

QBC Monitoring Report
Dublin Transportation Office
November 2004

Contents

Section	P age
1 Introduction & Structure of the Report	1
2 Main Findings.....	3
3 Key Objectives Reports	4
4 Purpose, Scope & Methodology	17
5 QBC Specification	19
6 Summary of Progress	21
7 Comparative Bus & Car Journey Times in the Morning Peak.....	23
8 Performance Indicators.....	25
9 Mode Share.....	30
10 Final Reports	34
11 Sectional Bus and Car Journey Times	43
12 Sectional Bus Speeds.....	63
13 League Tables.....	84
14 Graphs.....	88
15 Pre QBC Reports	123
15.1 Howth Road Pre QBC	124
Appendix 1 November 2004 Survey Points	137
Appendix 2 Maps of Survey Points	147

List of Tables

Table Number & Description	Page Number(s)
Tables 1a to 1l Key Objectives Reports	
Table 1a Blanchardstown QBC	5
Table 1b Finglas QBC	6
Table 1c Lucan QBC	7
Table 1d Malahide QBC.....	8
Table 1e North Clondalkin QBC.....	9
Table 1f Rathfarnham QBC.....	10
Table 1g Stillorgan QBC	11
Table 1h Swords QBC	12
Table 1i Tallaght QBC	13
Table 1j Ballymun QBC	14
Table 1k Bray QBC	15
Table 1l Clontarf QBC	16
Table A Corridors Monitored in November 2004	18
Table 2 Summary of Progress 1997 - 2004	21
Table 3 Summary of Progress 2003 - 2004	22
Table 4 Comparative Bus and Car Journey Times	24
Table 5 Performance Indicators 2003/2004.....	26
Table 5a Performance Indicators 2003/2004 (Off Peak).....	27
Table 6 Performance Indicators 2002/2003/2004.....	28
Table 6a Performance Indicators 2002/2003/2004 (Off Peak).....	29
Tables 7 to 7b Mode Share Tables	
Table 7 – QBC Cordon Points	31
Table 7a – Non QBC Cordon Points	32
Table 7b – Non bus Cordon Points & Cordon Totals.....	33
Table 8 Stillorgan QBC Final Report	35
Tables 9a to 9i Sectional Bus & Car Journey Times	
Table 9a Blanchardstown QBC	44
Table 9b Finglas QBC	46
Table 9c Lucan QBC	47
Table 9d Malahide QBC.....	49
Table 9e North Clondalkin QBC.....	50
Table 9f Rathfarnham QBC.....	51
Table 9g Stillorgan QBC	53
Table 9h Swords QBC	55
Table 9i Tallaght QBC	57

Table 9j	Ballymun QBC	59
Table 9k	Bray QBC	61
Table 9l	Clontarf QBC	62

Tables 10a to 10l Bus Journey Speeds

Table 10a	Blanchardstown QBC	64
Table 10b	Finglas QBC	66
Table 10c	Lucan QBC	67
Table 10d	Malahide QBC	69
Table 10e	North Clondalkin QBC	71
Table 10f	Rathfarnham QBC	72
Table 10g	Stillorgan QBC	74
Table 10h	Swords QBC	76
Table 10i	Tallaght QBC	78
Table 10j	Ballymun QBC	80
Table 10k	Bray QBC	82
Table 10l	Clontarf QBC	83

Table 11	Morning Peak Period League Table	85
----------	--	----

Tables 12 a to 12v Sectional Graphs

Table 12a	Blanchardstown QBC	90
Table 12b	Blanchardstown QBC	91
Table 12c	Blanchardstown QBC	92
Table 12d	Finglas QBC	94
Table 12e	Lucan QBC	96
Table 12f	Lucan QBC	97
Table 12g	Lucan QBC	98
Table 12h	Malahide QBC	100
Table 12i	Malahide QBC	101
Table 12j	Malahide QBC	102
Table 12k	North Clondalkin QBC	104
Table 12l	North Clondalkin QBC	105
Table 12m	Rathfarnham QBC	107
Table 12n	Rathfarnham QBC	108
Table 12o	Stillorgan QBC	110
Table 12p	Swords QBC	112
Table 12q	Swords QBC	113
Table 12r	Tallaght QBC	115
Table 12s	Tallaght QBC	116
Table 12t	Ballymun QBC	118
Table 12u	Bray QBC	120
Table 12v	Clontarf QBC	122

Tables 13a to 13e Howth Road Pre QBC Results

Table 13a	Howth Road Pre QBC Key Objectives Report	125
Table 13b	Howth Road Pre QBC Final Report	126
Table 13c	Howth Road Pre QBC Sectional Bus & Car Journey Times	134
Table 13d	Howth Road Pre QBC Sectional Bus Speeds	135
Table 13e	Howth Pre QBC Sample Graph	136

1 Introduction & Structure of the Report

1.1 Background

The Dublin Transportation Office assumed responsibility for Quality Bus Corridor monitoring in November 2002. Monitoring had previously been undertaken on a bi-annual basis by Dublin City Council. Approval for carrying out the monitoring on an annual basis had been given at the March 2002 Steering Committee meeting.

To date, monitoring has been carried out in November 2002, November 2003 and November 2004. The undertaking of monitoring on an annual basis measures QBC performance both at a point in time, and over time.

Although this report deals specifically with the results from November 2004, comparisons are made with the results from 2002 and 2003.

The further development of an expanded Quality Bus Network is a key element of the DTO transport strategy as outlined in *A Platform for Change*. 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 strategy.

1.2 Structure of the Report

Section 2 sets out the main findings from the November 2004 QBC monitoring exercise based on the report given to the DTO Steering Committee at its April 2005 meeting.

Section 3 is a series of “Key Objectives” reports detailing the main results for each QBC.

Section 4 sets out the purpose, scope and methodology of the annual monitoring exercise.

Section 5 details the Specification against which the performance of each Quality Bus Corridor is measured.

Section 6 is a summary of the progress made from 1997 to 2004 in respect of the reduction in the number of cars crossing the Canal Cordon Points and the increase in bus service supply and resultant patronage.

Section 7 is a summary of comparative bus and car average morning peak period journey times for each of the 12 QBCs monitored.

Section 8 contains tables of Performance Indicators measured over the period 2002, 2003 and 2004.

Section 9 is a table showing Mode Share expressed in terms of the percentage of total persons crossing the canal cordon points by mode of travel.

Section 10 contains an example of the “Final Reports” for each QBC showing the detailed results for Stillorgan QBC.

Section 11 contains tables showing comparative bus and car journey times for each QBC on a sectional basis

Section 12 contains tables showing bus speeds for each QBC on a sectional basis.

Section 13 contains a “League Table” of results with comparisons for 2002 and 2003.

Section 14 contains graphs showing the performance of each QBC on a sectional basis. The graphs show the variation in bus operating speeds over different sections of each QBC and over different time periods. The examples shown are supported by a commentary.

Section 15 deals with the results from corridors monitored prior to the implementation of bus priority measures.

Appendix 1 is a table showing the complete list of survey points for the November 2004 monitoring exercise.

Appendix 2 contains maps showing the scope of the monitoring for each QBC including those monitored on a pre QBC basis.

2 Main Findings

- 2.1 The number of cars crossing the canal cordon points has reduced by 7849 (21.43%) from November 1997 to November 2004. See **Table 2** for details. There has, however, been an increase of 5.74% over the last 12 months with significant changes on some corridors. See **Table 3** for details.
- 2.2 The number of buses supplied by Dublin Bus has increased by 206 (32.54%) from November 1997 to November 2004. See **Table 2** for details. There has been a marginal decline in the supply of buses in the last 12 months. See **Table 3** for details.
- 2.3 The number of bus passengers has increased by 15016 (49.17%) from November 1997 to November 2004. See **Table 2** for details. There has, however, been a reduction in passenger numbers of 7.10% over the last 12 months. See **Table 3** for details.
- 2.4 Bus average journey times in the morning peak were less than the corresponding car average journey times in 9 out of the 12 QBCs monitored, with significant (greater than 10%) variations in 7 QBCs. See **Table 4** for details.
- 2.5 Bus average journey times in the morning peak have reduced in 5 of the 9 QBCs that were monitored both in 2003 and 2004. See **Table 4** for details.
- 2.6 Passengers travelling on QBC designated routes crossing the canal cordon between 0700 and 1000 have decreased by 6.73% compared with November 2003. See **Table 5** for details.
- 2.7 Bus mode share at the canal cordon crossing points between 0700 and 1000 has declined from 52.44% in November 2003 to 51.93%. See **Table 5 & Table 7b** for details.
- 2.8 The results for Malahide QBC highlight the continuing problems affecting the performance in the morning peak period on the section between Artane Roundabout and Casino Park, south of Donnycarney. See **Table 1d, Table 9d, Table 10d** and **Table 12i** for details.
- 2.9 Of the schemes introduced in the 12 months leading up to November 2004, where monitoring has taken place, the following results are of interest:
- Con Colbert Road/St Johns Road West**
On the section between Con Colbert Road and Ellis Quay there has been a saving of 4 minutes 4 seconds in bus average journey times in the morning peak.
- St Stephen's Green**
On the section between Leeson Street and Westmoreland Street via St Stephen's Green East there has been a saving of 3 minutes 12 seconds in bus average journey time in the morning peak.

3 Key Objectives Reports

The key results for each QBC are set out in terms of Key Objectives Reports.

Each report summarises the main 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 named “Spec Ref” match the performance indicators set out in the QBC Specification.

Tables 1a to 1i inclusive show the results for the 9 main radial QBCs.

Tables 1j to 1l inclusive show the results for those QBCs monitored for the first time in 2004, namely Ballymun QBC, Bray QBC incorporating the N11 extension from Foxrock to Loughlinstown and Clontarf QBC.

Table 1a Blanchardstown QBC

QUALITY BUS CORRIDOR MONITORING ANNUAL SUMMARY REPORT BLANCHARDSTOWN NOVEMBER 2004									
Spec Ref	KEY OBJECTIVES	PERFORMANCE INDICATORS				NOTES			
A5	Corridor Bus Journey Times	AM Peak		PM Peak		River Rd to Ormond/Merchants Quay			
A5	Corridor Bus Journey Time (Average)	33:24		33:00					
A5	Corridor Bus Journey Time (Range)	27:40 to 47:27		21:38 to 49:45					
A5	Corridor Bus Speed	15.26 km/h		15.25 km/h					
A5	Comparison of Corridor Journey Times Bus v Car	Bus AM Peak		Car AM Peak		Blanchardstown Bypass to North Circular Road			
A5	Comparison of Bus v Car Journey Times (Average)	23:00		23:05					
A5	Comparison of Bus v Car Journey Times (Range)	16:44 to 34:46		9:33 to 30:16					
B1	Passenger Wait Times	Target		Actual		Timings at Navan Road Garda Station			
B1a	Average Peak Wait Time	3 minutes		1:29					
B1b	Average Peak Excess Wait Time	Target		Actual					
B1c	Average Off Peak Wait Time	2 minutes		0					
B1d	Average Off Peak Excess Wait Time	Target		Actual					
B2	Boarding & Alighting Time / % of total journey time	4 minutes		4:57					
		Target		Actual		BAC On Bus Survey Nov 02			
		2 minutes		0:57					
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)	% Mode share at Canal Cordon				% Mode share at Navan Road			
		Car		Bus		Car		Bus	
		Nov-03	Nov-04	Nov-03	Nov-04	Nov-02	Nov-04	Nov-02	Nov-04
		40.11%	35.08%	46.31%	52.36%	27.70%	26.55%	67.02%	69.37%
		Taxi		Cycle		Taxi		Cycle	
		Nov-03	Nov-04	Nov-03	Nov-04	Nov-02	Nov-04	Nov-02	Nov-04
		0.88%	0.77%	1.49%	1.52%	0.71%	0.60%	1.04%	0.79%
		Walking		Total Persons		Walking		Total Persons	
		Nov-03	Nov-04	Nov-03	Nov-04	Nov-02	Nov-04	Nov-02	Nov-04
		8.47%	7.48%	17607	17222	0.66%	0.47%	9767	10817
E1	Passenger Journeys (Total)	Nov-03		Nov-04		Cordon Counts (0700 - 1000) BAC Designated QBC Routes			
		5344		6087					

Table 1b Finglas QBC

QUALITY BUS CORRIDOR MONITORING ANNUAL SUMMARY REPORT FINGLAS NOVEMBER 2004						
Spec Ref	KEY OBJECTIVES	PERFORMANCE INDICATORS		NOTES		
A5	Corridor Bus Journey Times	AM Peak	PM Peak	Finglas to City Centre		
A5	Corridor Bus Journey Time (Average)	20:20	25:50			
A5	Corridor Bus Journey Time (Range)	10:51 to 31:36	20:10 to 32:21			
A5	Corridor Bus Speed	15.56 km/h	11.79 km/h			
A5	Comparison of Corridor Journey Times Bus v Car	Bus AM Peak	Car AM Peak	Finglas to Whitworth Road		
A5	Comparison of Bus v Car Journey Times (Average)	10:39	16:39			
A5	Comparison of Bus v Car Journey Times (Range)	4:32 to 16:29	12:38 to 24:52			
B1	Passenger Wait Times	Target	Actual	Timings at Harts Corner		
B1a	Average Peak Wait Time	3 minutes	3:47			
B1b	Average Peak Excess Wait Time	Target	Actual			
B1c	Average Off Peak Wait Time	2 minutes	0:47			
B1d	Average Off Peak Excess Wait Time	Target	Actual			
B2	Boarding & Alighting Time / % of total journey time	4 minutes	2:56			
		Target	Actual	BAC On Bus Survey Nov 02		
		2 minutes	0			
		AM Peak	PM Peak			
		12.11%	14.03%			
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
		Car		Bus		
		Nov-03	Nov-04	Nov-03	Nov-04	
		36.55%	33.78%	50.88%	54.78%	
		Taxi		Cycle		
		Nov-03	Nov-04	Nov-03	Nov-04	
		0.92%	0.35%	1.34%	1.37%	
		Walking		Total Persons		
		Nov-03	Nov-04	Nov-03	Nov-04	
		7.64%	7.66%	16553	15868	
E1	Passenger Journeys (Total)	Nov-03		Nov-04		Cordon Counts (0700 - 1000) BAC Designated QBC Routes
		1437		1982		

Table 1c Lucan QBC

QUALITY BUS CORRIDOR MONITORING ANNUAL SUMMARY REPORT LUCAN NOVEMBER 2004									
Spec Ref	KEY OBJECTIVES	PERFORMANCE INDICATORS				NOTES			
A5	Corridor Bus Journey Times	AM Peak		PM Peak		Foxhunter Pub to Bachelors Walk/ Wellington Quay via Chapelizod Bypass			
A5	Corridor Bus Journey Time (Average)	29:00		25:35					
A5	Corridor Bus Journey Time (Range)	24:20 to 33:41		22:45 to 28:00					
A5	Corridor Bus Speed	23.58 km/h		26.18 km/h		Foxhunter Pub to Bachelors Walk via Chapelizod Bypass			
A5	Comparison of Corridor Journey Times Bus v Car	Bus AM Peak		Car AM Peak					
A5	Comparison of Bus v Car Journey Times (Average)	29:00		31:37					
A5	Comparison of Bus v Car Journey Times (Range)	24:20 to 33:41		20:13 to 41:34					
B1	Passenger Wait Times	Target		Actual		Timings at Palmerston			
B1a	Average Peak Wait Time	3 minutes		1:35					
B1b	Average Peak Excess Wait Time	Target		Actual					
B1c	Average Off Peak Wait Time	2 minutes		0					
B1d	Average Off Peak Excess Wait Time	Target		Actual					
B2	Boarding & Alighting Time / % of total journey time	4 minutes		5:05					
		Target		Actual		BAC On Bus Survey Nov 02			
		2 minutes		1:05					
		AM Peak		PM Peak					
		10.06%		14.69%					
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)	% Mode share at Canal Cordon				% Mode share at Palmerston			
		Car		Bus		Car		Bus	
		Nov-03	Nov-04	Nov-03	Nov-04	Nov-02	Nov-04	Nov-02	Nov-04
		40.41%	39.60%	52.92%	52.14%	45.17%	43.70%	47.68%	45.80%
		Taxi		Cycle		Taxi		Cycle	
		Nov-03	Nov-04	Nov-03	Nov-04	Nov-02	Nov-04	Nov-02	Nov-04
		0.82%	0.48%	0.81%	1.23%	0.43%	0.61%	0.50%	0.47%
		Walking		Total Persons		Walking		Total Persons	
		Nov-03	Nov-04	Nov-03	Nov-04	Nov-02	Nov-04	Nov-02	Nov-04
		0.83%	0.82%	16014	13701	1.78%	2.76%	13020	13777
E1	Passenger Journeys (Total)	Nov-03		Nov-04		Cordon Counts (0700 - 1000) BAC Designated QBC Routes			
		5139		4717					

Table 1d Malahide QBC

QUALITY BUS CORRIDOR MONITORING ANNUAL SUMMARY REPORT MALAHIDE NOVEMBER 2004						
Spec Ref	KEY OBJECTIVES	PERFORMANCE INDICATORS				NOTES
A5	Corridor Bus Journey Times	AM Peak		PM Peak		Greencastle Rd to Amiens Street
A5	Corridor Bus Journey Time (Average)	49:09		25:59		
A5	Corridor Bus Journey Time (Range)	18:11 to 71:08		23:40 to 28:51		
A5	Corridor Bus Speed	6.96 km/h		13.08 km/h		
A5	Comparison of Corridor Journey Times Bus v Car	Bus AM Peak		Car AM Peak		Greencastle Rd to Amiens Street
A5	Comparison of Bus v Car Journey Times (Average)	49:09		55:28		
A5	Comparison of Bus v Car Journey Times (Range)	18:11 to 71:08		14:48 to 84:53		
B1	Passenger Wait Times	Target		Actual		Timings at Fairview Pedestrian Footbridge
B1a	Average Peak Wait Time	3 minutes		3:27		
B1b	Average Peak Excess Wait Time	Target		Actual		
		2 minutes		0:27		
B1c	Average Off Peak Wait Time	Target		Actual		
		4 minutes		2:54		
B1d	Average Off Peak Excess Wait Time	Target		Actual		
		2 minutes		0		
B2	Boarding & Alighting Time / % of total journey time	AM Peak		PM Peak		BAC On Bus Survey Nov 02
		21.01%		15.92%		
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)	% Mode share at Canal Cordon				Newcomen Bridge
		Car		Bus		
		Nov-03	Nov-04	Nov-03	Nov-04	
		15.68%	25.13%	72.92%	63.33%	
		Taxi		Cycle		
		Nov-03	Nov-04	Nov-03	Nov-04	
		1.88%	2.34%	2.86%	2.75%	
		Walking		Total Persons		
		Nov-03	Nov-04	Nov-03	Nov-04	
		5.14%	4.41%	12542	12674	
E1	Passenger Journeys (Total)	Nov-03		Nov-04		Cordon Counts (0700 - 1000) BAC Designated QBC Routes
		4750		4146		

Table 1e North Clondalkin QBC

QUALITY BUS CORRIDOR MONITORING ANNUAL SUMMARY REPORT NORTH CLONDALKIN NOVEMBER 2004									
Spec Ref	KEY OBJECTIVES	PERFORMANCE INDICATORS				NOTES			
A5	Corridor Bus Journey Times	AM Peak		PM Peak		Coldcut Road to Westmoreland Street/ Aston Quay			
A5	Corridor Bus Journey Time (Average)	37:13		77:09					
A5	Corridor Bus Journey Time (Range)	30:50 to 49:59		46:56 to 98:01					
A5	Corridor Bus Speed	14.39 km/h		6.96 km/h					
A5	Comparison of Corridor Journey Times Bus v Car	Bus AM Peak		Car AM Peak		Coldcut Road to Cornmarket			
A5	Comparison of Bus v Car Journey Times (Average)	26:40		21:26					
A5	Comparison of Bus v Car Journey Times (Range)	21:37 to 37:01		12:32 to 33:24					
B1	Passenger Wait Times	Target		Actual		Timings at James's Street			
B1a	Average Peak Wait Time	3 minutes		7:49					
B1b	Average Peak Excess Wait Time	Target		Actual					
		2 minutes		4:49					
B1c	Average Off Peak Wait Time	Target		Actual					
		4 minutes		6:10					
B1d	Average Off Peak Excess Wait Time	Target		Actual		BAC On Bus Survey Nov 02			
		2 minutes		2:10					
B2	Boarding & Alighting Time / % of total journey time	AM Peak		PM Peak					
		14.56%		18.28%					
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)	% Mode share at Canal Cordon				% Mode share at Ballyfermot			
		Car		Bus		Car		Bus	
		Nov-03	Nov-04	Nov-03	Nov-04	Nov-02	Nov-04	Nov-02	Nov-04
		33.21%	41.70%	60.79%	52.95%	44.84%	32.44%	40.43%	57.67%
		Taxi		Cycle		Taxi		Cycle	
		Nov-03	Nov-04	Nov-03	Nov-04	Nov-02	Nov-04	Nov-02	Nov-04
		0.66%	1.00%	1.35%	0.61%	0.83%	0.94%	0.85%	0.42%
		Walking		Total Persons		Walking		Total Persons	
		Nov-03	Nov-04	Nov-03	Nov-04	Nov-02	Nov-04	Nov-02	Nov-04
		0.77%	1.47%	5035	5103	10.45%	6.98%	5538	4987
E1	Passenger Journeys (Total)	Nov 2003		Nov 2004		Cordon Counts (0700 - 1000) BAC QBC Designated Routes			
		2283		1795					

Table 1f Rathfarnham QBC

QUALITY BUS CORRIDOR MONITORING ANNUAL SUMMARY REPORT RATHFARNHAM NOVEMBER 2004						
Spec. Ref	KEY OBJECTIVES	PERFORMANCE INDICATORS		NOTES		
A5	Corridor Bus Journey Times	AM Peak	PM Peak	Rathfarnham to Westmoreland Street / College Green		
A5	Corridor Bus Journey Time (Average)	39:08	38:32			
A5	Corridor Bus Journey Time (Range)	29:29 to 51:40	33:16 to 44:29			
A5	Corridor Bus Speed	9.35 km/h	10.10 km/h			
A5	Comparison of Corridor Journey Times Bus v Car	Bus AM Peak	Car AM Peak	Rathfarnham to Camden Street		
A5	Comparison of Bus v Car Journey Times (Average)	27:33	25:43			
A5	Comparison of Bus v Car Journey Times (Range)	21:43 to 40:03	13:43 to 38:36			
B1	Passenger Wait Times	Target	Actual	Timings at Canal		
B1a	Average Peak Wait Time	3 minutes	4:07			
B1b	Average Peak Excess Wait Time	Target	Actual			
		2 minutes	1:07			
B1c	Average Off Peak Wait Time	Target	Actual			
		4 minutes	3:19			
B1d	Average Off Peak Excess Wait Time	Target	Actual	BAC On Bus Survey Nov 02		
		2 minutes	0			
B2	Boarding & Alighting Time / % of total journey time	AM Peak	PM Peak			
		17.73%	18.59%			
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)	% Mode share at Canal Cordon				Harold's Cross Bridge
		Car		Bus		
		Nov-03	Nov-03	Nov-03	Nov-03	
		39.55%	42.85%	44.08%	41.97%	
		Taxi		Cycle		
		Nov-03	Nov-03	Nov-03	Nov-03	
		1.24%	1.35%	4.80%	4.54%	
		Walking		Total Persons		
		Nov-03	Nov-03	Nov-03	Nov-03	
		6.75%	5.87%	8276	7954	
E1	Passenger Journeys (Total)	Nov-03		Nov-04		
		2420		2120		

Table 1g Stillorgan QBC

QUALITY BUS CORRIDOR MONITORING ANNUAL SUMMARY REPORT STILLORGAN NOVEMBER 2004									
Spec. Ref	KEY OBJECTIVES	PERFORMANCE INDICATORS				NOTES			
A5	Corridor Bus Journey Times	AM Peak		PM Peak		Foxrock Church to Leeson Street			
A5	Corridor Bus Journey Time (Average)	28:38		28:37					
A5	Corridor Bus Journey Time (Range)	20:24 to 34:12		20:46 to 34:15					
A5	Corridor Bus Speed	19.25		19.20		Foxrock Church to Leeson Street			
A5	Comparison of Corridor Journey Times Bus v Car	Bus AM Peak		Car AM Peak					
A5	Comparison of Bus v Car Journey Times (Average)	28:38		31:35					
A5	Comparison of Bus v Car Journey Times (Range)	20:24 to 34:12		15:49 to 47:41		Timings at Donnybrook Village			
B1	Passenger Wait Times	Target		Actual					
B1a	Average Peak Wait Time	3 minutes		2:16					
B1b	Average Peak Excess Wait Time	Target		Actual					
B1c	Average Off Peak Wait Time	2 minutes		0					
B1d	Average Off Peak Excess Wait Time	Target		Actual					
B2	Boarding & Alighting Time / % of total journey time	4 minutes		3:10		BAC On Bus Survey Nov 02			
		Target		Actual					
		2 minutes		0					
		AM Peak		PM Peak					
		18.86%		N/A					
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)	% Mode share at Canal Cordon				% Mode share at Fosters Ave N11			
		Car		Bus		Car		Bus	
		Nov-03	Nov-04	Nov-03	Nov-04	Nov-02	Nov-04	Nov-02	Nov-04
		29.10%	35.83%	46.76%	47.57%	52.13%	54.88%	43.21%	39.45%
		Taxi		Cycle		Taxi		Cycle	
		Nov-03	Nov-04	Nov-03	Nov-04	Nov-02	Nov-04	Nov-02	Nov-04
		1.54%	0.50%	3.36%	2.74%	0.84%	0.93%	0.91%	1.60%
		Walking		Total Persons		Walking		Total Persons	
		Nov-03	Nov-04	Nov-03	Nov-04	Nov-02	Nov-04	Nov-02	Nov-04
		17.65%	11.27%	13363	12483	0.37%	0.17%	16123	15706
E1	Passenger Journeys (Total)	Nov 2003		Nov 2004		Cordon Counts (0700 - 1000) BAC QBC Designated Routes			
		4704		4357					

Table 1h Swords QBC

QUALITY BUS CORRIDOR MONITORING ANNUAL SUMMARY REPORT SWORDS NOVEMBER 2004					
Spec. Ref	KEY OBJECTIVES	PERFORMANCE INDICATORS		NOTES	
A5	Corridor Bus Journey Times	AM Peak		PM Peak	
A5	Corridor Bus Journey Time (Average)	63:23		50:48	
A5	Corridor Bus Journey Time (Range)	41:01 to 77:00		36:52 to 65:03	
A5	Corridor Bus Speed	13.40 km/h		16.63 km/h	
A5	Comparison of Corridor Journey Times Bus v Car	Bus AM Peak		Car AM Peak	
A5	Comparison of Bus v Car Journey Times (Average)	45:32		60:44	
A5	Comparison of Bus v Car Journey Times (Range)	26:15 to 58:51		28:44 to 76:04	
B1	Passenger Wait Times	Target		Actual	
B1a	Average Peak Wait Time	3 minutes		4:34	
B1b	Average Peak Excess Wait Time	Target		Actual	
		2 minutes		1:34	
B1c	Average Off Peak Wait Time	Target		Actual	
		4 minutes		7:09	
B1d	Average Off Peak Excess Wait Time	Target		Actual	
		2 minutes		3:09	
B2	Boarding & Alighting Time / % of total journey time	AM Peak		PM Peak	
		12.11%		14.03%	
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)	% Mode share at Canal Cordon			
		Car		Bus	
		Nov-03	Nov-04	Nov-03	Nov-04
		36.55%	33.78%	50.88%	54.78%
		Taxi		Cycle	
		Nov-03	Nov-04	Nov-03	Nov-04
		0.92%	0.35%	1.34%	1.37%
		Walking		Total Persons	
		Nov-03	Nov-04	Nov-03	Nov-04
		7.64%	7.66%	16553	15868
E1	Passenger Journeys (Total)	Nov 2003		Nov 2004	
		2905		2284	

Table 1i Tallaght QBC

QUALITY BUS CORRIDOR MONITORING ANNUAL SUMMARY REPORT TALLAGHT NOVEMBER 2004					
Spec. Ref	KEY OBJECTIVES	PERFORMANCE INDICATORS		NOTES	
A5	Corridor Bus Journey Times	AM Peak		PM Peak	
A5	Corridor Bus Journey Time (Average)	37:40		50:30	
A5	Corridor Bus Journey Time (Range)	27:44 to 54:03		44:28 to 58:05	
A5	Corridor Bus Speed	14.04 km/h		10.74 km/h	
A5	Comparison of Corridor Journey Times Bus v Car	Bus AM Peak		Car AM Peak	
A5	Comparison of Bus v Car Journey Times (Average)	35:28		42:23	
A5	Comparison of Bus v Car Journey Times (Range)	26:06 to 41:23		15:31 to 68:16	
B1	Passenger Wait Times	Target		Actual	
B1a	Average Peak Wait Time	3 minutes		3:04	
B1b	Average Peak Excess Wait Time	Target		Actual	
B1c	Average Off Peak Wait Time	2 minutes		0:04	
B1d	Average Off Peak Excess Wait Time	Target		Actual	
B2	Boarding & Alighting Time / % of total journey time	4 minutes		5:17	
		Target		Actual	
		2 minutes		1:17	
		AM Peak		PM Peak	
		16.16%		12.09%	
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)	% Mode share at Canal Cordon			
		Car		Bus	
		Nov-03	Nov-04	Nov-03	Nov-04
		21.87%	26.13%	50.29%	45.44%
		Taxi		Cycle	
		Nov-03	Nov-04	Nov-03	Nov-04
		0.61%	1.09%	5.54%	3.51%
		Walking		Total Persons	
		Nov-03	Nov-04	Nov-03	Nov-04
		20.03%	22.56%	12885	11011
E1	Passenger Journeys (Total)	Nov-03		Nov-04	
		4115		3382	
		Cordon Counts (0700 - 1000) BAC QBC Designated Routes			

Table 1j Ballymun QBC

QUALITY BUS CORRIDOR MONITORING ANNUAL SUMMARY REPORT BALLYMUN NOVEMBER 2004					
Spec. Ref	KEY OBJECTIVES	PERFORMANCE INDICATORS		NOTES	
A5	Corridor Bus Journey Times	AM Peak		PM Peak	
A5	Corridor Bus Journey Time (Average)	32:27		34:18	
A5	Corridor Bus Journey Time (Range)	26:12 to 38:43		26:25 to 41:02	
A5	Corridor Bus Speed	11.68		11.77	
A5	Comparison of Corridor Journey Times Bus v Car	Bus AM Peak		Car AM Peak	
A5	Comparison of Bus v Car Journey Times (Average)	22:44		20:19	
A5	Comparison of Bus v Car Journey Times (Range)	18:57 to 26:17		9:57 to 36:41	
B1	Passenger Wait Times	Target		Actual	
B1a	Average Peak Wait Time	3 minutes		5:44	
B1b	Average Peak Excess Wait Time	Target		Actual	
B1c	Average Off Peak Wait Time	2 minutes		2:44	
B1d	Average Off Peak Excess Wait Time	Target		Actual	
B2	Boarding & Alighting Time / % of total journey time	4 minutes		8:03	
		Target		Actual	
		2 minutes		4:03	
		AM Peak		PM Peak	
		N/A		N/A	
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)	% Mode share at Canal Cordon			
		Car		Bus	
		Nov-03	Nov-04	Nov-03	Nov-04
		50.06%	46.91%	30.17%	30.38%
		Taxi		Cycle	
		Nov-03	Nov-04	Nov-03	Nov-04
		1.91%	1.69%	2.52%	2.20%
		Walking		Total Persons	
		Nov-03	Nov-04	Nov-03	Nov-04
		12.39%	14.23%	7144	6502
E1	Passenger Journeys (Total)	Nov-03		Nov-04	
		1546		1631	

Table 1k Bray QBC

QUALITY BUS CORRIDOR MONITORING ANNUAL SUMMARY REPORT BRAY NOVEMBER 2004					
Spec. Ref	KEY OBJECTIVES	PERFORMANCE INDICATORS		NOTES	
A5	Corridor Bus Journey Times	AM Peak		PM Peak	
A5	Corridor Bus Journey Time (Average)	26:20		25:09	
A5	Corridor Bus Journey Time (Range)	21:42 to 30:46		23:42 to 26:42	
A5	Corridor Bus Speed	21.70 km/h		22.61 km/h	
A5	Comparison of Corridor Journey Times Bus v Car	Bus AM Peak		Car AM Peak	
A5	Comparison of Bus v Car Journey Times (Average)	26:20		32:22	
A5	Comparison of Bus v Car Journey Times (Range)	21:42 to 30:46		17:27 to 54:13	
B1	Passenger Wait Times	Target		Actual	
B1a	Average Peak Wait Time	3 minutes		7:45	
B1b	Average Peak Excess Wait Time	Target		Actual	
B1c	Average Off Peak Wait Time	2 minutes		4:45	
B1d	Average Off Peak Excess Wait Time	Target		Actual	
B2	Boarding & Alighting Time / % of total journey time	4 minutes		12:53	
		Target		Actual	
		2 minutes		8:53	
		AM Peak		PM Peak	
		N/A		N/A	
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)	% Mode share at Canal Cordon			
		Car		Bus	
		Nov-03	Nov-04	Nov-03	Nov-04
		60.10%	52.61%	25.59%	29.99%
		Taxi		Cycle	
		Nov-03	Nov-04	Nov-03	Nov-04
		1.08%	1.30%	2.44%	2.65%
		Walking		Total Persons	
		Nov-03	Nov-04	Nov-03	Nov-04
		9.12%	11.68%	4627	4068
E1	Passenger Journeys (Total)	Nov-03		Nov-04	
		569		1064	
		Cordon Counts (0700 - 1000) BAC QBC Designated Routes			

Table 11 Clontarf QBC

QUALITY BUS CORRIDOR MONITORING ANNUAL SUMMARY REPORT CLONTARF NOVEMBER 2004					
Spec. Ref	KEY OBJECTIVES	PERFORMANCE INDICATORS		NOTES	
A5	Corridor Bus Journey Times	AM Peak		PM Peak	
A5	Corridor Bus Journey Time (Average)	10:22		12:34	
A5	Corridor Bus Journey Time (Range)	7:53 to 14:32		7:37 to 21:57	
A5	Corridor Bus Speed	15.87 km/h		13.79 km/h	
A5	Comparison of Corridor Journey Times Bus v Car	Bus AM Peak		Car AM Peak	
A5	Comparison of Bus v Car Journey Times (Average)	10:22		18:42	
A5	Comparison of Bus v Car Journey Times (Range)	7:53 to 14:32		6:56 to 32:02	
B1	Passenger Wait Times	Target		Actual	
B1a	Average Peak Wait Time	3 minutes		5:23	
B1b	Average Peak Excess Wait Time	Target		Actual	
		2 minutes		2:23	
B1c	Average Off Peak Wait Time	Target		Actual	
		4 minutes		5:05	
B1d	Average Off Peak Excess Wait Time	Target		Actual	
		2 minutes		1:05	
B2	Boarding & Alighting Time / % of total journey time	AM Peak		PM Peak	
		N/A		N/A	
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)	% Mode share at Canal Cordon			
		Car		Bus	
		Nov-03	Nov-04	Nov-03	Nov-04
		15.68%	25.13%	72.92%	63.33%
		Taxi		Cycle	
		Nov-03	Nov-04	Nov-03	Nov-04
		1.88%	2.34%	2.86%	2.75%
		Walking		Total Persons	
		Nov-03	Nov-04	Nov-03	Nov-04
		5.14%	4.41%	12542	12674
E1	Passenger Journeys (Total)	Nov-03		Nov-04	
		1728		1678	

4 Purpose, Scope & Methodology

4.1 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, modal share for citybound 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.

4.2 Scope

12 QBCs ([Table A](#)) were monitored over a 4 week period in November 2004. For the first time the performance of Ballymun, Clontarf and the recently extended N11 QBC to Bray was monitored. Monitoring was also undertaken on sections of the proposed South Clondalkin, Orbital and Howth Road QBCs to establish a base performance prior to the implementation of QBC measures. A similar pre-QBC monitoring exercise had been undertaken in November 2002 for Crumlin Road (Service 77) and Rock Road. A number of additional, specific locations were incorporated into the monitoring exercise at the request of the QBN Project Office. See [Appendix 1](#) for details.

4.3 Methodology

Roadside surveys were carried out at strategic locations 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 2004 surveys were carried out by *Count On Us* following a competitive tender.

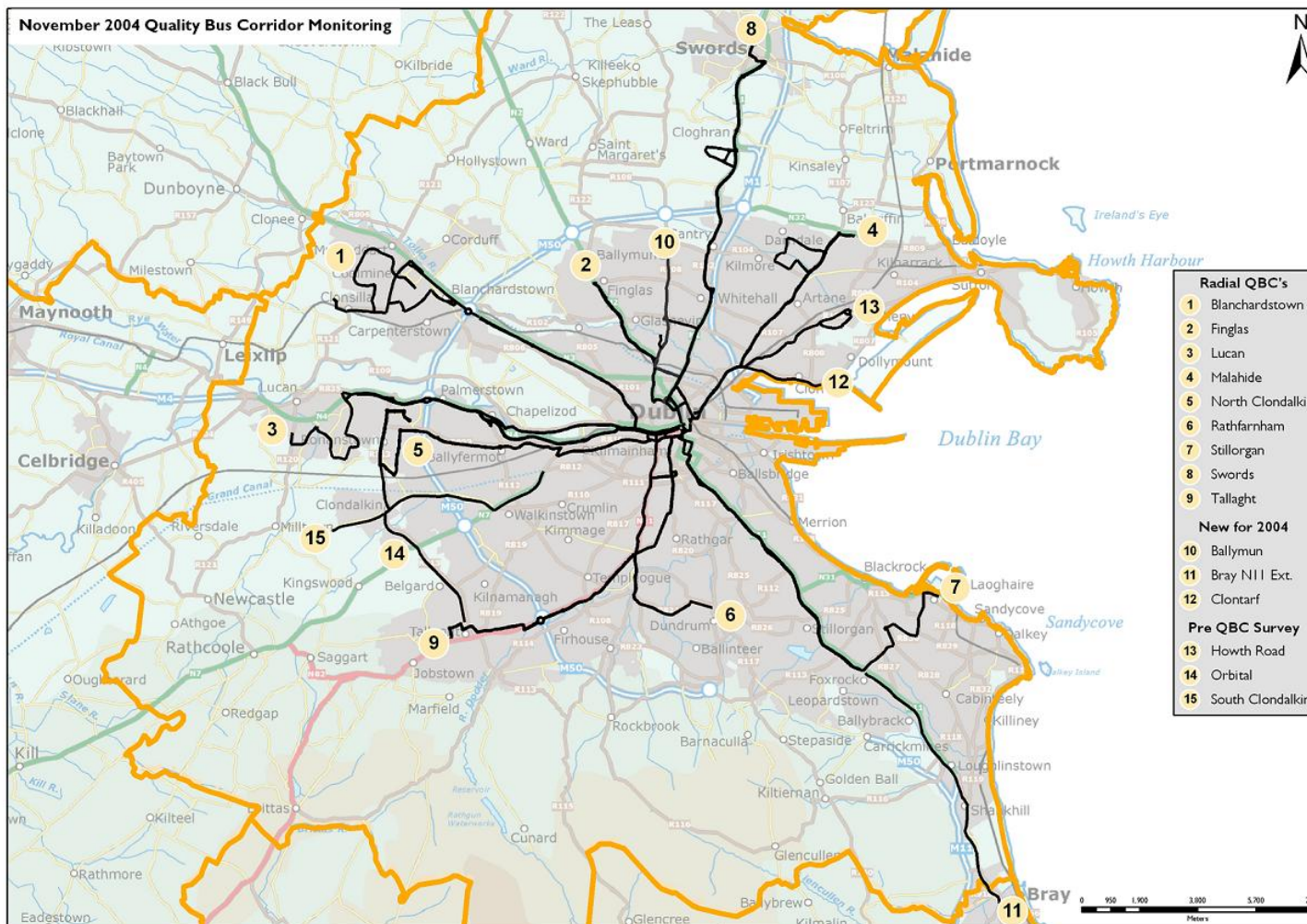
Traffic Cordon Counts were undertaken by Dublin City Council measuring the volume of citybound traffic and persons in the morning peak period with a view to reporting on modal share. This data included the counting of all bus passengers. The Railway Procurement Agency undertook an all day passenger count on Luas which included measuring the volume of citybound passengers during the morning peak period.

Data from the surveys was used to report on passenger wait times in the morning peak and off peak periods, and the age and quality of buses operating on each QBC.

An infrastructure audit 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.

Table A Corridors Monitored in November 2004



5 QBC Specification

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.
- 7a 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

1. provide the following profile of passenger waiting at all points on the corridor before boarding a bus

Average Wait Time (minutes)		Av. 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

6 Summary of Progress

6.1 Progress from 1997 to 2004

Table 2 is a summary of the progress that has been made from November 1997 to November 2004 in respect of the reduction in the number of cars crossing the canal cordon points and the increase in bus service supply and resultant patronage.

Table 2 Summary of Progress 1997 - 2004

QBC Monitoring 1997 - 2004				
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-97	Nov-04	% Change
Stillorgan	CARS	5794	4142	-28.51
	BUSES	40	124	210.00
	BUS PAX	1787	5613	214.10
Blanchardstown	CARS	5963	4821	-19.15
	BUSES	83	132	59.04
	BUS PAX	4573	7328	60.24
Lucan	CARS	6104	4718	-22.71
	BUSES	71	105	47.89
	BUS PAX	4303	5903	37.18
Finglas / Swords	CARS	5678	5009	-11.78
	BUSES	112	151	34.82
	BUS PAX	5670	8025	41.53
North Clondalkin	CARS	1555	1744	12.15
	BUSES	46	44	-4.35
	BUS PAX	2079	2391	15.01
Malahide	CARS	4620	2922	-36.75
	BUSES	133	145	9.02
	BUS PAX	4747	7963	67.75
Tallaght	CARS	3314	2438	-26.43
	BUSES	72	82	13.89
	BUS PAX	4098	5003	22.08
Rathfarnham	CARS	3605	2990	-17.06
	BUSES	76	56	-26.32
	BUS PAX	3285	3332	1.43
Total	CARS	36633	28784	-21.43
	BUSES	633	839	32.54
	BUS PAX	30542	45558	49.17

6.2 Changes from 2003 to 2004

Table 3 shows the changes in the last 12 months. There has been an increase of 5.74% in the number of cars crossing the canal cordon over the last 12 months with significant changes on some corridors. There has been a marginal decline in the supply of buses and a 7.10% reduction in passengers.

Table 3 Summary of Progress 2003 - 2004

QBC Monitoring 2003 - 2004				
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-03	Nov-04	% Change
Stillorgan	CARS	3323	4142	24.65
	BUSES	128	124	-3.13
	BUS PAX	6058	5613	-7.35
Blanchardstown	CARS	5561	4821	-13.31
	BUSES	136	132	-2.94
	BUS PAX	6668	7328	9.90
Lucan	CARS	5393	4718	-12.52
	BUSES	106	105	-0.94
	BUS PAX	6759	5903	-12.66
Finglas / Swords	CARS	5000	5009	0.18
	BUSES	133	151	13.53
	BUS PAX	7611	8025	5.44
North Clondalkin	CARS	1405	1744	24.13
	BUSES	46	44	-4.35
	BUS PAX	2879	2391	-16.95
Malahide	CARS	1599	2922	82.74
	BUSES	155	145	-6.45
	BUS PAX	9116	7963	-12.65
Tallaght	CARS	2237	2438	8.99
	BUSES	94	82	-12.77
	BUS PAX	6318	5003	-20.81
Rathfarnham	CARS	2704	2990	10.58
	BUSES	56	56	0.00
	BUS PAX	3631	3332	-8.23
Total	CARS	27222	28784	5.74
	BUSES	854	839	-1.76
	BUS PAX	49040	45558	-7.10

7 Comparative Bus & Car Journey Times in the Morning Peak

Table 4 shows summary findings for comparative bus and car journey times for city bound morning peak journeys.

There are comparisons available for all the 12 QBCs monitored. The table details the section of each QBC over which the comparisons are made.

Bus average journey times in the morning peak were less than the corresponding car average journey times in 9 out of the 12 QBCs monitored, with significant (greater than 10%) variations on 7 QBCs.

Table 4 Comparative Bus and Car Journey Times

QUALITY BUS CORRIDOR MONITORING NOVEMBER 2004 SUMMARY OF AM PEAK COMPARATIVE BUS AND CAR JOURNEY TIMES				
Corridor	Section Measured	Bus Average Journey Time	Car Average Journey Time	% Difference
Clontarf	Clontarf Bus Garage to Fairview	10:22	18:42	80.4%
Finglas	Finglas to Prospect Road/Whitworth Road	10:39	16:39	56.3%
Swords	Cloghran Roundabout to Dorset St Lower	45:32	60:44	33.4%
Bray	Bray to Foxrock Church	26:20	32:22	22.9%
Tallaght	West of M50 to Camden Street	35:28	42:23	19.5%
Malahide	Greencastle Rd to Amiens Street	49:09	55:28	12.8%
Stillorgan	Foxrock Church to Leeson Street	28:38	31:35	10.3%
Lucan	Foxhunter to Bachelors Walk via Chapelizod Bypass	29:00	31:37	9.0%
Blanchardstown	Blanchardstown Bypass to North Circular Road	23:00	23:05	0.4%
Rathfarnham	Rathfarnham to Camden Street	27:33	25:43	(6.6%)
Ballymun	Ballymun to Dorset Street Lower	22:44	20:19	(10.6%)
North Clondalkin	Coldcut Road to Cornmarket	26:40	21:26	(19.6%)

8 Performance Indicators

8.1 Performance Indicators 2002 2003 2004

Table 5 shows comparative performance indicators for the years 2003 and 2004. The areas highlighted in yellow indicate those areas where performance has improved. Performance is measured against the QBC Specification where appropriate.

Performance for each QBC is measured in respect of the following indicators:

- i. Bus average journey times in the morning peak period inbound to the city
- ii. Bus average journey times in the afternoon/evening peak period outbound from the city
- iii. Bus average journey times in the off peak period inbound and outbound
- iv. Bus average speeds in the morning peak period inbound
- v. Bus average speeds in the afternoon/evening peak period outbound
- vi. Bus average speeds in the off peak period inbound and outbound
- vii. Bus passengers on designated QBC routes in the morning peak period inbound
- viii. Cars crossing the canal cordon points in the morning peak period inbound
- ix. Bus mode share in the morning peak period inbound
- x. Bus passenger average waiting time in the morning peak period inbound
- xi. Bus passenger average waiting times in the off peak period inbound
- xii. Average age of the bus fleet
- xiii. Percentage of low floor accessible buses

8.2 Performance Indicators 2002, 2003 2004

Table 6 shows the same performance indicators as **Table 5** but for the 3 years 2002, 2003 and 2004.

In respect of both **Table 5** and **Table 6** the morning peak period was measured from 0700 to 1000. The afternoon peak period was measured from 1600 to 1900. Off peak performance was measured between 1200 and 1300 inbound and from 1300 to 1400 outbound.

Table 5 Performance Indicators 2003/2004

QBC Performance Indicators Comparison 2003 cf 2004																						
Corridor	Bus Journey Times - AM Peak		Bus Speeds AM Peak Km/h		Bus Journey Times - PM Peak		Bus Speeds PM Peak Km/h		BAC Bus Pax QBC Routes		Cars Crossing Canal Cordon		Bus Mode Share		Ave Wait Time AM Peak		Ave Wait Time Off Peak		Fleet Age Average		Low Floor Buses % Fleet	
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
	Blanchardstown	36:37	33:24	13.92	15.26	32:10	33:00	15.64	15.25	5344	6087	5561	4821	46.31%	52.36%	1:30	1:29	3:39	4:57	3.20	3.57	72%
Position	N/A	N/A	5=	4	N/A	N/A	4	4	1	1	1	2	7	4	1	1	2	5	1	1	1	1
Finglas	16:53	20:20	18.74	15.56	24:54	25:50	12.54	11.79	1437	1982	5000	5009	50.88%	54.78%	4:54	3:47	4:03	2:56	7.16	4.94	8%	3%
Position	N/A	N/A	3	3	N/A	N/A	6	6	9	8	3	1	4	2	8	6	4	2	9	5	8	9
Lucan	31:55	29:00	21.42	23.58	28:04	25:35	23.86	26.18	5139	4717	5393	4718	52.92%	52.14%	1:49	1:35	5:06	5:05	3.63	4.61	40%	48%
Position	N/A	N/A	1	1	N/A	N/A	1	1	2	2	2	3	3	5	3	2	7	6	3	3	5	4
Malahide	23:57	49:09	14.28	6.96	20:53	25:59	16.27	13.08	4750	4146	1599	2922	72.92%	63.33%	2:10	3:27	2:27	2:54	3.40	4.06	59%	57%
Position	N/A	N/A	4	9	N/A	N/A	3	5	3	4	7	6	1	1	4	5	1	1	2	2	3	3
North Clondalkin	38:29	37:13	13.92	14.39	61:34	77:09	8.72	6.96	2283	1795	1405	1744	60.79%	52.95%	7:01	7:49	5:25	6:10	5.87	7.07	0%	7%
Position	N/A	N/A	5=	5	N/A	N/A	9	9	8	9	8	8	2	3	9	9	9	8	8	9	9	8
Rathfarnham	30:46	39:08	11.89	9.35	43:14	38:32	9.00	10.10	2420	2120	2704	2990	44.08%	41.97%	4:07	4:07	4:58	3:19	4.90	5.95	27%	29%
Position	N/A	N/A	8	8	N/A	N/A	8	8	7	7	5	5	8	8	7	7	6	4	6	7	6	6
Stillorgan	29:00	28:38	19.00	19.25	29:16	28:37	19.21	19.20	4704	4357	3323	4142	46.76%	47.57%	1:39	2:16	3:59	3:10	4.07	4.89	51%	41%
Position	N/A	N/A	2	2	N/A	N/A	2	2	4	3	4	4	6	6	2	3	3	3	4	4	4	5
Swords	61:32	63:23	13.81	13.40	66:52	50:48	12.63	16.63	2905	2284	5000	5009	50.88%	54.78%	3:32	4:34	4:25	7:09	5.41	6.00	19%	17%
Position	N/A	N/A	7	7	N/A	N/A	5	3	6	6	3	1	4	2	6	8	5	9	7	8	7	7
Tallaght	47:37	37:40	11.11	14.04	43:07	50:30	12.32	10.74	4115	3382	2237	2438	50.29%	45.44%	2:35	3:04	5:18	5:17	4.10	5.11	61%	63%
Position	N/A	N/A	9	6	N/A	N/A	7	7	5	5	6	7	5	7	5	4	8	7	5	6	2	2
Totals for 9 QBCs	N/A	N/A	14.78	13.86	N/A	N/A	13.40	13.14	33097	30870	27222	28784	52.44%	51.93%	3:15	3:34	4:22	4:33	4.20	4.75	47%	48%
QBC Specification	N/A	N/A	17.60	17.60	N/A	N/A	17.60	17.60	N/A	N/A	N/A	N/A	N/A	N/A	3:00	3:00	4:00	4:00	5.00	5.00	100%	100%

Notes:

1 N/A = Not Applicable

2 QBC Specification of Bus Journey Speed of 20 kph minimum excludes boarding and alighting time at an average of 12%

3 Cordon Counts 0700 - 1000

4 Cordon Counts 0700 - 1000 Swords and Finglas QBC Crossings at Binns Bridge

5 Cordon Counts 0700 - 1000 Swords and Finglas QBC Crossings at Binns Bridge

Items highlighted in yellow indicate an improvement in the last 12 months

Table 5a Performance Indicators 2003/2004 (Off Peak)

QBC Performance Indicators Comparison - Off Peak								
Corridor	Bus Journey Times - Inbound		Bus Speeds Inbound Km/h		Bus Journey Times - Outbound		Bus Speeds Outbound Km/h	
	2003	2004	2003	2004	2003	2004	2003	2004
Blanchardstown	23:10	23:56	22.00	21.30	30:25	24:03	16.54	20.91
Position	N/A	N/A	2	3	N/A	N/A	5	3
Finglas	18:28	18:25	17.13	17.17	18:49	17:54	16.19	17.02
Position	N/A	N/A	7	6	N/A	N/A	6	6
Lucan	29:53	29:07	22.24	22.83	24:35	25:53	27.76	26.63
Position	N/A	N/A	1	2	N/A	N/A	1	1
Malahide	18:12	11:54	18.79	28.74	24:59	22:48	13.60	14.90
Position	N/A	N/A	5	1	N/A	N/A	9	8
North Clondalkin	29:46	32:28	17.99	16.49	36:13	30:50	15.29	17.40
Position	N/A	N/A	6	8	N/A	N/A	7	5
Rathfarnham	27:56	27:30	13.10	13.30	27:59	27:06	13.90	14.36
Position	N/A	N/A	9	9	N/A	N/A	8	9
Stillorgan	27:38	26:45	20.24	20.91	28:52	24:48	19.48	22.56
Position	N/A	N/A	3	4	N/A	N/A	2	2
Swords	52:21	53:03	16.23	18.84	44:40	44:26	18.91	19.01
Position	N/A	N/A	8	5	N/A	N/A	3	4
Tallaght	27:29	29:36	19.26	17.88	31:44	33:48	17.09	16.04
Position	N/A	N/A	4	6	N/A	N/A	4	7
Totals for 9 QBCs	N/A	N/A	18.30	19.05	N/A	N/A	17.54	18.70
QBC Specification	N/A	N/A	17.60	17.60	N/A	N/A	17.60	17.60

Note: Swords QBC Inbound journeys in 2004 via Airport

Table 6 Performance Indicators 2002/2003/2004

QBC Performance Indicators Comparison																																	
Corridor	Bus Journey Times - AM Peak			Bus Speeds AM Peak Km/h			Bus Journey Times PM Peak			Bus Speeds PM Peak Km/h			BAC Bus Pax QBC Routes			Cars Crossing Canal Cordon			Bus Mode Share			Ave Wait Time AM Peak			Ave Wait Time Off Peak			Fleet Age Average			Low Floor Buses % Fleet		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
Blanchardstown	37:01	33:10	29:23	12.18	13.59	15.34	21:31	29:02	27:41	20.73	15.04	15.78	4912	5344	6087	5389	5561	4821	45.78%	46.31%	52.36%	1:41	1:30	1:29	4:57	3:39	4:57	2.11	3.20	3.57	75%	72%	89%
Position	N/A	N/A	N/A	7	5	4	N/A	N/A	N/A	2	3	4	1	1	1	2	1	2	6	7	4	2	1	1	3	2	5	1	1	1	1	1	1
Finglas	18:09	16:53	20:20	17.43	18.74	15.56	25:09	24:54	25:50	12.11	12.54	11.79	1832	1437	1982	4632	5000	5009	54.16%	50.88%	54.78%	2:56	4:54	3:47	5:10	4:03	2:56	6.49	7.16	4.94	26%	8%	3%
Position	N/A	N/A	N/A	2	3	3	N/A	N/A	N/A	6	6	6	9	9	8	3	3	1	3=	4	2	5	8	6	5	4	2	9	9	5	5	8	9
Lucan	31:33	25:45	22:54	19.64	24.07	27.07	29:51	28:04	25:35	22.44	23.86	26.18	4688	5139	4717	6562	5393	4718	45.62%	52.92%	52.14%	2:21	1:49	1:35	5:03	5:06	5:05	4.33	3.63	4.61	19%	40%	48%
Position	N/A	N/A	N/A	1	1	1	N/A	N/A	N/A	1	1	1	3	2	2	1	2	3	7	3	5	4	3	2	4	7	6	5	3	3	7	5	4
Malahide	26:11	23:57	49:09	13.06	14.28	6.96	18:50	20:53	25:59	17.99	16.27	13.08	4796	4750	4146	2232	1599	2922	68.20%	72.92%	63.33%	1:46	2:10	3:27	3:28	2:27	2:54	3.19	3.40	4.06	42%	59%	57%
Position	N/A	N/A	N/A	6	6	9	N/A	N/A	N/A	7	7	5	2	3	4	6	7	6	1	1	1	3	4	5	1	1	1	3	2	2	3	3	3
North Clondalkin	19:15	19:48	19:07	13.82	13.44	13.92	33:47	31:37	31:21	7.95	8.49	8.56	1972	2283	1795	1270	1405	1744	61.04%	60.79%	52.95%	3:34	7:01	7:49	4:05	5:25	6:10	6.05	5.87	7.07	0%	0%	7%
Position	N/A	N/A	N/A	5	7	5	N/A	N/A	N/A	9	9	9	8	8	9	8	8	8	2	2	3	6	9	9	2	9	8	8	8	9	9	9	8
Rathfarnham	48:53	30:46	39:08	7.48	11.89	9.35	43:48	43:14	38:32	8.72	9.00	10.10	2129	2420	2120	2647	2704	2990	42.48%	44.08%	41.97%	6:57	4:07	4:07	12:18	4:58	3:19	4.67	4.90	5.95	25%	27%	29%
Position	N/A	N/A	N/A	9	8	8	N/A	N/A	N/A	8	8	8	7	7	7	5	5	5	9	8	8	9	7	7	9	6	4	6	6	7	6	6	6
Stillorgan	32:55	29:00	28:38	16.74	19.00	19.25	36:31	29:16	28:37	15.40	19.21	19.20	4483	4704	4357	3674	3323	4142	44.38%	46.76%	47.57%	1:01	1:39	2:16	5:54	3:59	3:10	2.91	4.07	4.89	51%	51%	41%
Position	N/A	N/A	N/A	3	2	2	N/A	N/A	N/A	3	2	2	4	4	3	4	4	4	8	6	6	1	2	3	7	3	3	2	4	4	2	4	5
Swords	57:11	61:32	63:23	14.86	13.81	13.40	71:30	66:52	50:48	13.14	12.63	16.63	2242	2905	2284	4632	5000	5009	54.16%	50.88%	54.78%	4:04	3:32	4:34	6:15	4:25	7:09	4.17	5.41	6.00	17%	19%	17%
Position	N/A	N/A	N/A	4	4	6	N/A	N/A	N/A	4	5	3	6	6	6	3	3	1	3=	4	2	8	6	8	8	5	9	4	7	8	8	7	7
Tallaght	50:07	39:43	35:28	9.06	11.43	12.80	38:21	36:46	42:58	12.18	12.70	10.87	3560	4115	3382	2175	2237	2438	49.25%	50.29%	45.44%	2:59	2:35	3:04	5:22	5:18	5:17	5.59	4.10	5.11	38%	61%	63%
Position	N/A	N/A	N/A	8	9	7	N/A	N/A	N/A	5	4	7	5	5	5	7	6	7	5	5	7	6	5	4	6	8	7	7	5	6	4	2	2
Totals for 9 QBCs	N/A	N/A	N/A	13.12	15.03	13.71	N/A	N/A	N/A	13.73	13.78	14.36	30614	33097	30870	28581	27222	28784	50.94%	52.44%	51.93%	3:02	3:15	3:34	5:50	4:22	4:33	3.95	4.20	4.75	38%	47%	48%
QBC Specification	N/A	N/A	N/A	17.60	17.60	17.60	N/A	N/A	N/A	17.60	17.60	17.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3:00	3:00	3:00	4:00	4:00	4:00	5.00	5.00	5.00	100%	100%	100%

Notes:

- 1 N/A = Not Applicable
- 2 QBC Specification of Bus Journey Speed of 20 kph minimum excludes boarding and alighting time at an average of 12%
- 3 Cordon Counts 0700 - 1000
- 4 Cordon Counts 0700 - 1000 Swords and Finglas QBC Crossings at Binns Bridge
- 5 Cordon Counts 0700 - 1000 Swords and Finglas QBC Crossings at Binns Bridge
- Items highlighted in yellow indicate an improvement over the previous 12 months

Table 6a Performance Indicators 2002/2003/2004 (Off Peak)

QBC Performance Indicators Comparison - Off Peak												
Corridor	Bus Journey			Bus Speeds			Bus Journey			Bus Speeds		
	Times - Off Peak Inbound			Off Peak Inbound Km/h			Times Off Peak Outbound			Off Peak Outbound Km/h		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
Blanchardstown	24:38	26:04	29:23	18.30	17.29	15.34	25:40	21:05	19:12	17.38	20.72	22.75
Position	N/A	N/A	N/A	6	5	7	N/A	N/A	N/A	4	2	2
Finglas	16:47	18:28	18:25	18.85	17.13	17.17	17:27	18:49	17:54	17.46	16.19	17.02
Position	N/A	N/A	N/A	5	6	6	N/A	N/A	N/A	3	6	5
Lucan	22:58	24:01	23:33	26.15	25.01	25.51	28:53	24:35	25:53	23.62	27.76	26.36
Position	N/A	N/A	N/A	1	1	2	N/A	N/A	N/A	1	1	1
Malahide	15:47	18:12	11:54	20.06	18.79	28.74	15:00	24:59	22:48	15.66	13.60	14.90
Position	N/A	N/A	N/A	3	4	1	N/A	N/A	N/A	6	9	8
North Clondalkin	20:13	17:16	19:37	13.16	15.41	13.56	20:49	19:56	16:06	12.90	13.47	16.68
Position	N/A	N/A	N/A	8	8	8	N/A	N/A	N/A	9	8	6
Rathfarnham	28:32	27:56	27:30	12.82	13.10	13.30	29:12	27:59	27:06	13.14	13.90	14.36
Position	N/A	N/A	N/A	9	9	9	N/A	N/A	N/A	8	7	9
Stillorgan	25:50	27:38	26:45	21.61	20.24	20.91	36:46	28:52	24:48	15.29	19.48	22.56
Position	N/A	N/A	N/A	2	3	3=	N/A	N/A	N/A	7	3	3
Swords	43:23	52:21	53:03	19.58	16.23	18.84	55:59	44:40	44:26	17.82	18.91	19.01
Position	N/A	N/A	N/A	4	7	5	N/A	N/A	N/A	2	4	4
Tallaght	27:18	20:18	21:43	16.98	22.37	20.91	26:56	27:11	29:17	17.34	17.18	15.95
Position	N/A	N/A	N/A	7	2	3=	N/A	N/A	N/A	5	5	7
Totals for 9 QBCs	N/A	N/A	N/A	18.30	18.00	18.78	N/A	N/A	N/A	16.52	17.42	18.87
QBC Specification	N/A	N/A	N/A	17.60	17.60	17.60	N/A	N/A	N/A	17.60	17.60	17.60

Note: Swords QBC 2004 journeys via Airport

9 Mode Share

In November of each year Dublin City Council undertakes counts at 33 locations around the cordon formed by the Royal and Grand Canals. The counts are carried out between 0700 and 1000 and measure the volume of citybound traffic by type. The results are expressed in terms of the number of vehicles with the exception of pedestrians.

At the request of the DTO the counts now include counting taxis separately and also measure car and taxi occupancy. The data from these counts, and from the bus passenger counts undertaken simultaneously by Dublin Bus, provide the information necessary to calculate mode share. As Luas became operational in the summer of 2004, a similar count was undertaken by the Railway Procurement Agency measuring the number of citybound passengers crossing the canal cordon points between 0700 and 1000 on both the Red and Green Lines.

Table 7 shows the number of people entering the city at those crossing points that are served by Quality Bus Corridors.

Table 7a shows the same results for the other crossing points that are served by bus.

Table 7b 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 7 – QBC Cordon Points

Mode Share - November 2004															
Corridor	All Bus 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
Stillorgan (Car Occupancy)	5938	47.57%	4473 1.08	35.83%	62	0.50%	39	0.31%	222	1.78%	342	2.74%	1407	11.27%	12483
Lucan (Car Occupancy)	7144	52.14%	5425 1.15	39.60%	66	0.48%	594	4.34%	191	1.39%	169	1.23%	112	0.82%	13701
Blanchardstown (Car Occupancy)	9017	52.36%	6041 1.25	35.08%	133	0.77%	322	1.87%	159	0.92%	262	1.52%	1288	7.48%	17222
Malahide (Car Occupancy)	8027	63.33%	3185 1.09	25.13%	297	2.34%	53	0.42%	205	1.62%	348	2.75%	559	4.41%	12674
Tallaght (Car Occupancy)	5003	45.44%	2877 1.18	26.13%	120	1.09%	31	0.28%	109	0.99%	387	3.51%	2484	22.56%	11011
Swords/Finglas (Car Occupancy)	8693	54.78%	5360 1.07	33.78%	55	0.35%	175	1.10%	152	0.96%	217	1.37%	1216	7.66%	15868
Rathfarnham (Car Occupancy)	3338	41.97%	3408 1.14	42.85%	107	1.35%	47	0.59%	226	2.84%	361	4.54%	467	5.87%	7954
North Clondalkin (Car Occupancy)	2702	52.95%	2128 1.22	41.70%	51	1.00%	63	1.23%	53	1.04%	31	0.61%	75	1.47%	5103
QBC Totals	49862	51.93%	32897 1.14	34.26%	891	0.93%	1324	1.38%	1317	1.37%	2117	2.20%	7608	7.92%	96016

Table 7a – Non QBC Cordon Points

Mode Share - November 2004																	
Cordon Point	All Bus Pax	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
Dolphins Barn (Car Occupancy)	4208	55.59%			2536 1.18	33.50%	69	0.91%	363	4.80%	72	0.95%	90	1.19%	232	3.06%	7570
Phibsborough Rd (Car Occupancy)	1975	30.38%			3050 1.13	46.91%	110	1.69%	218	3.35%	81	1.25%	143	2.20%	925	14.23%	6502
Charlemount (Car Occupancy)	870	11.48%	4125	54.45%	1687 1.29	22.27%	22	0.29%	18	0.24%	38	0.50%	205	2.71%	611	8.06%	7576
Mount Street (Car Occupancy)	1220	29.99%			2140 1.22	52.61%	53	1.30%	29	0.71%	43	1.06%	108	2.65%	475	11.68%	4068
South Circular Rd (Car Occupancy)	801	18.18%	1497	33.98%	1783 1.27	40.47%	30	0.68%	20	0.45%	38	0.86%	56	1.27%	181	4.11%	4406
Charleville Road (Car Occupancy)	1025	43.84%			1126 1.60	48.16%	16	0.68%	11	0.47%	13	0.56%	29	1.24%	118	5.05%	2338
Baggot Street (Car Occupancy)	628	14.42%			2290 1.20	52.57%	94	2.16%	81	1.86%	80	1.84%	132	3.03%	1051	24.13%	4356
Ballybough Rd (Car Occupancy)	865	13.52%			4813 1.09	75.20%	33	0.52%	57	0.89%	83	1.30%	107	1.67%	442	6.91%	6400
Barrow Street (Car Occupancy)	688	19.02%			2080 1.22	57.51%	71	1.96%	99	2.74%	44	1.22%	139	3.84%	496	13.71%	3617
Clogher Road (Car Occupancy)	203	6.63%			2460 1.20	80.39%	26	0.85%	26	0.85%	37	1.21%	93	3.04%	215	7.03%	3060
Non QBC Totals (Car Occupancy)	12483	25.02%	5622	11.27%	23965 1.19	48.03%	524	1.05%	922	1.85%	529	1.06%	1102	2.21%	4746	9.51%	49893
QBC Totals (Car Occupancy)	49862	51.93%	0		32897 1.14	34.26%	891	0.93%	1324	1.38%	1317	1.37%	2117	2.20%	7608	7.92%	96016
All Bus Crossings (Car Occupancy)	62345	42.73%	5622	3.85%	56862	38.97%	1415	0.97%	2246	1.54%	1846	1.27%	3219	2.21%	12354	8.47%	145909

Table 7b – Non bus Cordon Points & Cordon Totals

Mode Share - November 2004																	
Cordon Point	All Bus Pax	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 (Car Occupancy)		0%			1732 1.18	59.54%	66	2.27%	90	3.09%	49	1.68%	82	2.82%	890	30.59%	2909
Huband Bridge (Car Occupancy)		0%			783 1.91	58.99%	25	1.82%	8	0.58%	44	3.20%	112	8.15%	402	29.26%	1374
Herberton Bridge (Car Occupancy)		0%			2237 1.25	84.38%	48	1.81%	78	2.94%	31	1.17%	84	3.17%	173	6.53%	2651
Kilmainham Lane (Car Occupancy)		0%			828 1.65	83.89%	29	2.94%	14	1.42%	35	3.55%	30	3.04%	51	5.17%	987
Phoenix Park Main (Car Occupancy)		0%			2127 1.18	85.28%	11	0.44%	3	0.12%	105	4.21%	131	5.25%	117	4.69%	2494
Phoenix Park Back (Car Occupancy)		0%			1730 1.30	91.49%	4	0.21%	3	0.16%	21	1.11%	25	1.32%	108	5.71%	1891
Annamore Road (Car Occupancy)		0%			1014 1.69	78.91%	6	0.47%	22	1.71%	14	1.08%	25	1.95%	204	15.88%	1285
Royal Canal Bank (Car Occupancy)		0%			487 2.31	61.57%	19	2.40%	2	0.25%	24	3.03%	56	7.08%	203	25.66%	791
Russell Street (Car Occupancy)		0%			1352 1.40	82.54%	4	0.24%	30	1.83%	19	1.16%	43	2.63%	190	11.60%	1638
Ossory Road (Car Occupancy)		0%			244 2.30	46.30%	5	0.95%	9	1.71%	1	0.19%	46	8.73%	222	42.13%	527
Sheriff St Lower (Car Occupancy)		0%			1865 1.23	83.07%	17	0.76%	109	4.86%	35	1.56%	39	1.74%	180	8.02%	2245
North Wall Quay (Car Occupancy)		0%			649 1.70	49.54%	1	0.08%	439	33.51%	25	1.91%	49	3.74%	147	11.22%	1310
Non Bus Totals (Car Occupancy)	0	0%	0	0%	15065 1.36	74.94%	235	1.17%	807	4.01%	403	2.00%	722	3.59%	2887	14.36%	20102
Non QBC Totals (Car Occupancy)	12483	25.02%	5622	11.27%	23965 1.19	48.03%	524	1.05%	922	1.85%	529	1.06%	1102	2.21%	4746	9.51%	49893
QBC Totals (Car Occupancy)	49862	51.93%	0	0.00%	32897 1.14	34.26%	891	0.93%	1324	1.38%	1317	1.37%	2117	2.20%	7608	7.92%	96016
All Bus Crossings (Car Occupancy)	62345	42.73%	5622	3.85%	56862 1.16	38.97%	1415	0.97%	2246	1.54%	1846	1.27%	3219	2.21%	12354	8.47%	145909
All Crossings (Car Occupancy)	62345	37.55%	5622	3.39%	71927 1.20	43.33%	1650	0.99%	3053	1.84%	2249	1.35%	3941	2.37%	15241	9.18%	166011

10 Final Reports

Comprehensive reports for the performance of each QBC have been prepared.

An example relating to the performance of Stillorgan QBC is presented in this section.

Reports for all QBCs can be obtained from Michael Warnock-Smith of Dublin Transportation Office at the following e-mail address: michaelw@dto.ie.

Each report gives detailed information on the performance indicators as follows:

- Bus journey times in the morning peak, off peak and afternoon/evening peak periods
- Bus speeds
- Comparative bus and car journey times for all time periods
- QBC infrastructure attributes including the level and operational hours of bus priority, the location of pedestrian crossing facilities relative to bus stops and the provision and quality of passenger waiting facilities and information
- Passenger waiting times
- Mode share comparing 2004 with 2003 and 2004 with performance prior to the implementation of bus priority measures
- Quality of the bus fleet including the provision of low floor accessible buses
- Passenger journeys
- Bus occupancy levels
- Passenger satisfaction levels

The codes in the left hand column named “Spec Ref” match the performance indicators set out in the QBC Specification.

Table 8 Stillorgan QBC Final Report

QUALITY BUS CORRIDOR MONITORING ANNUAL REPORT STILLORGAN NOVEMBER 2004					
A	INFRASTRUCTURE OBJECTIVES	PERFORMANCE INDICATORS		NOTES	
1	QBC starts on regional or higher classification road	Start Point	End Point		
		Foxrock Church	Leeson Street		
2	Bus services to have priority access to QBC from lower classification roads	No.of signalised jcts	% prioritised		
		9	0%		
3	Bus journey speeds to be 20kph minimum	Average journey speeds		Foxrock Church to Leeson Street	
	Foxrock Church to Leeson Street	AM Peak Inbound			
		19.25 km/h			
	Foxrock Church to Leeson Street	Off Peak Inbound			
20.91 km/h					
Leeson Street to Foxrock Church	PM Peak Outbound		Leeson Street to Foxrock Church		
	19.20 km/h				
3a	Bus journey speeds to increase by 25% pre and post QBC implementation	Pre QBC average journey speeds		Dublin City Council November 1998	
		AM Peak Inbound	Off Peak Inbound		
	Foxrock Church to Fleet Street	16.17 km/h	N/A	Foxrock Church to Fleet Street	
		PM Peak Outbound			
		18.06 km/h			
			% increase		Comparison not applicable as 1998 data excludes boarding & alighting time
			AM Peak	Off peak	
N/A			N/A		
PM Peak					
		N/A			

**QUALITY BUS CORRIDOR MONITORING ANNUAL REPORT
STILLORGAN
NOVEMBER 2004**

A	INFRASTRUCTURE OBJECTIVES		PERFORMANCE INDICATORS				NOTES
4	Corridor to have segregated bus lanes where physically feasible		% Segregated		% Non Segregated		Foxrock Church to Leeson Street Inbound
			Inbound	Outbound	Inbound	Outbound	
			84%	87%	16%	13%	Leeson Street to Foxrock Church Outbound
5	Bus Journey Times (Average)	AM Peak Inbound	AM Peak				
	Foxrock Church to Leeson Street		28:38				Foxrock Church to Leeson Street
5	Bus Journey Times (Average)	Off Peak Inbound	Off Peak				
	Foxrock Church to Leeson Street		26:45				Foxrock Church to Leeson Street
5	Bus Journey Times (Average)	PM Peak Outbound	PM Peak				
	Leeson Street to Foxrock Church		28:37				Leeson Street to Foxrock Church
5	Comparable Bus v Car Journey Times (Average)	AM Peak Inbound	Bus		Car		
			AM Peak		AM Peak		
	Foxrock Church to Leeson Street		28:38		31:35		Foxrock Church to Leeson Street
5	Comparable Bus v Car Journey Times (Average)	Off Peak Inbound	Bus		Car		
			Off Peak		Off Peak		
	Foxrock Church to Leeson Street		26:45		16:24		Foxrock Church to Leeson Street
5	Comparable Bus v Car Journey Times (Average)	PM Peak Outbound	Bus		Car		
			PM Peak		PM Peak		
	Morehampton Road to Foxrock Church		22:41		29:08		Morehampton Road to Foxrock Church

QUALITY BUS CORRIDOR MONITORING ANNUAL REPORT STILLORGAN NOVEMBER 2004							
A	INFRASTRUCTURE OBJECTIVES		PERFORMANCE INDICATORS				NOTES
5	Bus Sectional Journey Times (Range)	AM Peak	AM Peak				Foxrock Church to Leeson Street
			Low	High			
	Foxrock Church to Leeson Street		20:24	34:12			
5	Bus Sectional Journey Times (Range)	Off Peak	Off Peak				Foxrock Church to Leeson Street
			Low	High			
	Foxrock Church to Leeson Street		24:32	28:18			
5	Bus Sectional Journey Times (Range)	PM Peak	PM Peak				Leeson Street to Foxrock Church
			Low	High			
	Leeson Street to Foxrock Church		20:46	34:15			
5	Comparable Bus v Car Journey Times (Range)	AM Peak	Bus		Car		Foxrock Church to Leeson Street
			AM Peak		AM Peak		
			Low	High	Low	High	
	Foxrock Church to Leeson Street		20:24	34:12	15:49	47:41	
5	Comparable Bus v Car Journey Times (Range)	Off Peak	Bus		Car		Foxrock Church to Leeson Street
			Off Peak		Off Peak		
			Low	High	Low	High	
	Foxrock Church to Leeson Street		24:32	28:18	14:05	23:53	

**QUALITY BUS CORRIDOR MONITORING ANNUAL REPORT
STILLORGAN
NOVEMBER 2004**

A	INFRASTRUCTURE OBJECTIVES	PERFORMANCE INDICATORS				NOTES
5	Comparable Bus v Car Journey Times (Range) PM Peak Morehampton Road to Foxrock Church	Bus		Car		
		PM Peak		PM Peak		
		Low	High	Low	High	
		17:16	27:13	13:38	41:04	Morehampton Road to Foxrock Church
6	Traffic Management Measures to support QBC	No. of Signalised Jcts		% Prioritised		
		31	Inbound	0%		
		31	Outbound			
7	Bus Lanes to operate for 12 hours (0700 to 1900)	% Peak Hours only		% 12 hour		
		0%		93%		
		% 24 hour		% 7-10 & 12-19		
		0%		7%		
7a	Bus Lanes to be clearly defined	% surface marked		% signed		
		98%		100%		
8	Bus stops to be located to minimise walk times	Average distance to Ped X		Maximum distance to Ped X		
		101m		342m		

**QUALITY BUS CORRIDOR MONITORING ANNUAL REPORT
STILLORGAN
NOVEMBER 2004**

A	INFRASTRUCTURE OBJECTIVES	PERFORMANCE INDICATORS		NOTES
9	High quality waiting areas at all high usage stops to include shelters, level platforms, seating, and additional facilities eg cycle parking, telephones & ticket vending m/c's	Total Number of bus shelters		Total Number of bus stops
		40		67
		% with lighting	% with seating	% bus shelters
		95%	90%	
		% with telephones	% with ticket vending	
		5%	0%	
		% with cycle parking	Range of cycle spaces	
		20%	3 to 9	
% level platforms	% fully accessible			
10%	10%			
10	Passenger Information	% shelters with RTPI	% working	% bus shelters
10a	Real Time Passenger Information at high usage stops	0%	N/A	
10b	Fixed Information at bus stops eg route & network maps & timetables	% timetables	% route maps	% bus stops
		88%	0%	
		% network maps	% fares information	
0%	85%			

**QUALITY BUS CORRIDOR MONITORING ANNUAL REPORT
STILLORGAN
NOVEMBER 2004**

B	SERVICE OBJECTIVES	PERFORMANCE INDICATORS		NOTES
1	Passenger Wait Times	Target	Actual	Timings at Donnybrook
1a	Average Peak Wait Time	3 minutes	2:16	
1b	Average Peak Excess Wait Time	Target	Actual	
		2 minutes	0	
1c	Average Off Peak Wait Time	Target	Actual	
		4 minutes	3:10	
1d	Average Off Peak Excess Wait Time	Target	Actual	
		2 minutes	0	
2	Boarding & Alighting time / % of total journey time	AM Peak	Off Peak	Off Peak survey not undertaken
		18.86%	N/K	
C	FLEET OBJECTIVES	PERFORMANCE INDICATORS		NOTES
2	Average Fleet age	Average Fleet age		
		4.89		
2a	Maximum Fleet age	Maximum Fleet age		
		12		
3	QBC to be operated by uniformed staff	% staff uniformed		
		100%		
4	QBC to be operated by low floor buses	% of low floor buses		
		41%		

**QUALITY BUS CORRIDOR MONITORING ANNUAL REPORT
STILLORGAN
NOVEMBER 2004**

C	FLEET OBJECTIVES	PERFORMANCE INDICATORS	NOTES
5	QBC to be operated by branded vehicles	% of branded vehicles	City Swift
		20%	

D	NETWORK PERFORMANCE	PERFORMANCE INDICATORS				NOTES
1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)	% Mode share				Car Occupancy 1.15 from DCC Survey November 2004
		Car		Bus		
		Nov-03	Nov-04	Nov-03	Nov-04	
		29.10%	35.83%	46.76%	47.57%	
		Taxi		Cycle		
		Nov-03	Nov-04	Nov-03	Nov-04	
		1.54%	0.50%	3.36%	2.74%	
		Walking		Total Persons		
		Nov-03	Nov-04	Nov-03	Nov-04	
	17.65%	11.27%	13363	12483		

QUALITY BUS CORRIDOR MONITORING ANNUAL REPORT STILLORGAN NOVEMBER 2004						
D	NETWORK PERFORMANCE	PERFORMANCE INDICATORS				NOTES
2	Assess the before & after impact of QBC on all Modes (Pre & Post QBC Analysis)	% Mode share				November 2004 Cordon Count includes all bus passengers Pre QBC November 1998 Cordon Count includes Dublin Bus passengers only Car Occupancy 1.15 from DCC Survey November 2004
		Car		Bus		
		Pre QBC	Nov-04	Pre QBC	Nov-04	
		54.36%	35.83%	23.78%	47.57%	
		Taxi		Cycle		
		Pre QBC	Nov-04	Pre QBC	Nov-04	
		N/A	0.50%	3.60%	2.74%	
		Walking		Total Persons		
Pre QBC	Nov-04	Pre QBC	Nov-04			
		16.40%	11.27%	10174	12483	
E	ADDITIONAL OBJECTIVES	PERFORMANCE INDICATORS				NOTES
1	Passenger Journeys (Total)	Nov-03		Nov-04		Cordon Counts (0700 - 1000) BAC QBC Designated Routes
		4704		4357		
2	Bus Occupancy Levels (Average)	Peak		Off Peak		Survey at Canal Cordon AM Peak 0800 - 0900 & Donnybrook Off Peak 1015 - 1115
		65		45		
5	Passenger Satisfaction Levels	% Satisfaction				Dublin Bus Survey November 2002
		Reliability		Quality of Service		
		88%		92%		
		Quality of Information		Value for Money		
		N/A		86%		
9	Mobility Impaired Access % Full Accessibility	% buses		% bus stops		
		41%		6%		
		% ped x				
		100%				

11 Sectional Bus and Car Journey Times

Comparative bus and car journey times were calculated for all sections of all QBCs where sufficient robust data was available. Sections where comparisons were either unable to be made or where not appropriate are marked as “N/A”.

Each QBC is split into sections with survey points located at strategic points of each corridor. In particular, survey points are located at the start and end of sections where bus priority has been provided with a view to measuring the effectiveness of the infrastructure on those sections.

Tables 9a to 9i inclusive show the results for the 9 main radial QBCs.

Tables 9j to 9l inclusive show the results for those QBCs monitored for the first time in 2004, namely Ballymun QBC, Bray QBC incorporating the N11 extension from Foxrock to Loughlinstown and Clontarf QBC.

The tables show both the average and the range of bus and car journey times for the morning peak, off peak and afternoon/evening peak periods. Where car journey times exceed bus journey times the results are highlighted in yellow.

These tables should be looked at in conjunction with the bus speed tables which give details of the length of each section and the length of bus priority. **Tables 10a to 10l.**

Table 9a Blanchardstown QBC

Blanchardstown QBC Roadside Survey Results - November 2004									
Sectional Results									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
St Josephs Hospital to Hansfield Road	Average Range	3:57 1:30 to 6:44	6:34 2:46 to 10:37	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Hansfield Road to Shelerin Road	Average Range	7:37 2:03 to 21:33	20:53 2:01 to 49:30	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Shelerin Road Direct to Blanchardstown Rd Sth	Average Range	12:19 4:23 to 18:20	10:26 3:59 to 17:01	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Shelerin Rd via Hansfield to Blakestown Way (39)	Average Range	21:13 19:58 to 22:08	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
St Josephs Hosp direct to Blanchardstown Rd Sth	Average Range	21:24 20:00 to 22:47	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
St Josephs Hosp via Hansfield to Blakestown Way	Average Range	31:27 25:34 to 39:01	N/A N/A	17:28 13:07 to 22:45	N/A N/A	23:20 22:25 to 25:07	N/A N/A	N/A N/A	N/A N/A
Blakestown Way to Rear of Shopping C'tre (Peak)	Average Range	4:15 2:58 to 6:14	7:06 3:26 to 10:33	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Blanchardstown Road South to Coolmine Rd	Average Range	5:09 3:16 to 7:49	N/A N/A	N/A N/A	N/A N/A	3:37 3:05 to 4:15	N/A N/A	N/A N/A	N/A N/A
Rear of Shopping Centre to River Rd R'bt (Peak)	Average Range	4:40 3:14 to 6:06	9:23 2:34 to 15:52	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Coolmine Road to Main Street	Average Range	1:46 1:07 to 2:37	2:07 1:07 to 3:29	3:53 2:14 to 5:12	5:06 4:44 to 5:46	2:18 1:47 to 2:59	2:52 2:07 to 3:37	1:19 1:01 to 1:35	1:35 1:35
Main Street to River Road Roundabout	Average Range	5:03 1:24 to 8:31	3:54 2:57 to 6:38	4:42 3:27 to 8:11	N/A N/A	3:23 2:41 to 4:22	2:57 2:54 to 3:00	4:10 3:26 to 4:54	N/A N/A
River Road Rbt to New River Road	Average Range	5:52 2:04 to 17:06	3:21 1:45 to 7:17	5:20 4:04 to 7:27	5:49 4:03 to 7:20	2:48 1:19 to 4:47	4:27 1:07 to 7:08	4:00 3:19 to 4:43	3:43 2:21 to 6:44
New River Road to Ashtown Roundabout	Average Range	2:27 1:36 to 3:27	2:47 2:11 to 3:44	2:17 1:36 to 3:59	5:48 5:06 to 7:12	1:37 1:37	2:39 2:03 to 3:42	2:48 2:04 to 3:12	3:02 2:51 to 3:12
Ashtown Roundabout to Ratoath Road	Average Range	6:25 3:32 to 9:30	4:48 3:53 to 5:43	12:29 6:36 to 19:05	3:26 2:57 to 4:07	5:30 5:30	3:07 1:27 to 5:01	6:55 4:26 to 7:52	5:46 5:15 to 6:06
Ashtown R'bout to Old Cabra Rd/Nth Circular	Average Range	9:45 7:23 to 13:40	7:34 5:49 to 9:18	12:15 1:38 to 15:29	N/A N/A	6:26 5:49 to 7:04	4:43 2:42 to 6:58	8:38 7:11 to 9:27	N/A N/A

Table 9a Blanchardstown QBC (continued)

Blanchardstown QBC Roadside Survey Results - November 2004									
Sectional Results									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
Ratoath Rd to Old Cabra Rd/North Circular Rd	Average Range	2:59 0:39 to 7:20	2:46 1:56 to 3:35	1:46 1:04 to 3:25	6:53 1:25 to 9:32	2:30 1:34 to 4:29	1:36 1:15 to 1:57	1:43 0:56 to 2:45	1:56 1:42 to 2:22
Old Cabra Rd/North Circular Rd to Manor St	Average Range	4:32 1:37 to 9:36	5:18 1:32 to 10:37	4:01 2:00 to 6:57	3:27 0:58 to 9:27	2:05 1:14 to 2:42	2:07 1:40 to 2:23	2:50 2:17 to 3:24	2:39 1:47 to 3:17
Manor Street to Blackhall Place/Bridge	Average Range	3:07 1:47 to 6:26	2:48 1:38 to 3:25	4:31 2:52 to 7:04	3:09 2:17 to 5:53	1:58 1:27 to 2:22	1:22 1:08 to 1:34	2:52 2:25 to 3:19	2:24 1:53 to 2:54
Blackhall Place to Capel Street	Average Range	8:20 5:22 to 10:58	7:29 5:12 to 8:27	N/A N/A	N/A N/A	8:21 6:10 to 10:34	6:21 5:18 to 6:57	N/A N/A	N/A N/A
Merchants Quay to Manor Street	Average Range	N/A N/A	N/A N/A	6:51 3:59 to 13:26	N/A N/A	N/A N/A	N/A N/A	5:01 4:32 to 5:43	N/A N/A
Capel Street to Tara Street	Average Range	10:02 6:49 to 14:51	N/A N/A	N/A N/A	N/A N/A	7:17 6:11 to 9:46	N/A N/A	N/A N/A	N/A N/A
Hawkins St to Merchants Quay/Winetavern St	Average Range	N/A N/A	N/A N/A	23:02 13:59 to 32:13	N/A N/A	N/A N/A	N/A N/A	16:08 13:19 to 22:20	N/A N/A
Merchants Quay to Blackhall Bridge	Average Range	N/A N/A	N/A N/A	2:39 0:47 to 8:37	5:44 4:27 to 7:07	N/A N/A	N/A N/A	1:52 0:55 to 3:18	3:14 2:38 to 3:37

Table 9b Finglas QBC

Finglas QBC Roadside Survey Results - November 2004									
Sectional Results									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
Mallowes Bridge to Finglas	Average Range	2:39 1:25 to 6:09	1:44 0:50 to 3:32	3:32 1:44 to 6:00	2:15 1:57 to 2:25	1:46 1:03 to 2:24	1:10 0:50 to 1:28	3:53 3:27 to 4:22	3:50 2:07 to 5:34
Finglas to Prospect Road/Whitworth Rd	Average Range	10:39 4:32 to 16:29	16:39 12:38 to 24:52	7:57 5:53 to 10:23	8:30 7:45 to 9:13	8:53 7:46 to 10:21	8:13 5:53 to 10:46	7:09 5:35 to 8:17	7:39 7:29 to 7:49
Whitworth Rd to Dorset Street Lower	Average Range	5:14 3:07 to 9:11	N/A N/A	9:43 3:42 to 16:20	7:02 5:37 to 9:50	4:16 2:32 to 6:24	2:39 2:39	4:28 2:16 to 6:07	N/A N/A
Dorset Street to Frederick St North	Average Range	3:15 1:45 to 4:34	N/A N/A	N/A N/A	N/A N/A	4:27 1:10 to 6:52	N/A N/A	N/A N/A	N/A N/A
Dorset Street to Parnell Square East	Average Range	4:17 2:46 to 5:03	N/A N/A	N/A N/A	N/A N/A	5:53 3:45 to 8:57	N/A N/A	N/A N/A	N/A N/A
Frederick St North to Parnell Square East	Average Range	1:30 0:42 to 3:38	N/A N/A	N/A N/A	N/A N/A	1:52 0:29 to 3:36	N/A N/A	N/A N/A	N/A N/A
Parnell Street to Dorset Street	Average Range	N/A N/A	N/A N/A	9:43 6:08 to 16:41	N/A N/A	N/A N/A	N/A N/A	6:22 4:03 to 8:05	N/A N/A

Table 9c Lucan QBC

Lucan QBC Roadside Survey Results - November 2004									
Sectional Results - Journey Times									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
Lucan Superquinn to Penny Hill Pub	Average Range	17:04 10:49 to 23:04	N/A N/A	18:35 14:38 to 20:54	N/A N/A	17:06 15:48 to 18:25	N/A N/A	9:56 7:39 to 12:13	N/A N/A
Penny Hill Pub to Foxhunter	Average Range	7:30 3:13 to 11:24	6:30 3:14 to 8:58	5:05 4:05 to 6:24	3:36 3:02 to 4:15	5:06 4:09 to 6:04	3:42 2:49 to 4:31	3:28 2:32 to 4:08	2:21 2:01 to 2:49
Foxhunter to West of M50	Average Range	3:33 1:57 to 6:46	6:15 1:40 to 10:15	3:18 2:01 to 5:13	2:09 1:27 to 4:20	2:27 2:02 to 3:02	1:33 1:17 to 2:41	2:01 1:44 to 2:17	1:46 1:25 to 4:40
West of M50 to Palmerston	Average Range	4:30 3:03 to 6:10	3:50 2:13 to 8:00	4:32 2:31 to 6:24	3:35 2:12 to 5:56	3:39 3:00 to 4:29	2:30 2:02 to 3:16	4:03 3:26 to 5:16	3:22 2:02 to 7:09
West of M50 to Chapelizod Slip Rd	Average Range	5:31 3:57 to 7:22	4:12 3:14 to 4:56	7:36 4:53 to 10:18	N/A N/A	4:34 3:42 to 5:41	2:58 2:28 to 3:40	5:35 4:25 to 6:37	N/A N/A
Palmerston to Chapelizod Slip Rd	Average Range	1:04 0:19 to 3:17	0:37 0:14 to 5:20	2:40 1:12 to 4:40	4:54 1:04 to 8:45	0:49 0:25 to 1:12	0:27 0:17 to 1:22	1:27 0:54 to 1:56	2:06 0:57 to 7:24
Chapelizod Slip Rd to Conyngham Road	Average Range	10:23 6:11 to 17:43	N/A N/A	9:24 6:57 to 13:00	13:50 5:23 to 20:09	6:43 4:57 to 7:30	N/A N/A	7:17 5:43 to 9:00	7:22 6:43 to 7:53
Chapelizod Slip Rd to Con Colbert Rd	Average Range	3:48 3:02 to 6:05	4:50 2:28 to 11:17	N/A N/A	8:14 5:08 to 13:38	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Con Colbert Road to Heuston Station	Average Range	3:01 2:10 to 5:04	4:56 3:16 to 6:36	3:23 2:29 to 5:18	3:18 2:13 to 4:27	2:28 2:09 to 2:41	2:59 2:19 to 3:29	N/A N/A	N/A N/A
Heuston Station to Ellis Quay	Average Range	4:25 3:06 to 5:53	4:31 1:57 to 6:47	N/A N/A	N/A N/A	2:47 2:20 to 3:13	3:02 2:15 to 3:54	N/A N/A	N/A N/A

Table 9c Lucan QBC (continued)

Lucan QBC Roadside Survey Results - November 2004									
Sectional Results - Journey Times									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
Conyngham Road to Parkgate Street	Average Range	2:24 1:02 to 3:52	2:36 1:40 to 2:56	N/A N/A	N/A N/A	2:26 2:10 to 2:46	1:48 1:15 to 2:17	N/A N/A	N/A N/A
Con Colbert Road to Ellis Quay	Average Range	7:08 4:57 to 8:43	8:41 5:20 to 12:29	N/A N/A	N/A N/A	5:42 5:26 to 5:56	4:57 4:48 to 5:06	N/A N/A	N/A N/A
Parkgate Street to Ellis Quay	Average Range	3:32 2:08 to 4:55	4:43 2:47 to 7:36	N/A N/A	N/A N/A	3:39 2:32 to 4:29	2:44 2:19 to 3:03	N/A N/A	N/A N/A
Ellis Quay to Arran Quay	Average Range	2:53 0:53 to 5:42	2:59 2:03 to 4:44	N/A N/A	N/A N/A	3:16 1:24 to 4:57	2:34 2:21 to 2:45	N/A N/A	N/A N/A
Arran Quay to Bachelors Walk	Average Range	5:56 3:36 to 10:23	6:22 3:49 to 9:36	N/A N/A	N/A N/A	5:23 4:11 to 7:51	6:14 5:54 to 6:34	N/A N/A	N/A N/A
Wellington Quay to Merchants Quay	Average Range	N/A N/A	N/A N/A	5:41 1:41 to 13:17	5:21 4:16 to 6:38	N/A N/A	N/A N/A	3:54 2:42 to 5:25	4:08 3:13 to 5:01
Merchants Quay to Heuston Station	Average Range	N/A N/A	N/A N/A	3:09 1:22 to 6:04	7:20 4:32 to 10:29	N/A N/A	N/A N/A	3:38 2:20 to 6:40	4:38 3:47 to 5:49
Merchants Quay to Conyngham Road	Average Range	N/A N/A	N/A N/A	6:46 4:16 to 11:16	10:06 8:16 to 11:31	N/A N/A	N/A N/A	5:56 4:46 to 8:55	5:37 3:27 to 7:00

Table 9d Malahide QBC

Malahide QBC Roadside Survey Results - November 2004									
Sectional Results									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
Clare Hall to Priorswood Road	Average Range	3:05 1:13 to 5:12	2:28 1:57 to 3:16	4:18 3:36 to 5:52	3:22 1:48 to 6:10	3:08 2:40 to 3:35	3:20 1:50 to 6:42	2:37 2:29 to 2:48	3:06 2:10 to 3:40
Priorswood Rd to Greencastle Rd (Direct)	Average Range	1:38 0:43 to 2:36	2:10 1:19 to 2:36	4:15 2:47 to 7:34	2:35 1:21 to 6:03	1:08 1:08	1:49 0:53 to 2:51	N/A N/A	2:11 1:08 to 3:42
Priorswood Rd to Greencastle Rd (Darndale)	Average Range	17:50 13:34 to 22:47	N/A N/A	13:40 9:58 to 16:34	N/A N/A	16:15 12:34 to 19:13	N/A N/A	14:44 13:37 to 17:34	N/A N/A
Greencastle Road to North of Kilmore Road	Average Range	5:57 3:58 to 13:28	4:11 3:11 to 5:46	5:54 2:51 to 9:04	6:05 3:04 to 12:55	4:22 4:05 to 4:59	4:37 1:16 to 9:46	5:46 4:28 to 7:29	4:40 2:14 to 9:20
North of Kilmore Road to St Davids Wood	Average Range	24:24 0:33 to 44:32	25:58 0:14 to 49:01	N/A N/A	N/A N/A	0:42 0:10 to 1:35	0:29 0:07 to 2:16	N/A N/A	N/A N/A
St Davids Wood to Collins Avenue	Average Range	2:30 0:38 to 7:59	3:34 0:18 to 9:20	N/A N/A	N/A N/A	1:39 1:07 to 2:21	1:03 0:33 to 2:11	N/A N/A	N/A N/A
Collins Avenue to Casino Park	Average Range	6:29 2:32 to 11:54	4:52 1:04 to 11:19	N/A N/A	N/A N/A	1:33 0:26 to 2:52	1:16 0:33 to 2:09	N/A N/A	N/A N/A
Casino Park to Fairview	Average Range	1:54 0:52 to 3:41	1:42 0:46 to 4:36	N/A N/A	N/A N/A	4:25 3:58 to 4:51	3:59 3:08 to 4:57	N/A N/A	N/A N/A
Fairview to Amiens Street/North Strand	Average Range	5:33 2:07 to 11:45	8:12 3:11 to 10:38	7:19 3:23 to 15:04	5:14 2:54 to 9:13	2:58 1:43 to 5:08	1:47 0:57 to 2:33	4:14 2:55 to 5:47	2:55 1:47 to 3:53
Amiens Street/North Strand to Talbot Street	Average Range	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Collins Avenue to Kilmore Road	Average Range	29:46 1:50 to 46:18	37:05 4:21 to 57:44	5:10 1:54 to 11:59	6:07 0:41 to 13:51	2:26 1:17 to 3:56	1:34 0:55 to 2:32	3:09 2:13 to 4:58	2:40 0:43 to 4:28
Griffith Avenue to Collins Avenue	Average Range	N/A N/A	N/A N/A	3:34 1:23 to 7:09	4:17 1:07 to 10:53	N/A N/A	N/A N/A	3:23 1:30 to 5:16	2:10 1:19 to 2:55
Fairview to Griffith Avenue	Average Range	N/A N/A	N/A N/A	4:18 2:29 to 7:47	5:21 2:11 to 8:22	N/A N/A	N/A N/A	3:49 2:13 to 5:08	2:33 1:34 to 3:18

Table 9e North Clondalkin QBC

North Clondalkin QBC Roadside Survey Results - November 2004									
Sectional Results									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
Fonhill Road North to Fonhill Road South	Average Range	3:06 1:18 to 6:03	2:31 1:40 to 4:01	2:49 1:43 to 3:54	2:02 0:52 to 3:49	2:27 2:05 to 2:52	1:52 1:26 to 2:37	2:40 2:06 to 3:28	1:51 1:25 to 2:54
Fonhill Road South to Coldcut Road	Average Range	12:18 10:54 to 14:41	N/A N/A	10:10 8:03 to 12:09	N/A N/A	8:20 8:20	N/A N/A	10:06 9:57 to 10:14	N/A N/A
Coldcut Road to Ballyfermot/Le Fanu	Average Range	5:34 2:18 to 10:18	4:45 2:54 to 7:46	23:26 4:11 to 38:43	21:06 8:53 to 28:50	3:10 2:31 to 4:22	3:38 2:31 to 4:23	3:30 2:39 to 4:10	2:53 2:37 to 3:09
Ballyfermot/Le Fanu to Ballyfermot/Kylemore	Average Range	4:10 2:42 to 6:21	3:10 1:56 to 5:57	8:57 2:31 to 15:12	7:10 4:41 to 10:34	4:32 3:47 to 5:32	2:29 1:58 to 3:41	3:42 2:56 to 4:17	3:48 3:00 to 5:06
Ballyfermot/Kylemore to Emmet Road	Average Range	7:00 3:13 to 9:39	6:47 3:57 to 11:34	9:13 6:32 to 11:42	6:30 3:25 to 14:29	5:09 4:14 to 6:00	3:57 2:09 to 4:59	6:36 5:40 to 8:13	5:17 3:50 to 8:11
Emmet Rd to South Circular Road	Average Range	3:01 1:40 to 6:14	1:49 0:42 to 3:36	4:45 3:22 to 7:42	4:36 1:45 to 6:53	3:10 2:05 to 4:48	1:34 0:52 to 2:15	3:12 2:47 to 3:36	2:17 1:36 to 3:38
South Circular Road to Mount Brown/James St	Average Range	2:46 1:20 to 6:15	2:25 1:09 to 3:42	10:38 2:47 to 18:47	6:09 2:53 to 7:50	2:36 1:10 to 3:59	3:51 1:52 to 6:57	4:51 3:58 to 6:01	5:25 4:29 to 6:52
Mount Brown / James St to Cornmarket	Average Range	3:44 2:10 to 6:09	3:32 2:15 to 5:24	3:48 1:42 to 5:40	2:10 1:26 to 3:13	5:02 2:51 to 7:04	3:03 2:05 to 4:04	2:55 0:45 to 4:50	1:28 1:00 to 1:55
Cornmarket to Westmoreland Street	Average Range	9:54 7:12 to 13:20	N/A N/A	N/A N/A	N/A N/A	7:51 5:36 to 10:31	N/A N/A	N/A N/A	N/A N/A
Aston Quay to Bridge Street	Average Range	N/A N/A	N/A N/A	6:20 2:56 to 12:13	6:18 5:15 to 7:14	N/A N/A	N/A N/A	3:36 2:23 to 4:29	4:43 4:22 to 4:54
Bridge Street to Cornmarket	Average Range	N/A N/A	N/A N/A	3:40 1:55 to 7:04	2:03 1:39 to 2:31	N/A N/A	N/A N/A	2:18 0:45 to 7:01	0:47 0:17 to 1:25

Table 9f Rathfarnham QBC

Rathfarnham QBC Roadside Survey Results - November 2004									
Sectional Results									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
Dundrum Road to Nutgrove Ave Terminus	Average Range	3:08 1:36 to 5:19	2:47 1:25 to 8:53	1:36 0:57 to 2:37	1:40 0:36 to 3:51	3:09 2:29 to 3:40	2:54 2:05 to 4:02	1:45 1:43 to 1:46	1:33 0:44 to 2:38
Nutgrove Ave Terminus to Oakdown Road	Average Range	1:04 0:28 to 2:11	0:26 0:14 to 0:49	1:50 1:10 to 2:36	1:40 0:29 to 4:51	0:57 0:26 to 1:23	0:27 0:13 to 0:48	1:35 0:41 to 2:50	1:09 0:24 to 3:36
Oakdown Rd to R'nham Rd/Butterfield Avenue	Average Range	6:43 4:06 to 9:59	10:20 4:01 to 16:37	5:36 3:28 to 7:43	N/A N/A	4:42 2:52 to 5:37	7:26 3:25 to 10:22	4:46 1:47 to 6:28	N/A N/A
Rathfarnham Road to Butterfield Avenue	Average Range	N/A N/A	N/A N/A	0:34 0:08 to 0:53	0:32 0:09 to 1:33	N/A N/A	N/A N/A	0:56 0:15 to 2:20	2:11 0:12 to 4:09
Rathfarnham Road to Brookvale Road	Average Range	1:41 0:32 to 3:52	3:07 0:28 to 4:52	N/A N/A	N/A N/A	1:00 0:31 to 2:08	0:56 0:30 to 1:32	N/A N/A	N/A N/A
Terenure Road North to Rathfarnham Road	Average Range	N/A N/A	N/A N/A	7:24 4:40 to 9:45	6:52 3:48 to 8:14	N/A N/A	N/A N/A	4:28 2:31 to 5:58	2:51 2:35 to 3:06
Brookvale Road to Terenure Road East	Average Range	2:56 1:00 to 4:48	4:10 1:59 to 9:33	N/A N/A	N/A N/A	1:53 1:07 to 3:19	1:58 1:26 to 2:58	N/A N/A	N/A N/A
Whitton Road to Terenure Road North	Average Range	N/A N/A	N/A N/A	2:14 1:00 to 4:05	2:36 0:32 to 6:06	N/A N/A	N/A N/A	1:57 1:03 to 3:19	1:54 1:05 to 3:46
Terenure Road East to Mount Tallant Avenue	Average Range	3:21 1:25 to 5:50	2:00 0:29 to 4:44	N/A N/A	N/A N/A	2:48 2:07 to 3:49	1:28 0:29 to 2:15	N/A N/A	N/A N/A
Leinster Road to Terenure Rd North	Average Range	N/A N/A	N/A N/A	5:38 3:05 to 8:39	4:58 2:46 to 8:31	N/A N/A	N/A N/A	4:08 2:29 to 5:43	2:57 1:47 to 3:48
Harolds Cross/Leinster Rd to Whitton Road	Average Range	N/A N/A	N/A N/A	3:31 1:37 to 5:53	2:28 0:53 to 5:18	N/A N/A	N/A N/A	1:52 0:54 to 3:23	1:24 0:39 to 2:22
Mount Tallant Avenue to Leinster Road West	Average Range	4:03 1:54 to 8:29	3:27 1:14 to 9:50	N/A N/A	N/A N/A	2:31 1:46 to 3:15	2:10 0:49 to 3:22	N/A N/A	N/A N/A

Table 9f Rathfarnham QBC (continued)

Rathfarnham QBC Roadside Survey Results - November 2004									
Sectional Results									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
Leinster Road West to Harolds Cross Road	Average Range	3:16 0:42 to 8:17	3:55 0:31 to 10:21	N/A N/A	N/A N/A	1:33 1:15 to 1:54	0:54 0:24 to 1:56	N/A N/A	N/A N/A
Canal to Harolds Cross/Leinster Rd	Average Range	N/A N/A	N/A N/A	4:43 1:59 to 7:22	4:41 1:43 to 7:20	N/A N/A	N/A N/A	2:25 1:58 to 3:22	1:53 1:11 to 3:50
Harolds Cross/Leinster Rd to Clanbrassil St	Average Range	3:23 1:55 to 5:41	5:16 1:45 to 9:51	N/A N/A	N/A N/A	2:33 1:38 to 3:27	1:53 0:56 to 2:32	N/A N/A	N/A N/A
Clanbrassil Street to Canal	Average Range	N/A N/A	N/A N/A	4:27 1:50 to 6:56	5:15 2:45 to 7:56	N/A N/A	N/A N/A	2:59 1:40 to 4:13	2:20 1:52 to 3:05
Clanbrassil Street to South Circular Road	Average Range	2:23 1:32 to 5:06	2:03 0:52 to 4:23	1:38 0:31 to 2:59	2:44 0:20 to 7:27	2:06 0:44 to 3:07	1:53 1:02 to 2:55	0:36 0:16 to 0:57	0:29 0:12 to 0:52
Clanbrassil Street/Canal to Dean Street	Average Range	6:18 2:09 to 13:28	6:37 2:14 to 12:47	5:10 3:50 to 8:06	4:04 2:18 to 8:05	2:09 1:29 to 2:25	4:39 3:35 to 6:06	4:09 3:55 to 4:30	3:53 3:53
Dean St to Westmoreland St/College Green	Average Range	12:14 8:24 to 15:32	N/A N/A	12:41 8:45 to 16:07	10:05 6:57 to 18:38	7:18 6:54 to 7:54	N/A N/A	6:22 5:24 to 7:20	5:19 4:27 to 6:10
South Circular Road to Camden Street	Average Range	5:58 2:03 to 14:13	3:35 2:05 to 5:30	6:18 3:43 to 9:23	6:18 1:06 to 8:56	3:46 1:06 to 4:47	3:32 2:21 to 4:55	4:07 3:19 to 6:20	6:41 2:42 to 10:31
Camden Street to Bishop Street	Average Range	2:55 0:54 to 5:23	2:52 1:18 to 4:30	3:22 1:12 to 6:02	2:33 1:20 to 3:58	2:52 1:34 to 5:13	3:14 2:04 to 3:53	2:52 1:43 to 3:57	2:28 0:58 to 3:44
Camden Street to Stephen Street	Average Range	4:01 2:02 to 5:57	3:52 1:45 to 5:21	N/A N/A	N/A N/A	4:00 2:37 to 6:11	3:54 2:40 to 4:40	N/A N/A	N/A N/A
Camden St to W'land St/College Green	Average Range	8:38 5:16 to 11:47	N/A N/A	8:17 4:47 to 12:05	7:52 3:28 to 10:18	9:30 8:33 to 10:55	N/A N/A	6:48 5:34 to 9:25	5:22 4:29 to 6:15
Bishop Street to Stephen Street	Average Range	1:13 0:25 to 2:50	0:46 0:17 to 1:31	N/A N/A	N/A N/A	1:07 0:34 to 1:48	0:55 0:34 to 1:15	N/A N/A	N/A N/A
Bishop St to Westmoreland St/College Gn	Average Range	6:08 3:45 to 8:42	N/A N/A	4:50 2:48 to 10:06	5:40 1:26 to 8:28	6:45 5:21 to 8:41	N/A N/A	3:57 2:27 to 5:29	3:01 2:21 to 3:38
Stephen Street to Westmoreland Street	Average Range	4:43 2:52 to 6:54	N/A N/A	N/A N/A	N/A N/A	5:41 4:03 to 6:53	N/A N/A	N/A N/A	N/A N/A

Table 9g Stillorgan QBC

Stillorgan QBC Roadside Survey Results November 2004									
Sectional Results									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
Dun Laoghaire Station to Oliver Plunkett Road	Average Range	8:03 5:58 to 17:30	N/A N/A	5:54 2:09 to 9:31	N/A N/A	12:16 10:47 to 14:38	N/A N/A	7:19 6:00 to 8:32	N/A N/A
Oliver Plunkett Road to Abbey Road	Average Range	4:45 3:19 to 6:38	N/A N/A	4:40 2:40 to 7:19	N/A N/A	5:03 3:12 to 7:00	N/A N/A	4:44 3:38 to 5:38	N/A N/A
Abbey Road to Foxrock Church	Average Range	7:30 4:24 to 12:01	N/A N/A	7:01 3:54 to 8:34	N/A N/A	5:45 4:22 to 7:39	N/A N/A	6:28 4:33 to 8:30	N/A N/A
Oliver Plunkett Road to Foxrock Church	Average Range	12:04 8:43 to 18:39	N/A N/A	11:42 9:43 to 13:19	N/A N/A	10:48 7:34 to 13:31	N/A N/A	11:33 8:59 to 13:41	N/A N/A
Dun Laoghaire to Foxrock Church	Average Range	20:46 14:41 to 31:16	N/A N/A	17:24 15:03 to 22:50	N/A N/A	23:04 19:59 to 28:09	N/A N/A	16:59 16:59	N/A N/A
Foxrock Church to Mount Merrion Avenue	Average Range	10:03 6:41 to 13:38	11:35 5:35 to 20:46	10:00 6:35 to 12:33	8:35 7:10 to 10:39	9:33 6:43 to 12:14	3:29 2:42 to 4:16	8:55 4:41 to 11:00	8:00 7:07 to 8:30
Mount Merrion Avenue to Donnybrook	Average Range	9:08 4:56 to 14:10	8:30 5:03 to 16:23	8:11 4:34 to 12:31	8:42 6:54 to 11:18	8:07 6:55 to 9:39	5:02 4:34 to 6:12	6:35 4:54 to 7:57	6:18 5:14 to 7:05
Donnybrook to Morehampton Road	Average Range	3:44 1:49 to 6:40	6:59 3:05 to 13:44	4:12 2:22 to 7:08	4:31 3:43 to 6:06	3:59 1:51 to 6:09	3:39 3:06 to 4:16	4:13 2:50 to 5:38	3:54 3:29 to 4:29
Morehampton Road to Leeson Street	Average Range	5:42 3:26 to 8:25	4:05 1:40 to 7:12	6:17 2:59 to 10:12	5:44 4:41 to 7:30	5:12 4:00 to 6:24	4:29 3:11 to 6:23	4:16 3:17 to 5:30	2:28 2:11 to 2:46
Donnybrook to Leeson Street	Average Range	9:30 5:31 to 12:41	N/A N/A	10:30 6:47 to 19:07	N/A N/A	8:41 6:00 to 10:27	N/A N/A	8:32 6:07 to 10:39	N/A N/A

Table 9g Stillorgan QBC (continued)

Stillorgan QBC Roadside Survey Results November 2004									
Sectional Results									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
Foxrock Church to Leeson Street	Average	28:38	31:35	28:37	N/A	26:45	16:24	24:48	N/A
	Range	20:24 to 34:12	15:49 to 47:41	20:46 to 34:15	N/A	24:32 to 28:18	14:05 to 23:53	21:39 to 26:32	N/A
Foxrock Church to Morehampton Road	Average	23:14	N/A	22:41	29:08	21:44	N/A	19:37	18:12
	Range	18:15 to 28:20	N/A	17:16 to 27:13	13:38 to 41:04	18:28 to 24:13	N/A	13:53 to 22:51	13:43 to 22:42
Leeson St to D'Olier/W'moreland Street	Average	7:31	N/A	9:04	N/A	7:54	N/A	7:46	N/A
	Range	4:17 to 14:13	N/A	5:57 to 14:21	N/A	6:09 to 9:41	N/A	6:33 to 9:21	N/A
Foxrock Church to Westmoreland Street	Average	37:18	N/A	37:54	N/A	34:05	N/A	33:23	N/A
	Range	27:49 to 42:52	N/A	28:09 to 44:56	N/A	31:47 to 36:23	N/A	32:13 to 34:34	N/A
Dun Laoghaire to Westmoreland Street	Average	58:04	N/A	58:08	N/A	57:09	N/A	51:59	N/A
	Range	50:15 to 66:32	N/A	49:42 to 67:04	N/A	51:46 to 64:32	N/A	49:33 to 54:20	N/A

Table 9h Swords QBC

Swords QBC Roadside Survey Results - November 2004									
Sectional Results									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
County Council to Swords Main Street	Average Range	1:49 0:27 to 3:05	0:55 0:28 to 2:27	1:46 0:38 to 6:41	1:40 0:41 to 3:19	2:12 1:12 to 2:41	1:19 0:38 to 2:22	3:37 2:04 to 5:51	2:53 1:17 to 4:47
Swords Main Str to Airside Business Pk	Average Range	4:26 2:45 to 6:22	4:08 2:25 to 5:11	5:38 3:27 to 7:01	4:01 1:48 to 7:27	4:47 4:05 to 5:28	2:36 2:15 to 2:54	4:34 3:39 to 5:30	5:28 2:18 to 7:10
Airside Business Pk to Cloghran R'bout	Average Range	3:25 2:12 to 5:09	2:42 1:40 to 3:43	2:29 2:00 to 3:24	2:14 1:28 to 4:33	2:35 2:09 to 3:14	2:20 1:37 to 3:26	2:48 1:59 to 4:32	2:36 1:34 to 5:50
County Council to Cloghran R'bout	Average Range	9:42 7:19 to 11:41	N/A N/A	9:37 6:08 to 12:24	N/A N/A	11:19 11:19	N/A N/A	12:10 10:33 to 13:47	N/A N/A
Cloghran Rbt to Airport South (Not via Airport)	Average Range	9:15 4:59 to 11:56	7:37 5:15 to 9:42	4:52 2:42 to 7:54	5:02 3:44 to 6:32	N/A N/A	4:14 3:36 to 4:52	6:20 5:11 to 6:57	3:54 3:32 to 4:37
Cloghran Rbt to Airport South (Via Airport)	Average Range	19:36 14:07 to 25:55	N/A N/A	N/A N/A	N/A N/A	13:53 12:46 to 15:00	N/A N/A	N/A N/A	N/A N/A
Airport South to Omni Park	Average Range	8:18 3:59 to 13:59	7:13 5:03 to 11:47	8:05 3:44 to 12:04	6:59 5:39 to 8:22	3:56 3:03 to 4:48	4:56 4:34 to 5:28	8:32 7:15 to 9:49	4:39 4:23 to 5:03
Omni Park to Collins Avenue	Average Range	13:40 7:06 to 21:01	6:50 4:58 to 12:36	9:12 3:37 to 18:45	5:55 4:45 to 7:26	8:26 5:53 to 11:38	4:59 4:28 to 5:39	8:22 4:04 to 12:40	4:43 4:36 to 4:48
Collins Ave to Richmond Rd/Botanic Ave	Average Range	5:45 2:54 to 8:17	9:32 3:27 to 17:45	6:14 3:59 to 8:06	5:58 3:01 to 11:00	5:26 4:09 to 7:27	7:54 3:10 to 12:28	5:54 4:56 to 7:06	5:08 4:22 to 6:26

Table 9h Swords QBC (continued)

Swords QBC Roadside Survey Results - November 2004									
Sectional Results									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
Richmond Rd/Botanic Ave to Dorset St Lwr	Average Range	5:47 3:17 to 8:35	5:26 2:52 to 9:06	5:39 2:53 to 9:24	4:18 2:02 to 8:14	4:16 2:29 to 5:43	3:06 2:17 to 3:47	3:17 2:26 to 5:07	2:29 1:53 to 3:53
Dorset St Lwr to Frederick Street North	Average Range	3:59 1:38 to 6:47	N/A N/A	N/A N/A	N/A N/A	3:23 2:11 to 5:16	N/A N/A	N/A N/A	N/A N/A
Frederick Street North to O'Connell St	Average Range	3:59 1:32 to 6:21	N/A N/A	N/A N/A	N/A N/A	4:37 1:41 to 8:02	N/A N/A	N/A N/A	N/A N/A
Richmond Rd to O'Connell Street	Average Range	14:38 10:37 to 21:42	N/A N/A	16:14 9:53 to 25:25	N/A N/A	13:01 8:21 to 18:10	N/A N/A	13:28 12:23 to 14:22	N/A N/A
Lwr Abbey St to Dorset St Lower/North Circular	Average Range	N/A N/A	N/A N/A	8:29 4:43 to 11:53	N/A N/A	N/A N/A	N/A N/A	7:53 7:04 to 8:21	N/A N/A
O'Connell Street to Parnell Square West	Average Range	N/A N/A	N/A N/A	3:57 1:15 to 10:15	5:54 5:23 to 6:22	N/A N/A	N/A N/A	3:48 2:06 to 6:55	3:50 3:26 to 4:07
Parnell Square West to Granby Row	Average Range	N/A N/A	N/A N/A	3:06 0:55 to 9:19	4:34 2:39 to 6:03	N/A N/A	N/A N/A	1:27 0:31 to 2:40	2:18 1:40 to 2:55
Granby Row to Blessington Street	Average Range	N/A N/A	N/A N/A	1:23 0:15 to 4:03	2:34 1:07 to 5:05	N/A N/A	N/A N/A	1:18 0:28 to 2:23	1:39 1:03 to 2:30
Blessington Street to Dorset St Lwr/N Circular	Average Range	N/A N/A	N/A N/A	1:46 0:23 to 3:46	2:11 0:47 to 4:14	N/A N/A	N/A N/A	2:03 0:43 to 3:09	1:33 0:54 to 2:27

Table 9i Tallaght QBC

Tallaght QBC Roadside Survey Results - November 2004									
Sectional Results									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
Tallaght Bypass to Main Street	Average Range	16:58 8:53 to 25:55	9:07 6:15 to 11:18	17:59 13:55 to 20:52	N/A N/A	18:13 17:31 to 18:55	9:12 8:13 to 10:10	16:47 14:24 to 20:06	N/A N/A
Main Street to West M50	Average Range	4:27 2:30 to 5:29	4:29 2:42 to 5:41	7:36 4:17 to 13:07	5:38 3:55 to 7:14	1:53 1:38 to 2:05	3:51 3:15 to 4:39	4:35 4:23 to 4:47	4:27 3:31 to 5:12
West M50 to East M50	Average Range	3:49 1:19 to 7:12	4:37 1:41 to 6:30	4:19 1:45 to 5:58	4:35 1:30 to 11:35	1:54 1:33 to 2:18	3:09 2:47 to 3:47	2:59 2:47 to 3:11	3:12 2:24 to 3:47
East M50 to Oldbridge Road	Average Range	3:30 2:18 to 4:29	5:05 3:57 to 8:26	6:25 3:11 to 12:16	4:30 1:43 to 9:29	2:18 2:12 to 2:24	4:16 3:33 to 5:06	4:01 3:49 to 4:13	3:36 3:15 to 4:31
Oldbridge Road to Fortfield Road	Average Range	2:41 1:30 to 3:46	2:41 1:38 to 3:58	4:33 2:32 to 7:22	5:08 2:30 to 8:03	2:26 2:06 to 3:35	2:18 1:34 to 3:09	3:42 2:16 to 5:17	2:26 1:37 to 4:16
Fortfield Road to Rathdown Park	Average Range	1:48 0:58 to 2:40	0:52 0:24 to 1:28	1:45 0:59 to 5:30	1:50 0:49 to 5:12	1:34 1:16 to 1:50	3:22 2:03 to 5:29	1:25 0:57 to 2:23	1:45 0:56 to 2:27
Rathdown Park to Terenure Road East	Average Range	8:06 5:04 to 10:09	10:12 3:19 to 15:48	2:56 0:57 to 4:53	2:57 1:30 to 4:59	4:55 1:15 to 6:09	5:17 3:16 to 7:08	1:47 1:28 to 2:18	1:10 0:37 to 2:11
Terenure Road East to Rathgar Road	Average Range	2:20 1:01 to 3:53	3:54 0:39 to 12:18	8:48 5:43 to 14:06	8:03 3:48 to 14:22	2:08 1:16 to 3:43	0:58 0:41 to 1:17	6:36 5:15 to 8:20	4:31 3:59 to 5:15
Rathgar Road to Leinster Road	Average Range	7:08 1:30 to 15:49	6:22 1:07 to 15:39	1:53 1:01 to 2:55	1:14 0:25 to 2:17	2:06 1:12 to 2:51	1:42 0:36 to 5:07	1:44 0:44 to 2:47	1:24 0:38 to 2:43
Leinster Road to Canal	Average Range	3:08 0:28 to 5:40	5:28 3:42 to 8:18	2:56 0:57 to 5:40	2:03 1:04 to 3:53	1:55 0:48 to 2:31	1:32 0:47 to 2:32	2:32 1:07 to 4:26	1:39 1:17 to 2:05

Table 9i Tallaght QBC (continued)

Tallaght QBC Roadside Survey Results - November 2004									
Sectional Results									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
Canal to Camden Street	Average Range	3:51 1:58 to 5:54	3:52 1:42 to 6:09	4:39 3:04 to 7:14	5:35 3:24 to 9:13	2:25 1:22 to 3:36	2:36 1:18 to 3:12	4:25 3:26 to 5:40	3:58 3:04 to 5:04
Camden Street to Dame Street	Average Range	6:49 3:50 to 12:40	N/A N/A	6:48 5:04 to 9:21	6:16 4:15 to 9:22	7:53 5:12 to 15:49	N/A N/A	5:13 4:27 to 6:11	3:50 3:14 to 4:13
Dame Street to Tara St / Eden Quay	Average Range	7:45 2:17 to 14:06	N/A N/A	7:17 6:11 to 8:53	N/A N/A	4:41 4:04 to 5:18	N/A N/A	4:28 4:15 to 4:38	N/A N/A

Table 9j Ballymun QBC

Ballymun QBC Roadside Survey Results - November 2004									
Sectional Results									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
Civic Centre to Griffith Avenue	Average Range	7:53 4:13 to 11:36	8:58 3:08 to 20:12	5:52 2:18 to 7:52	4:40 2:06 to 7:50	5:19 4:50 to 5:49	3:41 2:24 to 8:45	9:40 6:05 to 13:49	4:37 2:42 to 8:31
Griffith Avenue to Botanic Avenue	Average Range	2:15 1:08 to 3:45	3:08 0:39 to 8:23	N/A N/A	N/A N/A	1:08 0:51 to 1:26	1:09 0:46 to 1:41	N/A N/A	N/A N/A
Griffith Avenue to Dorset St Lower	Average Range	14:33 10:09 to 19:14	N/A N/A	14:49 12:39 to 20:54	N/A N/A	7:28 7:28	N/A N/A	11:00 11:00	N/A N/A
Botanic Avenue to Cliftonville Road	Average Range	3:44 2:12 to 6:02	4:35 2:28 to 8:24	N/A N/A	N/A N/A	1:48 1:45 to 1:51	1:29 0:48 to 1:55	N/A N/A	N/A N/A
Bon Secours Hospital to Cliftonville Road	Average Range	4:05 2:17 to 6:31	3:39 0:43 to 5:56	N/A N/A	N/A N/A	3:21 1:10 to 6:14	3:46 2:34 to 6:02	N/A N/A	N/A N/A
Cliftonville Road to Prospect Road	Average Range	2:54 1:02 to 5:36	4:11 3:09 to 5:21	3:23 2:18 to 4:39	3:53 2:52 to 5:12	1:24 0:39 to 2:46	1:37 1:24 to 1:44	2:31 2:03 to 2:44	2:46 2:38 to 2:55
Prospect Rd to Dorset St Lwr/Whitworth	Average Range	5:14 3:07 to 9:11	N/A N/A	9:43 3:42 to 16:20	7:02 5:37 to 9:50	4:16 2:32 to 6:24	2:39 2:39	4:28 2:16 to 6:07	3:45 3:45
Prospect Rd to Frederick St N via Phib	Average Range	9:26 8:15 to 12:18	N/A N/A	N/A N/A	N/A N/A	8:55 7:16 to 10:39	N/A N/A	N/A N/A	N/A N/A
Dorset St Lwr to Frederick St North	Average Range	3:15 1:45 to 4:34	N/A N/A	N/A N/A	N/A N/A	4:27 1:10 to 6:52	N/A N/A	N/A N/A	N/A N/A
Frederick St North to Parnell Square East	Average Range	1:30 0:42 to 3:38	N/A N/A	N/A N/A	N/A N/A	1:52 0:29 to 3:36	N/A N/A	N/A N/A	N/A N/A
Parnell Square East to O'Connell St Lwr	Average Range	3:47 1:09 to 6:40	N/A N/A	N/A N/A	N/A N/A	4:17 2:20 to 9:47	N/A N/A	N/A N/A	N/A N/A

Table 9j Ballymun QBC (continued)

Ballymun QBC Roadside Survey Results - November 2004									
Sectional Results									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
O'Connell St Lwr to Parnell Square West	Average Range	N/A	N/A	4:03	5:31	N/A	N/A	4:06	4:25
		N/A	N/A	1:25 to 7:12	4:01 to 7:26	N/A	N/A	2:23 to 7:21	4:21 to 4:29
Parnell Square West to Granby Row	Average Range	N/A	N/A	4:17	3:41	N/A	N/A	1:29	1:17
		N/A	N/A	0:29 to 19:02	0:23 to 5:15	N/A	N/A	0:39 to 2:26	0:57 to 1:41
Parnell Sq West to Prospect Rd via Phib	Average Range	N/A	N/A	16:41	N/A	N/A	N/A	9:58	N/A
		N/A	N/A	9:35 to 27:07	N/A	N/A	N/A	8:20 to 11:00	N/A
Granby Row to Blessington Street	Average Range	N/A	N/A	3:43	2:39	N/A	N/A	1:30	0:50
		N/A	N/A	0:47 to 7:12	1:13 to 3:46	N/A	N/A	0:39 to 4:25	0:42 to 0:55
Blessington Street to Whitworth Road	Average Range	N/A	N/A	3:34	4:13	N/A	N/A	3:19	2:28
		N/A	N/A	1:11 to 5:58	3:02 to 8:00	N/A	N/A	1:49 to 4:30	1:47 to 3:23
Glasnevin Hill to The Rise	Average Range	N/A	N/A	5:34	2:09	N/A	N/A	3:33	3:12
		N/A	N/A	3:09 to 8:03	1:08 to 3:19	N/A	N/A	2:38 to 5:00	2:33 to 4:45

Table 9k Bray QBC

Bray QBC Roadside Survey Results - November 2004									
Sectional Results									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
Bray Main Street to Upper Dargle Road	Average Range	1:30 0:27 to 3:22	2:11 1:09 to 3:03	2:23 1:29 to 4:14	2:38 1:52 to 3:44	1:24 0:42 to 2:21	1:50 1:01 to 2:45	2:05 1:55 to 2:14	2:23 1:56 to 3:01
Upper Dargle Rd to Wilford Roundabout	Average Range	3:43 1:15 to 6:00	3:13 1:50 to 5:45	4:24 1:58 to 7:33	6:15 5:19 to 7:11	2:39 1:57 to 3:18	1:50 1:33 to 2:03	2:47 1:54 to 3:33	3:23 2:18 to 4:25
Wilford Roundabout to Shanganagh	Average Range	1:57 0:58 to 4:25	3:22 2:24 to 4:56	N/A N/A	N/A N/A	1:38 1:11 to 2:09	2:00 1:23 to 2:36	N/A N/A	N/A N/A
Wilford Roundabout to Shankill Village	Average Range	5:10 3:22 to 8:54	N/A N/A	4:21 2:45 to 6:10	4:50 3:36 to 6:01	4:22 3:44 to 5:01	N/A N/A	3:41 2:56 to 5:16	3:52 3:35 to 4:08
Shanganagh to Shankill Village	Average Range	3:01 1:29 to 7:55	4:21 1:05 to 10:07	N/A N/A	N/A N/A	2:42 2:07 to 3:06	1:58 1:03 to 4:37	N/A N/A	N/A N/A
Shankill Village to Loughlinstown Roun	Average Range	3:58 3:04 to 4:59	5:24 4:25 to 5:52	3:25 2:47 to 3:53	6:58 2:41 to 8:44	4:01 3:30 to 4:39	2:54 2:13 to 3:12	3:20 3:12 to 3:36	4:50 2:14 to 6:05
Loughlinstown Roun to Cabinteely South	Average Range	4:58 4:05 to 6:27	4:19 1:17 to 7:51	4:37 2:54 to 6:20	2:59 2:06 to 3:40	3:20 3:15 to 3:27	3:39 3:21 to 3:48	4:47 3:58 to 6:04	2:40 2:22 to 2:54
Cabinteely South to Foxrock Church	Average Range	5:22 3:30 to 7:29	12:27 5:16 to 20:12	3:50 2:04 to 5:06	3:40 2:24 to 6:36	3:50 3:39 to 4:01	6:14 5:04 to 7:25	2:31 2:18 to 2:44	3:14 1:23 to 5:36
Bray Main Street to Foxrock Church	Average Range	26:20 21:42 to 30:46	32:22 17:27 to 54:13	25:09 23:42 to 26:42	24:24 17:02 to 30:15	17:18 17:18	17:42 14:49 to 20:42	16:58 16:58	N/A N/A
Bray Main Street to Leeson Street	Average Range	54:21 48:47 to 62:48	N/A N/A	53:51 48:30 to 58:40	N/A N/A	44:33 44:33	N/A N/A	N/A N/A	N/A N/A

Table 91 Clontarf QBC

Clontarf QBC Roadside Survey Results - November 2004									
Sectional Results									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
Clontarf Garage to Vernon Avenue	Average Range	1:19 0:28 to 2:18	0:40 0:18 to 2:54	1:39 1:10 to 2:17	0:55 0:36 to 1:37	1:18 0:37 to 2:20	0:36 0:17 to 1:04	1:27 0:54 to 1:56	0:53 0:32 to 2:07
Vernon Avenue to Castle Avenue	Average Range	2:35 1:24 to 4:02	10:36 1:28 to 26:38	1:31 0:57 to 2:19	1:03 0:38 to 1:54	2:08 1:29 to 2:41	1:28 1:07 to 1:44	1:26 1:06 to 1:59	0:54 0:26 to 1:19
Castle Avenue to Alfie Byrne Road	Average Range	2:03 0:43 to 3:45	4:00 1:27 to 7:39	4:01 2:46 to 5:11	3:07 1:27 to 4:38	1:16 0:39 to 1:42	1:25 1:16 to 1:42	2:37 1:36 to 3:36	2:13 1:37 to 2:51
Alfie Byrne Road to Fairview	Average Range	3:20 1:30 to 5:23	3:58 2:07 to 7:21	4:45 1:17 to 7:42	4:29 1:46 to 8:31	2:38 1:44 to 4:25	1:58 1:11 to 2:52	2:49 2:31 to 3:27	2:13 1:44 to 3:32
Fairview to Amiens Street/North Strand	Average Range	4:54 3:18 to 6:31	8:00 3:50 to 10:03	7:19 3:23 to 15:04	5:14 2:54 to 9:13	3:35 2:21 to 4:56	3:30 2:04 to 6:20	4:14 2:55 to 5:47	2:55 1:47 to 3:53
Amiens Street to Talbot Street	Average Range	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Lwr Abbey St to North Strand	Average Range	N/A N/A	N/A N/A	4:51 2:54 to 7:36	N/A N/A	N/A N/A	N/A N/A	3:55 3:26 to 5:34	N/A N/A

12 Sectional Bus Speeds

The data used to compile the sectional bus journey times shown in **Section 11** is used to convert time to speed.

The results for each QBC for all the time periods surveyed are shown in **Tables 10a to 10l**.

Tables 10a to 10i inclusive show the results for the 9 main radial QBCs.

Tables 10j to 10l inclusive show the results for those QBCs monitored for the first time in 2004, namely Ballymun QBC, Bray QBC incorporating the N11 extension from Foxrock to Loughlinstown and Clontarf QBC.

Each table is colour coded as follows:

- **Yellow** denotes those sections where average speed is less than 5 kilometres per hour which effectively is walking speed
- **Blue** denotes those sections where average speed is greater than 5 but less than 10 kilometres per hour
- **Green** denotes those sections where average speed is greater than 10 but less than the minimum QBC specification speed (ie 20 kilometres per hour less 12% boarding and alighting time)
- White denotes those sections that exceed the QBC specification

Table 10a Blanchardstown QBC

Blanchardstown QBC Roadside Survey Results - November 2004					
Sectional Results - Bus Journey Speeds					
Section	Distance Metres	Bus Lane Metres		AM Peak Inbound Km/h	Off Peak Inbound Km/h
St Josephs Hospital to Hansfield Road	726	0	Average Range	11.03 6.47 to 29.04	N/A N/A
Hansfield Road to Shelerin Road	820	0	Average Range	6.46 2.28 to 24.00	N/A N/A
Shelerin Road to B'town Rd Sth via Town Centre	5899	0	Average Range	16.68 15.99 to 17.73	N/A N/A
Shelerin Road direct to Blanchardstown Road South	1836	0	Average Range	8.94 6.01 to 25.13	N/A N/A
St Josephs to Blanchardstown Road South via Town Centre	7451	0	Average Range	14.21 11.46 to 17.49	19.16 17.80 to 19.94
Blakestown Way to Rear of Town C'tre (Peak)	1074	0	Average Range	15.16 10.34 to 21.72	N/A N/A
Blanchardstown Road South to Coolmine Rd	1719	388	Average Range	20.03 13.19 to 31.57	28.51 24.27 to 33.45
Rear of Town Centre to River Rd Roundabout (Peak)	1727	N/A	Average Range	22.20 16.99 to 32.05	N/A N/A
Coolmine Road to Main Street	1110	0	Average Range	37.69 25.45 to 59.62	28.96 22.33 to 37.35
Main Street to River Road Roundabout	1098	0	Average Range	13.04 7.73 to 47.06	19.47 15.09 to 24.55
River Road Roundabout to New River Road	983	300	Average Range	10.05 3.45 to 28.53	21.06 12.33 to 44.78
New River Road to Ashtown Roundabout	1958	1958	Average Range	47.95 34.05 to 73.42	72.65 72.65
Ashtown Roundabout to Ratoath Road	2395	2075	Average Range	22.39 15.13 to 40.67	26.13 26.13
Ratoath Road to North Circular Road	841	0	Average Range	16.92 6.88 to 77.63	20.18 11.26 to 32.20
North Circular Road to Manor Street	659	120	Average Range	8.72 4.12 to 24.45	18.98 14.64 to 32.07
Manor Street to Blackhall Place	658	506	Average Range	12.67 6.14 to 22.14	20.07 16.68 to 27.23
Blackhall Place to Capel Street	1001	312	Average Range	7.21 5.48 to 11.19	7.19 5.68 to 9.74
Capel Street to Tara Street	1278	221	Average Range	7.64 5.16 to 11.25	10.53 7.85 to 12.40
Total Inbound Distance (39) B'town Rd Sth to Capel St	12422	5659	Average Range	17.55 13.75 to 21.92	N/A N/A
Total Inbound Distance (39) B'town Rd Sth to Manor St	10763	4841	Average Range	21.65 14.79 to 31.60	25.54 25.34 to 25.73
Total Inbound Distance (39A/B) Blakestown Way to Capel St	11296	N/A	Average Range	14.79 12.13 to 18.36	N/A N/A
Total Inbound Distance River Road to Ormond Quay	8495	5271	Average Range	15.26 10.74 to 18.42	21.30 21.08 to 21.51
Total Inbound Distance New River Road to Ormond Quay	7512	4971	Average Range	15.34 12.60 to 20.00	23.07 19.71 to 27.79

Table 10a Blanchardstown QBC (continued)

Blanchardstown QBC Roadside Survey Results - November 2004					
Sectional Results - Bus Journey Speeds					
Section	Distance Metres	Bus Lane Metres		PM Peak Outbound Km/h	Off Peak Outbound Km/h
Hawkins Street to Merchants Quay	1416	0	Average Range	3.69 2.64 to 6.08	5.27 3.80 to 6.38
Merchants Quay to Blackhall Place Bridge	732	450	Average Range	16.52 5.10 to 56.07	23.52 13.31 to 47.89
Blackhall Place Bridge to Manor Street	712	0	Average Range	9.47 5.52 to 14.90	14.90 12.88 to 17.67
Manor Street to North Circular Road	635	0	Average Range	9.49 5.48 to 19.05	13.45 11.21 to 16.69
North Circular Road to Ratoath Road	824	0	Average Range	27.98 14.47 to 46.33	28.79 17.98 to 52.99
Ratoath Road to Ashtown Roundabout	2565	100	Average Range	12.33 8.06 to 23.32	22.25 19.56 to 34.72
Ashtown Roundabout to New River Road	1811	1332	Average Range	47.59 27.28 to 67.91	38.81 33.96 to 52.57
New River Road to River Road Roundabout	1108	0	Average Range	12.47 8.92 to 16.35	16.62 14.09 to 20.04
River Road Roundabout to Main Street	896	0	Average Range	11.44 6.57 to 15.58	12.90 10.97 to 15.66
Main Street to Coolmine Road	1088	0	Average Range	16.81 12.55 to 29.23	49.57 41.24 to 64.19
Coolmine Road to Blakestown Way via Town Centre	3410	593	Average Range	N/A N/A	N/A N/A
Blakestown Way to St Josephs Hospital	5941	0	Average Range	20.41 15.67 to 27.17	N/A N/A
Total Outbound Distance Hawkins St to New River Road	8695	1882	Average Range	10.14 7.34 to 15.31	14.70 14.70
Total Outbound Distance Merchants Quay to New River Rd	7279	1882	Average Range	15.78 10.32 to 24.86	22.75 20.78 to 25.24
Total Outbound Distance Manor Street to New River Rd	5835	1432	Average Range	19.78 16.63 to 23.47	23.84 21.24 to 25.77
Total Outbound Distance Merchants Quay to River Rd	8387	1882	Average Range	15.25 10.11 to 23.26	20.91 19.98 to 21.94

Table 10b Finglas QBC

Finglas QBC Roadside Survey Results - November 2004					
Sectional Results - Bus Journey Speeds					
Section	Distance Metres	Bus Lane Metres		AM Peak Inbound Km/h	Off Peak Inbound Km/h
Mellowes Road Bridge to Finglas Road	547	0	Average Range	12.37 5.34 to 23.17	18.58 13.67 to 31.26
Finglas Road to Prospect Road/Whitworth Road	3222	2978	Average Range	18.14 11.73 to 42.64	21.76 18.68 to 24.89
Prospect Road/Whitworth Road to Dorset Street Lower	957	17	Average Range	10.99 6.25 to 18.42	13.46 8.97 to 22.67
Dorset Street Lower to Frederick Street North	703	703	Average Range	12.95 9.24 to 24.10	9.48 6.14 to 36.14
Frederick Street North to Parnell Square East	390	390	Average Range	15.68 6.44 to 33.43	12.53 6.50 to 48.45
Dorset Street Lower to Parnell Square East	1093	1093	Average Range	15.31 12.99 to 23.70	11.15 7.33 to 17.49

Corridor Inbound Distance Finglas Rd to Parnell Square	5272	4088	Average Range	15.56 10.01 to 29.15	17.17 12.61 to 23.09
--	------	------	---------------	-------------------------	-------------------------

Section	Distance Metres	Bus Lane Metres		PM Peak Outbound Km/h	Off Peak Outbound Km/h
Parnell Street to Dorset Street Lower/Whitworth	1218	396	Average Range	7.52 4.38 to 11.92	11.48 9.04 to 18.04
Dorset Street Lower to Whitworth Road/Prospect Rd	952	0	Average Range	5.88 3.50 to 15.44	12.79 9.34 to 25.20
Prospect Road to Finglas Road	2907	1818	Average Range	21.96 16.80 to 29.65	24.39 21.06 to 31.24
Finglas Road to Mellowes Road Bridge	761	0	Average Range	12.92 7.61 to 26.34	11.76 10.46 to 13.23

Corridor Outbound Distance Parnell St to Finglas Rd	5077	2214	Average Range	11.79 9.42 to 15.10	17.02 14.88 to 21.20
---	------	------	---------------	------------------------	-------------------------

Table 10c Lucan QBC

Lucan QBC Roadside Survey Results - November 2004					
Sectional Results - Bus Journey Speeds					
Section	Distance Metres	Bus Lane Metres		AM Peak Inbound Km/h	Off Peak Inbound Km/h
Lucan Superquinn to Penny Hill Pub	4675	N/A	Average Range	16.44 12.16 to 25.93	16.39 15.23 to 17.75
Penny Hill Pub to Foxhunter	1920	154	Average Range	15.35 10.11 to 35.81	22.51 18.99 to 27.76
Foxhunter to West of M50	2026	2026	Average Range	34.24 17.96 to 62.34	49.62 40.08 to 59.79
West of M50 to Palmerston	1595	390	Average Range	21.27 15.52 to 31.38	26.22 21.35 to 31.90
Palmerston to Chapelizod Slip	267	267	Average Range	15.02 4.88 to 50.59	19.61 13.35 to 38.42
West of M50 to Chapelizod Slip	1862	657	Average Range	20.25 15.16 to 28.28	24.46 19.66 to 30.19
Chapelizod Slip to Con Colbert Rd (via Bypass)	3601	3601	Average Range	56.90 31.24 to 71.23	N/A N/A
Chapelizod Slip to Conyngham Rd	4080	253	Average Range	23.58 13.82 to 39.59	36.44 32.64 to 49.45
Conyngham Rd to Parkgate St	951	674	Average Range	23.77 14.76 to 55.24	23.45 20.62 to 26.33
Con Colbert Rd to Heuston Station (Expresso)	1559	966	Average Range	30.93 18.46 to 43.17	37.92 34.86 to 43.51
Heuston Station to Ellis Quay (Expresso)	785	393	Average Range	10.66 8.01 to 15.19	16.92 14.64 to 20.19
Con Colbert Rd to Ellis Quay (Expresso)	2344	1359	Average Range	19.72 16.13 to 28.41	24.67 23.70 to 25.89
Parkgate St to Ellis Quay	595	558	Average Range	10.10 7.26 to 16.74	9.78 7.96 to 14.09
Ellis Quay to Arran Quay	497	0	Average Range	10.34 5.23 to 33.77	9.13 6.02 to 21.30
Arran Quay to Bachelors Walk	1067	936	Average Range	10.80 6.17 to 17.78	11.89 8.15 to 15.30

Corridor Distance Via Bypass (Expresso)	11397	8579	Average Range	23.58 20.30 to 28.10	N/A N/A
Corridor Distance Via Chapelizod	11078	5104	Average Range	18.76 14.91 to 23.51	22.83 21.69 to 24.11
Route Distance Via Bypass (Expresso)	17992	N/A	Average Range	17.90 17.90	N/A N/A
Route Distance Via Chapelizod	17673	N/A	Average Range	16.51 15.36 to 18.75	19.23 19.23

Table 10c Lucan QBC (continued)

Lucan QBC Roadside Survey Results - November 2004					
Sectional Results - Bus Journey Speeds					
Section	Distance Metres	Bus Lane Metres		PM Peak Outbound Km/h	Off Peak Outbound Km/h
Wellington Quay to Merchants Quay	824	400	Average Range	8.71 3.72 to 29.37	12.68 9.13 to 18.31
Merchants Quay to Conyngham Rd	2222	640	Average Range	19.69 11.83 to 31.25	22.45 14.94 to 27.94
Merchants Quay to Heuston Station (Expresso)	1286	640	Average Range	24.49 12.72 to 56.44	21.24 11.57 to 33.07
Heuston Station to Con Colbert Road (Expresso)	1592	506	Average Range	28.30 18.02 to 38.46	N/A N/A
Con Colbert Road to Chapelizod Slip (Expresso)	3009	2486	Average Range	N/A N/A	N/A N/A
Con Colbert Road to Palmerston (Expresso)	3935	3229	Average Range	40.38 33.81 to 52.47	N/A N/A
Conyngham Rd to Chapelizod Slip	3875	253	Average Range	24.72 17.88 to 33.45	31.92 25.83 to 40.67
Chapelizod Slip to Palmerston	926	743	Average Range	20.87 11.91 to 46.30	38.32 28.74 to 61.73
Palmerston to West of M50	1558	500	Average Range	20.64 14.61 to 37.14	23.08 17.75 to 27.23
West of M50 to Foxhunter	1967	756	Average Range	35.78 22.62 to 58.52	58.51 51.69 to 68.10
Foxhunter to Penny Hill Pub	1581	N/A	Average Range	18.64 14.82 to 23.23	27.36 22.95 to 37.45
Penny Hill Pub to Lucan Superquinn	4726	N/A	Average Range	15.26 13.57 to 19.38	28.55 23.21 to 37.07
Foxhunter to Lucan Superquinn	6307	N/A	Average Range	15.99 14.50 to 20.07	27.00 25.66 to 28.45
Corridor Distance Via Bypass (Expresso)	11162	6031	Average Range	26.18 23.92 to 29.44	N/A N/A
Corridor Distance Via Chapelizod	11372	3292	Average Range	21.21 16.92 to 27.26	26.36 25.32 to 27.46
Route Distance Via Chapelizod	17679	N/A	Average Range	18.55 15.99 to 20.91	26.58 25.44 to 27.80
Route Distance Via Bypass (Expresso)	17469	N/A	Average Range	21.63 21.63	N/A N/A

Table 10d Malahide QBC

Malahide QBC Roadside Survey Results - November 2004					
Sectional Results - Bus Journey Speeds					
Section	Distance Metres	Bus Lane Metres		AM Peak Inbound Km/h	Off Peak Inbound Km/h
Clare Hall to Priorswood Road	1185	1017	Average Range	23.06 13.67 to 58.42	22.69 19.84 to 26.66
Priorswood Road to Greencastle Road (Direct)	992	671	Average Range	36.45 22.89 to 83.01	52.53 52.53
Priorswood Rd to Greencastle Road (via Darndale)	4089	0	Average Range	13.76 10.77 to 18.08	15.10 12.77 to 19.52
Greencastle Road to North of Kilmore Road	1532	998	Average Range	15.46 6.83 to 23.17	21.05 18.45 to 22.51
North of Kilmore Road to St Davids Wood	150	0	Average Range	0.37 0.20 to 16.36	12.86 5.68 to 53.89
St Davids Wood to Collins Avenue	671	601	Average Range	16.09 5.04 to 63.57	24.40 17.13 to 36.04
Collins Avenue to Casino Park	318	0	Average Range	2.94 1.60 to 7.53	12.31 6.65 to 44.06
Casino Park to Fairview	1133	1054	Average Range	35.88 18.46 to 78.44	15.39 14.02 to 17.14
Fairview to Amiens Street	1897	1529	Average Range	20.52 9.69 to 53.77	38.36 22.17 to 66.29
Amiens Street to Talbot Street	435	0	Average Range	N/A N/A	N/A N/A
Total Inbound Distance Clare Hall to Talbot St (Direct)	8313	5870	Average Range	N/A N/A	N/A N/A
Total Inbound Distance Clare Hall to Talbot St (D'dale)	11410	5199	Average Range	N/A N/A	N/A N/A
Total Inbound Distance Greencastle Rd to Talbot St	6136	4182	Average Range	N/A N/A	N/A N/A
Total Inbound Distance Clare Hall to Amiens St (Direct)	7878	5870	Average Range	8.36 6.18 to 18.50	N/A N/A
Total Inbound Distance Clare Hall to Amiens St (D'dale)	10975	5199	Average Range	9.45 7.74 to 19.97	16.66 16.66
Total Inbound Distance Greencastle Rd to Amiens St	5701	4182	Average Range	6.96 4.81 to 18.81	28.74 23.14 to 33.21

Note: No survey details for Talbot Street due to roadworks

Table 10d Malahide QBC (continued)

Malahide QBC Roadside Survey Results - November 2004					
Sectional Results - Bus Journey Speeds					
Section	Distance Metres	Bus Lane Metres		PM Peak Outbound Km/h	Off Peak Outbound Km/h
Talbot Street to North Strand	724	124	Average Range	N/A N/A	N/A N/A
North Strand to Fairview	1706	1706	Average Range	13.98 6.79 to 30.25	24.18 17.70 to 35.09
Fairview to Griffith Avenue	675	0	Average Range	9.41 5.20 to 16.31	10.61 7.89 to 18.27
Griffith Avenue to Collins Avenue	887	772	Average Range	14.92 7.44 to 38.47	15.73 10.10 to 35.48
Collins Avenue to Kilmore Road	955	158	Average Range	11.09 4.78 to 30.16	18.19 11.54 to 25.85
Kilmore Road to Greencastle Road	1440	911	Average Range	14.63 9.53 to 30.32	14.98 11.55 to 19.34
Greencastle Road to Priorswood Road (Direct)	997	687	Average Range	14.07 7.90 to 21.49	N/A N/A
Greencastle Rd to Priorswood Road (Via Darndale)	4021	0	Average Range	17.65 14.56 to 24.21	16.37 13.73 to 17.72
Priorswood Road to Clare Hall	1289	1152	Average Range	17.99 13.18 to 21.48	29.55 27.62 to 31.15
Total Outbound Distance Talbot St to Clare Hall (D'dale)	11697	4823	Average Range	N/A N/A	N/A N/A
Total Outbound Distance Talbot St to Clare Hall (Direct)	8673	5510	Average Range	N/A N/A	N/A N/A
Total Outbound Distance Talbot St to Greencastle Rd	6387	3671	Average Range	N/A N/A	N/A N/A
Total Outbound Distance Amiens St to Clare Hall (D'dale)	10973	4699	Average Range	15.55 14.68 to 16.53	16.45 16.45
Total Outbound Distance Amiens St to Clare Hall (Direct)	7949	5386	Average Range	N/A N/A	N/A N/A
Total Outbound Distance Amiens St to Greencastle Rd	5663	3547	Average Range	13.08 11.78 to 14.36	14.90 13.71 to 16.86

Note: No survey details for Talbot Street due to roadworks

Table 10e North Clondalkin QBC

North Clondalkin QBC Roadside Survey Results - November 2004					
Sectional Results - Bus Journey Speeds					
Section	Distance Metres	Bus Lane Metres		AM Peak Inbound Km/h	Off Peak Inbound Km/h
Fonhill Road North to Fonhill Road South	1176	1176	Average Range	22.76 11.66 to 54.28	28.80 24.61 to 33.87
Fonhill Road South to Coldcut Road	3778	563	Average Range	18.43 15.44 to 20.80	27.20 27.20
Coldcut Road to Ballyfermot Road/Le Fanu Road	1558	719	Average Range	16.78 9.08 to 40.64	29.52 21.41 to 37.14
Ballyfermot Rd/Le Fanu Rd to Ballyfermot Rd/Kylemore Rd	642	162	Average Range	9.23 6.07 to 14.27	8.50 6.96 to 10.18
Ballyfermot Rd/Kylemore Rd to Emmet Rd/Tyrconnell Rd	2292	236	Average Range	19.65 14.25 to 42.75	26.70 22.92 to 32.49
Emmet Rd/Tyrconnell Rd to Emmet Rd/South Circular Rd	851	334	Average Range	16.89 8.19 to 30.64	16.12 10.64 to 24.51
Emmet Road/South Circular Rd to Mount Brown	1150	278	Average Range	24.99 11.04 to 51.75	26.54 17.32 to 59.13
Mount Brown to Cornmarket	1068	725	Average Range	17.20 10.42 to 29.58	12.73 9.07 to 22.48
Cornmarket to Westmoreland Street	1365	197	Average Range	8.27 6.14 to 11.38	10.43 7.79 to 14.62

Inbound Distance Coldcut Rd to Westmoreland St	8926	2651	Average Range	14.39 10.71 to 17.37	16.49 14.21 to 18.28
Inbound Distance Sth Circular Rd to W'moreland St	3583	1200	Average Range	13.27 10.15 to 17.64	13.97 11.24 to 18.61
Inbound Distance Emmet Rd to W'moreland St	4434	1534	Average Range	13.92 10.96 to 17.20	13.56 12.20 to 15.47

Section	Distance Metres	Bus Lane Metres		PM Peak Outbound Km/h	Off Peak Outbound Km/h
Aston Quay to Bridge Street	1086	651	Average Range	10.29 5.33 to 22.21	18.10 14.53 to 27.34
Bridge Street to Cornmarket	316	0	Average Range	5.17 2.68 to 9.89	8.24 2.70 to 25.28
Cornmarket to James Street	796	655	Average Range	12.55 8.43 to 28.09	16.37 9.88 to 63.68
James Street to Emmet Road/South Circular Road	1425	0	Average Range	8.04 4.55 to 30.72	17.63 14.21 to 21.55
Emmet Road/South Circular Rd to Emmet Rd/Tyrconnell Rd	852	0	Average Range	10.75 6.64 to 15.18	15.97 14.20 to 18.37
Emmet Road/Tyrconnell Rd to Ballyfermot Rd/Kylemore Rd	2315	658	Average Range	15.07 11.87 to 21.26	21.04 16.90 to 24.51
Ballyfermot Rd/Kylemore Rd to Ballyfermot Rd/Le Fanu Rd	605	174	Average Range	4.06 2.39 to 14.42	9.81 8.47 to 12.38
Ballyfermot Rd/Le Fanu Rd to Coldcut Road	1549	144	Average Range	3.97 2.40 to 22.22	26.55 22.30 to 35.07
Coldcut Road to Fonhill Road South	3847	473	Average Range	22.70 19.00 to 28.67	22.85 22.56 to 23.20
Fonhill Road South to Fonhill Road North	1280	736	Average Range	27.26 19.69 to 44.73	28.80 22.15 to 36.57
Outbound Distance Aston Quay to Coldcut Road	8944	2282	Average Range	6.96 5.47 to 11.43	17.40 17.40
Outbound Distance Aston Quay to Emmet Road	4475	1306	Average Range	8.56 6.77 to 11.28	16.67 14.40 to 19.81

Table 10f Rathfarnham QBC

Rathfarnham QBC Roadside Survey Results					
Sectional Results - Bus Journey Speeds - November 2004					
Section	Distance Metres	Bus Lane Metres		AM Peak Inbound Km/h	Off Peak Inbound Km/h
Dundrum Road to Nutgrove Avenue Terminus	880	0	Average Range	16.85 9.93 to 33.00	16.76 14.40 to 21.26
Nutgrove Avenue Terminus to Oakdown Road	298	0	Average Range	16.77 8.19 to 38.31	18.82 12.93 to 41.29
Oakdown Road to Rathfarnham Road	2098	1900	Average Range	18.73 12.61 to 30.70	26.78 22.41 to 43.91
Rathfarnham Road to Brookvale Road	277	0	Average Range	9.84 4.30 to 31.16	16.62 7.79 to 32.15
Brookvale Road to Terenure Road East	759	525	Average Range	15.50 9.49 to 45.54	24.18 13.73 to 40.77
Terenure Road East to Mount Tallant Avenue	816	0	Average Range	14.61 8.39 to 34.56	17.49 12.83 to 23.13
Mount Tallant Avenue to Leinster Road West	513	417	Average Range	7.59 3.63 to 16.20	12.23 9.47 to 17.42
Leinster Road West to Harolds Cross Road	214	0	Average Range	3.94 1.55 to 18.34	8.28 6.76 to 10.27
Harolds Cross Road to Clanbrassil Street	1043	845	Average Range	18.53 11.01 to 32.65	24.54 18.14 to 38.32
Clanbrassil Street to South Circular Road	478	0	Average Range	12.05 5.62 to 18.70	13.66 9.20 to 39.13
Clanbrassil Street to Dean Street	818	0	Average Range	7.79 3.64 to 22.83	22.83 20.31 to 33.09
Dean Street to Westmoreland Street	1425	N/A	Average Range	6.99 5.50 to 10.18	11.71 10.82 to 12.39
South Circular Road to Camden Street	777	532	Average Range	7.80 3.28 to 22.74	12.38 9.75 to 42.38
Camden Street to Bishop Street	142	0	Average Range	2.92 1.58 to 9.47	2.97 1.63 to 5.44
Camden Street to Stephen Street	565	0	Average Range	8.44 5.70 to 16.67	8.47 5.48 to 12.95
Bishop Street to Stephen Street	423	0	Average Range	20.76 8.96 to 60.91	22.72 14.10 to 44.76
Stephen Street to Westmoreland Street	655	514	Average Range	8.33 5.70 to 13.71	5.82 4.53 to 7.35
Total Inbound Nutgrove Ave to W'land St	8493	4733	Average Range	10.19 8.48 to 11.69	15.37 13.69 to 18.14
Total Inbound Rathfarnham to W'land St	6097	2833	Average Range	9.35 7.08 to 12.41	13.30 11.95 to 15.22

Table 10f Rathfarnham QBC (continued)

Rathfarnham QBC Roadside Survey Results					
Sectional Results - Bus Journey Speeds - November 2004					
Section	Distance Metres	Bus Lane Metres		PM Peak Outbound Km/h	Off Peak Outbound Km/h
College Green to Bishop Street	943	291	Average Range	11.71 5.60 to 20.21	14.32 10.32 to 23.09
College Green to Dean Street	1290	N/A	Average Range	6.10 4.80 to 8.85	12.16 10.55 to 14.33
Dean Street to Canal	1070	0	Average Range	12.44 7.93 to 16.75	15.47 14.27 to 16.39
Bishop Street to Camden Street	293	0	Average Range	5.21 2.91 to 14.65	6.13 4.45 to 10.24
College Green to Camden Street	1236	291	Average Range	8.95 6.14 to 15.50	10.90 7.87 to 13.32
Camden Street to South Circular Road	958	407	Average Range	9.13 6.13 to 15.47	13.96 9.08 to 17.33
South Circular Road (Outbound Bus Lane)	247	247	Average Range	9.11 4.97 to 28.68	24.70 15.60 to 55.51
South Circular Road to Canal	427	0	Average Range	5.75 3.70 to 13.97	8.59 6.07 to 15.37
Canal to Leinster Road	749	447	Average Range	9.53 6.10 to 22.66	18.59 13.35 to 22.85
Leinster Road to Whitton Road	1240	0	Average Range	22.16 12.65 to 46.02	39.85 21.99 to 82.67
Whitton Road to Terenure Road North	174	174	Average Range	4.68 2.56 to 10.44	5.35 3.15 to 9.94
Terenure Road North to Rathfarnham Road	1287	0	Average Range	10.45 7.92 to 16.55	17.29 12.94 to 30.68
Rathfarnham Road to Butterfield Avenue	166	166	Average Range	17.39 11.28 to 74.89	10.67 4.27 to 39.84
Butterfield Avenue to Oakdown Road	1826	0	Average Range	19.59 14.20 to 31.60	22.98 16.94 to 61.45
Oakdown Road to Nutgrove Avenue Terminus	299	299	Average Range	9.74 6.90 to 15.38	11.33 6.33 to 26.27
Nutgrove Avenue Terminus to Dundrum Road	863	0	Average Range	32.23 19.79 to 54.51	29.59 29.30 to 30.16
College Green to Nutgrove Avenue Terminus	8609	2031	Average Range	11.80 10.02 to 14.45	15.44 13.75 to 18.20
College Green to Butterfield Avenue	6484	1732	Average Range	10.10 8.75 to 11.69	14.36 13.76 to 15.01

Table 10g Stillorgan QBC

Stillorgan QBC Roadside Survey Results November 2004					
Sectional Results - Bus Journey Speeds					
Section	Distance Metres	Bus Lane Metres		AM Peak Inbound Km/h	Off Peak Inbound Km/h
Dun Laoghaire Station to Oliver Plunkett Road	2409	N/A	Average Range	17.95 8.26 to 24.22	11.78 9.88 to 13.40
Oliver Plunkett Road to Abbey Road	1652	N/A	Average Range	20.87 14.94 to 29.88	19.63 14.16 to 30.98
Abbey Road to Foxrock Church	1478	N/A	Average Range	11.82 7.38 to 20.15	15.42 11.59 to 20.31
Oliver Plunkett Road to Foxrock Church	3130	N/A	Average Range	15.56 10.07 to 21.54	17.39 13.89 to 24.82
Foxrock Church to Mount Merrion Avenue	Peak 3393	3393	Average Range	20.25 14.93 to 30.46	N/A N/A
Foxrock Church to Mount Merrion Avenue	Off Peak 3529	3393	Average Range	N/A N/A	22.17 17.31 to 31.52
Mount Merrion Avenue to Donnybrook	3267	2525	Average Range	21.45 13.84 to 39.73	24.15 20.31 to 28.34
Donnybrook to Morehampton Road	1190	1167	Average Range	19.09 10.71 to 39.30	17.93 11.61 to 38.59
Morehampton Road to Leeson Street	1335	660	Average Range	14.05 9.52 to 23.33	15.40 12.51 to 20.02
Donnybrook to Leeson Street	2525	1827	Average Range	15.95 11.94 to 27.46	17.45 14.50 to 25.25
Leeson Street to Westmoreland Street	1551	657	Average Range	12.37 6.55 to 21.73	11.78 9.61 to 15.13
Total Inbound Distance Dun Laoghaire to Westmoreland St	Peak 16275	N/A	Average Range	16.82 14.68 to 19.43	N/A N/A
Total Inbound Distance Dun Laoghaire to Westmoreland St	Off Peak 16411	N/A	Average Range	N/A N/A	17.23 15.26 to 19.02
Corridor Distance Foxrock Church to Leeson St	Peak 9185	7745	Average Range	19.25 16.11 to 27.01	N/A N/A
Corridor Distance Foxrock Church to Leeson St	Off Peak 9321	7745	Average Range	N/A N/A	20.91 19.76 to 22.80
Corridor Distance Foxrock Church to Westmoreland St	Peak 10736	8402	Average Range	17.27 15.03 to 23.16	N/A N/A
Corridor Distance Foxrock Church to Westmoreland St	Off Peak 10872	8402	Average Range	N/A N/A	19.14 17.93 to 20.52
Non QBC Distance Dun Laoghaire to Foxrock Ch	5539	N/A	Average Range	16.00 10.63 to 22.63	14.40 11.81 to 16.63

Table 10g Stillorgan QBC (continued)

Stillorgan QBC Roadside Survey Results November 2004					
Sectional Results - Bus Journey Speeds					
Section	Distance Metres	Bus Lane Metres		PM Peak Outbound Km/h	Off Peak Outbound Km/h
D'Olier Street to Leeson Street	1526	311	Average Range	10.10 6.38 to 15.39	11.79 9.79 to 13.98
Leeson Street to Morehampton Road	1304	852	Average Range	12.45 7.67 to 26.23	18.34 14.22 to 23.83
Morehampton Road to Donnybrook	1202	569	Average Range	17.16 10.11 to 30.47	17.10 12.80 to 25.46
Leeson Street to Donnybrook	2506	1421	Average Range	14.32 7.86 to 22.17	17.62 14.12 to 24.58
Donnybrook to Mount Merrion Avenue	3283	3215	Average Range	24.09 15.74 to 43.13	29.92 24.78 to 40.20
Mount Merrion Avenue to Foxrock Church (Off Peak)	Off Peak 3538	Off Peak 3153	Average Range	N/A N/A	23.81 19.30 to 45.33
Mount Merrion Avenue to Foxrock Church (Peak)	Peak 3367	Peak 3367	Average Range	20.21 16.10 to 30.69	N/A N/A
Foxrock Church to Abbey Road	1424	N/A	Average Range	12.18 9.97 to 21.91	13.21 10.05 to 18.78
Abbey Road to Oliver Plunkett Road	1802	N/A	Average Range	23.17 14.78 to 40.54	22.84 19.19 to 29.76
Foxrock Church to Oliver Plunkett Road	3226	N/A	Average Range	16.54 14.53 to 19.92	16.76 14.15 to 21.55
Oliver Plunkett Road to Dun Laoghaire Station	1980	N/A	Average Range	20.13 12.48 to 55.25	16.24 13.92 to 19.80
Total Outbound Distance OP D'Olier St to Dun Laoghaire	Off Peak 16059	Off Peak N/A	Average Range	N/A N/A	18.54 17.73 to 19.44
Total Outbound Distance Peak D'Olier St to Dun Laoghaire	Peak 15888	Peak N/A	Average Range	16.40 14.21 to 19.18	N/A N/A
Corridor Distance Peak Leeson St to Foxrock Church	Peak 9156	Peak 8003	Average Range	19.20 16.04 to 26.45	N/A N/A
Corridor Distance Off Peak Leeson St to Foxrock Church	Off Peak 9327	Off Peak 7789	Average Range	N/A N/A	22.56 21.09 to 25.85
Corridor Distance Peak D'Olier St to Foxrock Church	Peak 10682	Peak 8314	Average Range	16.91 14.26 to 22.77	N/A N/A
Corridor Distance Off Peak D'Olier St to Foxrock Church	Off Peak 10853	Off Peak 8100	Average Range	N/A N/A	19.50 18.84 to 20.21
Non QBC Distance Foxrock Ch to Dun Laoghaire	5206	N/A	Average Range	17.95 13.68 to 20.75	18.39 18.39

Table 10h Swords QBC

Swords QBC Roadside Survey Results					
Sectional Results - Bus Journey Speeds - November 2004					
Section	Distance Metres	Bus Lane Metres		AM Peak Inbound Km/h	Off Peak Inbound Km/h
County Council Offices to Swords Main Street	282	0	Average Range	9.27 5.49 to 37.60	7.69 6.31 to 14.10
Swords Main Street to Airside Business Park	2040	1249	Average Range	27.56 19.23 to 44.51	25.59 22.39 to 29.98
Airside Business Park to Cloghran Roundabout	1314	1009	Average Range	23.10 15.31 to 35.84	30.52 24.39 to 36.67
Swords County Council to Cloghran Roundabout	3636	2258	Average Range	22.49 18.67 to 29.81	19.28 19.28
Cloghran Rbt to Airport South (Not via Airport)	1388	476	Average Range	9.00 6.98 to 16.71	N/A N/A
Cloghran Rbt to Airport South (Via Airport)	3886	N/A	Average Range	11.90 9.00 to 16.52	16.79 15.54 to 18.26
Airport South to Omni Park	3741	3269	Average Range	27.05 16.05 to 56.35	57.07 46.76 to 73.59
Omni Park to Collins Avenue	1423	743	Average Range	6.25 4.06 to 12.02	10.12 7.34 to 14.51
Collins Avenue to Richmond Rd	1532	1183	Average Range	15.99 11.10 to 31.70	16.90 12.34 to 22.15
Richmond Rd to Dorset Street Lower	1111	841	Average Range	11.51 7.77 to 20.30	15.64 11.66 to 26.84
Dorset Street Lower to Frederick Street North	534	497	Average Range	8.04 4.72 to 19.62	9.48 6.08 to 14.67
Frederick Street North to O'Connell Street	796	796	Average Range	11.96 7.52 to 31.15	10.36 5.95 to 28.37
Dorset Street Lower to O'Connell Street	1330	1293	Average Range	9.95 7.64 to 13.88	9.22 6.10 to 20.02
Richmond Rd to O'Connell Street	2441	2134	Average Range	9.99 6.75 to 13.80	11.25 8.06 to 17.54
Total Inbound Distance Swords CC to O'Connell St	Direct 14161	10063	Average Range	13.40 11.03 to 20.71	N/A N/A
Total Inbound Distance Swords CC to O'Connell St	Via Airport 16659	N/A	Average Range	N/A N/A	18.84 17.07 to 21.12

Table 10h Swords QBC (continued)

Swords QBC Roadside Survey Results					
Sectional Results - Bus Journey Speeds - November 2004					
Section	Distance Metres	Bus Lane Metres		PM Peak Outbound Km/h	Off Peak Outbound Km/h
O'Connell Street to Parnell Square West	788	0	Average Range	11.97 4.61 to 37.82	12.47 6.84 to 22.51
Parnell Square West to Granby Row	224	0	Average Range	4.34 1.44 to 14.66	9.31 5.04 to 26.01
Granby Row to Blessington Street	233	0	Average Range	10.09 3.45 to 55.92	10.77 5.87 to 29.96
Blessington Street to Dorset Street Lower	534	534	Average Range	18.21 8.50 to 83.58	15.64 10.17 to 44.71
Lower Abbey Street to Dorset Street Lower	1497	352	Average Range	10.59 7.56 to 19.04	11.39 10.76 to 12.71
Dorset Street Lower to Botanic Avenue	909	147	Average Range	9.65 5.80 to 18.92	16.60 10.66 to 22.41
Botanic Avenue to Collins Avenue	1741	471	Average Range	16.75 12.90 to 26.22	17.72 14.71 to 21.17
Collins Avenue to Omni Park	1298	0	Average Range	8.47 4.15 to 21.53	9.31 6.15 to 19.15
Omni Park to Airport South	3746	2500	Average Range	27.80 18.63 to 60.20	26.34 22.89 to 31.00
Airport South to Cloghran Rbt (Not Via Airport)	1360	1211	Average Range	16.80 10.33 to 30.22	12.88 11.74 to 15.74
Airport South to Cloghran Rbt (Via Airport)	2945	N/A	Average Range	20.48 17.94 to 22.75	N/A N/A
Cloghran Roundabout to Airside Business Park	1346	0	Average Range	32.61 23.75 to 40.38	28.84 17.82 to 40.73
Airside Business Park to Swords Main Street	1898	1242	Average Range	20.19 16.23 to 33.01	24.93 20.70 to 31.20
Cloghran Roundabout to County Council Offices	3526	1242	Average Range	22.00 17.06 to 34.49	17.39 15.35 to 20.05
Swords Main Street to County Council Offices	282	0	Average Range	9.56 2.53 to 26.72	4.68 2.89 to 8.19
Total Outbound Distance Lwr Abbey St to Swords CC	Direct 14077	5923	Average Range	16.63 12.98 to 22.91	19.01 18.31 to 19.75
Total Outbound Distance Lwr Abbey St to Swords CC (A)	Via Airport 15662	N/A	Average Range	N/A N/A	N/A N/A

Table 10i Tallaght QBC

Tallaght QBC Roadside Survey Results					
Sectional Results - Bus Journey Speeds - November 2004					
Section	Distance Metres	Bus Lane Metres		AM Peak Inbound Km/h	Off Peak Inbound Km/h
Tallaght Bypass to Main Street Tallaght	3226	N/A	Average Range	11.41 7.47 to 21.79	10.62 10.23 to 11.05
Main Street Tallaght to West of M50	1850	1106	Average Range	24.95 20.24 to 44.40	58.95 53.29 to 67.97
West of M50 to East of M50	673	0	Average Range	10.58 5.61 to 30.67	21.25 17.56 to 26.05
East of M50 to Oldbridge Road	1412	1054	Average Range	24.23 18.90 to 36.83	36.83 35.30 to 38.51
Oldbridge Road to Fortfield Road	1212	279	Average Range	27.18 19.31 to 48.48	29.89 20.30 to 34.63
Fortfield Road to Rathdown Park	595	522	Average Range	19.85 13.39 to 36.93	22.78 19.48 to 28.18
Rathdown Park to Terenure Road East	806	0	Average Range	5.97 4.76 to 9.54	9.83 7.86 to 38.69
Terenure Road East to Rathgar Road	1256	1034	Average Range	32.25 19.41 to 74.12	35.33 20.27 to 59.48
Rathgar Road to Leinster Road	495	0	Average Range	4.16 1.88 to 19.80	14.14 10.42 to 24.75
Leinster Road to Canal	594	348	Average Range	11.36 6.29 to 76.37	18.59 14.16 to 44.55
Canal to Camden Street Lower	525	0	Average Range	8.18 5.34 to 16.02	13.03 8.75 to 23.04
Camden Street Lower to Dame Street	1252	798	Average Range	11.02 5.93 to 19.60	9.53 4.75 to 14.45
Dame Street to Tara Street Bridge	821	N/A	Average Range	6.36 3.49 to 21.57	10.52 9.29 to 12.11

Total Inbound Distance 14717

West of M50 to Camden Street	7568	3237	Average Range	12.80 10.97 to 17.40	20.91 20.91
West of M50 to Dame Street	8820	4035	Average Range	14.04 9.79 to 19.08	17.88 17.88
Main St to Dame Street	10670	5141	Average Range	15.20 11.13 to 21.18	20.21 20.21

Table 10i Tallaght QBC (continued)

Tallaght QBC Roadside Survey Results					
Sectional Results - Bus Journey Speeds - November 2004					
Section	Distance Metres	Bus Lane Metres		PM Peak Outbound Km/h	Off Peak Outbound Km/h
Eden Quay to Dame Street	806	0	Average Range	6.63 5.44 to 7.82	10.83 10.44 to 11.38
Dame Street to Camden Street Lower	1253	428	Average Range	11.05 8.04 to 14.84	14.41 12.16 to 16.89
Camden Street Lower to Canal	748	131	Average Range	9.66 6.20 to 14.63	10.16 7.92 to 13.07
Canal to Leinster Road	595	109	Average Range	12.18 6.30 to 37.58	14.09 8.05 to 31.96
Leinster Road to Rathgar Road	357	52	Average Range	11.40 7.34 to 21.07	12.36 7.70 to 29.22
Rathgar Road to Terenure Road East	1410	228	Average Range	9.60 6.00 to 14.80	12.82 10.15 to 16.11
Terenure Road East to Rathdown Park	800	0	Average Range	16.33 9.83 to 50.53	26.92 20.87 to 32.72
Rathdown Park to Fortfield Road	596	0	Average Range	20.50 6.50 to 36.37	25.24 15.01 to 37.64
Fortfield Road to Oldbridge Road	1298	281	Average Range	17.12 10.57 to 30.74	21.05 14.74 to 34.35
Oldbridge Road to East of M50	1327	419	Average Range	12.40 6.49 to 25.01	19.82 18.88 to 20.86
East of M50 to West of M50	653	0	Average Range	9.09 6.57 to 22.39	13.13 12.31 to 14.08
West of M50 to Main Street Tallaght	1917	0	Average Range	15.12 8.77 to 26.85	25.10 24.05 to 26.24
Main Street Tallaght to Tallaght Bypass	3279	N/A	Average Range	10.94 9.43 to 14.14	11.72 9.79 to 13.66

Total Outbound Distance 15039

Dame Street to West of M50	9037	1648	Average Range	10.74 9.33 to 12.19	16.04 16.04
----------------------------	------	------	---------------	------------------------	----------------

Eden Quay to Main Street	11760	1648	Average Range	10.58 9.43 to 11.75	16.47 16.47
--------------------------	-------	------	---------------	------------------------	----------------

Camden Street to West of M50	7784	1220	Average Range	10.87 9.34 to 12.61	15.95 15.95
------------------------------	------	------	---------------	------------------------	----------------

Table 10j Ballymun QBC

Ballymun QBC Roadside Survey Results - November 2004					
Sectional Results - Bus Journey Speeds					
Section	Distance Metres	Bus Lane Metres		AM Peak Inbound Km/h	Off Peak Inbound Km/h
Ballymun Civic Centre to Griffith Avenue	1976	1976	Average Range	14.94 10.22 to 28.11	22.30 20.38 to 24.53
Griffith Avenue to Botanic Avenue	792	792	Average Range	21.12 12.67 to 41.94	41.94 33.16 to 55.91
Griffith Avenue to Dorset St Lwr/Whitworth Rd	2840	1185	Average Range	11.71 8.86 to 16.79	22.82 22.82
Botanic Avenue to Cliftonville Road	329	0	Average Range	5.29 3.27 to 8.97	10.97 10.67 to 11.28
Bon Secours Hospital to Cliftonville Road	595	0	Average Range	8.74 5.48 to 15.64	10.66 5.73 to 30.59
Cliftonville Road to Prospect Road/Whitworth Rd	578	216	Average Range	11.96 6.19 to 33.57	24.77 12.53 to 53.35
Prospect Rd/Whitworth Rd to Dorset St Lwr/Whitworth Rd	957	17	Average Range	10.97 6.25 to 18.42	13.46 8.97 to 22.67
Prospect Rd/Whitworth Rd to Frederick St North via Phib	1931	182	Average Range	12.28 9.42 to 14.04	12.99 10.88 to 15.94
Dorset St Lwr/Whitworth Rd to Frederick Street North	703	703	Average Range	12.98 9.23 to 24.10	9.48 6.14 to 36.14
Frederick Street North to Parnell Square East	390	390	Average Range	15.60 6.44 to 33.43	12.53 6.50 to 48.45
Parnell Square East to Lwr O'Connell Street	591	591	Average Range	9.37 5.32 to 30.83	8.28 3.62 to 15.20
Inbound Ballymun to Lwr O'Connell St via Whitworth	6316	4685	Average Range	11.68 9.79 to 14.46	15.08 11.68 to 18.99
Inbound Griffith Ave to Lwr O'Connell St via Phibsboro	4611	2171	Average Range	10.53 9.79 to 11.38	14.35 11.25 to 18.55
Inbound Ballymun to Lwr O'Connell St via Griffith Ave	6500	4845	Average Range	11.14 9.92 to 12.99	14.05 14.05

Table 10j Ballymun QBC (continued)

Ballymun QBC Roadside Survey Results - November 2004					
Sectional Results - Bus Journey Speeds					
Section	Distance Metres	Bus Lane Metres		PM Peak Outbound Km/h	Off Peak Outbound Km/h
O'Connell St Lwr to Parnell Square West	788	0	Average Range	11.67 6.57 to 33.37	11.53 6.43 to 19.84
Parnell Sq West to Dorset Street Upper/Granby Row	224	0	Average Range	3.14 0.71 to 27.83	9.06 5.52 to 20.68
Parnell Square West to Prospect Rd via Phib	1880	0	Average Range	6.76 4.16 to 11.77	11.32 10.25 to 13.54
Granby Row to Blessington Street	233	0	Average Range	3.76 1.94 to 17.85	9.32 3.16 to 21.51
Blessington St to Dorset St Lwr/Whitworth Rd	659	659	Average Range	11.08 6.63 to 33.42	11.92 8.79 to 21.76
Dorset Street Lwr/Whitworth to Prospect Rd	952	0	Average Range	5.88 3.50 to 15.44	12.79 9.34 to 25.20
Whitworth Rd to Ballymun Rd/The Rise via Griffith Ave	3088	471	Average Range	12.50 9.01 to 14.65	16.84 16.84
Prospect Road to Botanic Road	768	0	Average Range	13.62 9.91 to 20.03	18.31 16.86 to 22.48
Botanic Road to Ballymun Road/The Rise	1354	0	Average Range	14.59 10.09 to 25.79	22.88 16.25 to 30.85
Ballymun Road/The Rise to Ballymun Shopping Centre	1751	1751	Average Range	17.91 13.35 to 45.68	10.87 7.60 to 17.27
Outbound O'Connell St to Ballymun via Whitworth Rd	6729	2410	Average Range	11.77 9.84 to 15.28	14.15 12.49 to 16.47
Outbound O'Connell St to The Rise via Phibsboro	4790	0	Average Range	9.34 6.44 to 13.91	14.06 11.49 to 18.09
Outbound O'Connell St to Ballymun via Griffith Ave	6743	2881	Average Range	12.16 9.90 to 14.96	14.36 13.43 to 15.40

Table 10k Bray QBC

Bray QBC Roadside Survey Results November 2004					
Sectional Results - Bus Journey Speeds					
Section	Distance Metres	Bus Lane Metres		AM Peak Inbound Km/h	Off Peak Inbound Km/h
Bray Main Street to Upper Dargle Road	516	0	Average Range	20.64 9.19 to 68.80	22.11 13.17 to 44.23
Upper Dargle Road to Wilford Roundabout	630	0	Average Range	10.17 6.30 to 30.24	14.26 11.45 to 19.38
Wilford Roundabout to Shanganagh Cemetery	1238	289	Average Range	38.09 16.82 to 76.81	45.49 34.55 to 62.79
Shanganagh Cemetery to Shankill Village	885	0	Average Range	17.60 6.71 to 35.81	19.67 17.13 to 25.08
Shankill Village to Loughlinstown Roundabout	1486	358	Average Range	22.47 17.89 to 29.07	22.19 19.17 to 25.47
Loughlinstown Roundabout to Cabinteely South	2653	2653	Average Range	32.05 24.68 to 38.99	47.76 46.14 to 48.98
Cabinteely South to Foxrock Church	2117	2117	Average Range	23.67 16.97 to 36.29	33.14 31.62 to 34.80
Total Inbound Distance Bray to Foxrock Church	9525	5417	Average Range	21.70 18.57 to 26.34	33.03 33.03
Total Inbound Distance Bray to Leeson Street	18710	13162	Average Range	20.65 17.87 to 23.01	25.20 25.20
Section	Distance Metres	Bus Lane Metres		PM Peak Outbound Km/h	Off Peak Outbound Km/h
Foxrock Church to Cabinteely South	2243	2243	Average Range	35.11 26.39 to 65.11	53.47 49.24 to 58.51
Cabinteely South to Loughlinstown Roundabout	2552	2552	Average Range	33.16 24.18 to 52.80	32.01 25.24 to 38.60
Loughlinstown Roundabout to Shankill Village	1483	0	Average Range	26.04 22.91 to 31.97	26.70 24.72 to 27.81
Shankill Village to Wilford Roundabout	2120	0	Average Range	29.24 20.63 to 46.25	34.54 24.15 to 43.37
Wilford Roundabout to Upper Dargle Road	628	0	Average Range	8.56 4.99 to 19.16	13.54 10.61 to 19.83
Upper Dargle Road to Bray Main Street	450	0	Average Range	11.33 6.38 to 18.21	12.96 12.09 to 14.08
Total Outbound Distance Foxrock Church to Bray	9476	4795	Average Range	22.61 21.29 to 23.99	33.51 33.51
Total Outbound Distance Leeson Street to Bray	18632	12798	Average Range	20.76 19.05 to 23.05	N/A N/A

Table 10I Clontarf QBC

Clontarf QBC Roadside Survey Results - November 2004					
Sectional Results - Bus Journey Speeds					
Section	Distance Metres	Bus Lane Metres		AM Peak Inbound Km/h	Off Peak Inbound Km/h
Clontarf Garage to Vernon Avenue	453	453	Average Range	20.74 11.82 to 58.24	20.91 11.65 to 44.05
Vernon Avenue to Castle Avenue	923	923	Average Range	21.39 13.73 to 39.56	25.96 20.64 to 37.34
Castle Avenue to Alfie Byrne Road	812	812	Average Range	22.48 8.70 to 67.98	38.45 28.66 to 74.95
Alfie Byrne Road to Fairview	555	555	Average Range	9.97 6.19 to 22.20	12.65 7.54 to 19.21
Fairview to Amiens Street	1897	1529	Average Range	23.23 17.46 to 34.49	31.77 23.07 to 48.34
Amiens Street to Talbot Street	435	0	Average Range	N/A N/A	N/A N/A

Inbound Clontarf Garage to Fairview	2743	2743	Average Range	15.87 11.32 to 20.88	23.24 17.32 to 30.20
Inbound Clontarf Garage to Amiens Street	4640	4272	Average Range	18.32 15.06 to 22.91	23.36 22.45 to 24.31

Section	Distance Metres	Bus Lane Metres		PM Peak Outbound Km/h	Off Peak Outbound Km/h
Lower Abbey Street to North Strand	763	0	Average Range	9.44 6.02 to 15.79	11.69 8.22 to 13.33
Amiens Street/North Strand to Fairview	1706	1706	Average Range	13.99 6.79 to 30.26	24.18 17.70 to 35.09
Fairview to Alfie Byrne Road	734	0	Average Range	7.38 3.04 to 34.32	15.63 12.76 to 17.50
Alfie Byrne Road to Castle Avenue	868	0	Average Range	12.97 10.05 to 18.82	19.90 14.47 to 32.55
Castle Avenue to Vernon Avenue	868	0	Average Range	34.27 22.48 to 54.82	36.34 26.26 to 47.34
Vernon Avenue to Clontarf Garage	419	0	Average Range	15.20 11.01 to 21.55	17.34 13.01 to 27.93

Outbound Fairview to Clontarf Garage	2889	0	Average Range	13.79 7.90 to 22.76	21.71 19.74 to 26.07
Outbound North Strand to Clontarf Garage	4595	1706	Average Range	12.93 9.22 to 18.73	22.09 21.02 to 23.36

13 League Tables

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

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

The league table for the morning peak period is shown in this section as an example. (**Table 11**)

The results are shown for 2004 and are compared with 2002 and 2003. As with the bus speed tables in **Section 12**, the results are colour coded as follows:

- **Yellow** denotes those sections where average speed is less than 5 kilometres per hour which effectively is walking speed
- **Blue** denotes those sections where average speed is greater than 5 but less than 10 kilometres per hour
- **Green** denotes those sections where average speed is greater than 10 but less than the minimum QBC specification speed (ie 20 kilometres per hour less 12% boarding and alighting time)
- White denotes those sections that exceed the QBC specification

The composite league table and those in relation to the off peak and the afternoon/evening peak periods can be obtained from Michael Warnock-Smith of Dublin Transportation Office at the following e-mail address: michaelw@dto.ie.

Table 11 Morning Peak Period League Table

Quality Bus Corridors - Average Sectional Bus Journey Times & Speeds - AM Peak League Table - November 2004												
Average Journey Time	Average Speed KM/H	2003	2002	Section	Section Length Metres	Bus Lane Metres	QBC	Range		Position	2003 Position	2002 Position
								Low KM/H	High KM/H			
1464	0.37	4.50	4.57	Kilmore Road to St Davids Wood	150	0	Malahide	0.20	16.36	106	95/97	68/74
175	2.92	2.94	N/A	Camden Street to Bishop Street	142	0	Rathfarnham	1.58	9.47	105	97/97	N/A
389	2.94	4.89	6.06	Collins Avenue to Casino Park	318	0	Malahide	1.60	7.53	104	94/97	64/74
196	3.94	4.08	2.38	Leinster Road West to Harolds Cross Road	214	0	Rathfarnham	1.55	18.34	103	96/97	74/74
428	4.16	5.64	3.21	Rathgar Road to Leinster Road	495	0	Tallaght	1.88	19.80	102	92/97	73/74
486	5.97	7.38	4.29	Rathdown Park to Terenure Road East	806	0	Tallaght	4.76	9.54	101	85/97	70/74
820	6.25	5.17	9.28	Omni Park to Collins Avenue	1423	743	Swords	4.06	12.02	100	93/97	50/74
465	6.36	6.95	6.81	Dame Street to Tara Street	821	0	Tallaght	3.49	21.57	99	87/97	61/74
457	6.46	N/A	N/A	Hansfield Road to Shelerin Road	820	0	Blanchardstown	2.28	24.00	98	N/A	N/A
500	7.21	9.38	N/A	Blackhall Place to Capel Street	1001	312	Blanchardstown	5.48	11.19	97	72/97	N/A
243	7.59	20.76	4.73	Mount Tallant Avenue to Leinster Road West	513	417	Rathfarnham	3.63	16.20	96	21/97	67/74
602	7.64	6.53	6.66	Capel Street to Tara Street	1278	221	Blanchardstown	5.16	11.25	95	90/97	63/74
358	7.80	13.26	7.54	South Circular Road to Camden Street	777	532	Rathfarnham	3.28	22.74	94	55/97	57/74
239	8.04	N/A	N/A	Dorset Street Lower to Frederick Street North	534	497	Swords	4.72	19.62	93	N/A	N/A
231	8.18	7.59	7.13	Canal to Camden Street Lower	525	0	Tallaght	5.34	16.02	92	84/97	59/74
594	8.27	8.90	8.20	Commarket to Westmoreland Street	1365	197	North Clondalkin	6.14	11.38	91	76/97	55/74
283	8.33	10.53	9.87	Stephen Street to Westmoreland Street	655	514	Rathfarnham	5.70	13.71	90	64/97	47/74
241	8.44	6.85	3.52	Camden Street to Stephen Street	565	0	Rathfarnham	5.70	16.67	89	88/97	72/74
272	8.72	9.53	N/A	North Circular Road to Manor Street	659	120	Blanchardstown	4.12	24.45	88	71/97	N/A
555	9.00	15.37	23.79	Cloghran Roundabout to Airport South	1388	476	Swords	6.98	16.71	87	45/97	13/74
250	9.23	15.30	N/A	Ballyfermot/Le Fanu Road to Kylemore Road	642	162	North Clondalkin	6.07	14.27	86	46/97	N/A
109	9.27	11.67	N/A	County Council Offices to Swords Main St	282	0	Swords	5.49	37.60	85	62/97	N/A
101	9.84	9.59	6.69	Rathfarnham Road to Brookvale Road	277	0	Rathfarnham	4.30	31.16	84	70/97	62/74
481	9.95	8.09	N/A	Dorset Street Lower to O'Connell Street	1330	1293	Swords	7.64	13.88	83	81/97	N/A
878	9.99	8.69	9.30	Richmond Road to O'Connell Street	2441	2134	Swords	6.75	13.80	82	78/97	49/74
352	10.05	16.69	22.40	River Road to New River Road	983	300	Blanchardstown	3.45	28.53	81	37/97	14/74
212	10.10	7.82	8.08	Parkgate Street to Ellis Quay	595	558	Lucan	7.26	16.74	80	83/97	56/74
173	10.34	6.60	5.88	Ellis Quay to Arran Quay	497	0	Lucan	5.23	33.77	79	89/97	65/74
229	10.58	15.14	14.33	West M50 to East M50	673	0	Tallaght	5.61	30.67	78	48/97	30/74
265	10.66	9.68	N/A	Heuston Station to Ellis Quay	785	393	Lucan	8.01	15.19	77	69/97	N/A
356	10.80	9.80	N/A	Arran Quay to Bachelors Walk	1067	936	Lucan	6.17	17.78	76	68/97	N/A
314	10.99	13.89	15.38	Prospect/Whitworth Road to Dorset St Lower	957	17	Finglas	6.25	18.42	75	54/97	29/74
409	11.02	8.63	N/A	Camden Street Lower to Dame Street	1252	798	Tallaght	5.93	19.60	74	79/97	N/A

Table 11 Morning Peak Period League Table (continued)

Quality Bus Corridors - Average Sectional Bus Journey Times & Speeds - AM Peak League Table - November 2004												
237	11.03	N/A	N/A	St Joseph's Hospital to Hansfield Road	726	0	Blanchardstown	6.47	29.04	73	N/A	N/A
188	11.36	10.09	9.26	Leinster Road to Canal	594	348	Tallaght	6.29	76.37	72	65/97	52/74
1018	11.41	26.63	24.45	Tallaght Bypass to Main Street	3226	N/A	Tallaght	7.47	21.79	71	9/97	12/74
347	11.51	9.90	N/A	Richmond Road to Dorset Street Lower	1111	641	Swords	7.77	20.30	70	67/97	N/A
450	11.82	14.70	N/A	Abbey Road to Foxrock Church	1478	N/A	Stillorgan	7.38	20.15	69	51/97	N/A
1176	11.90	17.31	19.96	Cloghran Roundabout to Airport Sth via Apt	3886	N/A	Swords	9.00	16.52	68	32/97	18/74
239	11.96	N/A	N/A	Frederick Street North to O'Connell Street	796	796	Swords	7.52	31.15	67	N/A	N/A
143	12.05	11.25	4.43	Clanbrassil Street to South Circular Road	478	0	Rathfarnham	5.62	18.70	66	63/97	69/74
159	12.37	7.08	N/A	Mellowes Bridge to Finglas Road	547	0	Finglas	5.34	23.17	65	86/97	N/A
451	12.37	10.03	10.48	Leeson Street to Westmoreland Street	1551	657	Stillorgan	6.55	21.73	64	66/97	44/74
187	12.67	9.01	N/A	Manor Street to Blackhall Place	658	506	Blanchardstown	6.14	22.14	63	74/97	N/A
195	12.95	N/A	N/A	Dorset Street Lower to Frederick Street North	703	703	Finglas	9.24	24.10	62	N/A	N/A
303	13.04	N/A	N/A	Main Street to River Road Roundabout	1098	0	Blanchardstown	7.73	47.06	61	N/A	N/A
1070	13.76	17.22	18.52	Priorswood to Greencastle Road via Darndale	4089	0	Malahide	10.77	18.08	60	33/97	21/74
342	14.05	18.77	N/A	Morehampton Road to Leeson Street	1335	660	Stillorgan	9.52	23.33	59	26/97	N/A
1887	14.21	18.77	16.72	Clonsilla to Blanchardstown Road South	7451	0	Blanchardstown	11.46	17.49	58	27/97	27/74
201	14.61	14.54	5.03	Terenure Road East to Mount Tallant Avenue	816	0	Rathfarnham	8.39	34.56	57	52/97	66/74
64	15.02	5.79	10.33	Palmerston to Chapelizod Slip	267	267	Lucan	4.88	50.59	56	91/97	45/74
255	15.16	17.42	24.78	Blakestown Way to Rear of Town Centre	1074	0	Blanchardstown	10.34	21.72	55	31/97	11/74
257	15.31	12.65	14.00	Dorset Street Lower to Parnell Square East	1093	1093	Finglas	12.99	23.70	54	58/97	32/74
450	15.35	8.96	N/A	Penny Hill Pub to Foxhunter	1920	154	Lucan	10.11	35.81	53	75/97	N/A
357	15.46	14.40	13.86	Greencastle Road to Kilmore Road	1532	998	Malahide	6.83	23.17	52	53/97	33/74
176	15.50	13.07	9.94	Brookvale Road to Terenure Road East	759	525	Rathfarnham	9.49	45.54	51	56/97	46/74
724	15.56	15.10	12.41	Oliver Plunkett Road to Foxrock Church	3130	N/A	Stillorgan	10.07	21.54	50	49/97	40/74
90	15.68	N/A	N/A	Frederick Street North to Parnell Square East	390	390	Finglas	6.44	33.43	49	N/A	N/A
570	15.95	15.92	9.59	Donnybrook to Leeson Street	2525	1827	Stillorgan	11.94	27.46	48	41/97	48/74
345	15.99	15.67	17.73	Collins Avenue to Richmond Road	1532	1183	Swords	11.10	31.70	47	44/97	25/74
150	16.09	11.96	10.59	St Davids Wood to Collins Avenue	671	601	Malahide	5.04	63.57	46	60/97	43/74
1024	16.44	16.43	N/A	Superquinn to Penny Hill Pub	4675	N/A	Lucan	12.16	25.93	45	39/97	N/A
64	16.77	N/A	N/A	Nutgrove Avenue Terminus to Oakdown Road	298	0	Rathfarnham	8.19	38.31	44	N/A	N/A
334	16.78	14.80	N/A	Coldcut Road to Ballyfermot/Le Fanu Road	1558	719	North Clondalkin	9.08	40.64	43	50/97	N/A
181	16.89	20.02	N/A	Emmet Road to South Circular Road	851	334	North Clondalkin	8.19	30.64	42	22/97	N/A
179	16.92	8.01	N/A	Ratoath Road to North Circular Road	841	0	Blanchardstown	6.88	77.63	41	82/97	N/A
224	17.20	8.74	10.71	Mount Brown to Cornmarket	1068	725	North Clondalkin	10.42	29.58	40	77/97	42/74
483	17.95	18.37	22.35	Dun Loaghare to Oliver Plunkett Road	2409	N/A	Stillorgan	8.26	24.22	39	30/97	15/74
639	18.14	24.11	19.20	Finglas Road to Prospect Road	3222	2978	Finglas	11.73	42.64	38	12/97	20/74
738	18.43	15.72	N/A	Fonthill Road to Coldcut Road	3778	563	North Clondalkin	15.44	20.80	37	43/97	N/A

Table 11 Morning Peak Period League Table (continued)

Quality Bus Corridors - Average Sectional Bus Journey Times & Speeds - AM Peak League Table - November 2004												
203	18.53	19.15	7.52	Harolds Cross Road to Clanbrassil Street	1043	845	Rathfarnham	11.01	32.65	36	24/97	58/74
403	18.73	17.05	13.20	Oakdown Road to Rathfarnham Road	2098	1900	Rathfarnham	12.61	30.70	35	34/97	34/74
224	19.09	12.82	N/A	Donnybrook to Morehampton Road	1190	1167	Stillorgan	10.71	39.30	34	57/97	N/A
420	19.65	18.71	N/A	Kylemore Road to Emmet Road	2292	236	North Clondalkin	14.25	42.75	33	28/97	N/A
403	19.72	11.74	12.42	Coolmine Road to River Road Roundabout	2208	361	Blanchardstown	18.84	21.66	32	61/97	39/74
428	19.72	15.80	12.56	Con Colbert Road to Ellis Quay	2344	1359	Lucan	16.13	28.41	31	42/97	37/74
108	19.85	8.37	40.43	Fortfield Road to Rathdown Park	595	522	Tallaght	13.39	36.93	30	80/97	4/74
309	20.03	21.05	18.31	Blanchardstown Road South to Coolmine Rd	1719	388	Blanchardstown	13.19	31.57	29	20/97	22/74
603	20.25	19.33	13.15	Foxrock Church to Mount Merrion Avenue	3393	3393	Stillorgan	14.93	30.46	28	23/97	35/74
333	20.52	16.70	N/A	Fairview to Amiens Street	1897	1592	Malahide	9.69	53.77	27	36/97	N/A
73	20.76	11.99	N/A	Bishop Street to Stephen Street	423	0	Rathfarnham	8.96	60.01	26	59/97	N/A
285	20.87	16.12	N/A	Oliver Plunkett Road to Abbey Road	1652	N/A	Stillorgan	14.94	29.88	25	40/97	N/A
270	21.27	26.58	28.71	West M50 to Palmerston	1595	390	Lucan	15.52	21.38	24	10/97	6/74
548	21.45	21.34	12.71	Mount Merrion Avenue to Donnybrook	3267	2525	Stillorgan	13.34	39.73	23	18/97	36/74
280	22.20	21.44	26.79	Rear of Town Centre to River Road	1727	N/A	Blanchardstown	16.99	32.05	22	17/97	8/74
385	22.39	18.83	19.46	Ashtown Roundabout to Ratoath Road	2395	2075	Blanchardstown	15.13	40.67	21	25/97	19/74
582	22.49	34.45	17.24	County Council Offices to Cloghran R'bout	3636	2258	Swords	18.67	29.81	20	6/97	26/74
186	22.76	N/A	N/A	Fonthill Road North to Fonthill Road South	1176	1176	North Clondalkin	11.66	54.28	19	N/A	N/A
185	23.06	18.55	21.54	Clare Hall to Priorswood Road	1185	1017	Malahide	13.67	58.42	18	29/97	16/74
205	23.10	43.39	N/A	Airside Business Park to Cloghran R'bout	1314	1009	Swords	15.31	35.84	17	2/97	N/A
623	23.58	28.97	18.00	Chapelizod Slip to Conyngham Road	4080	253	Lucan	13.82	39.59	16	8/97	23/74
144	23.77	22.67	14.32	Conyngham Road to Parkgate Street	951	674	Lucan	14.76	55.24	15	15/97	31/74
210	24.23	21.27	40.02	East M50 to Oldbridge Road	1412	1054	Tallaght	18.90	36.83	14	19/97	5/74
267	24.95	23.78	25.13	Main Street to West M50	1850	1106	Tallaght	20.24	44.40	13	13/97	10/74
166	24.99	16.56	N/A	South Circular Road to Mount Brown	1150	278	North Clondalkin	11.04	51.75	12	38/97	N/A
498	27.05	16.98	27.88	Airport South to Omni Park	3741	3269	Swords	16.05	56.35	11	35/97	7/74
161	27.18	22.49	12.47	Oldbridge Road to Fortfield Road	1212	279	Tallaght	19.31	48.48	10	16/97	38/74
266	27.56	39.91	N/A	Main Street to Airside Business Park	2040	1249	Swords	19.23	44.51	9	3/97	N/A
181	30.93	22.72	N/A	Con Colbert Road to Heuston Station	1559	966	Lucan	18.46	43.17	8	14/97	N/A
140	32.25	15.28	3.77	Terenure Road East to Rathgar Road	1256	1034	Tallaght	19.41	74.12	7	47/97	71/74
213	34.24	30.01	25.86	Foxhunter to West M50	2026	2026	Lucan	17.96	62.34	6	7/97	9/74
114	35.88	26.48	N/A	Casino Park to Fairview	1133	1054	Malahide	18.46	78.44	5	11/97	N/A
98	36.45	35.70	51.00	Priorswood Road to Greencastle Road	992	671	Malahide	22.89	83.01	4	5/97	1/74
106	37.69	N/A	N/A	Coolmine Road to Main Street	1110	0	Blanchardstown	25.45	59.62	3	N/A	N/A
147	47.95	36.91	44.62	New River Road to Ashtown Roundabout	1958	1958	Blanchardstown	34.05	73.42	2	4/97	2/74
228	56.90	71.61	44.25	Chapelizod Slip to Con Colbert Road	3601	3275	Lucan	31.24	71.23	1	1/97	3/74

14 Graphs

Data from the roadside surveys can be used effectively to produce graphs for all sections of each QBC.

The benefit in producing graphs is that the variations in individual bus operating speeds can be shown pictorially.

The results may help to pinpoint problems in particular sections at specific times.

Tables 12a to 12v are examples from each QBC of how the information can be displayed. Results from the morning peak period only are shown in this section, but graphs for all periods are available. The exception is North Clondalkin where one particular section is shown during the morning and afternoon/evening peak periods.

Each graph shows the speed of every individual bus over the section, the average bus journey speed on the section for the survey period, the minimum target bus speed as set out in the QBC Specification and, where available, the average car journey speed on the same section.

The x axis plots the individual bus times at the start of the section.
The y axis plots bus speed expressed in kilometres per hour.

Blanchardstown QBC

Tables 12a, 12b and 12c are examples of the results from **Blanchardstown QBC**.

Table 12a shows the section from New River Road to Ashtown Roundabout, a distance of 1958 metres with continuous bus priority.

- All buses operating over the entire morning peak period comfortably exceed the QBC specification
- Bus average speed exceeds car average speed
- The slowest bus operated at 34.05 kilometres per hour over this section

Table 12b shows the section from Ashtown Roundabout to Ratoath Road, a distance of 2395 metres. Although this section has bus priority of 2075 metres, it is not continuous and shows a different set of results.

- All but 2 buses exceed the QBC specification
- Car average speed comfortably exceeds bus average speed
- In the period from 0758 to 0937 all buses except one operate at less than car average speed

Table 12c shows the section from Blackhall Place to Capel Street along the North Quays, a distance of 1001 metres with bus priority amounting to 312 metres. The graph shows the following:

- All but 5 buses operate at speeds of less than half the QBC specification
- Bus and car average journey speeds are very similar
- The range of bus speeds is low with all buses throughout the period experiencing congestion

Table 12a Blanchardstown QBC

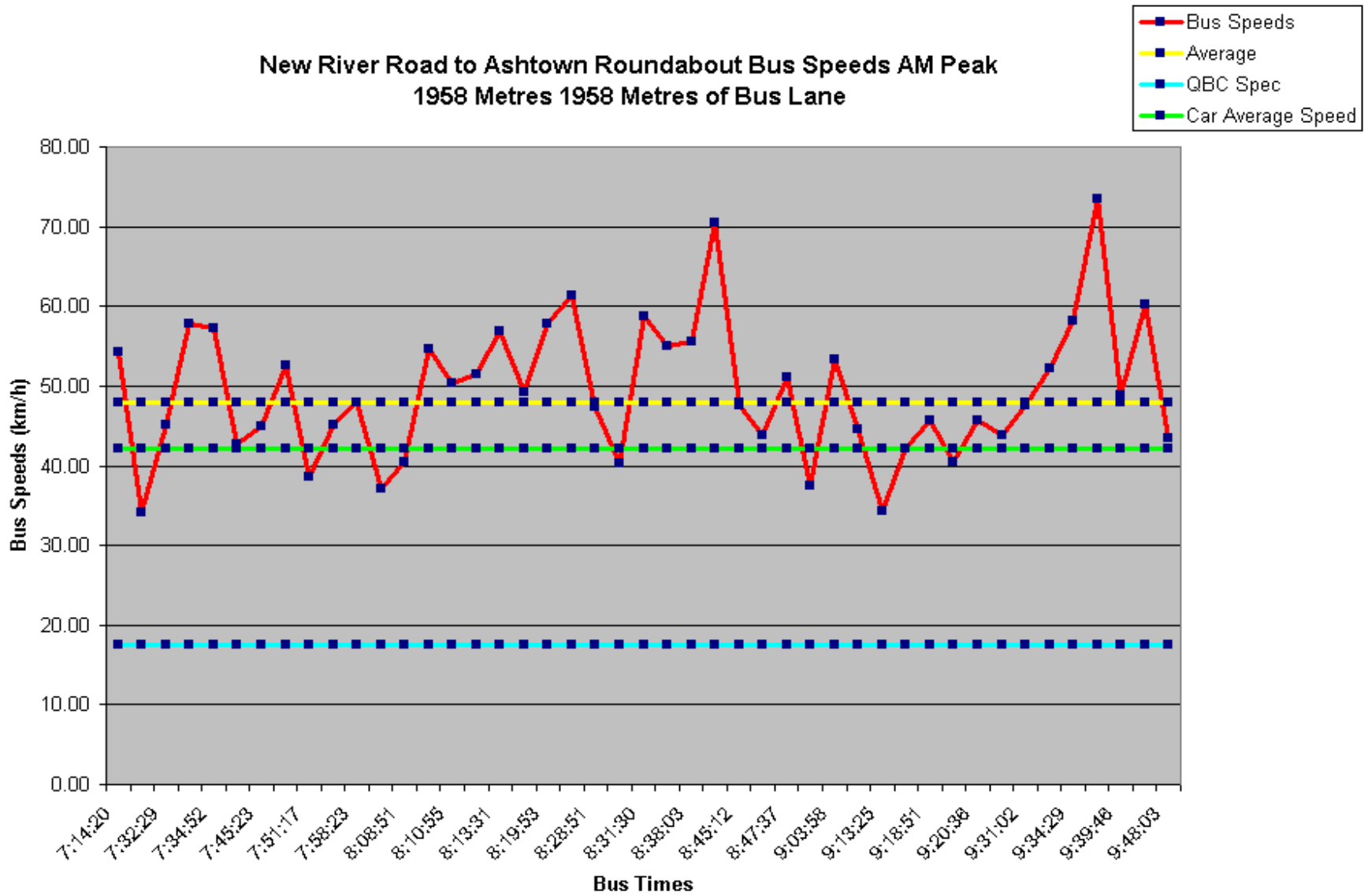


Table 12b Blanchardstown QBC

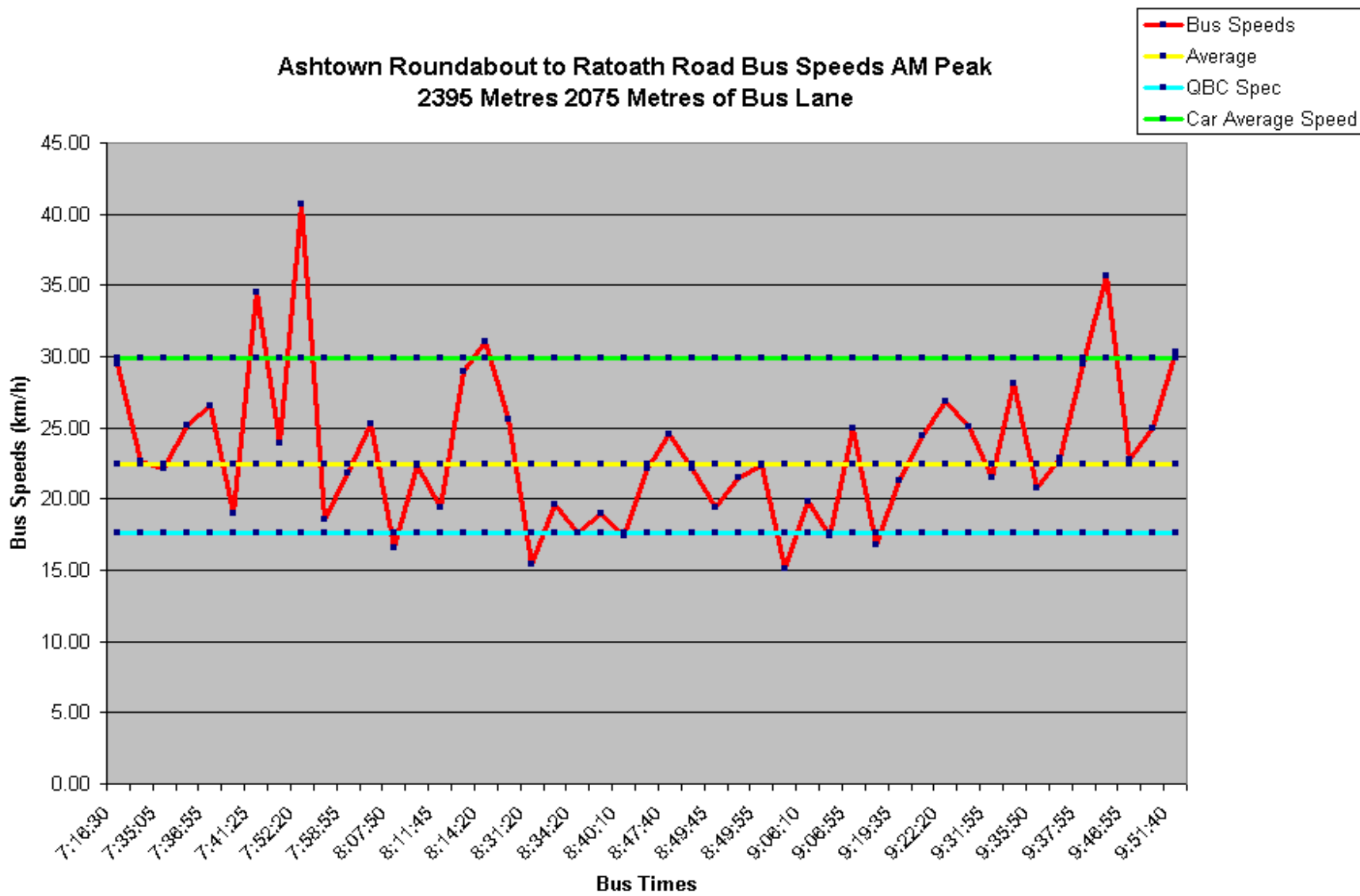
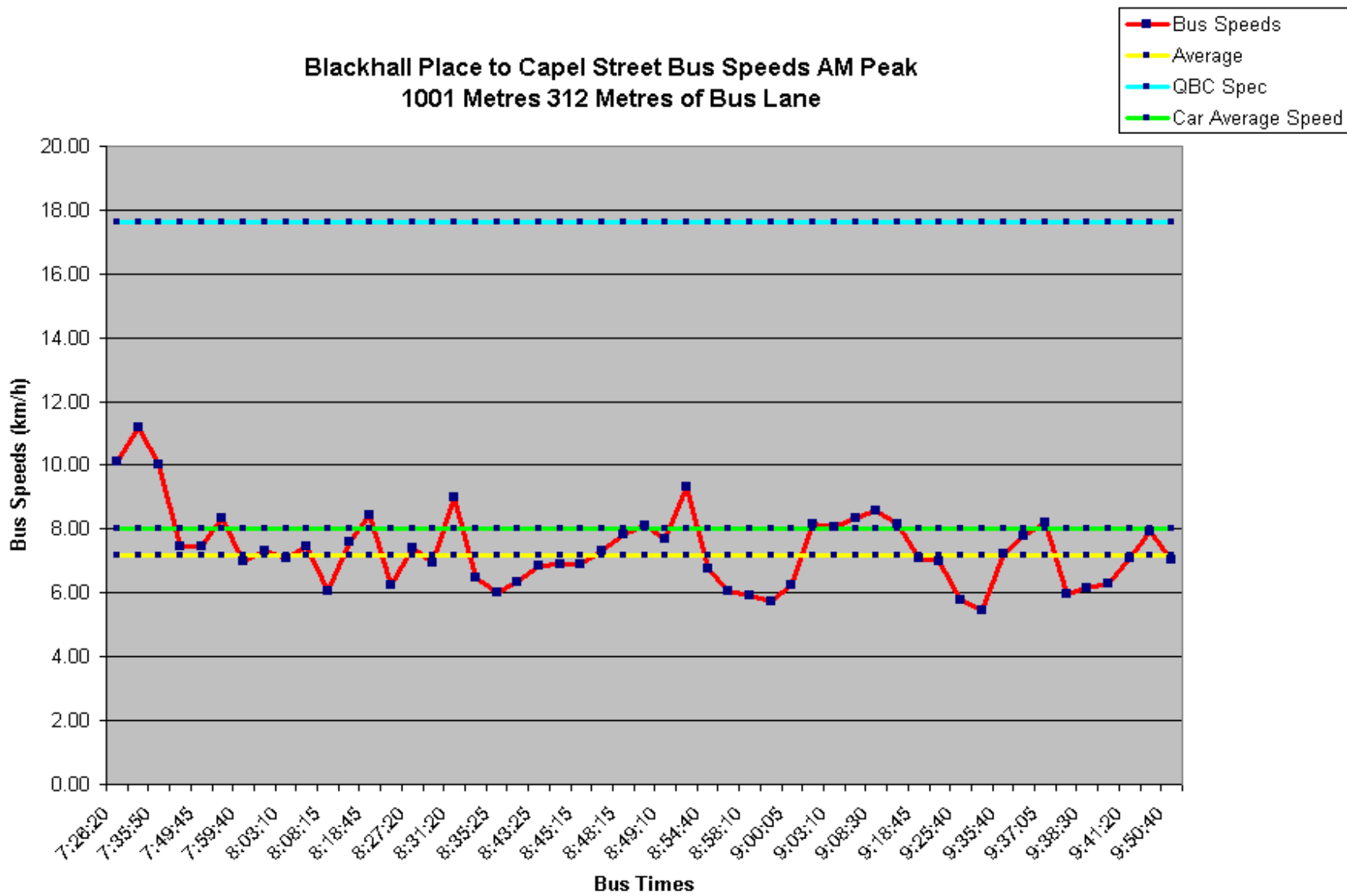


Table 12c Blanchardstown QBC



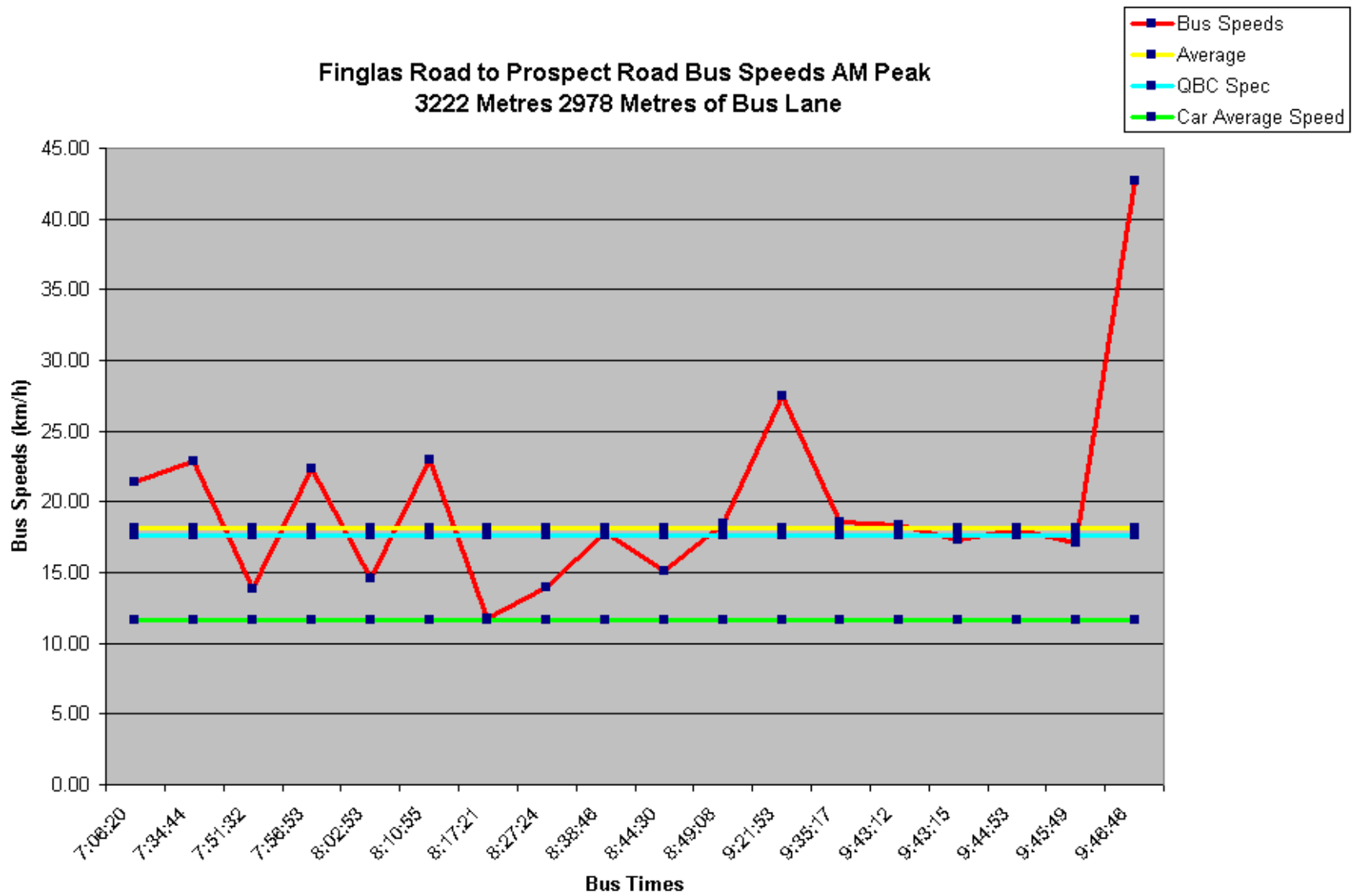
Finglas QBC

Table 12d shows the section from Finglas Road with its junction with Main Street to Prospect Road prior to the junction with Whitworth Road, a distance of 3222 metres with bus priority amounting to 2978 metres.

The graph shows the following:

- Bus average speed comfortably exceeds car average speed indicating the effectiveness of the bus priority
- All buses operate at speeds in excess of the average car speed
- Bus average speed marginally exceeds the QBC specification

Table 12d Finglas QBC



Lucan QBC

Tables 12e, 12f and 12g are examples of the results from Lucan QBC.

Table 12e shows the section on the N4 dual carriageway from the sliproad to Chapelizod village to Con Colbert Road prior to South Circular Road. This section measures 3601 metres with bus priority primarily along the hard shoulder amounting to 3275 metres.

The graph shows the following:

- Average bus speed of 56.9 kilometres per hour is almost treble the QBC specification
- Average bus speed comfortably exceeds car average speed

Table 12f shows the section from Con Colbert Road to Heuston Station including the recently opened bus lane on St Johns Road West. This section measures 1559 metres of which 966 metres has bus priority.

The graph shows the following:

- Bus average speed comfortably exceeds the QBC specification
- Bus average speed comfortably exceeds car average speed
- No buses are caught up in traffic congestion

Table 12g shows the section from Ellis Quay to Arran Quay on the North Quays. On this short section of 497 metres there is no bus priority.

The graph shows the following:

- Bus average speed is well below QBC specification
- Bus average speed of 10.48 kilometres per hour includes some much higher operating speeds achieved prior to 0736
- The half hour period 0736 to 0806 is the slowest
- Bus and car average speed are very similar

Table 12e Lucan QBC

Chapelizod Sliproad to Con Colbert Road Bus Speeds AM Peak
3601 Metres 3275 Metres of Bus Lane

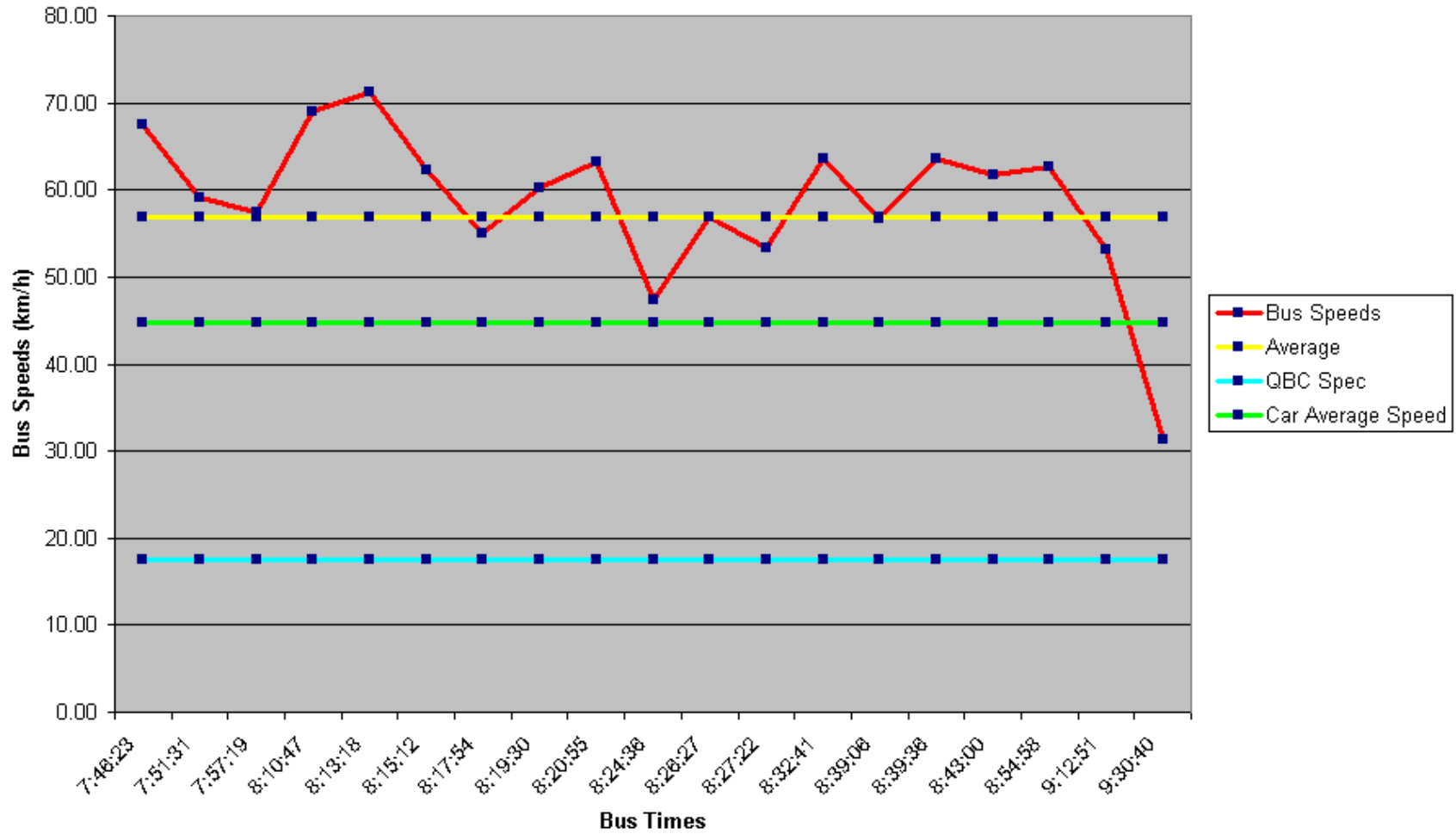


Table 12f Lucan QBC

Con Colbert Road to Heuston Station Bus Speeds AM Peak
1559 Metres 966 Metres of Bus Lane

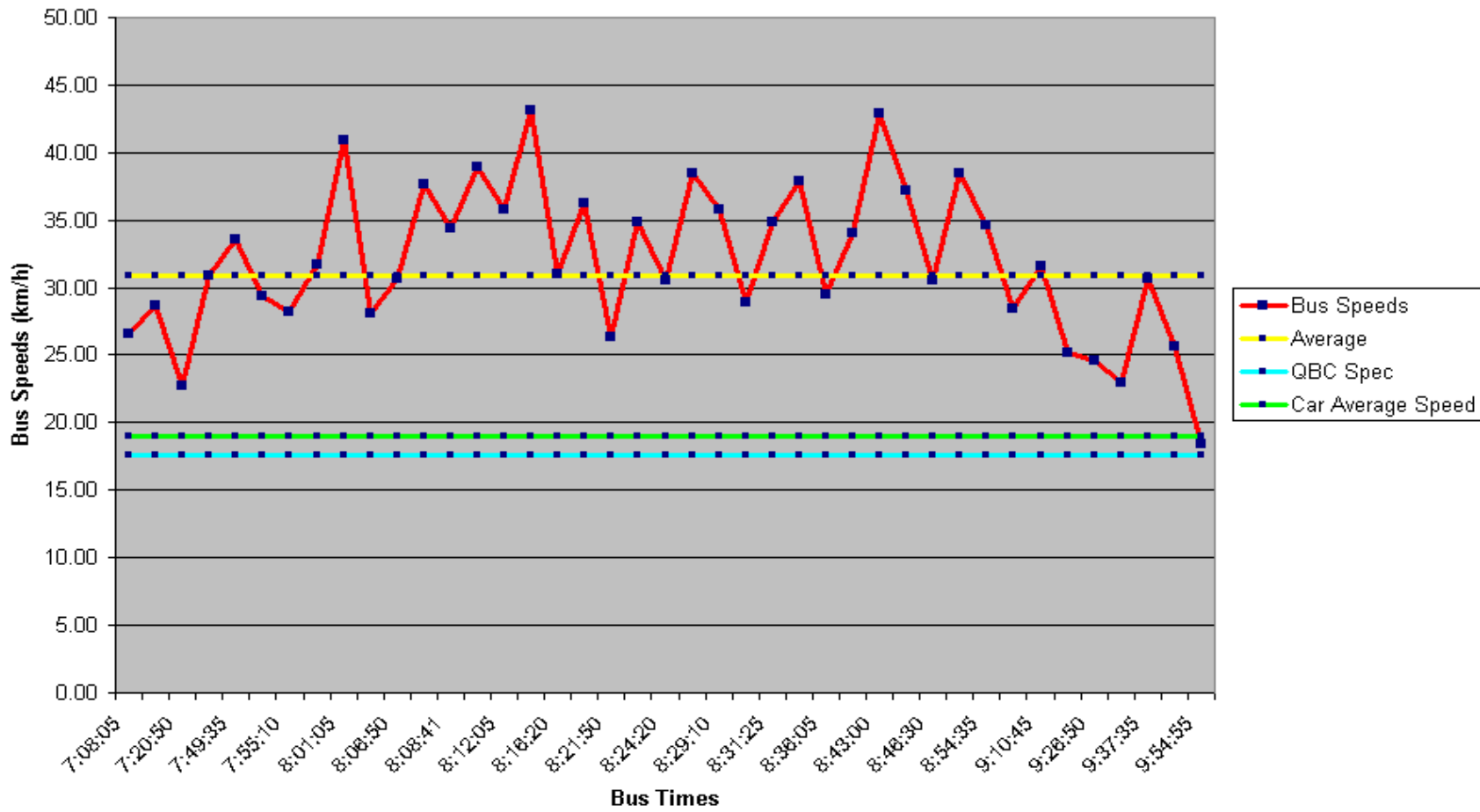
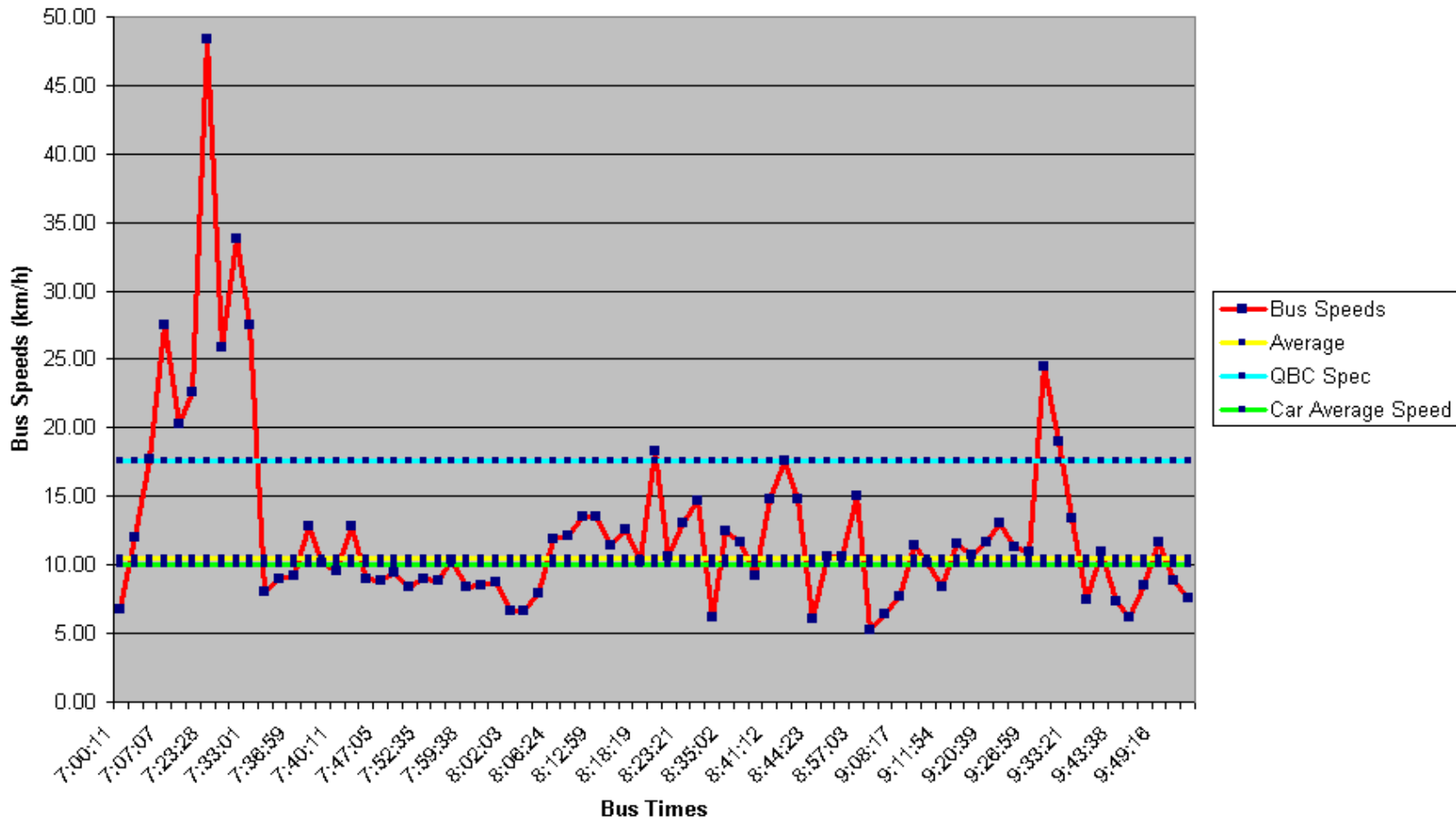


Table 12g Lucan QBC

Ellis Quay to Arran Quay Bus Speeds AM Peak
497 Metres 0 Metres of Bus Lane



Malahide QBC

Tables 12h, 12i and 12j are examples of the results from Malahide QBC.

Table 12h shows the section from south of Kilmore Road to Collins Avenue East measuring 671 metres of which 601 metres has bus priority.

The graph shows the following results:

- Bus average speed is just below the QBC specification
- Bus average speed exceeds car average speed
- Buses are most affected by congestion in the short period just after 0800
- Bus speeds show a high degree of variability

Table 12i shows the short 318 metre section from Collins Avenue East to Casino Park which has no bus priority.

The graph shows the following results:

- Both bus and car average speed is at walking pace
- Buses are hardly moving between 0823 and 0841

The results from this section are very similar to those for the short 150 metre section north and south of the junction with Kilmore Road. On the survey day all traffic was at a virtual standstill between 0751 and 0851. The poor performance of these two sections contributed significantly to the overall corridor performance.

Table 12j shows the section between Casino Park and Fairview, a distance of 1133 metres of which 1054 metres has bus priority.

The graph shows the following results:

- Bus average speed comfortably exceeds the QBC specification
- Car average speed exceeds bus average speed
- Bus speeds are significantly lower between 0828 and 0851

Table 12h Malahide QBC

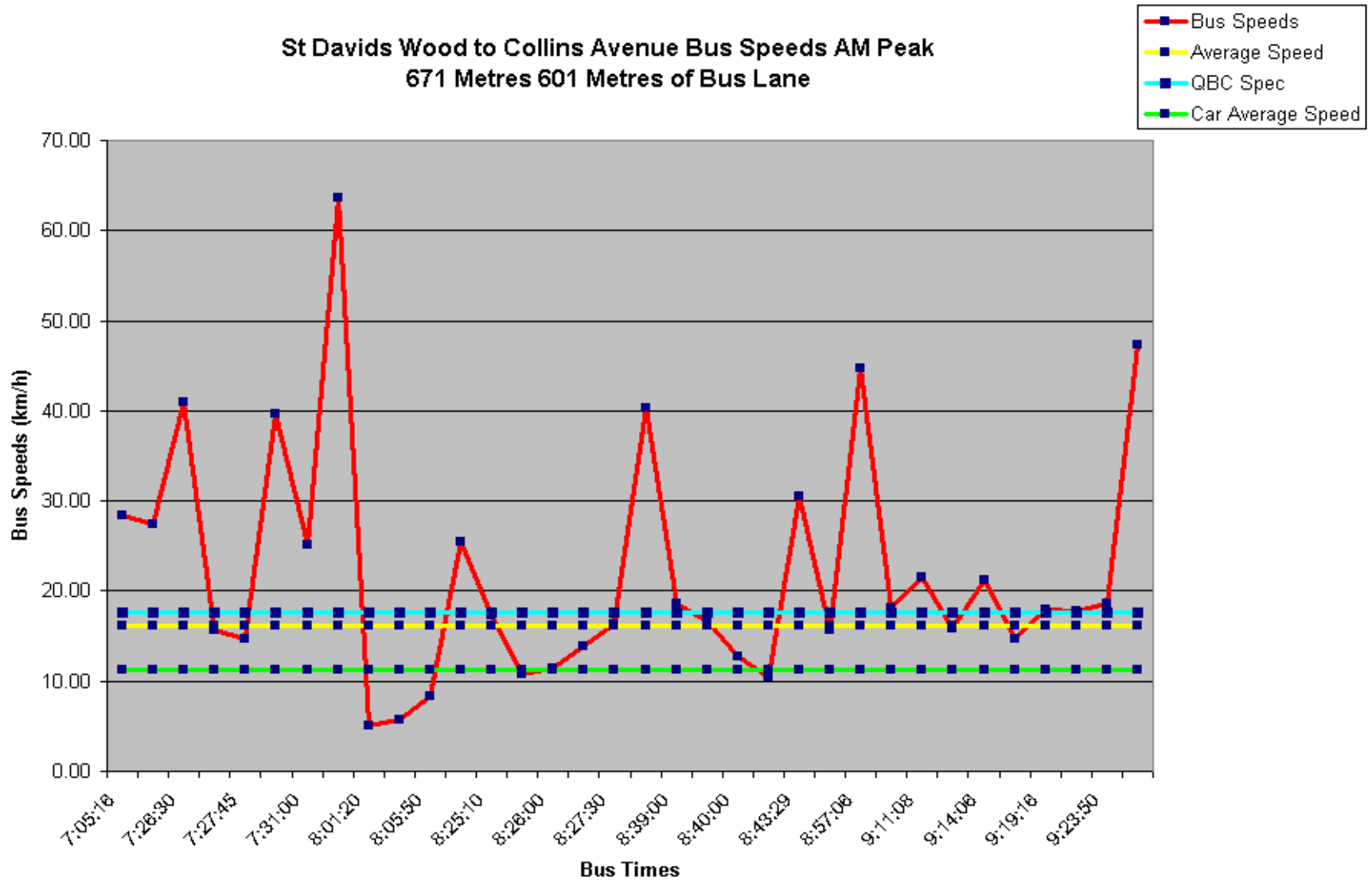


Table 12i Malahide QBC

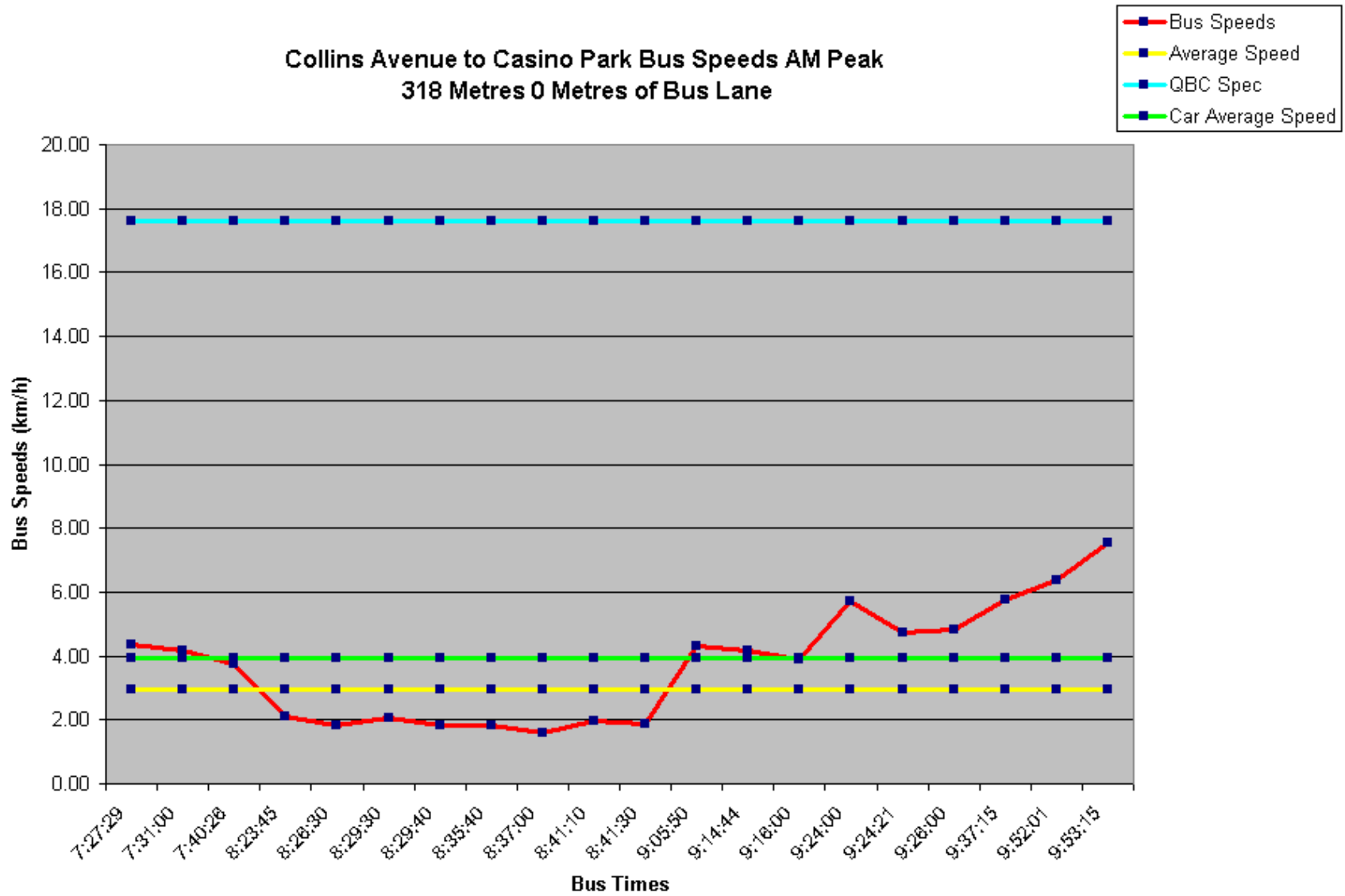
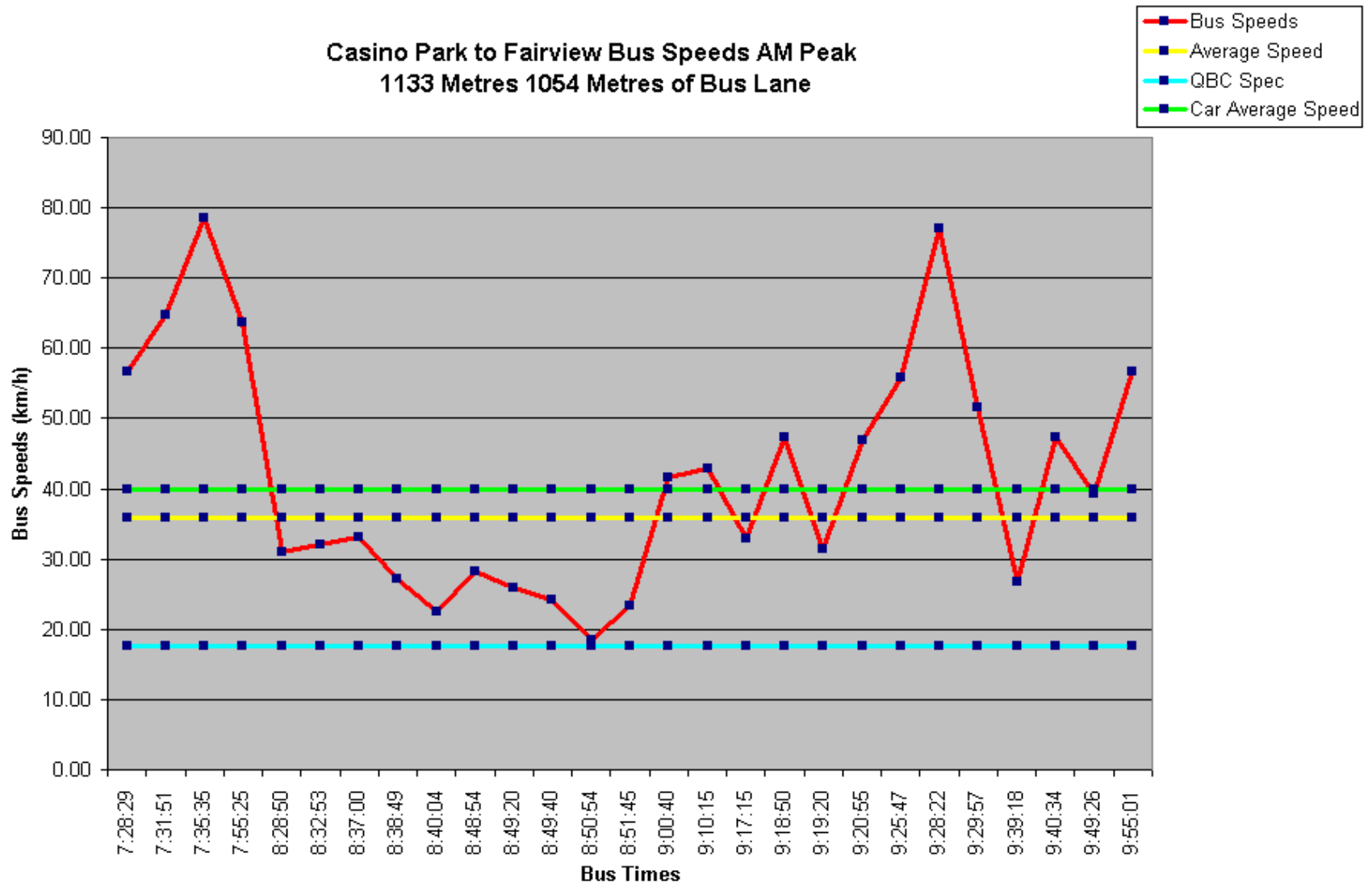


Table 12j Malahide QBC



North Clondalkin QBC

Tables 12k and **12l** are examples from North Clondalkin QBC.

Table 12k shows the section of Ballyfermot road from the junction with Coldcut Road to the junction with Le Fanu Road prior to the shopping centre.

This section measures 1558 metres of which 719 metres has bus priority.

The graph shows the following results:

- Bus and car average speed are very similar
- Although bus average speed is very close to QBC specification the period between 0836 and 0917 shows 12 buses operating at significantly lower speeds

Table 12l shows this section in reverse in the afternoon peak. The section measures 1549 metres with 144 metres of bus priority.

The graph shows the following results:

- All buses between 1659 and 1800 operated at less than 5 kilometres per hour
- Bus and car average speeds were virtually the same

Table 12k North Clondalkin QBC

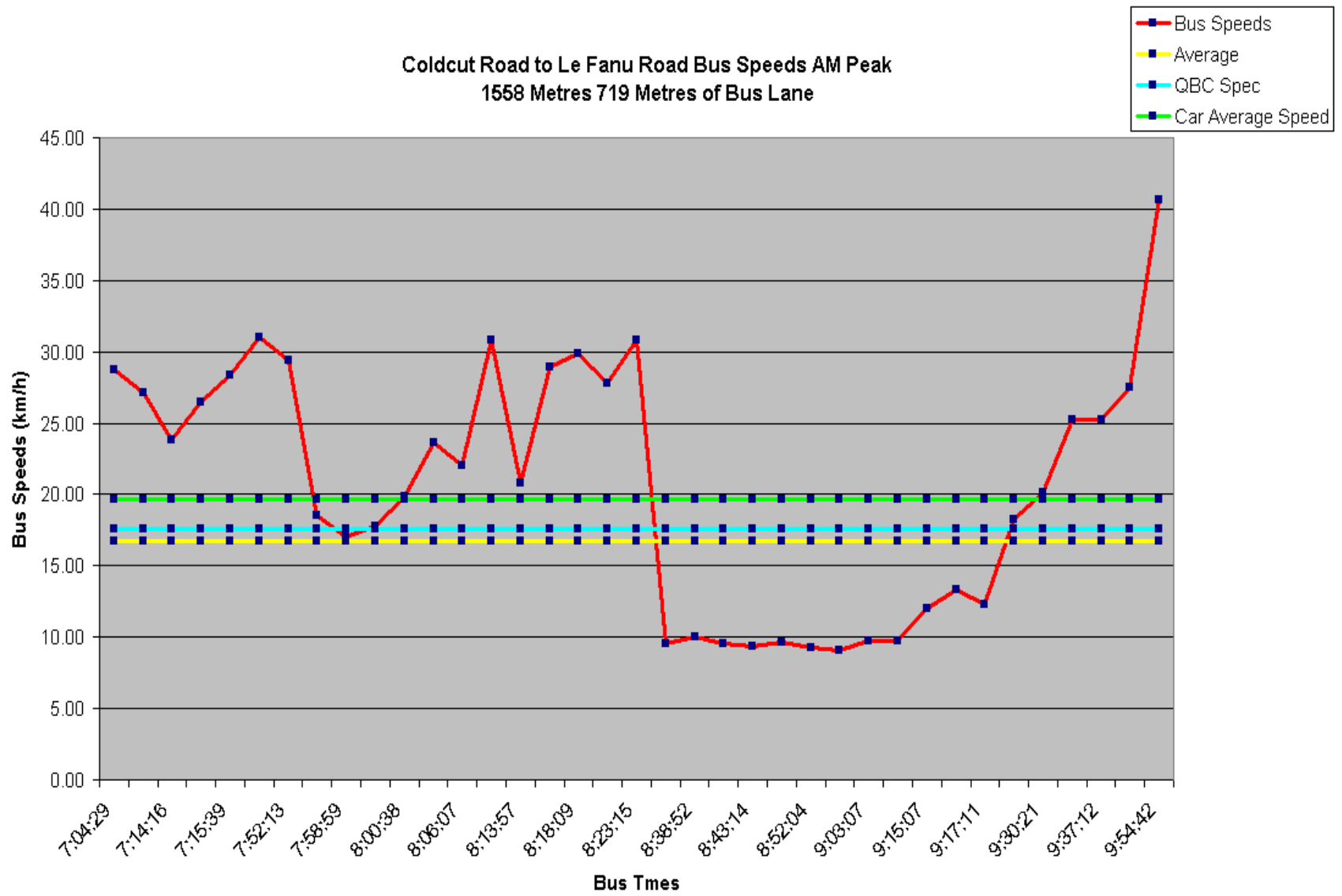
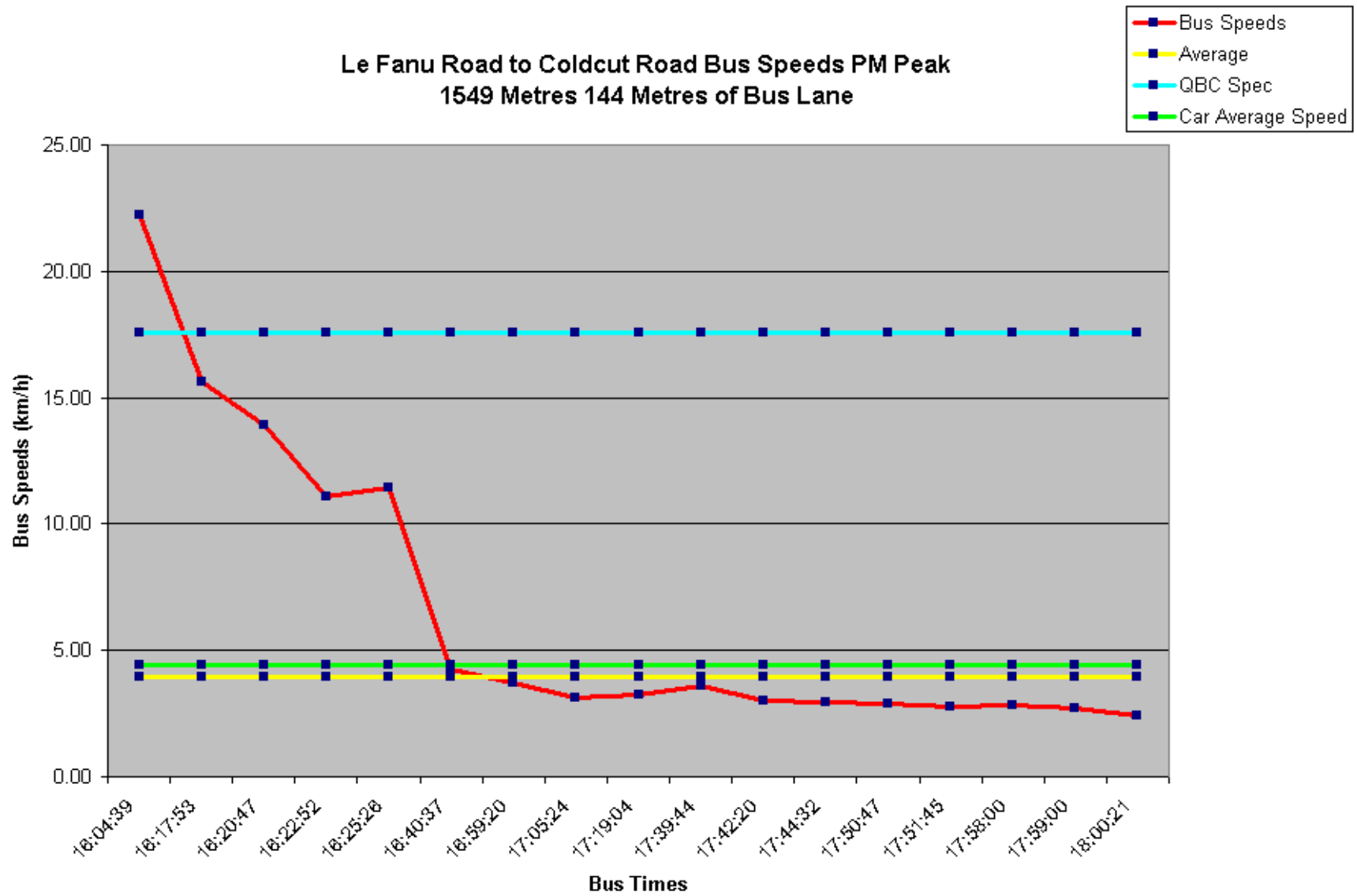


Table 12I North Clondalkin QBC



Rathfarnham QBC

Tables 12m and **12n** are examples from Rathfarnham QBC.

Table 12m shows the results for the section from Nutgrove Avenue to Rathfarnham village, a distance of 2098 metres of which 1900 has bus priority.

The graph shows the following results:

- Bus average speed is 50% higher than car average speed
- Bus average speed exceeds the QBC specification
- Bus average speed is well below QBC specification for all buses operating between 0753 and 0845

Table 12n shows the results for the section from South Circular Road just after the junction with Clanbrassil Street to Camden Street Upper. This section measures 777 metres of which 532 metres has bus priority.

The graph shows the following results:

- Car average speed is much higher than bus average speed
- Bus average speed is less than half the QBC specification speed
- All buses operate at very low speeds between 0806 and 0900

Table 12m Rathfarnham QBC

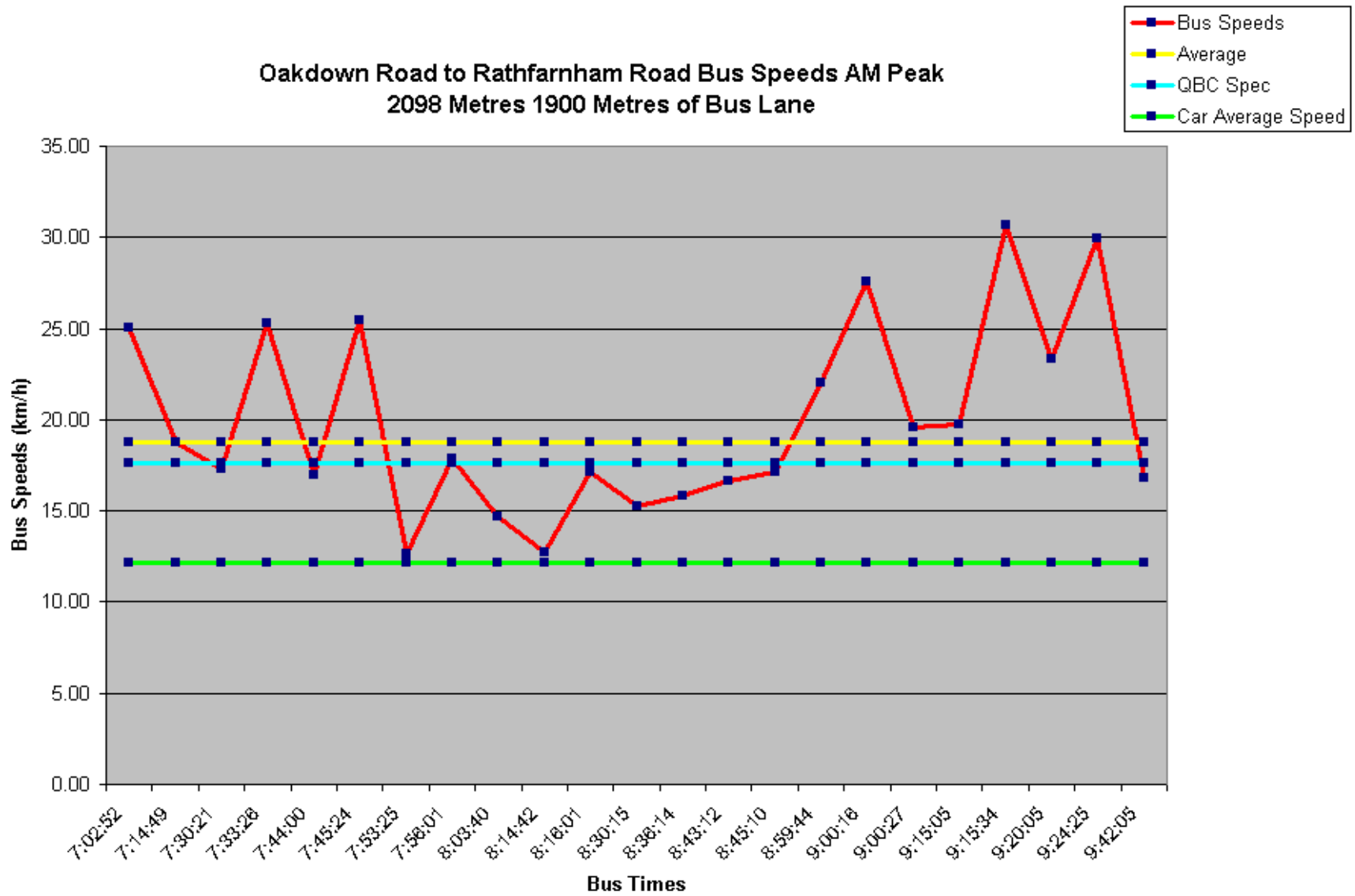
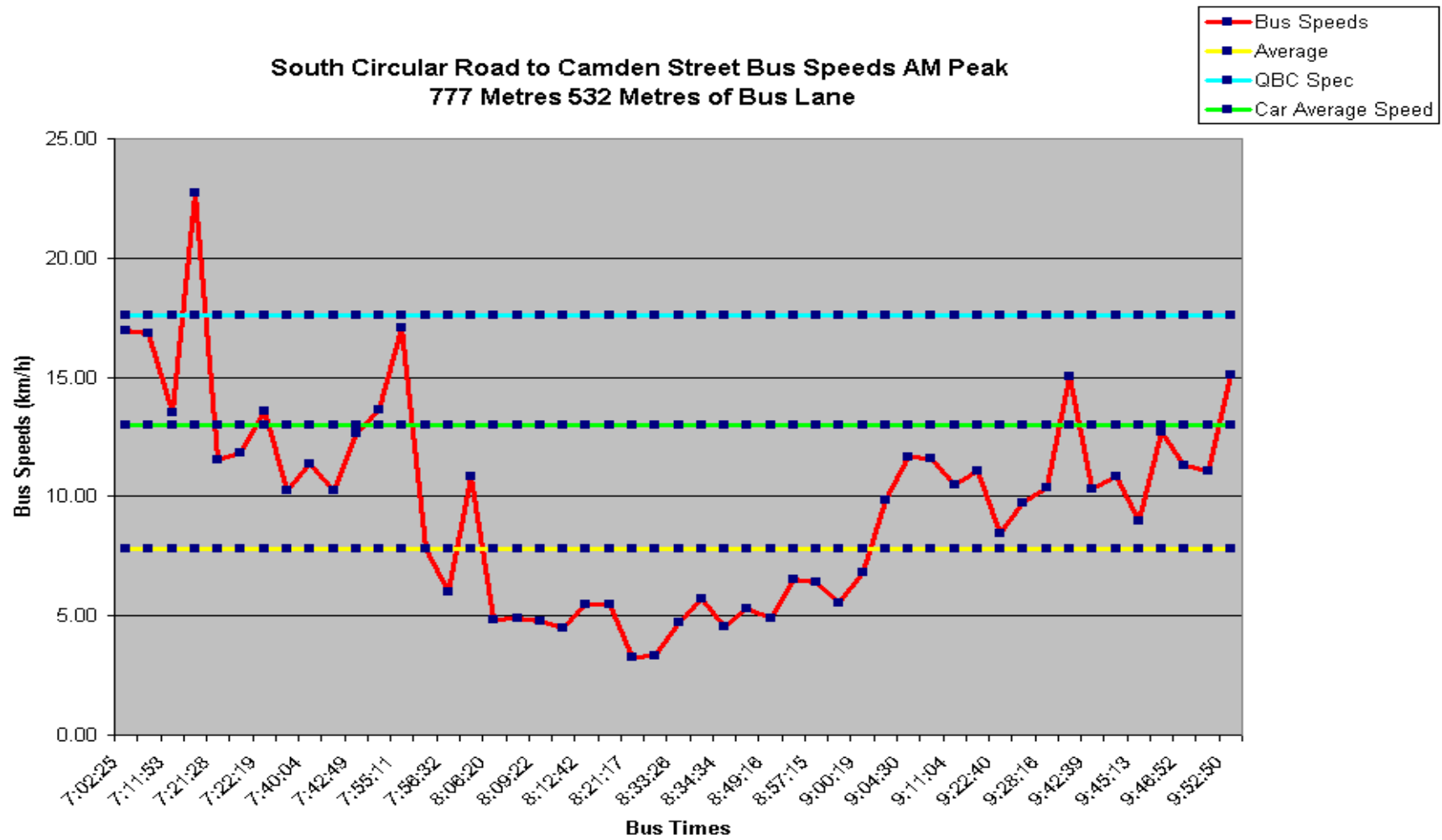


Table 12n Rathfarnham QBC



Stillorgan QBC

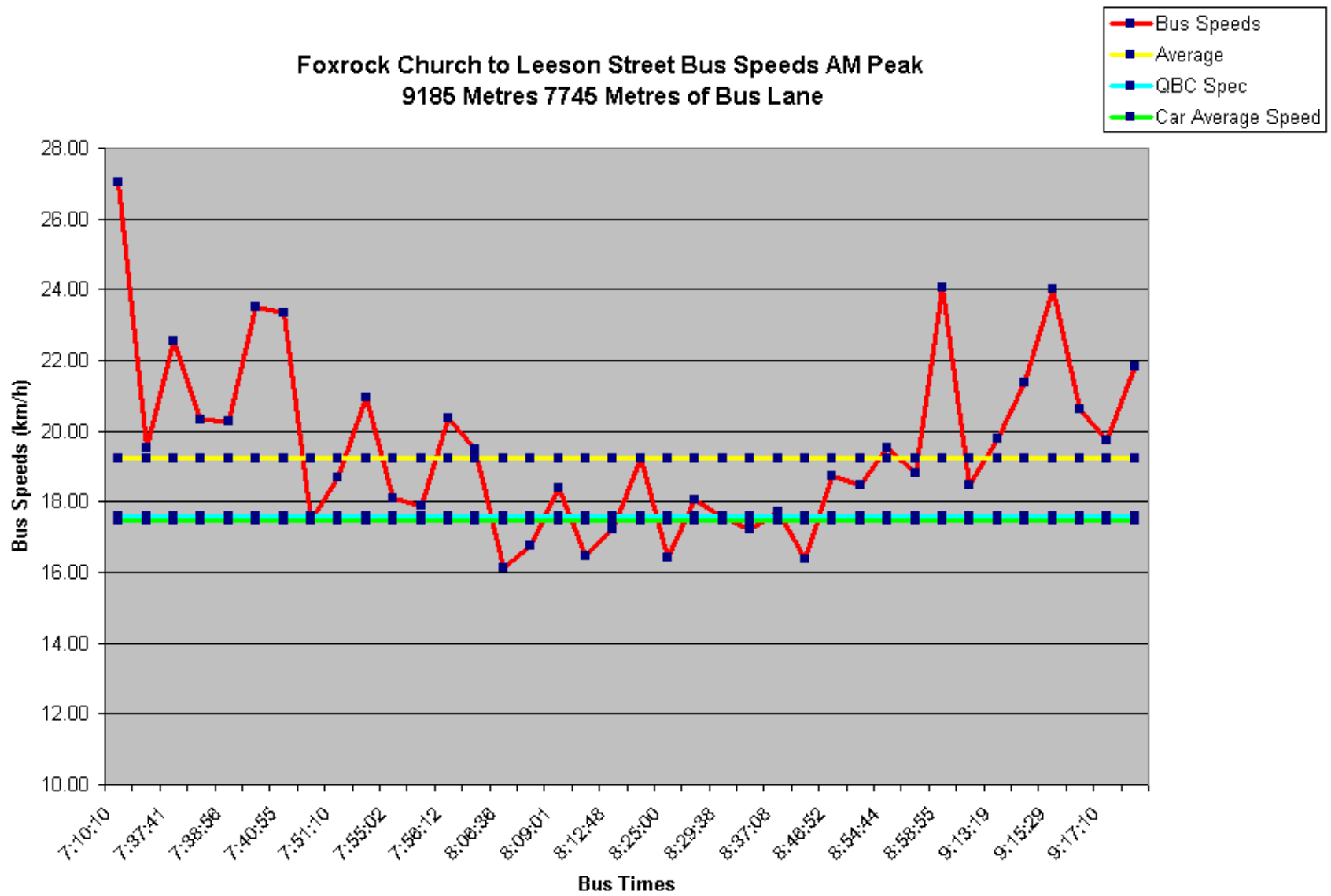
Table 12o shows the results for the whole Stillorgan Quality Bus Corridor from Foxrock Church to Leeson Street.

The corridor measures 9185 metres of which 7745 metres has bus priority.

The graph shows the following:

- Bus average speed exceeds car average speed
- Bus average speed exceeds the QBC specification
- No bus operates at less than 16.11 kilometres per hour

Table 12o Stillorgan QBC



Swords QBC

Tables 12p and 12q are examples from Swords QBC.

Table 12p shows the results for the section from just south of Dublin Airport to the Omni Park shopping centre. This section measures 3741 metres of which bus priority amounts to 3269 metres.

The graph shows the following:

- Bus and car average speed are similar
- Bus average speed comfortably exceeds the QBC specification but hovers on or around the specification level for all buses operating between 0801 and 0854

Table 12q shows the results for the section from Collins Avenue to Richmond Road. This section measures 1532 metres with 1183 metres of bus priority.

The graph shows the following:

- Bus average speed is more than 50% faster than car average speed
- Bus average speed is just below the QBC specification
- Bus speeds on the section are variable and generally lower between 0801 and 0856

Table 12p Swords QBC

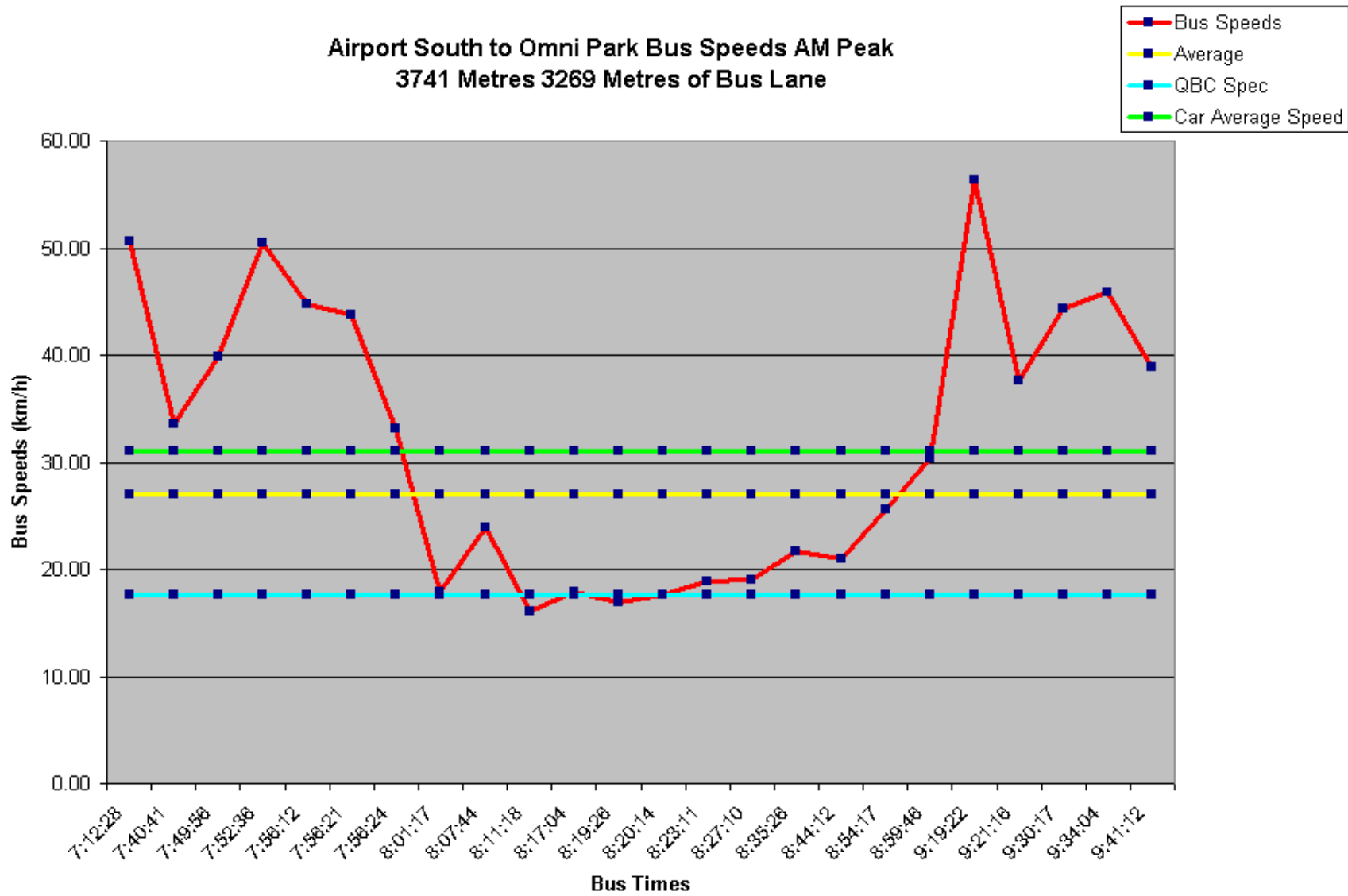
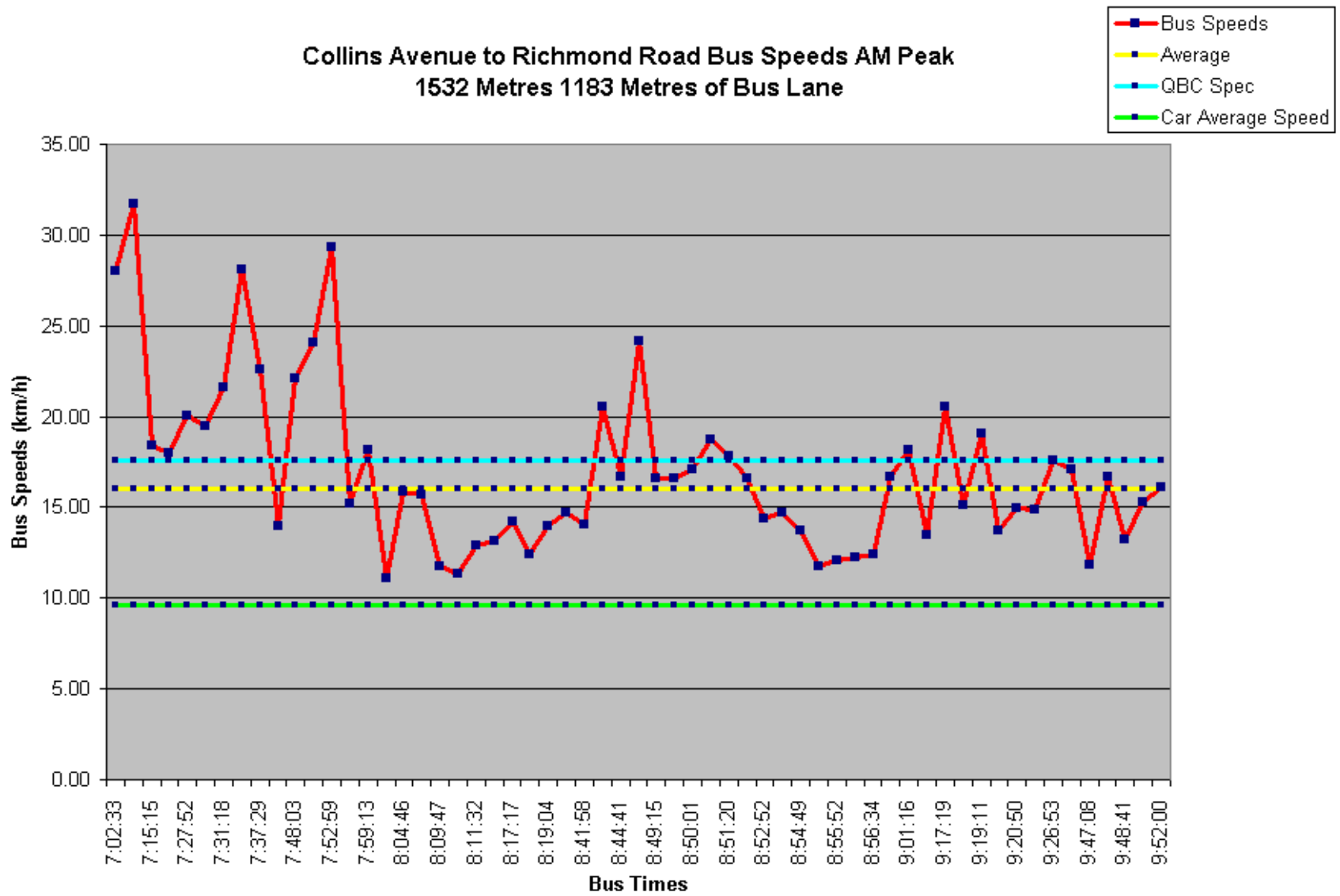


Table 12q Swords QBC



Tallaght QBC

Tables 12r and **12s** are examples from Tallaght QBC.

Table 12r shows the results for the section from Terenure to Rathgar Road prior to Rathmines. This section measures 1256 metres with 1034 metres of bus priority.

The graph shows the following:

- Bus average speed is more than 50% faster than car average speed
- All buses operate at speeds in excess of the QBC specification

Table 12s shows the very next section between Rathgar Road and Rathmines where there is no bus priority on the 495 metre section.

The graph shows the following:

- Bus and car average speeds are very similar with both being below 5 kilometres per hour
- Buses operate even more slowly between 0800 and 0850

Table 12r Tallaght QBC

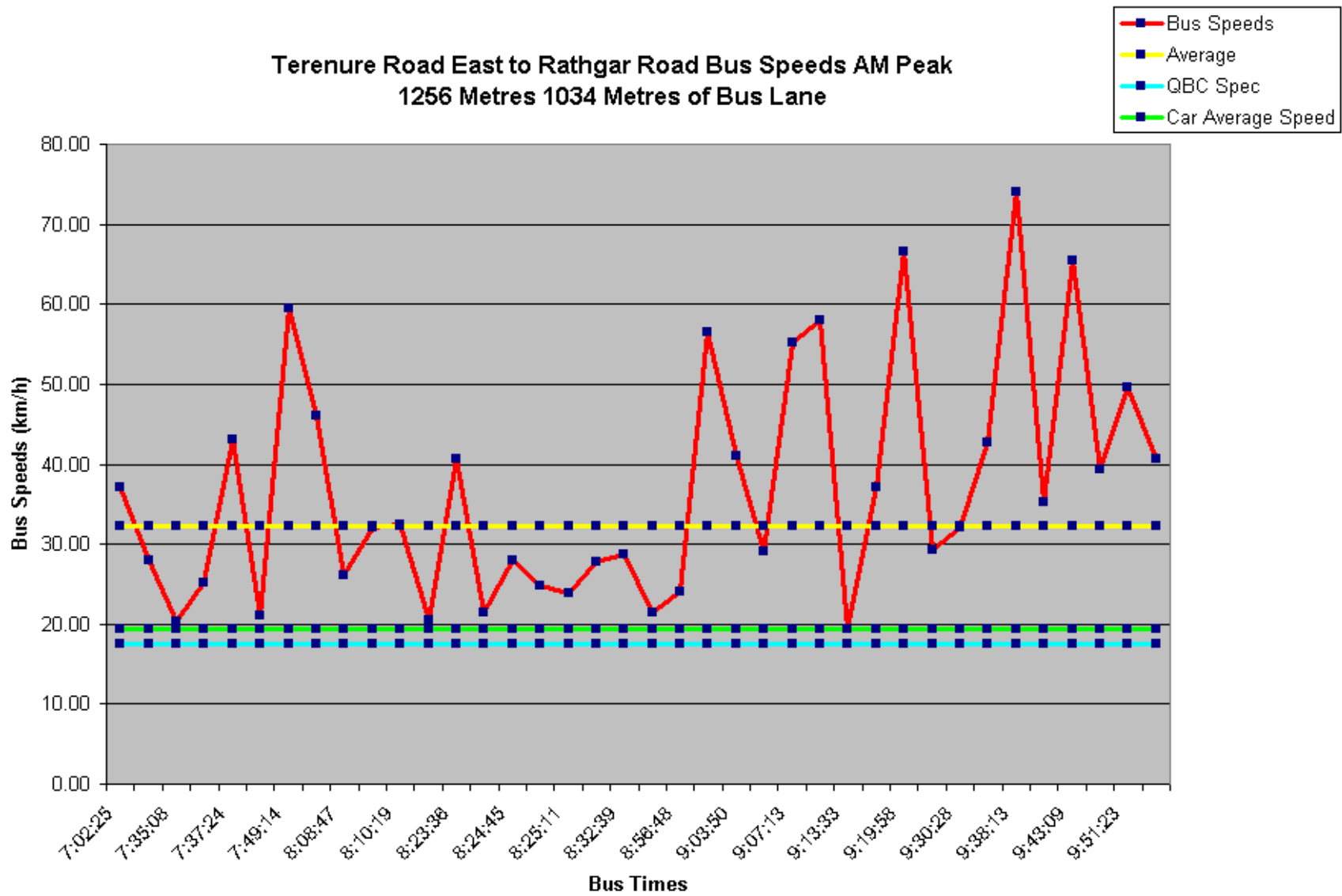
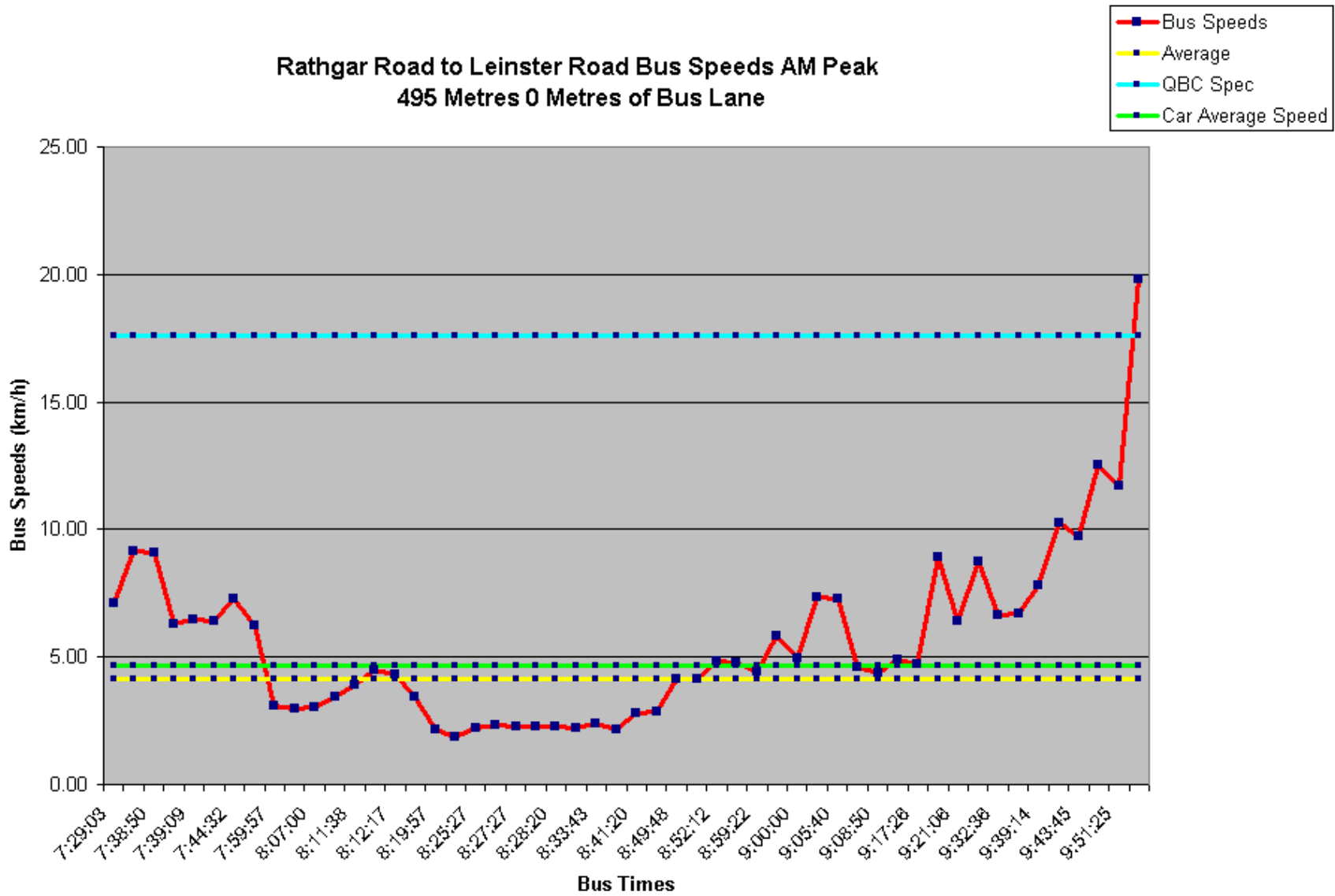


Table 12s Tallaght QBC



Ballymun QBC

Table 12t is an example from Ballymun QBC.

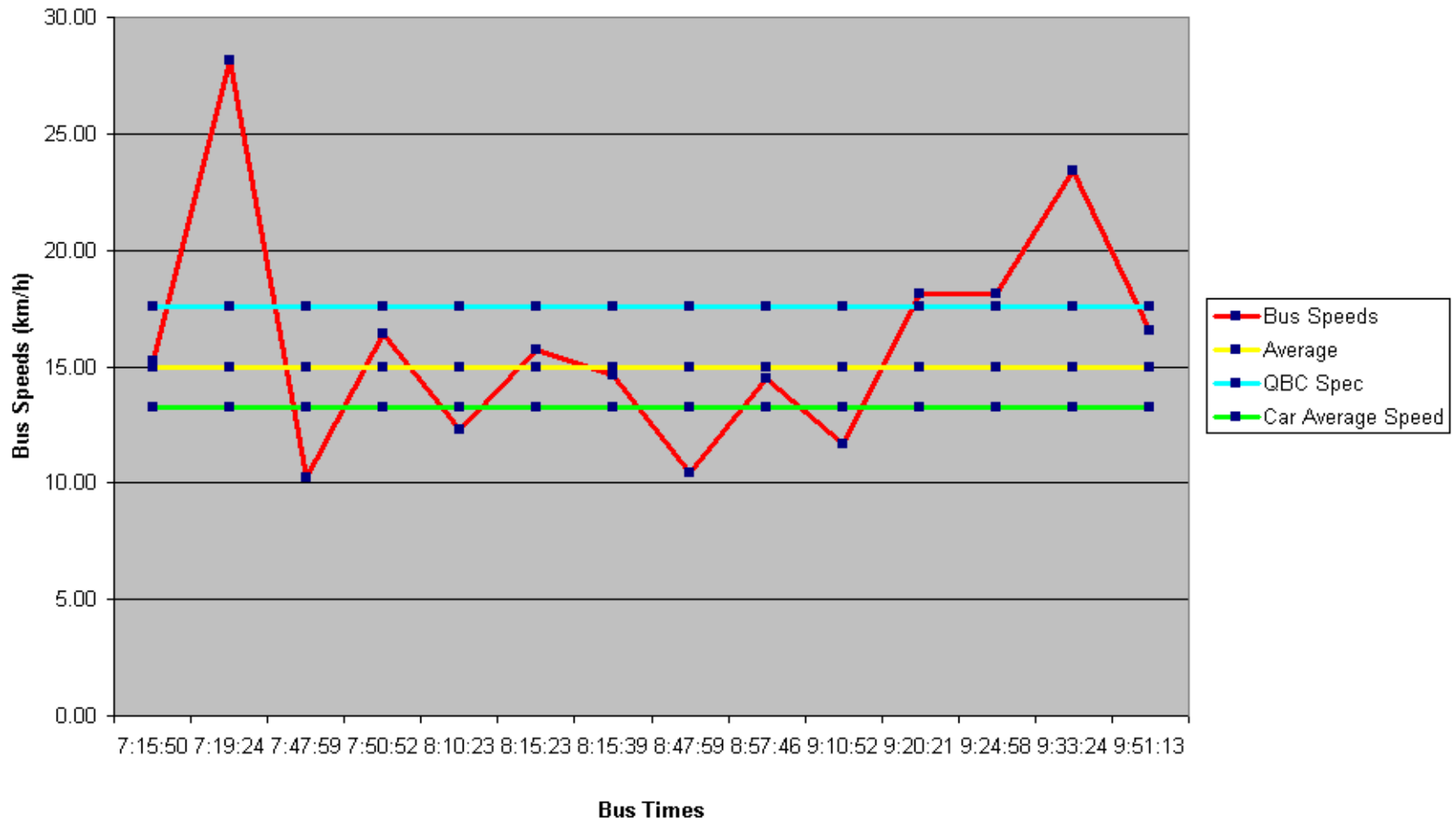
The table shows the section from Ballymun Civic Centre to Griffith Avenue which measures 1976 metres with 1976 metres of continuous bus priority.

The graph shows the following:

- Bus average speed exceeds car average speed with results being very similar
- Bus average speed is less than QBC specification despite the presence of continuous priority
- All buses operating between 0747 and 0910 travel at speeds below the specification

Table 12t Ballymun QBC

Ballymun Civic Centre to Griffith Avenue Bus Speeds AM Peak
1976 Metres 1976 Metres of Bus Lane



Bray QBC

Table 12u shows the result for one of the recently opened sections of the N11 extension.

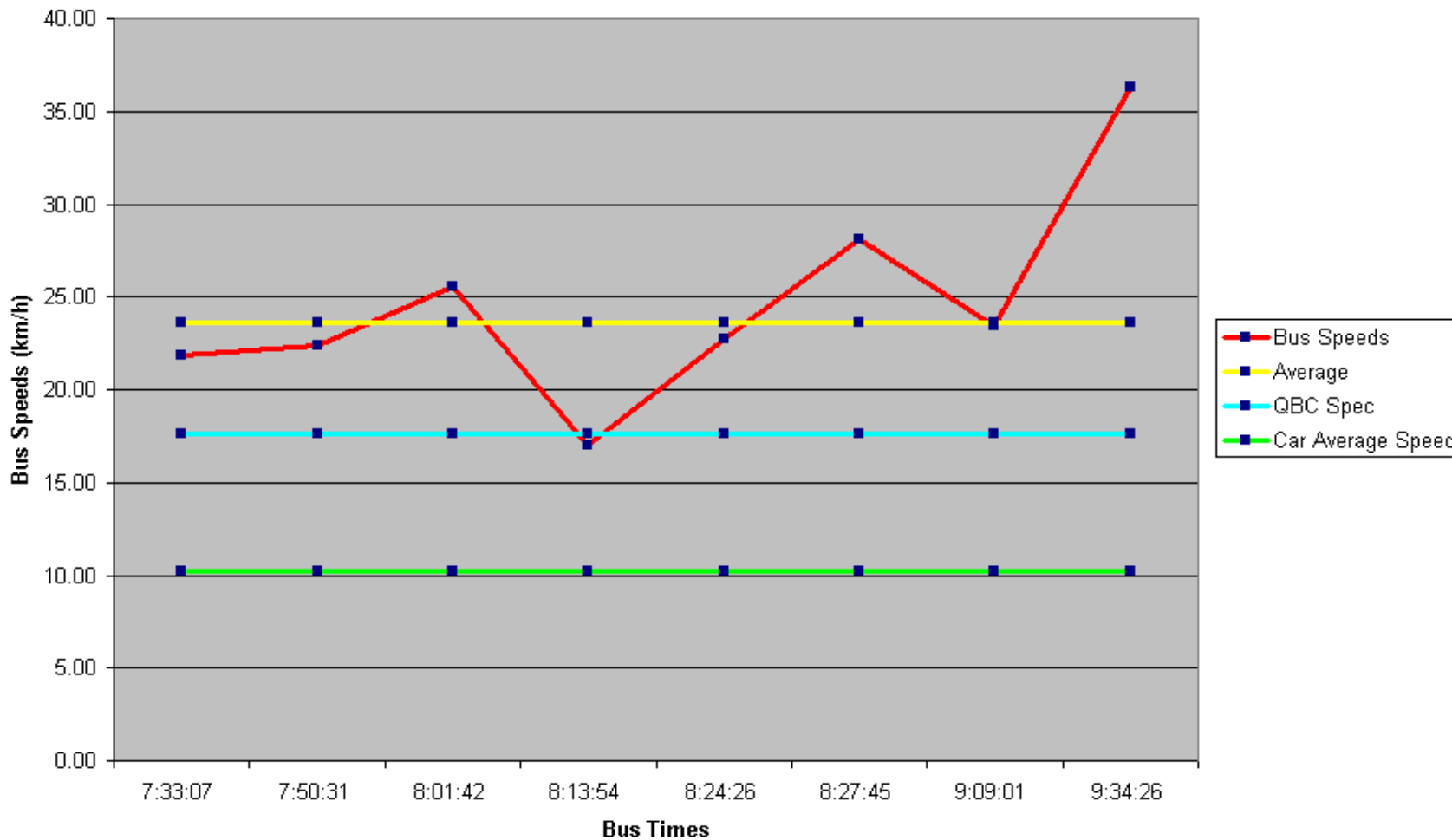
The section shown is from the Cabinteely South junction to Foxrock Church and has continuous bus priority of 2117 metres.

The graph shows the following:

- Bus average speed is nearly 3 times greater than car average speed
- Bus average speed comfortably exceeds the QBC specification
- The slowest bus operates at 16.97 kilometres per hour

Table 12u Bray QBC

Cabinteely South to Foxrock Church Bus Speeds AM Peak
2117 Metres 2117 Metres of Bus Lane



Clontarf QBC

Table 12v shows an example from Clontarf QBC.

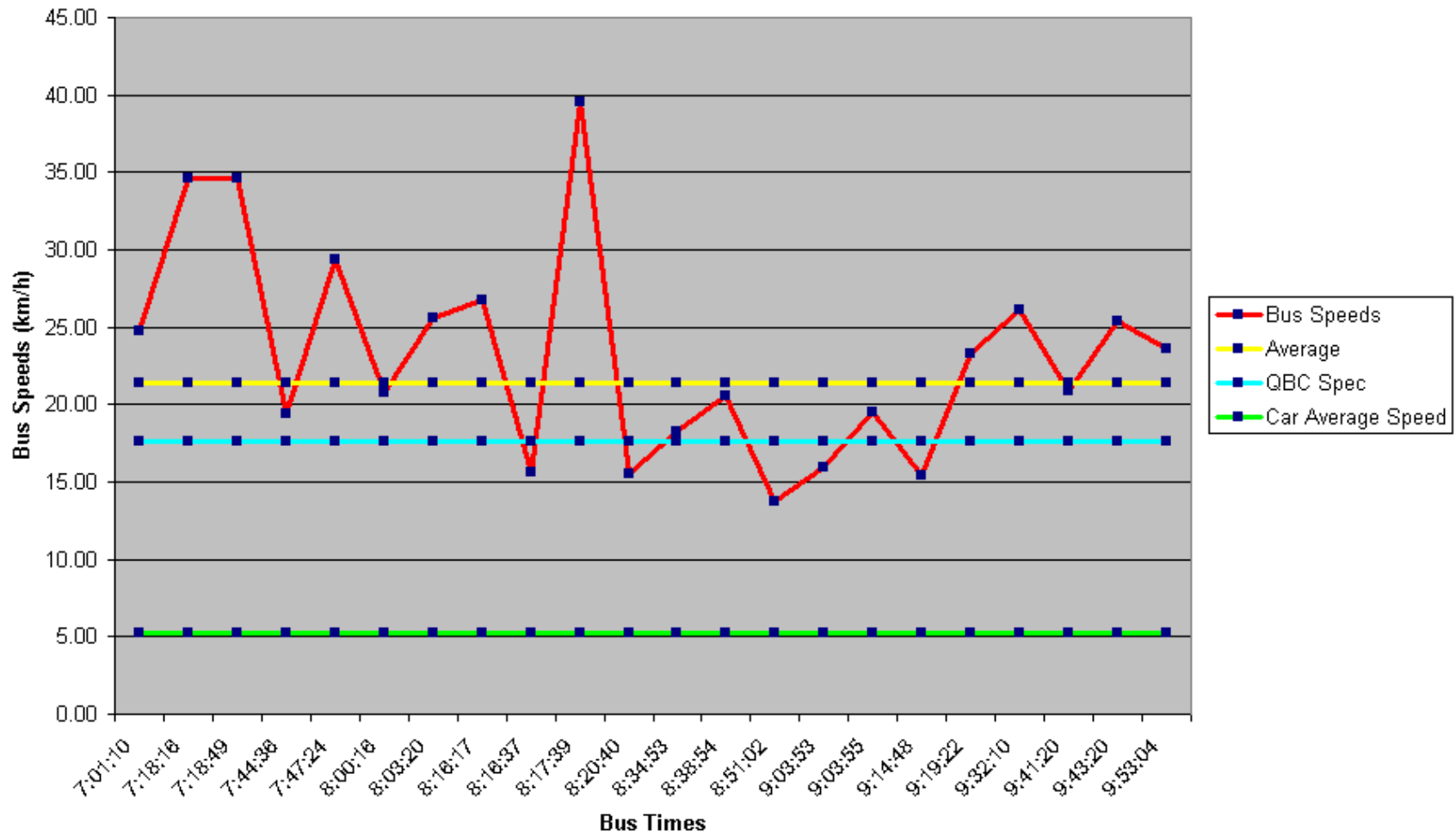
The section shown is from Vernon Avenue to Castle Avenue, a distance of 923 metres with continuous bus priority.

The graph shows the following:

- Bus average speed is more than 4 times greater than car average speed
- Bus average speed is comfortably in excess of the QBC specification
- Car average speed at 5.22 kilometres per hour is very slow
- The slowest bus operates at 13.73 kilometres per hour at 0851

Table 12v Clontarf QBC

Vernon Avenue to Castle Avenue Bus Speeds AM Peak
923 Metres 923 Metres of Bus Lane



15 Pre QBC Reports

An important element of the QBC monitoring process in measuring the effectiveness of bus priority measures is to gather data prior to implementation to enable performance to be measured on a before and after basis.

In the 3 years that the DTO has been undertaking the annual exercise the following corridors have been monitored on a “pre QBC” basis.

November 2002

Rock Road QBC Sallynoggin to City Centre via Dun Laoghaire, Blackrock, Rock Road and Merrion Road
Greenhills QBC Main Street Tallaght to City Centre via Greenhills Road & Crumlin Road

November 2003

Sth Clondalkin QBC Kingswood via Naas Road to Tyrconnell/Emmet Road
Kingswood via Naas Road and Long Mile Road to Drimnagh Road
Ninth Lock Road/Nangor Road via Nangor Road & Naas Road to Tyrconnell/Emmet Road
Ninth Lock/Nangor Road via Nangor Road & Long Mile Road to Drimnagh Road

November 2004

Howth Road QBC Raheny to Fairview via Howth Road
Sth Clondalkin QBC Grangecastle to Tyrconnell/Emmet Road via Nangor Road & Naas Road
Orbital QBC Quarryvale to Tallaght Belgard Square North via Fonthill Road & Belgard Road

In this report we will look at the results from Howth Road.

Information is available for Rock Road, Greenhills, South Clondalkin and the Orbital QBCs and can be obtained from Michael Warnock-Smith of Dublin Transportation Office. Please e-mail michaelw@dto.ie.

15.1 Howth Road Pre QBC

The data from the pre QBC monitoring process is presented in the same way as for the fully implemented QBCs as follows:

- **Table 13a** Key Objectives Report
- **Table 13b** Final Report
- **Table 13c** Sectional bus and car journey times
- **Table 13d** Sectional bus speeds
- **Table 13e** Sample Graph

Table 13a Howth Road Pre QBC Key Objectives Report

QUALITY BUS CORRIDOR MONITORING ANNUAL SUMMARY REPORT HOWTH ROAD - PRE QBC NOVEMBER 2004						
Spec. Ref	KEY OBJECTIVES	PERFORMANCE INDICATORS				NOTES
A5	Corridor Bus Journey Times	AM Peak		PM Peak		
A5	Corridor Bus Journey Time (Average)	39:55		18:31		
A5	Corridor Bus Journey Time (Range)	21:12 to 47:50		14:54 to 22:12		Raheny to Fairview
A5	Corridor Bus Speed	7.35 km/h		14.08 km/h		
A5	Comparison of Corridor Journey Times Bus v Car	Bus AM Peak		Car AM Peak		
A5	Comparison of Bus v Car Journey Times (Average)	39:55		25:02		
A5	Comparison of Bus v Car Journey Times (Range)	21:12 to 47:50		10:24 to 45:25		Raheny to Fairview
B1	Passenger Wait Times	Target		Actual		
B1a	Average Peak Wait Time	3 minutes		5:02		
B1b	Average Peak Excess Wait Time	Target		Actual		
		2 minutes		2:02		
B1c	Average Off Peak Wait Time	Target		Actual		
		4 minutes		7:01		Timings at Fairview Pedestrian Footbridge
B1d	Average Off Peak Excess Wait Time	Target		Actual		
		2 minutes		3:01		
B2	Boarding & Alighting Time / % of total journey time	AM Peak		PM Peak		
		21.01%		15.92%		BAC On Bus Survey Nov 02
D1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)	% Mode share at Canal Cordon				
		Car		Bus		
		Nov-03	Nov-04	Nov-03	Nov-04	
		15.68%	27.49%	72.92%	61.89%	
		Taxi		Cycle		
		Nov-03	Nov-04	Nov-03	Nov-04	
		1.88%	1.64%	2.86%	2.68%	
		Walking		Total Persons		
		Nov-03	Nov-04	Nov-03	Nov-04	
		5.14%	4.31%	12542	12970	
E1	Passenger Journeys (Total)	Nov-03		Nov-04		
		1276		1317		Cordon Counts (0700 - 1000) BAC QBC Designated Routes

Table 13b Howth Road Pre QBC Final Report

QUALITY BUS CORRIDOR MONITORING ANNUAL REPORT HOWTH ROAD - PRE QBC NOVEMBER 2004				
A	INFRASTRUCTURE OBJECTIVES	PERFORMANCE INDICATORS		NOTES
1	QBC starts on regional or higher classification road	Start Point	End Point	
		Raheny	Fairview	
2	Bus services to have priority access to QBC from lower classification roads	No. of signalised jcts	% prioritised	
		2	0%	
3	Bus journey speeds to be 20kph minimum	Average journey speeds		Raheny to Fairview
		AM Peak Inbound		
	7.35 km/h			
	Off Peak Inbound			
	Raheny to Fairview	24.92 km/h		Raheny to Fairview
	Fairview to Raheny	PM Peak Outbound		Fairview to Raheny
		14.08 km/h		
3a	Bus journey speeds to increase by 25% pre and post QBC implementation	Pre QBC average journey speeds		N/A
		AM Peak Inbound	Off Peak Inbound	
	N/A	N/A		
	PM Peak Outbound			
	N/A			
	% increase		Comparison not available as no pre QBC data collected	
	AM Peak	Off peak		
	N/A	N/A		
PM Peak				
		N/A		

**QUALITY BUS CORRIDOR MONITORING ANNUAL REPORT
HOWTH ROAD - PRE QBC
NOVEMBER 2004**

A	INFRASTRUCTURE OBJECTIVES		PERFORMANCE INDICATORS				NOTES
4	Corridor to have segregated bus lanes where physically feasible		% Segregated		% Non Segregated		
			Inbound	Outbound	Inbound	Outbound	
			0%	0%	100%	100%	
5	Bus Journey Times (Average)	AM Peak Inbound	AM Peak				
	Raheny to Fairview		39:55				Raheny to Fairview
5	Bus Journey Times (Average)	Off Peak Inbound	Off Peak				
	Raheny to Fairview		10:00				Raheny to Fairview
5	Bus Journey Times (Average)	PM Peak Outbound	PM Peak				
	Fairview to Raheny		18:31				Fairview to Raheny
5	Comparable Bus v Car Journey Times (Average)	AM Peak Inbound	Bus	Car			
			AM Peak	AM Peak			
	Raheny to Fairview		39:55	25:02			Raheny to Fairview
5	Comparable Bus v Car Journey Times (Average)	Off Peak Inbound	Bus	Car			
			Off Peak	Off Peak			
	Raheny to Fairview		10:00	9:34			Raheny to Fairview
5	Comparable Bus v Car Journey Times (Average)	PM Peak Outbound	Bus	Car			
			PM Peak	PM Peak			
	Fairview to Raheny		18:31	18:10			Fairview to Raheny

**QUALITY BUS CORRIDOR MONITORING ANNUAL REPORT
HOWTH ROAD - PRE QBC
NOVEMBER 2004**

A	INFRASTRUCTURE OBJECTIVES		PERFORMANCE INDICATORS				NOTES
5	Bus Sectional Journey Times (Range)	AM Peak	AM Peak				
			Low	High			
	Raheny to Fairview		21:12	47:50			Raheny to Fairview
5	Bus Sectional Journey Times (Range)	Off Peak	Off Peak				
			Low	High			
	Raheny to Fairview		7:51	10:41			Raheny to Fairview
5	Bus Sectional Journey Times (Range)	PM Peak	PM Peak				
			Low	High			
	Fairview to Raheny		14:54	22:12			Fairview to Raheny
5	Comparable Bus v Car Journey Times (Range)	AM Peak	Bus		Car		
			AM Peak		AM Peak		
			Low	High	Low	High	
	Raheny to Fairview		21:12	47:50	10:24	45:25	Raheny to Fairview
5	Comparable Bus v Car Journey Times (Range)	Off Peak	Bus		Car		
			Off Peak		Off Peak		
			Low	High	Low	High	
	Raheny to Fairview		7:51	10:41	6:53	12:27	Raheny to Fairview

QUALITY BUS CORRIDOR MONITORING ANNUAL REPORT
HOWTH ROAD - PRE QBC
NOVEMBER 2004

A	INFRASTRUCTURE OBJECTIVES		PERFORMANCE INDICATORS				NOTES
5	Comparable Bus v Car Journey Times (Range)	PM Peak	Bus		Car		
			PM Peak		PM Peak		
	Low	High	Low	High			
	Fairview to Raheny		14:54	22:12	15:15	23:49	Fairview to Raheny
6	Traffic Management Measures to support QBC		No. of Signalised Jcts		% Prioritised		
			11	Inbound	5%		
			8	Outbound			
7	Bus Lanes to operate for 12 hours (0700 to 1900)		% Peak Hours only		% 12 hour		
			N/A		N/A		
			% 24 hour		% 7-10 & 12-19		
			N/A		N/A		
7a	Bus Lanes to be clearly defined		% surface marked		% signed		
			100%		100%		
8	Bus stops to be located to minimise walk times		Average distance to Ped X		Maximum distance to Ped X		
			N/A		N/A		

**QUALITY BUS CORRIDOR MONITORING ANNUAL REPORT
HOWTH ROAD - PRE QBC
NOVEMBER 2004**

A	INFRASTRUCTURE OBJECTIVES	PERFORMANCE INDICATORS		NOTES
9	High quality waiting areas at all high usage stops to include shelters, level platforms, seating, and additional facilities eg cycle parking, telephones & ticket vending m/c's	Total Number of bus shelters		Total Number of bus stops
		12		25
		% with lighting	% with seating	% bus shelters
		24%	75%	
		% with telephones	% with ticket vending	
		25%	0%	
		% with cycle parking	Range of cycle spaces	
		8%	2	
% level platforms	% fully accessible			
33%	33%			
10	Passenger Information	% shelters with RTPI	% working	% bus shelters
10a	Real Time Passenger Information at high usage stops	0%	0%	
10b	Fixed Information at bus stops eg route & network maps & timetables	% timetables	% route maps	% bus stops
		44%	0%	
		% network maps	% fares information	
0%	0%			

**QUALITY BUS CORRIDOR MONITORING ANNUAL REPORT
HOWTH ROAD - PRE QBC
NOVEMBER 2004**

B	SERVICE OBJECTIVES	PERFORMANCE INDICATORS		NOTES
1	Passenger Wait Times	Target	Actual	Timings at Fairview
1a	Average Peak Wait Time	3 minutes	5:02	
1b	Average Peak Excess Wait Time	Target	Actual	
		2 minutes	2:02	
1c	Average Off Peak Wait Time	Target	Actual	
		4 minutes	7:01	
1d	Average Off Peak Excess Wait Time	Target	Actual	
		2 minutes	3:01	
2	Boarding & Alighting time / % of total journey time	AM Peak	Off peak	
		N/A	N/A	
C	FLEET OBJECTIVES	PERFORMANCE INDICATORS		NOTES
2	Average Fleet age	Average Fleet age		
		5.00		
2a	Maximum Fleet age	Maximum Fleet age		
		8		
3	QBC to be operated by uniformed staff	% staff uniformed		
		100%		
4	QBC to be operated by low floor buses	% of low floor buses		
		25%		

QUALITY BUS CORRIDOR MONITORING ANNUAL REPORT HOWTH ROAD - PRE QBC NOVEMBER 2004			
C	FLEET OBJECTIVES	PERFORMANCE INDICATORS	NOTES
5	QBC to be operated by branded vehicles	% of branded vehicles	City Swift
		8%	

D	NETWORK PERFORMANCE	PERFORMANCE INDICATORS				NOTES
1	Assess & Quantify the Effect of QBC on all Modes (Time Series Analysis)	% Mode share				Newcomen Bridge Car Occupancy 1.22 from DCC Survey November 2004
		Car		Bus		
		Nov-03	Nov-04	Nov-03	Nov-04	
		15.68%	27.49%	72.92%	61.89%	
		Taxi		Cycle		
		Nov-03	Nov-04	Nov-03	Nov-04	
		1.88%	1.64%	2.86%	2.68%	
		Walking		Total Persons		
Nov-03	Nov-04	Nov-03	Nov-04			
5.14%	4.31%	12542	12970			

QUALITY BUS CORRIDOR MONITORING ANNUAL REPORT HOWTH ROAD - PRE QBC NOVEMBER 2004						
D	NETWORK PERFORMANCE	PERFORMANCE INDICATORS				NOTES
2	Assess the before & after impact of QBC on all Modes (Pre & Post QBC Analysis)	% Mode share				November 2004 Cordon Count includes all bus passengers Pre QBC November 1998 Cordon Count includes Dublin Bus passengers only Car Occupancy 1.22 from DCC Survey November 2004
		Car		Bus		
		Pre QBC	Nov-04	Pre QBC	Nov-04	
		33.51%	27.49%	56.64%	61.89%	
		Taxi		Cycle		
		Pre QBC	Nov-04	Pre QBC	Nov-04	
		N/A	1.64%	3.05%	2.68%	
Walking		Total Persons				
Pre QBC	Nov-04	Pre QBC	Nov-04			
4.83%	4.31%	11151	12970			
E	ADDITIONAL OBJECTIVES	PERFORMANCE INDICATORS				NOTES
1	Passenger Journeys (Total)	Nov-03		Nov-04		Cordon Counts (0700 - 1000) BAC Designated QBC Routes
		1276		1317		
2	Bus Occupancy Levels (Average)	Peak		Off Peak		Inbound Survey at Fairview 0800 - 0900 (AM Peak) and 1000 - 1100 (Off Peak)
		63		33		
5	Passenger Satisfaction Levels	% Satisfaction				Dublin Bus Survey November 2002
		Reliability		Quality of Service		
		80%		83%		
		Quality of Information		Value for Money		
N/A		82%				
9	Mobility Impaired Access % Full Accessibility	% buses		% bus stops		
		8%		36%		
		% ped x				
100%						

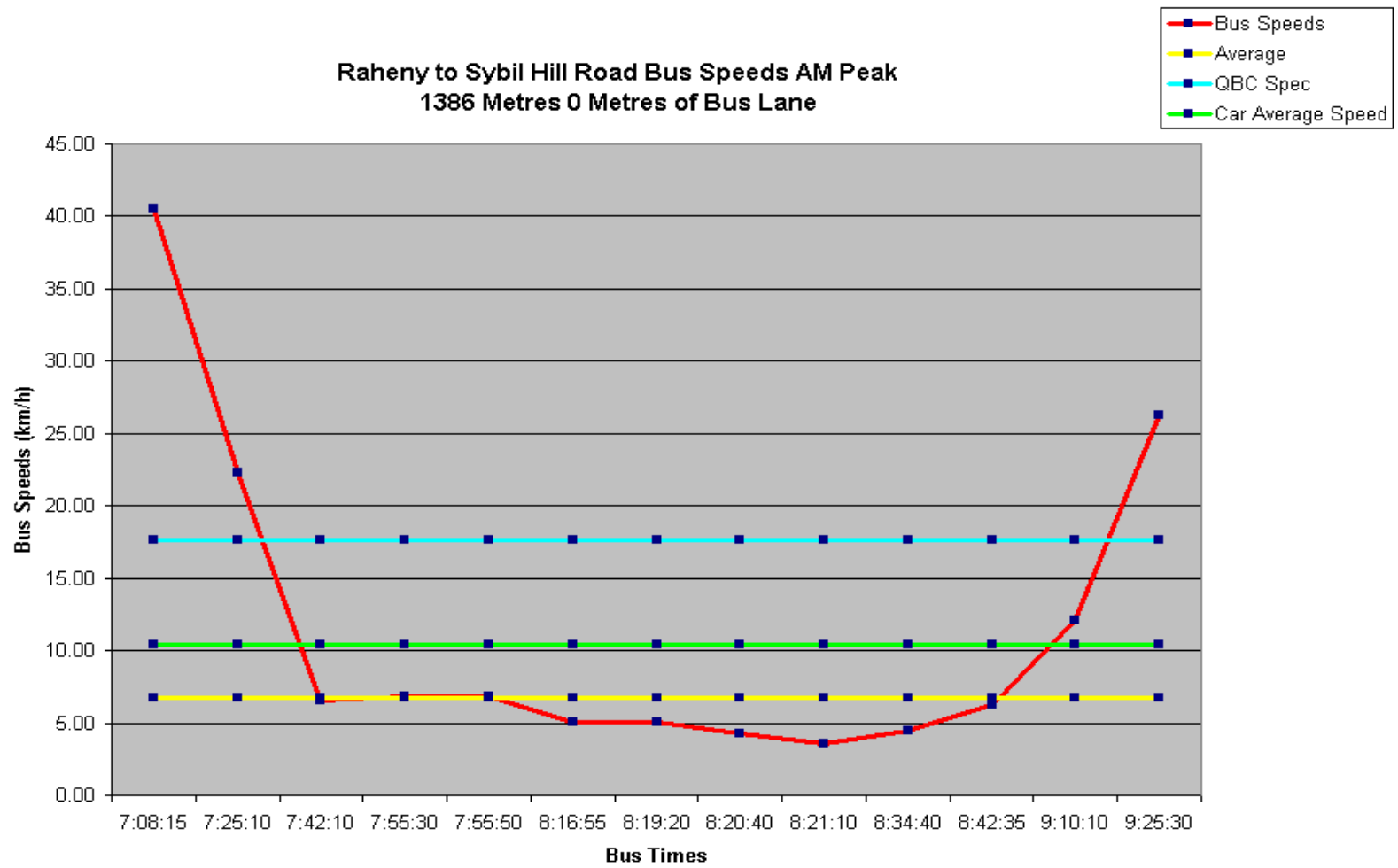
Table 13c Howth Road Pre QBC Sectional Bus & Car Journey Times

Howth Road Pre QBC Roadside Survey Results - November 2004									
Sectional Results									
Section		AM Peak Inbound		PM Peak Outbound		Off Peak Inbound		Off Peak Outbound	
		Bus	Car	Bus	Car	Bus	Car	Bus	Car
Raheny to Sybil Hill Road	Average Range	12:22 2:03 to 23:30	8:00 1:36 to 15:12	5:00 2:42 to 7:19	4:36 2:57 to 8:40	2:03 1:57 to 2:08	1:51 1:40 to 2:10	5:25 4:10 to 6:12	4:38 3:11 to 6:19
Sybil Hill Rd to Collins Avenue East	Average Range	14:43 3:52 to 28:23	8:44 3:37 to 24:13	3:21 1:42 to 6:19	3:54 2:23 to 5:42	3:03 2:18 to 3:42	3:30 2:14 to 4:31	3:19 2:00 to 6:04	2:23 1:33 to 2:49
Collins Ave East to Copeland Ave	Average Range	4:43 2:08 to 7:23	4:03 2:14 to 5:39	4:57 3:42 to 7:31	2:56 2:28 to 3:27	2:11 1:51 to 2:25	2:24 1:55 to 3:28	3:21 1:44 to 5:05	2:20 1:43 to 2:49
Copeland Ave to Fairview	Average Range	2:54 1:55 to 3:52	4:15 2:57 to 7:09	2:45 1:05 to 6:41	3:34 1:48 to 5:41	2:10 1:45 to 2:26	1:49 1:04 to 2:18	2:24 1:53 to 3:24	2:03 1:42 to 2:43
Fairview to Amiens Street	Average Range	4:54 3:18 to 6:31	8:00 3:50 to 10:03	N/A N/A	N/A N/A	3:35 2:21 to 4:56	3:30 2:04 to 6:20	N/A N/A	N/A N/A
Amiens Street to Talbot Street	Average Range	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Eden Quay to North Strand	Average Range	N/A N/A	N/A N/A	7:27 3:44 to 12:13	N/A N/A	N/A N/A	N/A N/A	4:40 3:41 to 5:40	N/A N/A
North Strand to Fairview	Average Range	N/A N/A	N/A N/A	7:19 3:23 to 15:04	5:14 2:54 to 9:13	N/A N/A	N/A N/A	4:14 2:55 to 5:47	2:55 1:47 to 3:53

Table 13d Howth Road Pre QBC Sectional Bus Speeds

Howth Road QBC Roadside Survey Results - November 2004					
Sectional Results - Bus Journey Speeds					
Section	Distance Metres	Bus Lane Metres		AM Peak Inbound Km/h	Off Peak Inbound Km/h
Raheny to Sybil Hill Road	1386	0	Average	6.73	40.57
			Range	3.54 to 40.57	38.99 to 42.65
Raheny to Sybil Hill Road via All Saints Road (29A)	1893	0	Average	10.16	24.69
			Range	6.82 to 23.10	21.98 to 28.27
Sybil Hill Road to Collins Avenue East	1042	0	Average	4.25	20.50
			Range	2.20 to 16.17	16.90 to 27.18
Collins Avenue East to Copeland Avenue	1283	0	Average	16.30	35.26
			Range	10.43 to 36.08	31.85 to 41.61
Copeland Avenue to Fairview	443	0	Average	9.17	12.27
			Range	6.87 to 13.87	10.92 to 15.19
Fairview to Amiens Street	1897	1529	Average	23.23	31.77
			Range	17.46 to 34.49	23.07 to 48.34
Amiens Street to Talbot Street	435	0	Average	N/A	N/A
			Range	N/A	N/A
Inbound Raheny to Fairview	4154	0	Average	7.35	24.92
			Range	5.21 to 11.76	24.92
Inbound Raheny to Fairview via All Saints Rd (29A)	4661	0	Average	8.13	23.24
			Range	5.90 to 15.55	23.24
Inbound Raheny to Amiens Street	6051	1529	Average	9.18	28.81
			Range	6.68 to 13.71	28.81
Inbound Raheny to Amiens St via All Saints Road (29A)	6558	1529	Average	10.11	24.36
			Range	7.43 to 17.75	24.36
Section	Distance Metres	Bus Lane Metres		PM Peak Outbound Km/h	Off Peak Outbound Km/h
Eden Quay to Amiens Street/North Strand	802	0	Average	6.46	10.31
			Range	3.94 to 12.89	8.49 to 13.06
Amiens Street/North Strand to Fairview	1706	1706	Average	13.99	24.18
			Range	6.79 to 30.26	17.70 to 35.09
Fairview to Copeland Avenue	610	0	Average	13.32	15.25
			Range	5.48 to 33.78	10.76 to 19.44
Copeland Avenue to Collins Avenue East	1241	0	Average	15.03	22.23
			Range	9.91 to 20.12	14.65 to 42.97
Collins Avenue East to Sybil Hill Road	1030	0	Average	18.43	18.63
			Range	9.78 to 36.35	10.19 to 30.90
Sybil Hill Road to Raheny via All Saints Road (29A)	2036	0	Average	N/A	N/A
			Range	N/A	N/A
Sybil Hill Road to Raheny	1467	0	Average	17.58	16.25
			Range	12.03 to 32.60	14.20 to 21.12
Fairview to Raheny	4348	0	Average	14.08	18.01
			Range	11.75 to 17.51	12.57 to 26.67
Outbound North Strand to Raheny	6054	1706	Average	14.60	20.12
			Range	12.03 to 17.30	20.12
Outbound Nth Strand to Raheny via All Saints Rd 29A	6623	1706	Average	N/A	N/A
			Range	N/A	N/A
Outbound Eden Quay to Raheny	6856	0	Average	12.70	18.11
			Range	9.70 to 16.63	17.34 to 18.93
Outbound Eden Quay to Raheny via All Saints Rd 29A	7425	0	Average	N/A	N/A
			Range	N/A	N/A

Table 13e Howth Pre QBC Sample Graph



Appendix 1 November 2004 Survey Points

Blanchardstown QBC Survey Points November 2004						
Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
1	Bus stop by St Joseph's Hospital	304569.05	238566.27	Inbound	All	Amended for 2004
2	Clonsilla Road just after junction with Hansfield Road	305025.962	238174.47	Inbound	AM Peak	New for 2004 (QBN)
3	Clonsilla Road just before junction with Shelerin Road	305840.07	238141.99	Inbound	AM Peak	New for 2004 (QBN)
4	North on B'town Rd South north arm at junction with Blakestown Way	306617.34	239363.65	Inbound	AM Peak	
5	South on B'town Bypass at rear of shopping centre	307321.16	239535.80	Inbound	AM Peak	
6	South on B'town Rd South south arm at junction with Blakestown Way	306598.42	239291.92	Inbound	All	
7	East on Clonsilla Rd adjacent to Coolmine Rd	306977.92	238196.09	Inbound	All	
8	Main Street just after junction with Clonsilla Road at start of bus lane	307821.71	238834.94	Inbound	All	New for 2004 (QBN)
9	Blanchardstown Bypass south east of roundabout at River Road	308650.70	238442.30	Inbound	All	
10	South on Navan Road at junction with New River Rd at start of bus lane	309421.44	237920.34	Inbound	All	
11	South on Navan Road at junction with Castleknock Rd at start of bus lane	311147.48	237012.80	Inbound	All	
12	South on Navan Rd before junction with Ratoath Road at end of bus lane	313211.27	236002.10	Inbound	All	Amended for 2004
13	South on Old Cabra Rd just before junction with North Circular Rd	313968.28	235475.54	Inbound	All	
14	South on Manor Street adjacent to Kirwan Street	314326.25	234937.09	Inbound	All	
15	South on Blackhall Place before jct with Ellis Quay at end of bus lane	314440.44	234325.36	Inbound	All	
16	East on Ormonde Quay Upper adjacent to Capel Street	315405.26	234244.03	Inbound	All	
17	West on Poolbeg Street adjacent to Tara Street	316199.21	234346.09	Inbound	All	Count Buses only

Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
18	Service 39 terminus at Hawkins Street	316130.41	234287.64	Outbound	All	Count Buses only
19	West on Merchants Quay adjacent to Winetavern St at start of bus lane	315089.70	234113.06	Outbound	All	
20	On James Joyce Bridge	314436.38	234283.19	Outbound	All	
21	North on Manor Street just after Manor Place	314298.00	234936.91	Outbound	All	
22	North on Old Cabra Road just after junction with North Circular Road	313960.26	235469.13	Outbound	All	
23	North on Navan Road adjacent to Ratoath Road	313285.35	235935.15	Outbound	All	
24	North on Navan Road after junction with Castleknock Road	311004.90	237072.13	Outbound	All	
25	North on Navan Road at end of bus lane before junction with New River Rd	309397.83	237902.15	Outbound	All	
26	North on B'town Bypass adjacent to Main Street before bus gate	308557.83	238463.94	Outbound	All	
27	Main Street just prior to Junction with Clonsilla Road	307812.02	238830.44	Outbound	All	New for 2004 (QBN)
28	West on Clonsilla Road adjacent to Coolmine Road	306982.20	238187.85	Outbound	All	
29	West on Blakestown Way after junction with B'town Rd South	306574.58	239354.68	Outbound	All	
30	North on B'town Bypass at rear of shopping centre	307295.39	239512.94	Outbound	PM Peak	
31	South on B'town Road South north arm at junction with Blakestown Way	306642.63	239352.31	Outbound	PM Peak	
32	Bus stop by St Joseph's Hospital	304537.78	238575.06	Outbound	All	Amended for 2004

Appendix 1 November 2004 Survey Points

Finglas QBC Survey Points November 2004 incorporating Ballymun QBC						
Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
1	Mellowes Road bridge over N2 prior to Main Street	313055.40	239081.96	Inbound	All	
2	Finglas Road by Main Street	313337.29	238735.17	Inbound	All	
3	Ballymun Rd north of Civic Centre at start of bus lane	315535.39	239865.76	Inbound	All	New for 2004
4	St Mobhi Road at end of bus lane prior to Griffith Avenue	315489.76	237907.63	Inbound	All	New for 2004
5	St Mobhi Road at end of bus lane prior to Botanic Avenue	315443.86	237133.84	Inbound	All	New for 2004
6	Glasnevin Hill Bon Secours Hospital Main Entrance	315282.23	237423.23	Inbound	AM Peak	New for 2004
7	Botanic Road at bus stop prior to Cliftonville Road	315265.74	236859.57	Inbound	All	New for 2004
8	Prospect Road just before junction with Whitworth Road	315105.21	236310.60	Inbound	All	
9	Dorset Street Lower after junction with Whitworth Road	315910.49	235936.82	Inbound	All	
10	Frederick Street North after junction with Dorset St Lower	315570.67	235340.31	Inbound	All	Buses Only New for 2004
11	40 Terminus Parnell Square East	315803.22	235027.07	Inbound	All	Count Buses Only
12	O'Connell Street at Bank of Ireland after junction with Abbey St Lower	315983.88	234469.97	Inbound	All	Buses Only New for 2004

Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
13	O'Connell Street prior to junction with Middle Abbey Street	315939.32	234470.25	Outbound	All	New for 2004
14	Parnell Square West at bus stop outside No 41	315593.38	235019.18	Outbound	All	New for 2004 (QBN)
15	Dorset St Upper just after junction with Granby Row	315452.08	235172.55	Outbound	All	New for 2004 (QBN)
16	Dorset St Lower after junction with Blessington St at start of bus lane	315557.48	235379.43	Outbound	All	New for 2004 (QBN)
17	Parnell Street	315856.11	235026.67	Outbound	All	
18	Dorset Street Lower prior to junction with Whitworth Road	315887.84	235949.19	Outbound	All	
19	Prospect Road just after junction with Whitworth Road	315087.50	236318.00	Outbound	All	
20	Finglas Road by Finglas Place	313447.40	238561.21	Outbound	All	
21	Mellowes Road bridge over N2 after junction with Main Street	313060.44	239064.80	Outbound	All	
22	Botanic Road bus stop prior to junction with Glasnevin Hill	315268.95	236897.58	Outbound	All	New for 2004
23	Ballymun Road at start of outbound bus lane opposite The Rise	315435.93	238105.44	Outbound	All	New for 2004
24	Ballymun Road bus stop outside shopping centre	315504.50	239842.08	Outbound	All	New for 2004

Appendix 1 November 2004 Survey Points

Lucan QBC Survey Points November 2004						
Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
1	South on Newcastle Rd at 25a departure point opposite Superquinn	303213.09	234164.63	Inbound	All	Count buses only
2	Opposite Penny Hill pub north of junction of Castle Rd & Ballyowen Rd	304953.86	234169.25	Inbound	All	
3	N4 opposite Foxhunter pub	305315.33	235462.13	Inbound	All	
4	Liffey Valley Bus Stop prior to M50	307237.09	235193.80	Inbound	All	
5	Palmerston opposite The Oval	308751.41	234967.54	Inbound	All	
6	Chapelized Sliproad	309008.32	234911.88	Inbound	All	
7	Con Colbert Road just east of junction with link road to Inchicore Road	312172.20	233836.39	Inbound	All	
8	Heuston Station Taxi Rank on St Johns Road	313666.43	234201.03	Inbound	All	
9	Conyngham Road east of junction with South Circular Road	312818.17	234438.91	Inbound	All	
10	Parkgate Street at segregated bus stop	313770.20	234419.01	Inbound	All	
11	Ellis Quay just east of junction with Ellis Street/Rory O' More Bridge	314352.08	234325.50	Inbound	All	
12	Arran Quay just before junction with Church Street/Fr. Mathew Bridge	314835.45	234218.97	Inbound	All	
13	Bachelors Walk just before O'Connell Street Bridge	315867.10	234384.37	Inbound	All	

Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
14	Wellington Quay Bus Stop	315727.73	234241.88	Outbound	All	
15	Merchants Quay just before junction with Bridge Street	314924.02	234130.56	Outbound	All	
16	Conyngham Road at Bridgewater Quay prior to South Circular Road	312817.38	234427.72	Outbound	All	
17	Opposite Taxi Rank Heuston Station St Johns Road	313698.78	234185.45	Outbound	All	
18	Con Colbert Road just east of junction with link road to Inchicore Road	312175.29	233806.16	Outbound	All	
19	Chapelized Sliproad	309497.51	234613.03	Outbound	All	
20	Palmerston just past The Oval	308691.89	234967.31	Outbound	All	
21	Liffey Valley Bus Stop just after M50	307221.35	235153.01	Outbound	All	
22	N4 at Foxhunter Pub	305317.04	235436.26	Outbound	All	
23	Penny Hill pub north of junction of Castle Rd & Ballyowen Rd	304972.64	234164.24	Outbound	All	
24	North on Newcastle Road at 25A terminus by Superquinn	303200.39	234144.51	Outbound	All	

Appendix 1 November 2004 Survey Points

Malahide QBC Survey Points November 2004 incorporating Howth Road & Clontarf QBCs						
Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
1	Clare Hall Terminus	321603.58	240635.74	Inbound	All	
2	Malahide Rd on northern arm of roundabout Priorswood Rd/Blunden Drive	320703.35	240138.78	Inbound	All	
3	Malahide Rd on south arm of crossroads junction with Greencastle Road	320114.23	239372.47	Inbound	All	
4	Malahide Road north of junction with Kilmore Road	319214.59	238180.99	Inbound	All	
5	Malahide Rd at start of bus lane south of Kilmore Rd near St Davids Wood	319115.36	238066.66	Inbound	All	
6	Malahide Road north of junction with Collins Avenue East	318622.14	237616.33	Inbound	All	
7	Howth Road at bus shelter after junction with Station Road Raheny	321452.74	238204.75	Inbound	All	New for 2004 (QBN)
8	Howth Road prior to junction with Sybil Hill Road	320208.63	237638.79	Inbound	All	New for 2004 (QBN)
9	Howth Road after junction with Collins Avenue East by shops	319398.11	237097.54	Inbound	All	New for 2004 (QBN)
10	Howth Road after junction with Copeland Avenue	318293.34	236532.07	Inbound	All	New for 2004 (QBN)
11	Clontarf Road after junction with Conquer Hill Road at start of bus lane	320533.17	236754.04	Inbound	All	New for 2004 (QBN)
12	Clontarf Road at bus shelter after junction with Vernon Avenue	320115.90	235812.17	Inbound	All	New for 2004 (QBN)
13	Clontarf Road at bus shelter after junction with Castle Avenue	319209.45	235922.43	Inbound	All	New for 2004 (QBN)
14	Clontarf Road at bus shelter prior to junction with Alfie Byrne Road	318461.72	236207.66	Inbound	All	New for 2004 (QBN)
15	Clontarf Road/Fairview at traffic lights at junction with Malahide Road	317921.20	236328.54	Inbound	All	New for 2004 (QBN)
16	Malahide Rd at start of bus lane at Golf Club opposite Casino Park	318445.73	237355.05	Inbound	All	
17	Fairview Bus Stop	317922.33	236366.03	Inbound	All	
18	Amiens Street at end of bus lane near Connolly Station	316672.54	235028.29	Inbound	All	
19	Talbot Street Bus Terminus set down point	316350.97	234801.51	Inbound	All	Count Buses only

Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
20	Talbot Street Bus Terminus Departure Point	316317.65	234789.33	Outbound	All	Count Buses only
21	Eden Quay just after 29A/31 Series departure point	316213.46	234512.39	Outbound	All	New 2004 Count Buses(QBN)
22	Abbey Street Lower 130 Departure Point	316180.69	234586.20	Outbound	All	New 2004 Count Buses(QBN)
23	Amiens Street/North Strand Road start of bus lane	316665.99	235050.04	Outbound	All	
24	Junction of Fairview Strand/Malahide Road at end of bus lane	317749.41	236319.94	Outbound	All	
25	Clontarf Road at bus stop after junction with Alfie Byrne Road	318463.83	236225.08	Outbound	All	New for 2004 (QBN)
26	Clontarf Road at bus stop after junction with Castle Avenue	319268.35	235932.50	Outbound	All	New for 2004 (QBN)
27	Clontarf Road at bus stop prior to junction with Vernon Avenue	320119.42	235824.00	Outbound	All	New for 2004 (QBN)
28	Clontarf Road at bus stop by bus garage/Conquer Hill Road	320502.73	235757.58	Outbound	All	New for 2004 (QBN)
29	Howth Road before junction with Copeland Avenue	318286.84	236539.34	Outbound	All	New for 2004 (QBN)
30	Howth Road at bus stop prior to junction with Collins Avenue East	319359.20	237075.96	Outbound	All	New for 2004 (QBN)
31	Howth Road prior to junction with Sybil Hill Road	320152.91	237630.02	Outbound	All	New for 2004 (QBN)
32	Howth Road on island by clock tower at junction with Station Rd Raheny	321473.79	238222.74	Outbound	All	New for 2004 (QBN)
33	Malahide Road start of bus lane just north of Griffith Avenue	318111.79	236826.26	Outbound	All	
34	Malahide Road just south of junction with Collins Avenue	318561.89	237584.12	Outbound	All	
35	Malahide Road just north of junction with Kilmore Road start of bus lane	319244.89	238244.02	Outbound	All	
36	Malahide Road south of junction with Greencastle Road at end of bus lane	320081.14	239368.79	Outbound	All	
37	Malahide Rd north of r'bout P'swood Rd/Blunden Drive at start of bus lane	320669.83	240138.67	Outbound	All	
38	Terminus in Clare Hall	321622.93	240644.40	Outbound	All	

Appendix 1 November 2004 Survey Points

North Clondalkin QBC Survey Points November 2004 incorporating Orbital QBC						
Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
1	North end of Fonthill Road at start of bus lane	306303.12	234649.47	In/South	All	New for 2004
2	South end of Fonthill Rd end of bus lane before Link Rd/Neilstown Rd jct	306099.47	233501.51	In/South	All	
3	Fonthill Road just prior to junction with New Nangor Road	306336.04	231692.98	South	All	New for 2004 (QBN)
4	Fonthill Road South at bus shelter prior to junction with Naas Road	307238.42	230450.95	South	All	New for 2004 (QBN)
5	Belgard Road just before Luas crossing	308456.77	229048.95	South	All	New for 2004 (QBN)
6	Belgard Road just before junction with Belgard Square North	308864.31	227949.10	South	All	New for 2004 (QBN)
7	Ballyfermot Rd after junction with Coldcut Road at start of bus lane	307980.04	234007.78	Inbound	All	
8	Ballyfermot Road prior to junction with Le Fanu Road at end of bus lane	309488.62	233709.11	Inbound	All	
9	Ballyfermot Rd after junction with Kylemore Road at schools bus stop	310102.52	233713.09	Inbound	All	
10	Emmet Road east of junction with Tyrconnell Road/Grattan Crescent	311913.14	233430.89	Inbound	All	
11	East on Emmet Road just west of South Circular Road/Inchicore Road	312736.70	233581.45	Inbound	All	
12	East on Old Kilmainham/Mount Brown west of Basin Street	313836.85	233863.81	Inbound	All	
13	East on Cornmarket east of St Augustine Street	314861.52	233914.09	Inbound	All	
14	At 78A terminating stop on Westmoreland Street	315977.89	234302.01	Inbound	All	Count Buses only

Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
15	78A departure stop on Aston Quay	315906.63	234315.33	Outbound	All	
16	Bridge Street just after junction with Merchants Quay	314875.07	234108.89	Outbound	All	
17	West on Cornmarket east of Francis Street	314865.29	233904.67	Outbound	All	
18	West on James Street east of Echlin Street	314100.35	233919.63	Outbound	All	
19	Emmet Road just west of junction with South Circular Road/Suir Road	312735.22	233569.42	Outbound	All	
20	West on Emmet Rd east of junction with Tyrconnell Rd/Grattan Crescent	311911.25	233421.29	Outbound	All	
21	Ballyfermot Rd at end of bus lane prior to junction with Kylemore Road	310069.45	233697.13	Outbound	All	
22	Ballyfermot Rd after junction with Le Fanu Road	309487.77	233698.91	Outbound	All	
23	Ballyfermot Road at end of bus lane prior to junction with Coldcut Road	307979.75	233984.64	Outbound	All	
24	Belgard Road just after junction with Belgard Square North	308845.55	227946.03	North	All	New for 2004 (QBN)
25	Belgard Road just after Luas crossing	308443.13	229037.01	North	All	New for 2004 (QBN)
26	Fonthill Road South opposite bus shelter after junction with Naas Road	307228.70	230442.25	North	All	New for 2004 (QBN)
27	Fonthill Road just after junction with New Nangor Road	306322.88	231692.10	North	All	New for 2004 (QBN)
28	South end of Fonthill Rd start of bus lane after Link Rd/Neilstown Rd jct	306086.69	233528.68	Out/North	All	
29	North end of Fonthill Road by pedestrian crossing at school	306305.33	234783.40	Out/North	All	New for 2004

Appendix 1 November 2004 Survey Points

Rathfarnham QBC Survey Points November 2004 incorporating extension to Dundrum & Dean Street/Patrick Street						
Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
1	Churchtown Road just after junction with Dundrum Road	316972.12	228407.32	Inbound	All	New for 2004 (QBN)
2	Nutgrove Avenue Terminus opposite end of outbound bus lane	316206.21	228501.63	Inbound	All	New for 2004 (QBN)
3	Nutgrove Avenue east of Oakdown Road at start of bus lane	315950.85	228348.34	Inbound	All	
4	Rathfarnham Rd south of junction with Main Street at end of bus lane	314462.04	229081.08	Inbound	All	
5	Rathfarnham Rd at junction with Brookvale Road at start of bus lane	314448.86	229356.31	Inbound	All	
6	Rathfarnham Rd south of junction with Terenure Rd E at end of bus lane	314434.71	230107.05	Inbound	All	
7	Harolds Cross Rd at Mount Tallant Avenue at start of bus lane	314593.66	230891.30	Inbound	All	
8	Harolds Cross Rd at junction with Leinster Rd West at end of bus lane	314738.45	231372.95	Inbound	All	
9	Harolds Cross Road north of Leinster Road at start of bus lane	314697.26	231581.29	Inbound	All	
10	Clanbrassil Street at end of bus lane	314949.06	232581.83	Inbound	All	
11	New Street South prior to junction with Dean Street	315109.56	233366.26	Inbound	All	New for 2004 (QBN)
12	South Circular Rd before Curzon Street at start of bus lane	315310.15	232726.37	Inbound	All	
13	Camden Street north of Camden Row at end of bus lane	315582.31	233202.86	Inbound	All	
14	Aungier Street at junction with Bishop Street	315552.68	233343.04	Inbound	All	
15	Aungier Street junction with Stephen Street at start of bus lane	315587.86	233757.59	Inbound	All	
16	Westmoreland Street outside Bank of Ireland	315975.23	234116.54	Inbound	All	Count buses only

Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
17	College Green east of Suffolk Street	315886.66	234053.94	Outbound	All	
18	Aungier Street at junction with Bishop Street	315564.33	233344.37	Outbound	All	
19	Camden Street south of junction with Camden Place at start of bus lane	315619.87	233060.15	Outbound	All	
20	South Circular Road at junction with Victoria St at start of bus lane	315280.68	232709.38	Outbound	All	
21	South Circular Rd at end of bus lane before junction with Clanbrassil St	315036.55	232686.17	Outbound	All	
22	New Street South after junction with Dean Street	315126.39	233366.72	Outbound	All	New for 2004 (QBN)
23	Harolds Cross Rd south of junction with Grove Rd at start of bus lane	314922.54	232335.24	Outbound	All	
24	Harolds Cross Road north of Leinster Road	314722.97	231620.58	Outbound	All	
25	Harolds Cross Road south of Whitton Rd at start of bus lane	314523.92	230444.44	Outbound	All	
26	Terenure Road North at end of bus lane	314488.79	230271.86	Outbound	All	
27	Rathfarnham Road by castle entrance at start of bus lane	314474.36	229003.08	Outbound	All	
28	Rathfarnham Road at junction with Butterfield Avenue at end of bus lane	314413.76	228846.00	Outbound	All	
29	Nutgrove Avenue east of Oakdown Road at start of bus lane	315944.26	228356.59	Outbound	All	
30	Nutgrove Avenue terminus at end of bus lane	316199.65	228513.33	Outbound	All	
31	Churchtown Road prior to junction with Dundrum Road	316976.19	228418.92	Outbound	All	New for 2004 (QBN)

Appendix 1 November 2004 Survey Points

Stillorgan QBC Survey Points November 2004 incorporating N11 extension to Bray						
Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
1	Bray Main Street between Florence Road & Quinsborough Road	326377.65	218700.40	Inbound	All	New for 2004
2	Castle St prior to junction with Upper Dargle Rd opposite bus stop	326075.17	219064.32	Inbound	All	New for 2004
3	Esso Garage prior to Wilford Roundabout	325755.06	219597.37	Inbound	All	New for 2004
4	At end of bus gate north of Shanganagh Cemetery	325427.51	220756.06	Inbound	AM	New for 2004
5	Village bus stop prior to Shankill Roundabout	325311.53	221584.98	Inbound	All	New for 2004
6	Bus stop at start of bus lane after Loughlinstown Roundabout	324883.59	222893.92	Inbound	All	New for 2004
7	Bus stop city side of Cabinteely South Footbridge	323491.07	225081.40	Inbound	All	New for 2004
8	Dun Laoghaire DART Station departure bus stop	324397.38	228778.02	Inbound	All	Count buses only
9	Oliver Plunkett Road just after junction with Mounttown Lower	323619.71	227493.76	Inbound	All	
10	Abbey Road at bus stop prior to junction with Kill Lane	322905.41	227193.16	Inbound	All	
11	North on Stillorgan Road just after junction with Kill Lane	321816.87	226358.38	Inbound	All	
12	Stillorgan Road just south of junction with Mount Merrion Avenue	319781.15	228820.22	Inbound	All	
13	Stillorgan Road above junction with Ailesbury Road/Beaver Row	317833.90	231328.53	Inbound	All	
14	Morehampton Rd end of bus lane before junction with Wellington Place	317040.21	232195.75	Inbound	All	
15	Leeson Street before junction with St Stephen's Green	316159.70	233132.93	Inbound	All	
16	Westmoreland Street prior to O'Connell Street Bridge	315977.05	234301.33	Inbound	All	

Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
17	D'Olier Street prior to junction with Townsend Street	316090.58	234271.03	Outbound	All	Count buses only
18	Leeson Street after junction with St Stephen's Green	316167.69	233147.25	Outbound	All	
19	Morehampton Rd at start of bus lane after junction with Wellington Place	317032.63	232217.22	Outbound	All	
20	Stillorgan Road above junction with Ailesbury Road/Beaver Row	317849.22	231346.84	Outbound	All	
21	Stillorgan Road just south of junction with Mount Merrion Avenue	319811.78	228822.55	Outbound	All	
22	Stillorgan Road just prior to junction with Kill Lane	321829.69	226389.65	Outbound	All	
23	Abbey Road after junction with Kill Lane	322897.03	227191.76	Outbound	All	
24	Oliver Plunkett Rd prior to junction with Mounttown Lower	323633.43	227504.91	Outbound	All	
25	Dun Laoghaire DART Station set down bus stop	324392.57	228780.96	Outbound	All	
26	Bus stop just after Cabinteely South Footbridge	323600.72	225030.71	Outbound	All	
27	Bus stop prior to Loughlinstown Roundabout	324901.71	222902.72	Outbound	All	New for 2004
28	Shankill village bus stop on Dublin Road	325322.28	221585.81	Outbound	All	New for 2004
29	Opposite Esso Garage just after Wilford Roundabout	325766.35	219600.96	Outbound	All	New for 2004
30	Bus stop at Castle Street just after junction with Upper Dargle Road	326088.39	219072.30	Outbound	All	New for 2004
31	Main Street Bray prior to junction with Quinsborough Road	326385.36	218768.72	Outbound	All	New for 2004

Appendix 1 November 2004 Survey Points

Swords QBC Survey Points November 2004 incorporating Granby Row & Dorset Street Upper						
Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
1	South on Main Street outside County Council Offices	318293.41	246896.01	Inbound	All	
2	South on Main Street north of junction with Malahide Road	318204.06	246628.93	Inbound	All	
3	Swords Road prior to junction with Nevinstown Lane at end of bus lane	317775.86	245442.23	Inbound	All	
4	Dublin Road north of junction with Naul Road at end of bus lane	317798.56	244142.64	Inbound	All	
5	Swords Road south of south turn into Airport	317680.29	242832.24	Inbound	All	
6	Swords Road south of junction with Lorcan Road opposite Omni Park	316734.77	239421.89	Inbound	All	
7	Swords Road south of junction with Collins Avenue at start of bus lane	316830.30	238209.29	Inbound	All	
8	Swords Road north of junction with Richmond Road at end of bus lane	316218.80	236814.08	Inbound	All	
9	Dorset Street Lower before jct with North Circular Rd at end of bus lane	315828.84	235791.17	Inbound	All	
10	Frederick Street North after junction with Dorset St Lower	315570.40	235340.30	All	All	New for 2004 Count Buses only
11	O'Connell Street just after junction with Earl Street North	315929.21	234642.06	Inbound	All	Count Buses only

Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
12	O'Connell Street prior to junction with Middle Abbey Street	315939.88	234470.49	Outbound	All	New for 2004
13	Abbey Street Lower 41 departure point	316217.34	234606.10	Outbound	All	Amended for 2004
14	Parnell Square West bus stop outside No 41	315593.42	235018.90	Outbound	All	New for 2004 (QBN)
15	Dorset St Upper just after junction with Granby Row	315452.58	235172.26	Outbound	All	New for 2004 (QBN)
16	Dorset St Lower after junction with Blessington St at start of bus lane	315557.63	235379.46	Outbound	All	New for 2004 (QBN)
17	Dorset St Lower after junction with North Circular Rd at start of bus lane	315805.81	235788.35	Outbound	All	
18	North on Drumcondra Rd Lower before junction with Botanic Avenue	316167.46	236612.63	Outbound	All	
19	North on Swords Road prior to junction with Collins Avenue	316814.70	238213.51	Outbound	All	
20	North on Swords Road before junction with Lorcan Road at Omni Park	316719.50	239422.54	Outbound	All	
21	North on Swords Road south of turn into Airport	317661.12	242839.39	Outbound	All	
22	North on Dublin Road north of junction with Naul Road	317781.34	244148.17	Outbound	All	
23	Swords Rd north of junction with Nevinstown Lane at start of bus lane	317760.65	245480.26	Outbound	All	
24	North on Main Street just after junction with Malahide Road	318193.98	246631.53	Outbound	All	
25	Main Street opposite County Council offices	318273.92	246901.21	Outbound	All	

Appendix 1 November 2004 Survey Points

Tallaght QBC Survey Points November 2004						
Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
1	East on Tallaght bypass east of junction with Killinarden Heights	307143.92	226554.00	Inbound	All	
2	East on Main Street Tallaght past the Dragon Inn	309386.05	227642.26	Inbound	All	
3	East on Tallaght Road west of M50	311097.12	227858.99	Inbound	All	
4	East on Tallaght Road east of M50	311623.83	228154.79	Inbound	All	
5	North on Templeogue Road east of junction with Oldbridge Road	312908.81	228689.80	Inbound	All	
6	North on Templeogue Road north of junction with Fortfield Road	313774.38	229504.80	Inbound	All	
7	North on Templeogue Road adjacent to junction with Rathdown Park	314179.53	229942.46	Inbound	All	
8	East on Terenure Road East adjacent to Brighton Road	314844.78	230372.91	Inbound	All	
9	North on Rathgar Road south of junction with Kenilworth Road	315448.96	231391.64	Inbound	All	
10	North on Rathmines Road Lower adjacent to junction with Leinster Road	315626.99	231812.63	Inbound	All	
11	North on Rathmines Road Lower adjacent to junction with Grove Park	315678.16	232404.35	Inbound	All	
12	Camden Street junction with Grantham Street at start of bus lane	315605.86	232920.57	Inbound	All	
13	East on Dame Street east of junction with South Great Georges Street	315739.23	234054.35	Inbound	All	Count Buses only
14	North on Tara Street Bridge	316253.32	234465.55	Inbound	All	Count Buses only

Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
15	Eden Quay 65 departure point	316093.57	234461.58	Outbound	All	Count Buses only
16	West on Dame Street east of junction with South Great Georges Street	315739.66	234042.74	Outbound	All	
17	Camden Street near junction with Grantham Street at end of bus lane	315626.26	232899.62	Outbound	All	
18	South on Rathmines Rd Lower adjacent to junction with Grove Park	315693.65	232404.35	Outbound	All	
19	South on Rathmines Rd Lower adjacent to junction with Leinster Rd	315638.17	231811.77	Outbound	All	
20	South on Rathgar Road east of junction with Kenilworth Road	315534.54	231507.75	Outbound	All	
21	West on Terenure Road East adjacent to Brighton Road	314847.36	230366.46	Outbound	All	
22	South on Templeogue Road adjacent to junction with Rathdown Park	314187.70	229935.15	Outbound	All	
23	South on Templeogue Road north of junction with Fortfield Road	313781.85	229498.35	Outbound	All	
24	South on Templeogue Road east of junction with Oldbridge Road	312843.02	228641.64	Outbound	All	
25	West on Tallaght Road east of M50	311634.14	228126.01	Outbound	All	
26	West on Tallaght Road west of M50	311116.47	227832.33	Outbound	All	
27	West on Main Street Tallaght past the Dragon Inn	309387.34	227631.94	Outbound	All	
28	West on Tallaght Bypass east of junction with Killinarden Heights	307147.71	226543.40	Outbound	All	

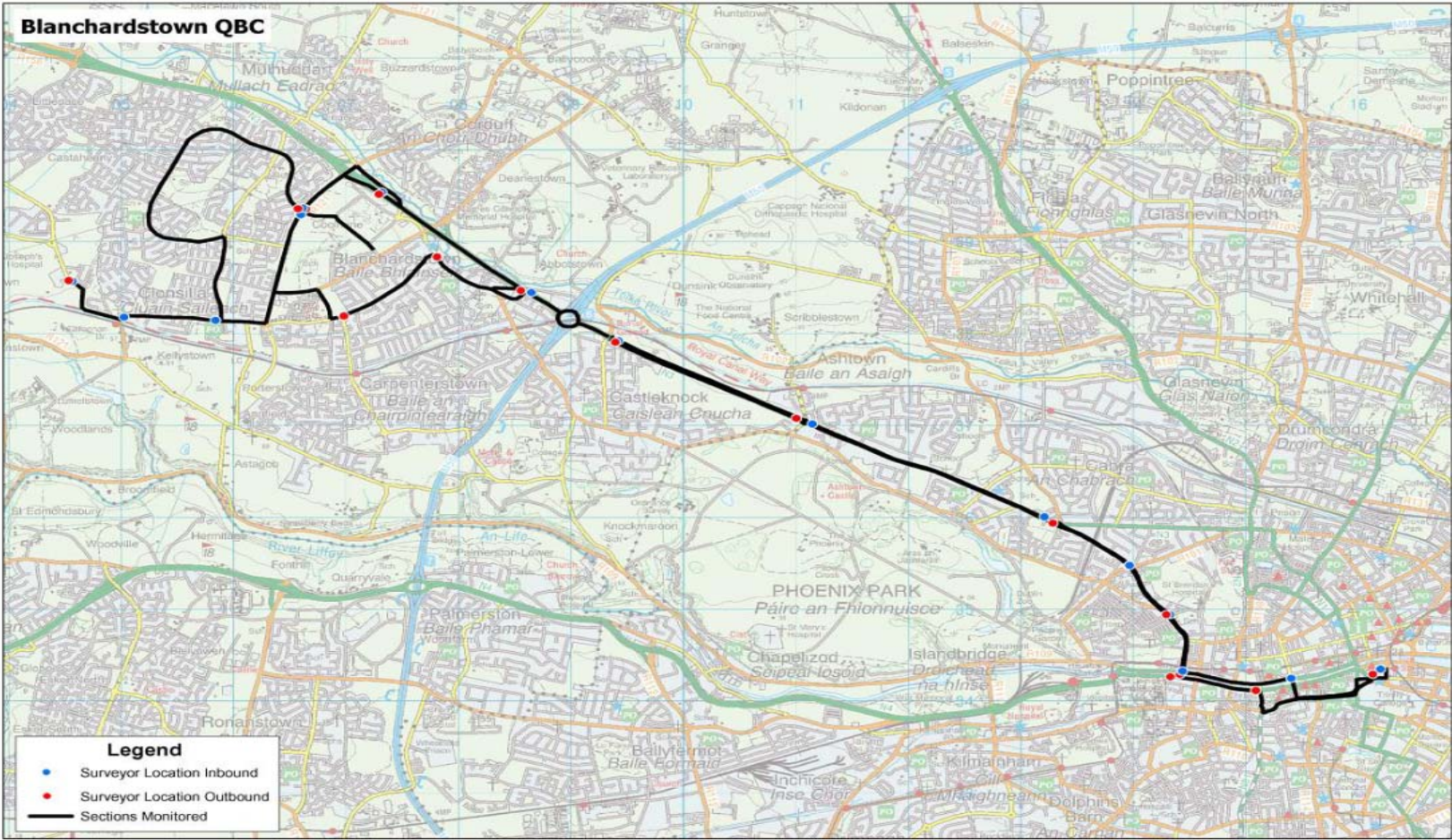
Appendix 1 November 2004 Survey Points

South Clondalkin QBC Survey Points November 2004						
Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
1SC	Nangor Road on city side of Grangecastle Roundabout	304516.85	230937.74	Inbound	All	New location for 2004 (QBN)
2SC	Nangor Road after junction with Ninth Lock Road	306987.87	232041.11	Inbound	All	
3SC	Nangor Road prior to junction with Naas Road	309794.44	231645.5	Inbound	All	
4SC	Naas Road prior to junction with Muirfield Industrial Estate	310990.46	232234.84	Inbound	All	New location for 2004 (QBN)
5SC	Naas Road prior to junction with Davitt Road	311367.96	232762.23	Inbound	All	

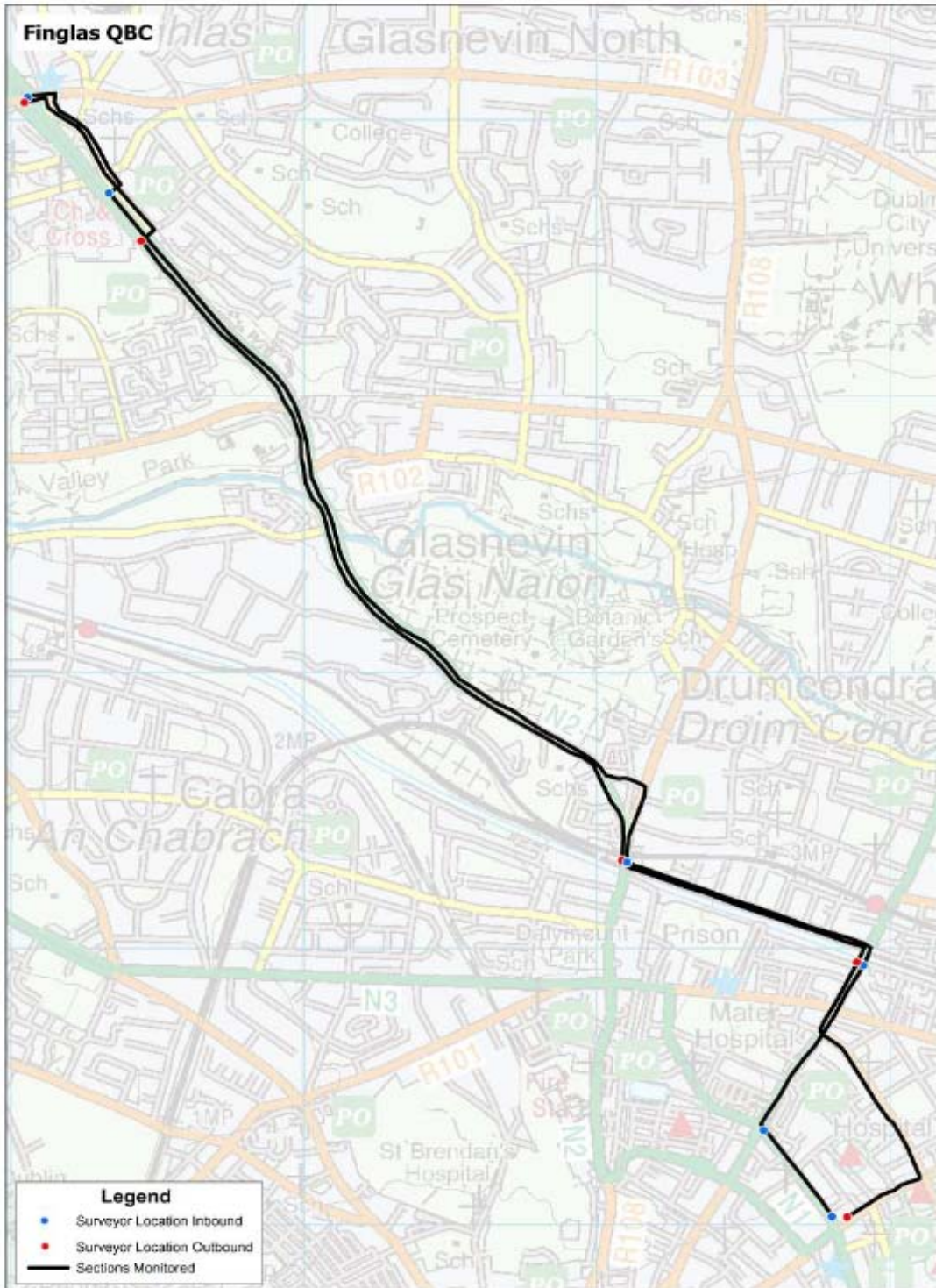
Point No.	Description	X Coordinate	Y Coordinate	Direction	Survey Periods	Notes
6SC	Tyrconnell Road just prior to junction with Davitt Road	311447.06	232890.77	Outbound	All	
7SC	Naas Road after junction with Muirfield Industrial Estate	311001.37	232218.81	Outbound	All	New location for 2004 (QBN)
8SC	Naas Road just prior to junction with Nangor Road	309893.91	231640.98	Outbound	All	
9SC	Nangor Road just prior to junction with Ninth Lock Road	306994.06	232029.26	Outbound	All	
10SC	Nangor Road on city side of Grangecastle Roundabout	304519.50	230926.71	Outbound	All	New location for 2004 (QBN)

Appendix 2 Maps of Survey Points

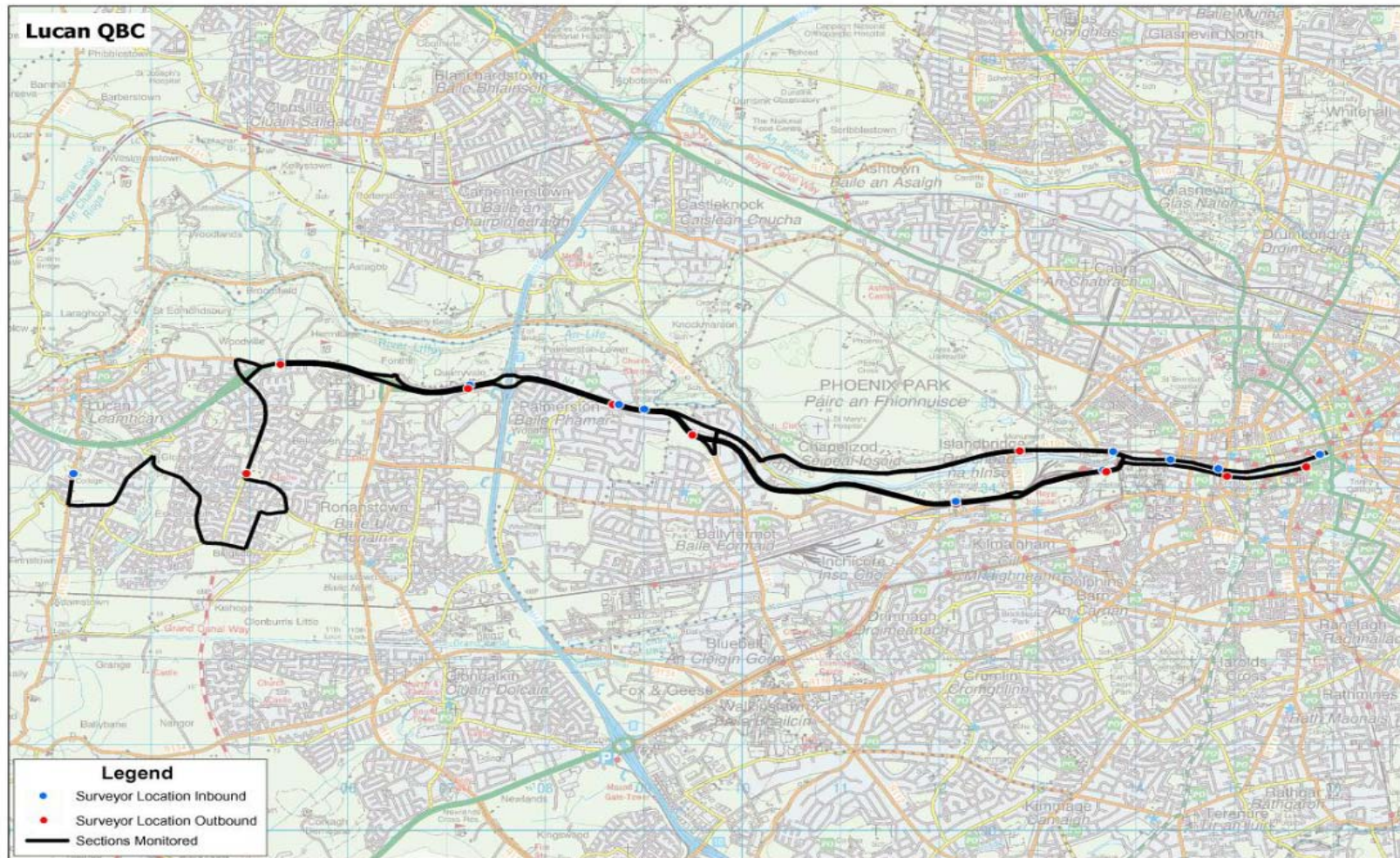
Blanchardstown QBC



Finglas QBC



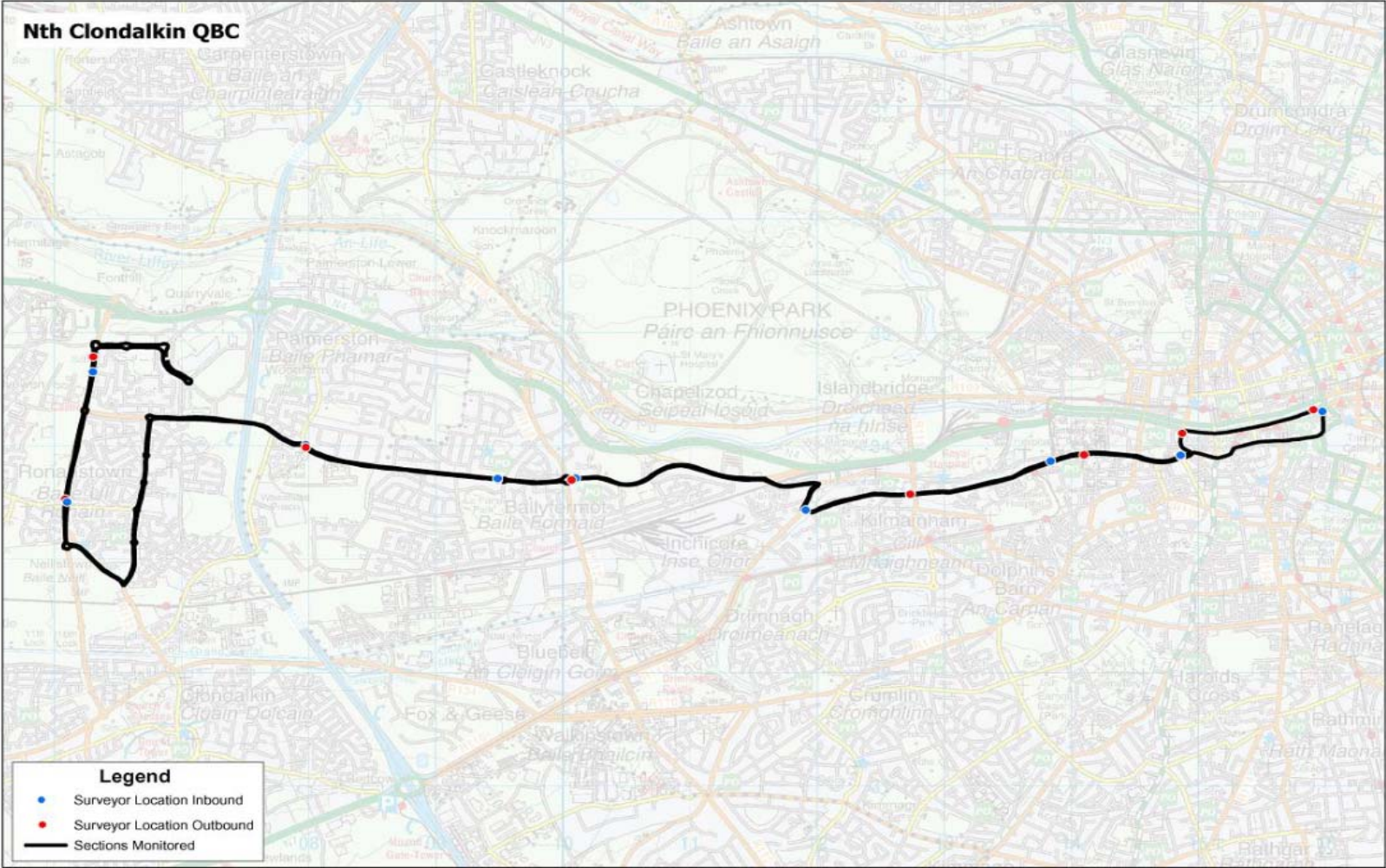
Lucan QBC



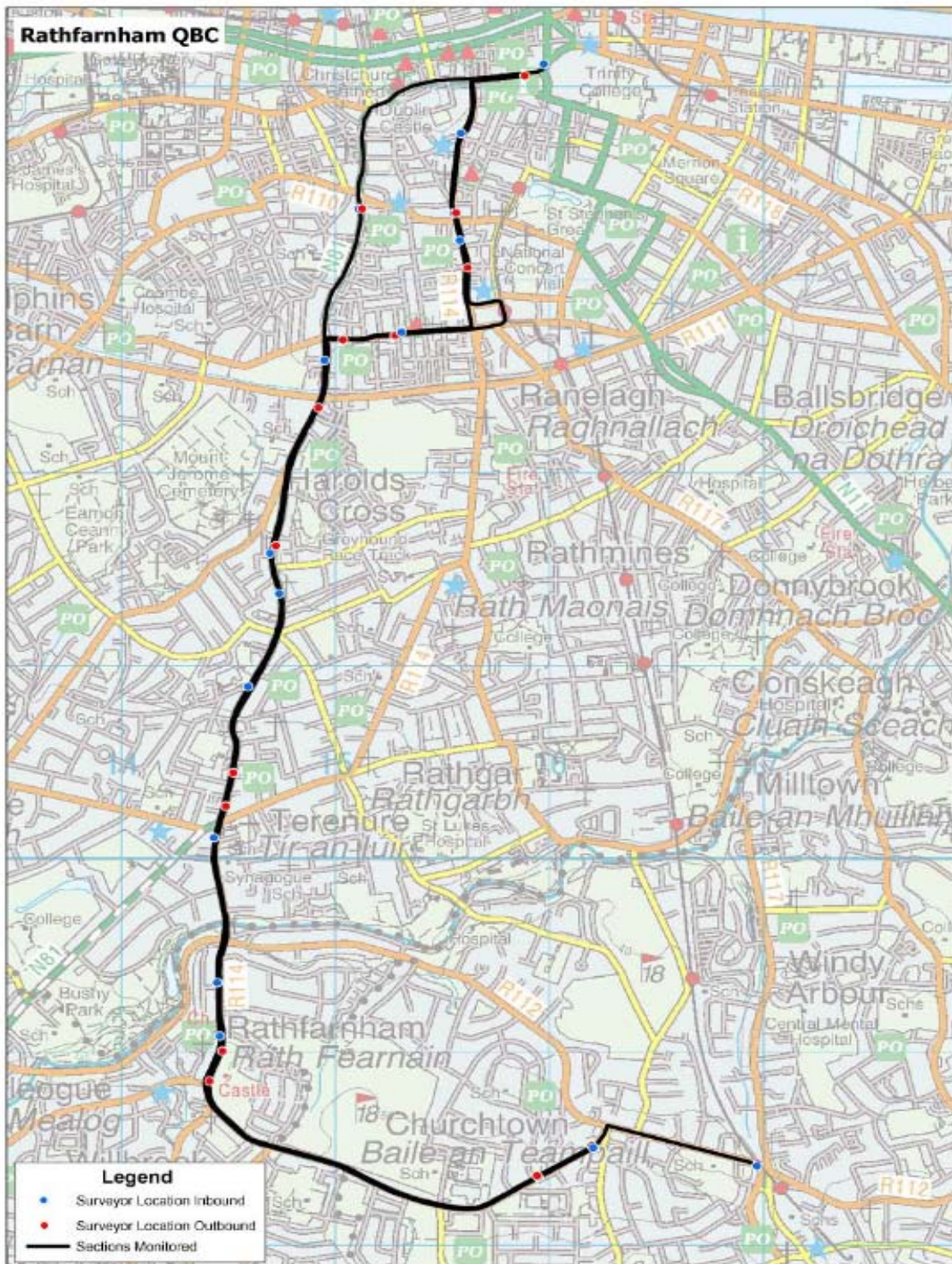
Malahide QBC



North Clondalkin QBC



Rathfarnham QBC



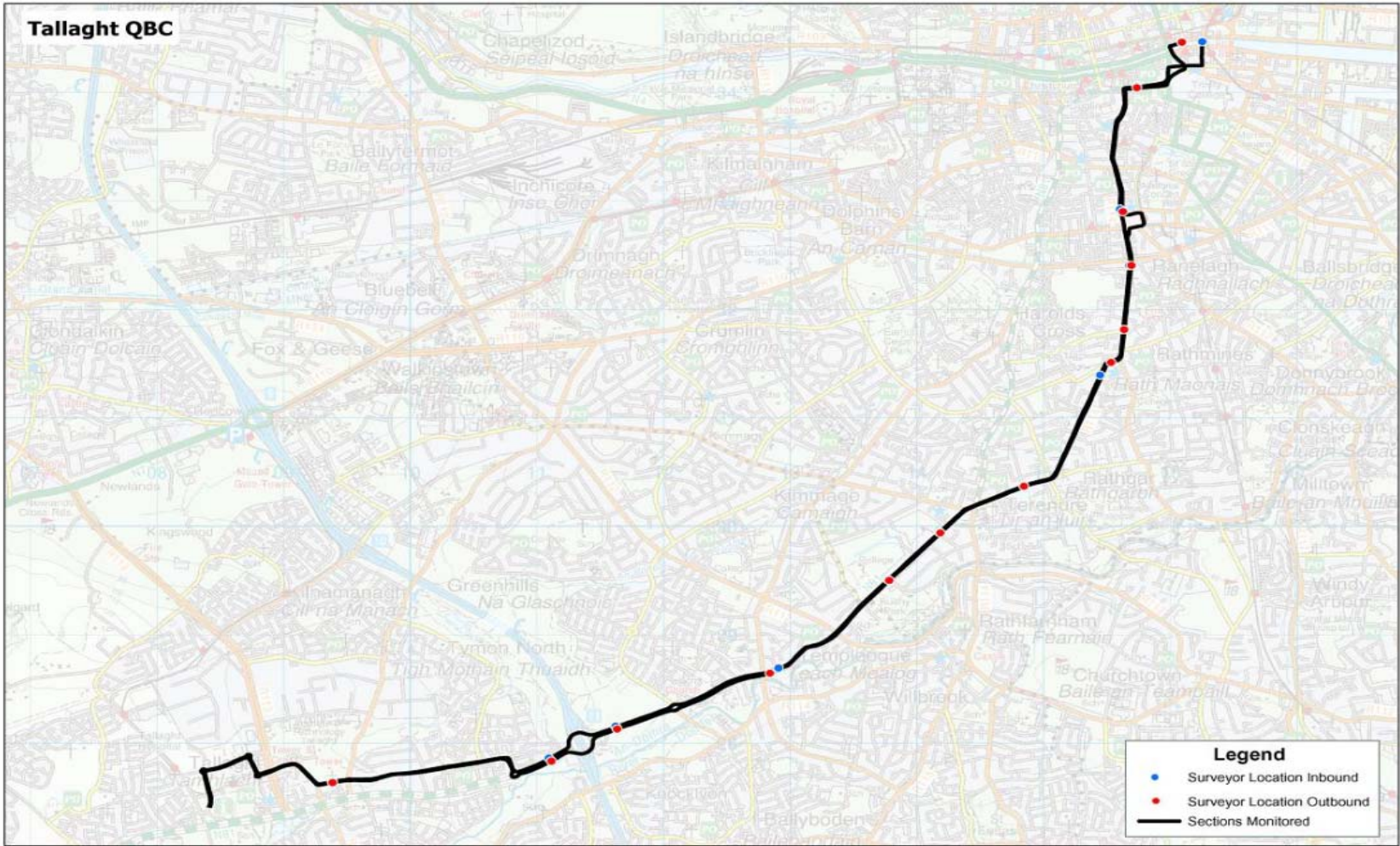
Stillorgan QBC



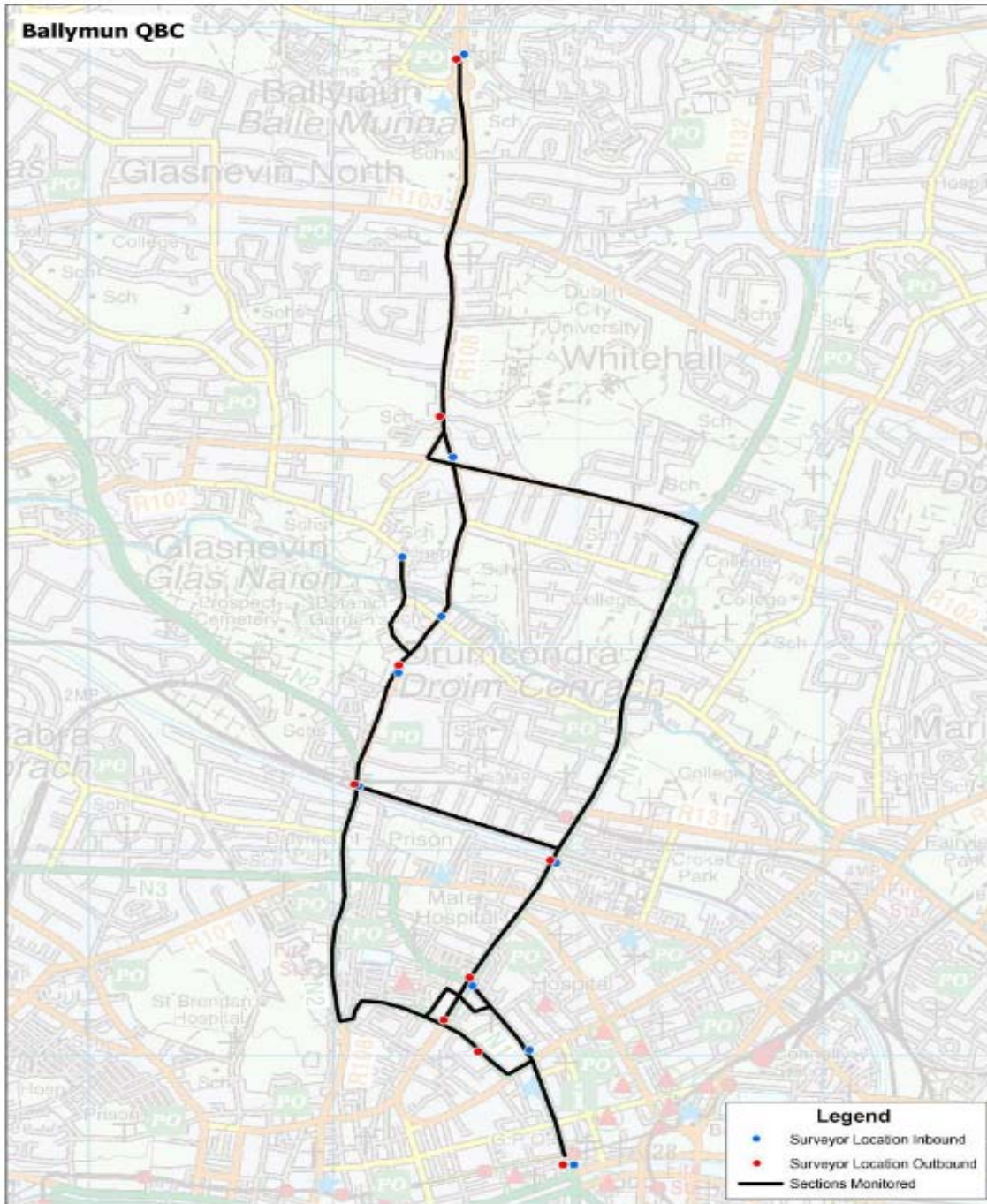
Swords QBC



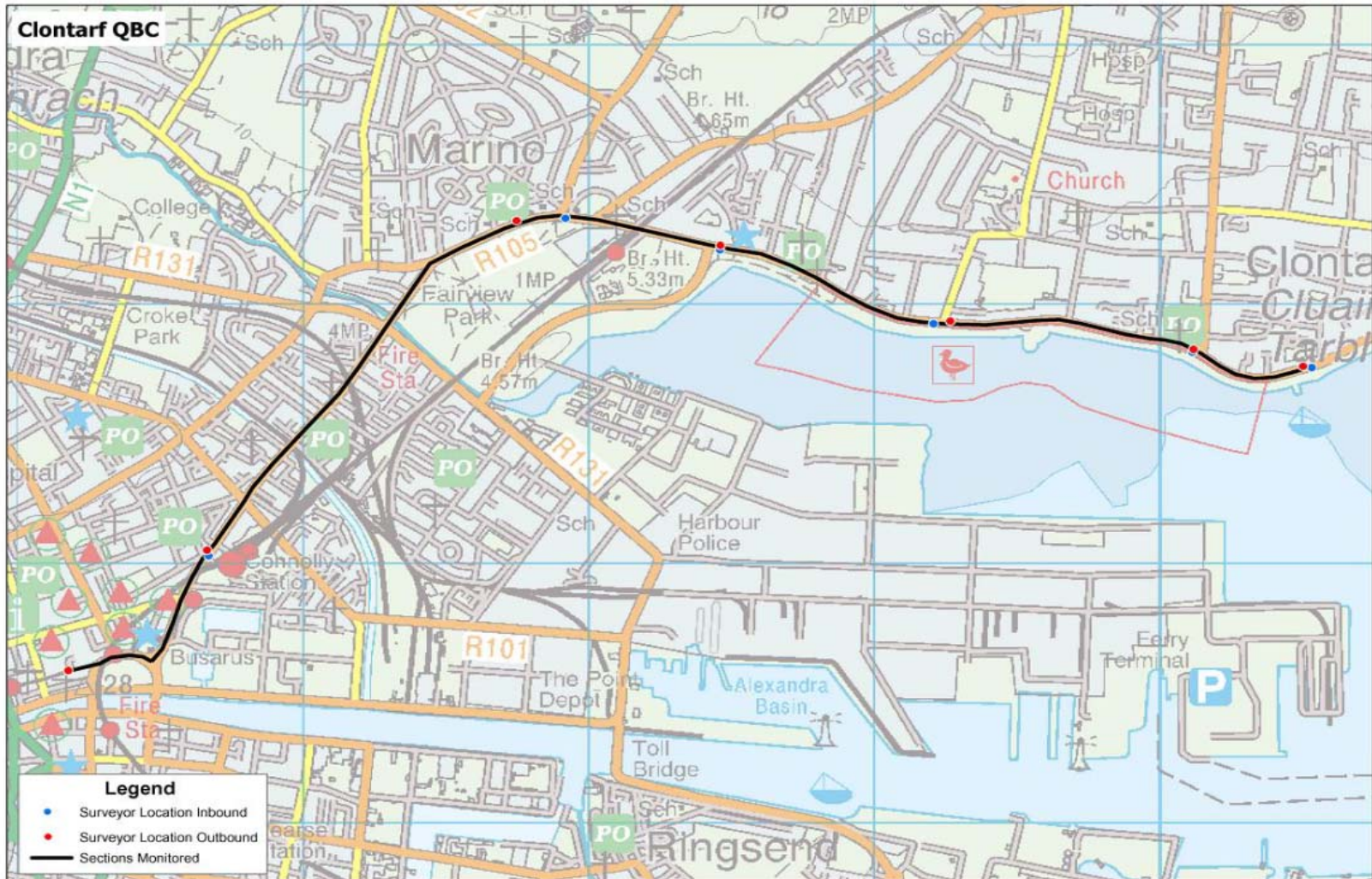
Tallaght QBC



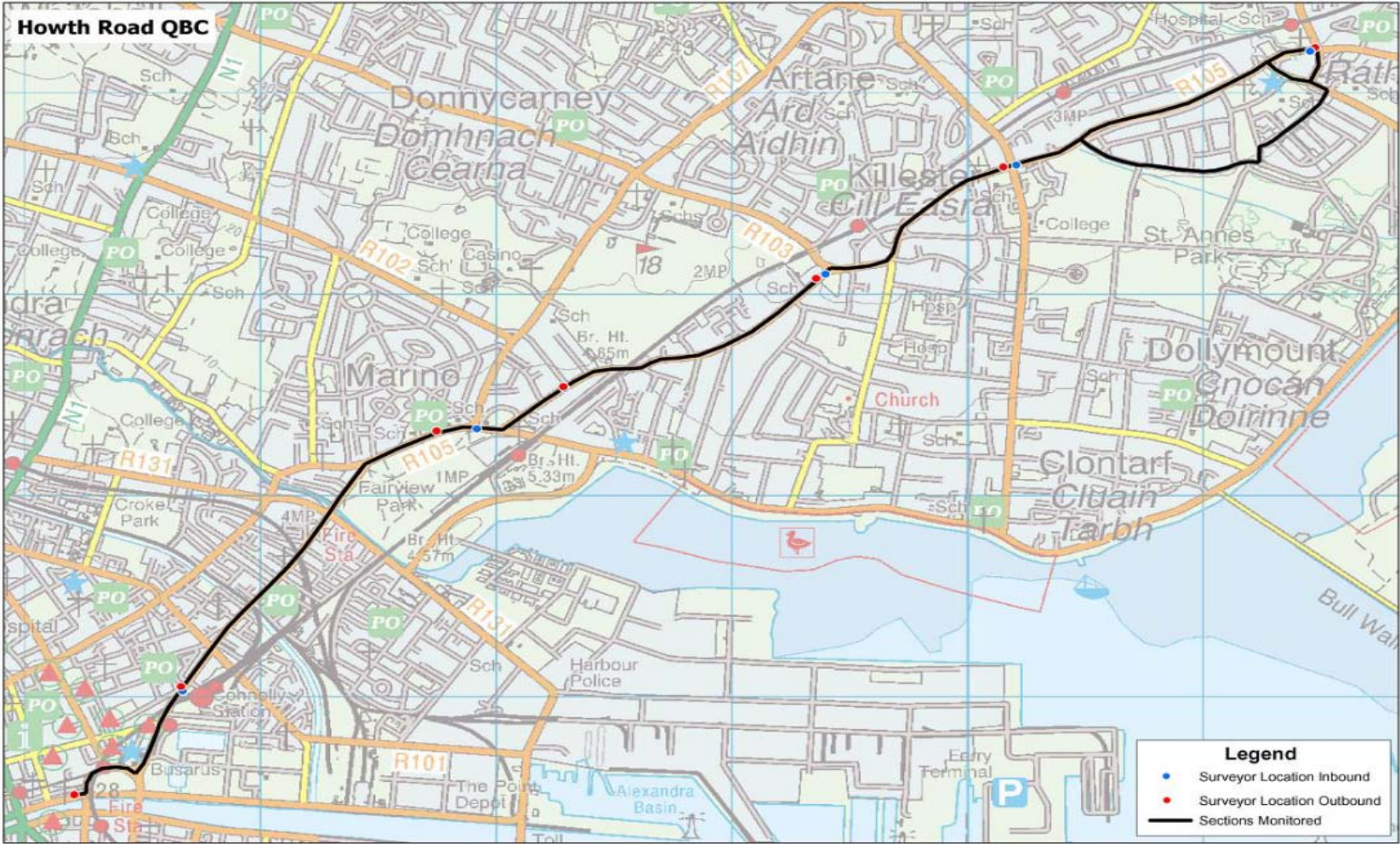
Ballymun QBC



Clontarf QBC



Howth Road Pre QBC



South Clondalkin Pre QBC

