

**Belfast City Council
Local Air Quality Management
Detailed Air Quality Assessment**

**Final Version
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Executive Summary

In May 2006 Belfast City Council published an Updating and Screening Assessment. This document, in accordance to Environment Order (NI) 2002, highlighted five areas within the city where exceedences of the National Air Quality Objectives could potentially be exceeded. These areas were identified as:

1. The junction of the Sydneham Bypass with the Lower Newtownards Road (Junction 1).
2. The Shaftesbury Square area (Junction 3).
3. The Donegall Road.
4. The Albertbridge Road.
5. The City Centre.

These areas were assessed for exceedences of mean nitrogen dioxide and particulate matter levels associated with busy roads and junctions.

Exceedences of the mean nitrogen dioxide were identified during this assessment process. However, no current relevant receptors are exposed to these predicted levels. No exceedences of the 24 hour mean or annual mean for particulate matter were identified. Therefore, the 2007 Detailed Air Quality Assessment for Belfast City Council concludes that there is no need to declare new Air Quality Management Areas nor expand or revoke existing AQMAs.

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1.0 Introduction

In 2002, the Environment Order was introduced in Northern Ireland. This places a responsibility upon district councils to periodically review air quality within their areas and compare them against the health based standards outlined within Table 1. This report is a part of that periodic review and involves a detailed assessment of five specific areas within Belfast. These areas were identified as requiring further investigation by the Updating and Screening Assessment (USA) process completed in April 2006. The areas were:

1. The junction of the Sydenham Bypass with the Lower Newtownards Road (named in the 2006 USA as Junction 1). A DMRB screening assessment showed possible breaches of the annual Objectives for nitrogen dioxide and particulate matter associated with road traffic.
2. The Shaftesbury Square area (named in the 2006 USA as Junction 3). A DMRB screening assessment showed possible breaches of the annual Objectives particulate matter associated with road traffic.
3. The Donegall Road for annual mean particulate matter. Predicted background concentrations for this area increased slightly during the updating process in January 2006. Previous review and assessments had identified this area as being close to the Objectives for mean annual particulate matter.
4. The Albertbridge Road for mean particulate matter. Predicted background concentrations for this area increased slightly during the updating process in January 2006. Previous review and assessments had identified this area as being close to the Objectives for mean annual particulate matter.
5. The City Centre for annual mean nitrogen dioxide. Monitoring data and new residential exposure gave rise to concerns regarding possible exposure to exceedences of the annual mean for nitrogen dioxide.

The last Detailed Assessment for Belfast City Council was completed in April 2004. It concluded that measures would be required in four specific areas of the city in order to mitigate the effects of nitrogen dioxide and particulate matter. In August 2004, Belfast City Council declared four Air Quality Management Areas (AQMAs) comprising the M1 Motorway and Westlink corridor, Cromac Street to the junction of Short Strand, Woodstock Link and the Albertbridge Road, the Upper Newtownards Road and the Ormeau Road. These AQMAs were declared for exceedences of the

annual nitrogen dioxide mean and for one (the M1 Motorway and Westlink corridor) both nitrogen dioxide (annual and hourly) and particulate matter (annual and 24 hour). A review of the monitoring data within these areas during the Updating and Screening Assessment found no evidence to support the possible de-declaring of the areas in terms of pollutants of concern, area and extent.

To ensure completeness and consistency in the way local authorities monitor, review and assess their air quality, the government has issued guidance entitled Technical Guidance LAQM TG(03). Belfast City Council's 2007 Detailed Assessment has followed this guidance.

Table 1. Relevant National Air Quality Objectives and European Directive limit and target values for the protection of human health relevant to Northern Ireland

Pollutant	Objective	Measured as	Date To be achieved and maintained thereafter	European Obligations	Date To be achieved and maintained thereafter
Nitrogen dioxide	200 µg/m ³ Not to be exceeded more than 18 times per year	1 Hour Mean	31 December 2005	200 µg/m ³ Not to be exceeded more than 18 times per year	1 st January 2010
	40 µg/m ³	Annual Mean	31 December 2005	40 µg/m ³	1 st January 2010
Particles (PM₁₀) (gravimetric)^a	50 µg/m ³ Not to be exceeded more than 35 times per year	24 Hour Mean	31 December 2004	50 µg/m ³ Not to be exceeded more than 35 times per year ^b	1 st January 2005
	40 µg/m ³	Annual Mean	31 December 2004	40 µg/m ³	1 st January 2005
Notes: a. Measured using the European gravimetric transfer sampler or equivalent. b. Indicative 2010 objectives for PM10 (from the 200 Strategy and 2003 Addendum) have been replaced by an exposure reduction approach for PM2.5 µg/m ³ - micrograms per cubic metre					

1.1 Assessment Methodologies

1.1.1 Screening Tool

The November 2003 Version 1.02 of the Design Manual for Roads and Bridges (DMRB) screening method published by the Highways Agency was used intensively during the USA process to screen out those areas of concern. However, the effectiveness of this screening tool was limited by the availability of traffic flow data. Large assumptions were made for areas not covered by the Road Service traffic

survey locations. Assumptions made were considered to be over exaggerations of the true traffic flows based on extrapolation from nearby survey locations on parallel roads or feeder roads, often some distance from the area under investigation. Under the instruction of the Department of Environment this screening tool was used again during this Detailed Assessment but with updated and accurate traffic flow data inputs acquired for the specific junctions and roads. This data collection was carried out under contract for Belfast City Council in November 2006. Where the DMRB screening assessment showed a possible exceedence of the Objectives this assessment proceeded to a Detailed Atmospheric Dispersion Modelled assessment.

1.1.2 Detailed Atmospheric Dispersion Modelling Tool

Belfast City Council uses the Cambridge Environmental Research Consultants (CERC) Atmospheric Dispersion Modelling Software (ADMS-Urban) to model air quality within its district. The model is a comprehensive tool for tackling air pollution problems in cities and towns and is used by over 70 Local Authorities within the UK. It can be used to examine emissions from 6,000 sources simultaneously, including 70,000 roads links and 1,500 points. The model incorporates the latest understanding of the boundary layer structure, and goes beyond the simplistic Pasquill-Gifford stability categories method with explicit calculation of important parameters. The model uses advanced algorithms for the height-dependence of wind speed, turbulence and stability to produce improved predictions.

Model inputs include; source parameters (road widths and canyon heights, stack heights, diameters, exit velocities etc), diurnal profiles, met data and background ambient concentrations. One of the most important advanced modules in ADMS-Urban is the chemistry module which allows the user to calculate NO_x chemistry. By using the 8 reaction Generic Reaction Set the model can calculate reactions with ozone and hydrocarbons enabling the user to calculate the NO_x chemical reactions within a study area to get accurate predictions of NO₂ concentrations. Outputs can be displayed in numerical format or overlain on maps using the ArcView GIS software. Pollution concentrations can be calculated for averaging times in line with limit values as stipulated by the National Air Quality Strategy. Modelled results can be verified by making comparisons with locally monitored data. This can be done by outputting results at receptor points corresponding to monitoring site locations. Modelled and monitored concentrations can then be compared as a time series plot. Results can be presented as colour contour plots using an intelligent gridding system

enabling users to model a large area yet obtain high spatial resolution in areas of particular interest.

1.2 Data Sources

1.2.1 Meteorological Data

The nearest meteorological station to Belfast is located at Aldergrove (Belfast International Airport). An ADMS compatible data set was obtained for the year 2006. Although the monitoring station is located some distance from Belfast and in a rural area it is deemed the most representative and authoritative data available. The data comprised of hourly sequential recordings of surface temperature, precipitation, wind speed, wind direction, relative humidity and cloud cover. The ADMS software was able to utilise 96% of the supplied hourly data. The wind rose for 2006 (Figure 1) shows three prominent wind directions (south south east, south and south south west) and mean speeds of 6 to 10 knots. Wind roses derived during the last Detailed Assessment in 2004 show a similar trend. However, the temperature recorded in 2006 was for many months above average on previous years. The highest recorded during the year was 30⁰C on 18th July, the highest temperature anywhere in Northern Ireland since 1995. This added to the warmest July recorded since 1961 when records began. In terms of rainfall, December was the wettest month in 2006 with 138.9 mm, well above average. May also experienced some very wet weather and in some places it was the wettest it had been since 1993, with an average of 116.8 mm. This was in contrast to June and July which both experienced their driest months since 1995, with 39.0 mm and 69.0 mm of rain falling respectively.

1.2.2 Background Data

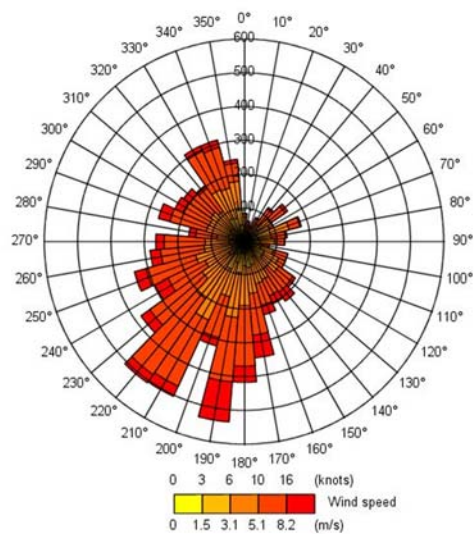
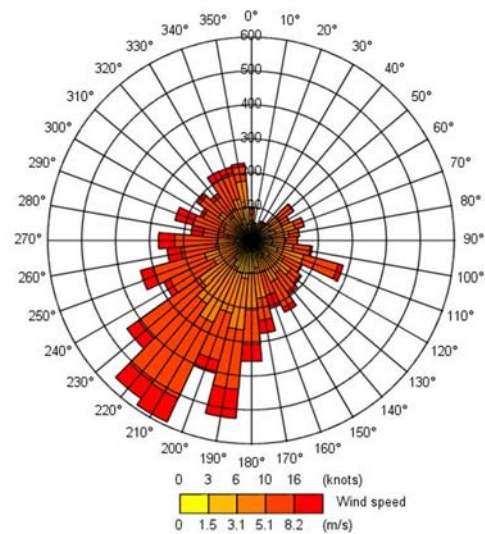
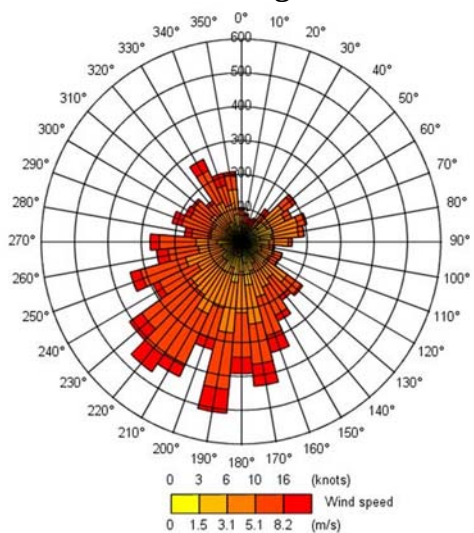
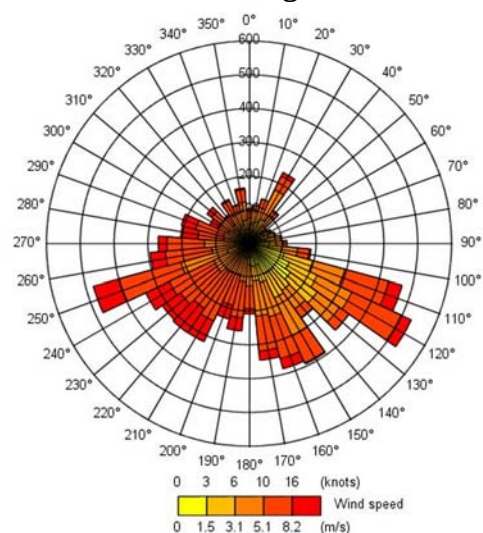
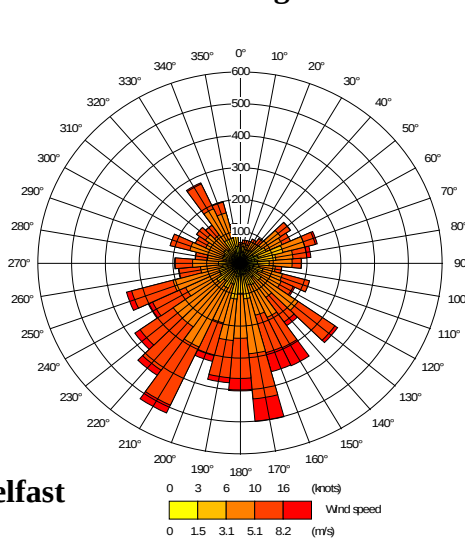
Background air quality data for each of the areas considered was derived from the 2006 updated UK Air Quality Archive available at:

<http://www.airquality.co.uk/archive/laqm/tools.php?tool=background04> . Data for the Northern Ireland Ordinance Grid system and the appropriate 1 km grid was used.

Conversion from 2005 to 2006 was achieved using the 2006 updated Year Adjustment Calculator available at:

<http://www.airquality.co.uk/archive/laqm/tools.php?tool=year04> .

Background nitrogen dioxide diffusion tubes are operated at the Royal Victoria Hospital, North Road and Whitewell Road. Bias adjusted (Appendix 1) background concentrations were 23, 21 and 24 $\mu\text{g m}^{-3}$ respectively, giving a mean

1998 Meteorological Data**1999 Meteorological Data****2000 Meteorological Data.****2002 Meteorological Data.****2006 Meteorological Data.**

**Figure 1. Wind roses for Belfast
1998 to 2006**

background value of $22.6 \mu\text{g m}^{-3}$. Monitored background concentrations are on average some 15% lower than that modelled by the Air Quality Archive.

The Belfast Centre AURN site is classed as an Urban Centre site and consequently not suitable for background concentrations for assessments of annual mean nitrogen dioxide.

The Belfast Clara Street site monitors particulate matter in a residential urban area and is classed as a Suburban site. The annual mean for 2006 was $22 \mu\text{g m}^{-3}$. Modelled background data used during this assessment ranged from 25.6 to 27.87 which are approximately 15 to 25% higher than that currently being monitored.

1.2.3 Traffic Flow Data

In order to accurately predict traffic flows, speeds and composition Belfast City Council commissioned a traffic count company to undertake a series of manual classified counts, automatic traffic counts and speed surveys. The locations of these traffic count surveys and the full report are given in Appendix 2. Surveys were carried out at each location for a 24 hour period between 28th November and 1st December 2006. These dates are considered to be realistic representations of the average and general flow patterns for each road.

A combination of Automatic Traffic Counters, CCTV footage and Radar Gun speed surveys were employed to record hourly traffic flows, 12 hour and 24 hour flows, to produce a 13 fold vehicle classifications, average speeds, median speeds and a 85th percentile speed.

1.2.4 Monitoring Data and the Verification Process

In order to verify modelled derived data results were compared with actual monitored data. Belfast City Council operates a network of nitrogen dioxide diffusion tube monitoring points throughout the city. For each of the study areas the nearest tube location was used. Data from these locations is derived by following the LAQM TG (03) guidance. Analysis is carried out at a WASP accredited lab using 50% TEA in acetone. A locally derived Bias Adjustment factor was applied using co-located tube data from the AURN monitoring station in Lombard Street. Full adjustment sheets are presented in Appendix 1.

Past DEFRA prepared studies has shown a wide variation in the performance of nitrogen dioxide diffusion tubes. Consequently, LAQM TG(03) stresses the importance of determining a laboratory specific bias adjustment factor and over a sufficient period of time. Belfast City Council has carried out and reported the results

from its collocation study at Lombard Street since 2002. During this period locally derived bias adjustment factors have ranged from 1.07 to 1.27. In 2006, the bias adjustment factor was 1.18. In order to take into account the inherent inaccuracies of the monitoring methodology the modelled data was compared against a range of locally derived bias adjustment factors derived over the past five years.

Table 2. Bias adjustment factors for collocated nitrogen dioxide diffusion tubes located at Lombard Street, 2002 to 2006

Year	Bias Adjustment Factor Derived from Collocation Studies at Lombard
2002	1.07 ¹
2003	1.17 ²
2004	1.27 ³
2005	1.08 ⁴
2006	1.18 ⁴

Source: **1** = Belfast City Council (2004). Second and Third Stages of the National Air Quality Review and Assessment Process. Available at:

http://www.airqualityni.co.uk/documents/reports/251060807_Belfast-2nd+3rd-report_Final_version.pdf **2** = Netcen (2005). Air Quality Monitoring in Northern Ireland, 2003.

Available at : http://www.airqualityni.co.uk/documents/reports/11060221_AQNIReport2003_web.pdf **3** = Netcen (2005). Quality Monitoring in Northern Ireland, 2004.

http://www.airqualityni.co.uk/documents/reports/16060221_Air_Quality_Monitoring_in_Northern_Ireland_and_2004-complete2.pdf **4** = Appendix 1.

Modelled background concentrations for each of the study sites for nitrogen dioxide and particulate matter concentrations were compared with means monitored by both continuous analysers and diffusion tubes. The Derry Brooke Park chemiluminescent nitrogen dioxide analyser in Derry is categorised as an Urban Background site and the Belfast background diffusion tubes are situated in urban locations adequately distanced from any particular sources. The Clara Street and Lombard Street TEOMs were used to determine the background particulate matter concentrations.

TABLE 3. Measured background concentrations used to verify modelled background concentrations.

	2006 Annual Mean Nitrogen Dioxide ugm ⁻³	2006 Annual Mean PM ¹⁰ ugm ⁻³
Derry Brooke Park, Derry. Chemiluminescent continuous analyser	12	-
Royal Victoria Hospital, Belfast. Bias Adjusted Diffusion tube	23	-
North Road, Belfast. Bias Adjusted Diffusion tube	21	-
Whitewell Road, Belfast. Bias Adjusted Diffusion tube	24	-
Lombard Street, Belfast. TEOM	-	18
Clara Street, Belfast. TEOM	-	22

2.0 Junction of Sydenham Bypass with the Lower Newtownards Road (Junction 1)

2.1 Background

The 2006 USA process identified this busy road junction as an area where potential exceedences of the nitrogen dioxide and particulate matter annual means could occur. Figure 2 shows the area in detail, the nearest existing receptor (green circle) and the diffusion tube monitoring location (blue circle).

2.2 Site Specific Input Data

2.2.1 Background data

Background data was sourced from the 2006 updated UK Air Quality Archive for the 1 kilometre grid square appropriate to the junction. Background concentrations for the year 2006 were calculated from the modelled 2005 background levels using the Year Adjustment Calculator.

Table 4. Background nitrogen dioxide and particulate matter concentrations for the Junction 1 assessment

NIOS X	NIOS Y	2005 Annual mean nitrogen dioxide $\mu\text{g m}^{-3}$	2006 Annual mean nitrogen dioxide $\mu\text{g m}^{-3}$	2005 Annual mean particulate matter $\mu\text{g m}^{-3}$	2006 Annual mean particulate matter $\mu\text{g m}^{-3}$
334500	374500	27.3	26.6	27.9	27.5

2.2.2 Road traffic data

Twenty four hour road traffic flows, composition and speeds were collected over the period 28th November to 30th November. Five survey locations were used (Figure 2). A combination of Automatic Traffic Counters (ATCs), video cameras and radar guns were used. Full traffic flow data is given in Appendix 2.

Table 5. Summarised traffic flow data for Junction 1

Survey Location	Flow Direction	24 hour AADT	Percentage Light Vehicle	Percentage Heavy Goods Vehicle	Average Speed (kmph)
1	Bridge End west bound	41,932	95	5	34
2	Sydenham Flyover west bound	6,461	98	2	30
3	Bridge End east bound	32,705	94	6	36
4	South Strand South bound	15,705	91	9	30
5	Short Strand North bound	18,847	93	7	32

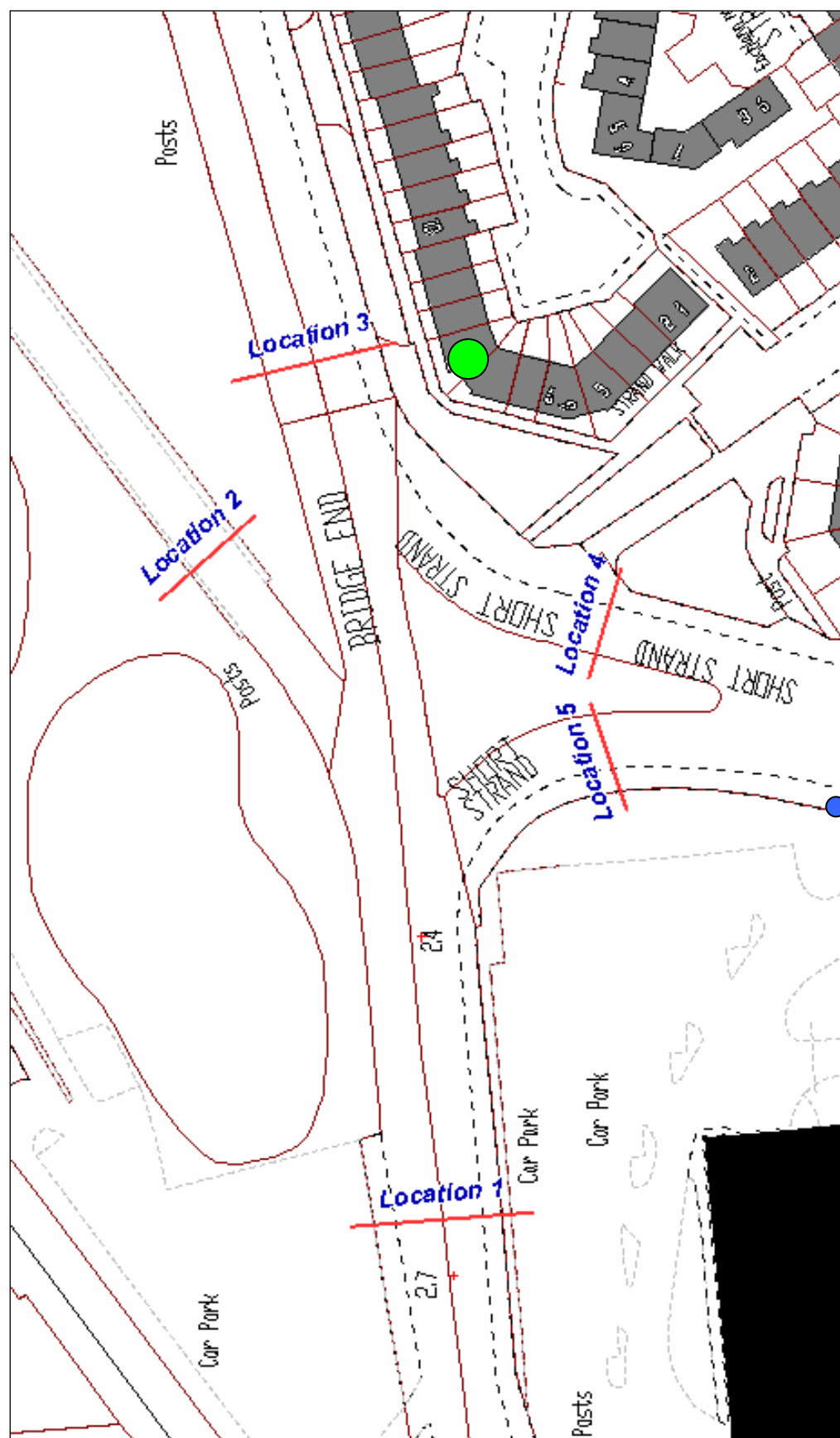


Figure 2. Junction 1, Traffic count locations, nitrogen dioxide diffusion tube monitoring location (blue circle) and receptor (green circle).

2.3 DMRB Screening Assessment

Nitrogen dioxide and particulate matter predicted concentrations for the nearest receptor to the junction were 41.02 ug m^{-3} nitrogen dioxide and 35.95 ug m^{-3} particulate matter with 54.6 days where levels exceed 50 ug m^{-3} . These levels are marginally higher than those predicted by the 2006 Updating and Screening Assessment (40 ug m^{-3} nitrogen dioxide and 35.7 ug m^{-3} particulate matter). Input and Output sheets are given in Appendix 3.

2.4 Dispersion Modelling Assessment

Results of the Screening Assessment show a potential exceedence of the nitrogen dioxide annual mean objective at the nearest receptor to the junction. Consequently, a detailed dispersion model assessment was carried out.

Site specific input data includes road width, elevation and street canyon. For this assessment road widths were measured as 10 to 13 meters wide and street canyon and elevation were kept at zero as the surrounding area is relatively open and free from tall obstructions that may influence the dispersal of pollutants. Surface roughness was set at 0.5 (Open Sub-urban) and the Chemical Reaction Scheme option was chosen.

2.4.1 Annual mean nitrogen dioxide

Figure 3 graphically represents the dispersion model outputs for mean nitrogen dioxide concentrations at Junction 1. Exceedences of the 40 ug m^{-3} level do occur at the junction and along the centre of the road but predicted levels at the adjacent properties range from 31.7 to 33.2 ug m^{-3} , well below the Objective. In order to verify the accuracy of this model run, the results were compared with monitored data for the same year and against data derived from previous year bias adjustment figures. The difference between monitored data and modelled data for 2006 is +1.8% giving confidence that the model is a relatively accurate prediction of the mean concentrations experienced during 2006. Using a range of locally derived bias adjustment factors a range of monitoring results from 35.5 to 42 ug m^{-3} was derived. The modelled result of 39.7 ug m^{-3} falls within the upper quartile of this range. Modelled background concentrations in this area were 27.8 ug m^{-3} some 57% higher than that monitored at Urban Background sites over the same period. This is further evidence that the model predictions for this area during 2006 are an over estimation of the actual concentrations.

Table 6. Modelled mean nitrogen dioxide concentrations for Junction 1

	NIOS X	NIOS Y	Measured Annual Mean $\mu\text{g m}^{-3}$	Modelled Annual Mean $\mu\text{g m}^{-3}$	Percentage Difference	Exceedence of the Objective
Monitoring Location	334,988	374,370	39 Data Capture 75%	39.7	+1.8	No
Monitoring Results Range	-	-	35.5 to 42	39.7	-6 to +11	-
Receptor	335,052	374,416	-	32.4	-	No
Background Concentrations	-	-	12 to 24	27.8	+16 to +57	-

2.4.2 Annual mean particulate matter

The verification process conducted during the nitrogen dioxide assessment gives confidence that the input data used in this modelling process is accurate and representative. Using this input data the model was run for mean particulate matter predictions. Background concentrations were measured in gravimetric equivalence and hence the 1.3 conversion factor was not applied to the modelling run. Figure 4 graphically represents the particulate matter concentrations around the Junction 1 area. Annual mean concentrations range from 27.5 to 35.2 $\mu\text{g m}^{-3}$. Predicted concentrations at the adjacent properties range from 27.8 to 28 $\mu\text{g m}^{-3}$. No exceedence of the 24 hour mean was predicted at these receptors. Background concentrations in this area were predicted to be 26 $\mu\text{g m}^{-3}$, more than the background concentrations monitored at Belfast Centre (Lombard Street 18 $\mu\text{g m}^{-3}$) and Clara Street (22 $\mu\text{g m}^{-3}$). This would give confidence that these modelled concentrations are a slight over estimation of the concentrations encountered at Junction 1 during 2006.

2.5 Conclusion

The 2006 Updating and Screening Assessment identified the junction of Sydenham Bypass with the Lower Newtownards Road (Junction 1) as an area where nitrogen dioxide and particulate matter Objectives could be exceeded. A detailed dispersion model based on site specific and up-to-date meteorological data confidently concludes that the current receptors at this junction are not exposed to exceedences of the relevant Air Quality Objectives. Consequently, it is considered unnecessary to declare this busy junction as an Air Quality Management Area.



Figure 3. Junction 1, Modelled annual mean nitrogen dioxide concentrations, 2006.

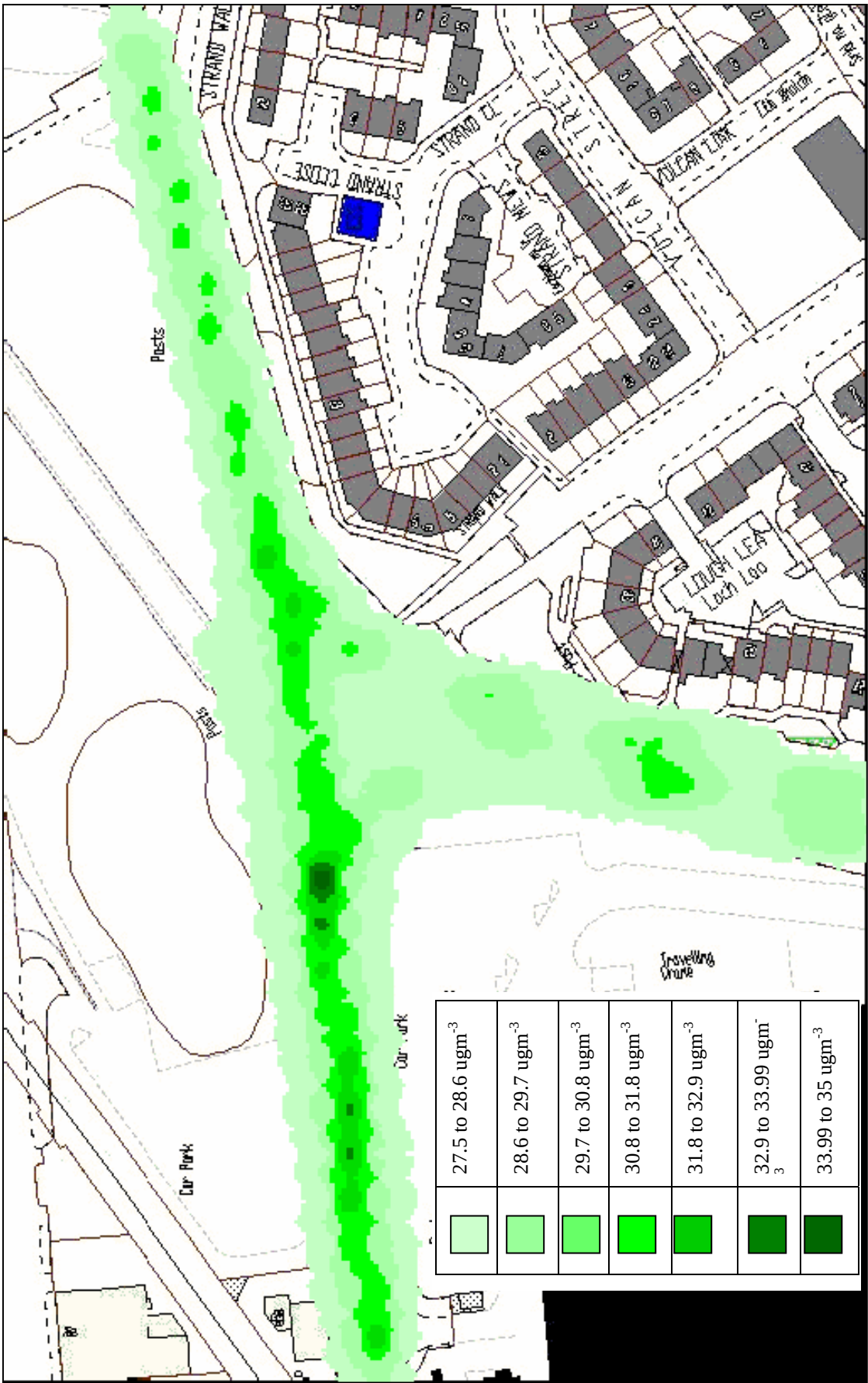


Figure 4. Junction 1, Modelled annual mean particulate matter concentrations, 2006.

3.0 Shaftesbury Square (Junction 3)

3.1 Background

The 2006 USA process identified this busy road junction as an area where potential exceedences of the annual mean for particulate matter could occur. The assessment used the DMRB screening tool and relied on traffic count data extrapolated from the nearest Road Service traffic count locations. Consequently, the 2006 assessment was considered to be an over-estimate of any potential exceedences of the Objectives and to ensure an accurate assessment of this area specific traffic flow data was acquired and the DMRB assessment repeated. Currently, there are no residential dwellings directly fronting this junction. However, applications to convert above shop and office spaces into flats have been received by this Department. There is therefore the potential that receptors could at sometime in the future be exposed to poor air quality. Figure 5 shows the junction in detail and the potential receptors used for this assessment.

3.2 Site Specific Input Data

3.2.1 Background data

Background data was sourced from the 2006 updated UK Air Quality Archive for the 1 kilometre grid square appropriate to the junction. Background concentrations for the year 2006 were calculated from the modelled 2005 background levels using the Year Adjustment Calculator.

Table 7. Background nitrogen dioxide and particulate matter concentrations for the Junction 3 assessment

NIOS X	NIOS Y	2005 Annual mean nitrogen dioxide $\mu\text{g m}^{-3}$	2006 Annual mean nitrogen dioxide $\mu\text{g m}^{-3}$	2005 Annual mean particulate matter $\mu\text{g m}^{-3}$	2006 Annual mean particulate matter $\mu\text{g m}^{-3}$
333500	373500	27.6	26.9	27.7	27.3

3.2.2 Road traffic data

Twenty four hour road traffic flows, composition and speeds were collected over the period 28th November to 30th November. Six survey locations were used (Figure 5). A combination of Automatic Traffic Counters (ATCs), video cameras and radar guns were used. Full traffic flow data is given in Appendix 2.

Table 8. Summarised traffic flow data for Junction 3

Survey Location	Flow Direction	24 hour AADT	Percentage Light Vehicle	Percentage Heavy Goods Vehicle	Average Speed (kmph)
6	Donegal Rd east and west bound	9,338	97	3	30
7	Bradbury Place north and south bound	29,655	94.5	5.5	29
8	Botanic Avenue north and south bound	8,356	91	9	28.5
9	Donegall Pass east and west bound	5,243	94	6	30
10	Dublin Street south bound	24,217	95	5	32
11	Great Victoria Street north bound	22,997	95	5	32

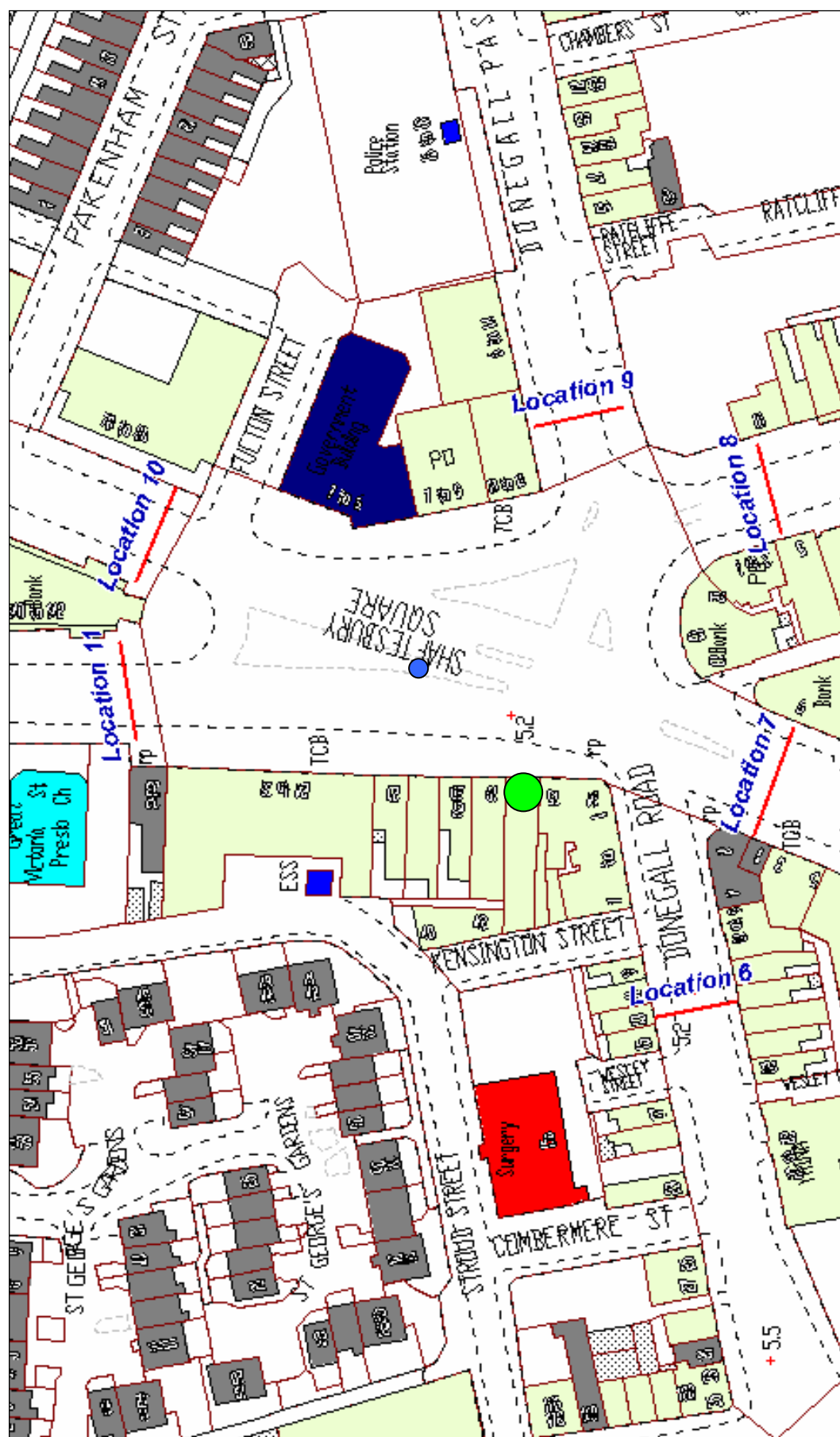


Figure 5. Junction 3, Traffic count locations, nitrogen dioxide diffusion tube monitoring location (blue circle) and receptor (green circle).

3.3 DMRB Screening Assessment

Nitrogen dioxide and particulate matter predicted concentrations for the receptor to the junction were 43.34 ugm^{-3} nitrogen dioxide and 38.15 ugm^{-3} particulate matter with 67 days where levels exceed 50 ugm^{-3} . These levels are higher than those predicted by the 2006 Updating and Screening Assessment (38 ugm^{-3} nitrogen dioxide and 34 ugm^{-3} particulate matter). Input and Output sheets are given in Appendix 3.

3.4 Dispersion Modelling Assessment

Results of the Screening Assessment show a potential exceedence of the nitrogen dioxide annual mean objective at potential receptors to the junction. Consequently, a detailed dispersion model assessment was carried out.

Site specific input data includes road width, elevation and street canyon. For this assessment road widths were measured as 10 meters and street canyon and elevation were kept at zero. Surface roughness was set at 1 (Cities and Woodlands) and the Chemical Reaction Scheme option was chosen.

3.4.1 Annual mean nitrogen dioxide

Figure 6 graphically represents the dispersion model outputs for mean nitrogen dioxide concentrations at Junction 3. Exceedences of the 40 ugm^{-3} level do occur at the junction, along the centre of the roads and at the intersections but predicted levels at the potential receptors range from 31.8 to 33.0 ugm^{-3} , well below the Objective. In order to verify the accuracy of this model run the results were compared with monitored data for the same year and against data derived from previous year bias adjustment figures. The difference between monitored data and modelled data for 2006 is +2% giving confidence that the model is a relatively accurate prediction of the mean concentrations experienced during 2006. Using a range of locally derived bias adjustment factors monitoring results range from 42 to 50 ugm^{-3} .

Modelled background concentrations in this area were 27.9 ugm^{-3} some 57% higher than that monitored at Urban Background sites over the same period. This is further evidence that the model predictions for this area during 2006 are over estimation of the actual concentrations.

Table 9. Modelled mean nitrogen dioxide concentrations for Junction 3

	NIOS X	NIOS Y	Measured Annual Mean $\mu\text{g m}^{-3}$	Modelled Annual Mean $\mu\text{g m}^{-3}$	Percentage Difference	Exceedence of the Objective
Monitoring Location	333,594	373,253	46 Data Capture 50%	47	+2	No
Monitoring Results Range	-	-	42 to 50	47	-8.5 to +8.5	-
Receptor	333,570	373,235	-	32	-	No
Background Concentrations	-	-	12 to 24	27.9	+16 to +57	-

3.4.2 Annual mean particulate matter

The verification process conducted during the nitrogen dioxide assessment gives confidence that the input data used in this modelling process is accurate and representative. Using this input data the model was run for mean particulate matter predictions. Background concentrations were measured in gravimetric equivalence and hence the 1.3 conversion factor was not applied to the modelling run. Figure 7 graphically represents the particulate matter concentrations around the Junction 3 area. Annual mean concentrations range from 26.1 to 30.1 $\mu\text{g m}^{-3}$. Predicted concentrations at the chosen potential receptor were 26.2 $\mu\text{g m}^{-3}$ and no exceedence of the 24 hour mean was predicted. Background concentrations in this area were predicted to be 26 $\mu\text{g m}^{-3}$, slightly more elevated than the background concentrations monitored at Belfast Centre (Lombard Street 18 $\mu\text{g m}^{-3}$) and Clara Street (22 $\mu\text{g m}^{-3}$). This would give confidence that these modelled concentrations are a slight over estimation of the concentrations encountered at Junction 1 during 2006.

3.5 Conclusion

The 2006 Updating and Screening Assessment identified the junction of Shaftesbury Square (Junction 3) as an area where nitrogen dioxide and particulate matter Objectives could be exceeded. A detailed dispersion model based on site specific and up-to-date meteorological data confidently concludes that the potential receptors at this junction are not exposed to exceedences of the relevant Air Quality Objectives. Consequently, it is considered unnecessary to declare this busy junction as an Air Quality Management Area.



Figure 6. Junction 3, Modelled annual mean nitrogen dioxide concentrations, 2006.

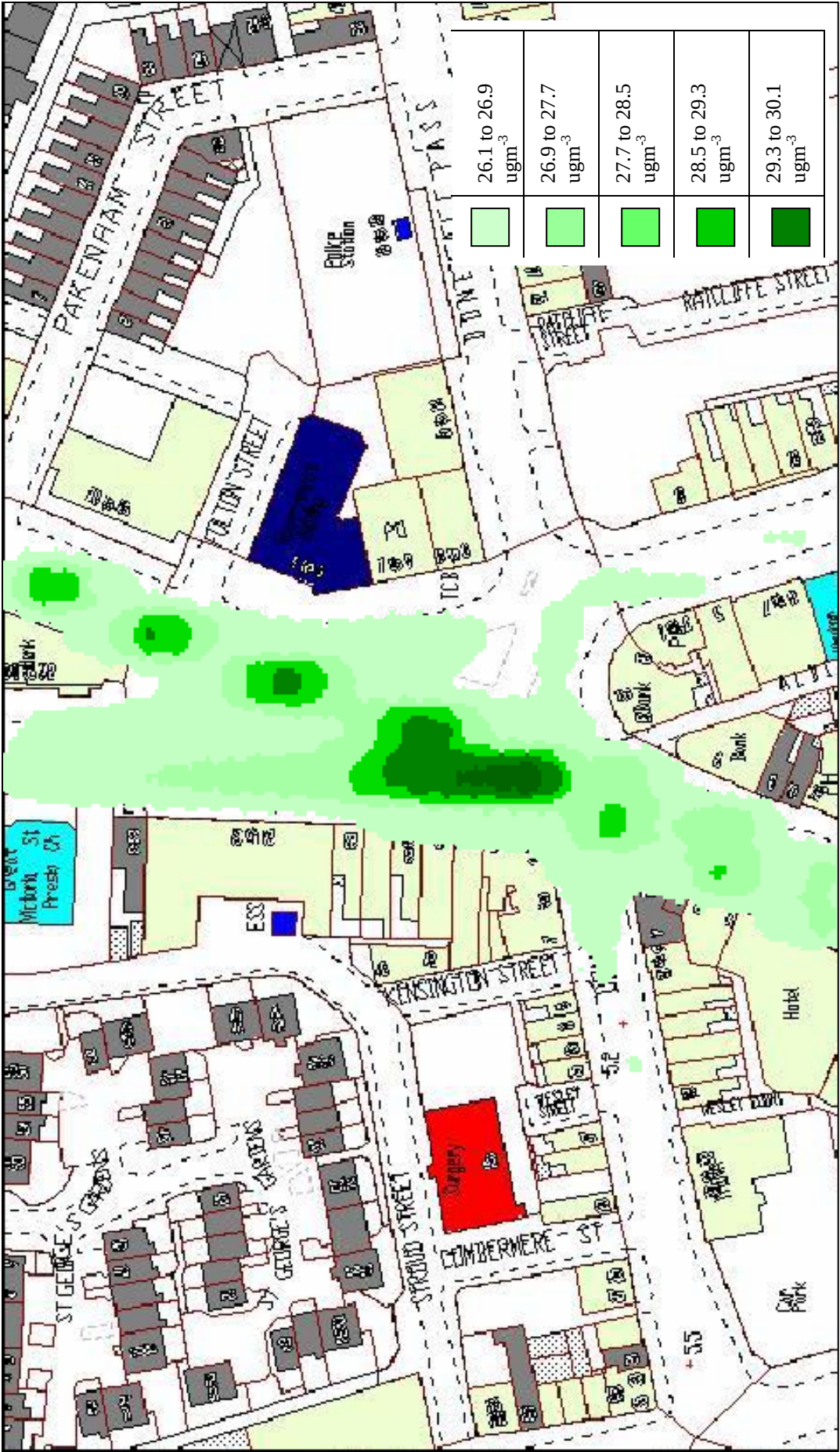


Figure 7. Junction 3, Modelled annual mean particulate matter concentrations, 2006.

4.0 The Donegall Road

4.1 Background

The 2006 USA process identified this busy road as an area where potential exceedences of the particulate matter annual mean could occur. Previous Review and Assessments had identified this area as being close to the particulate matter Objective. In January 2006, modelled background concentrations in this area predicted a small increase (2.2 percent) and consequently the potential for an exceedence of the objective required further consideration. Figure 8 shows the area in detail, the chosen receptor and the diffusion tube monitoring location.

4.2 Site Specific Input Data

4.2.1 Background data

Background data was sourced from the 2006 updated UK Air Quality Archive for the 1 kilometre grid square appropriate to the area. Background concentrations for the year 2006 were calculated from the modelled 2005 background levels using the Year Adjustment Calculator.

Table 10. Background nitrogen dioxide and particulate matter concentrations for the Donegall Road area

NIOS X	NIOS Y	2005 Annual mean nitrogen dioxide $\mu\text{g m}^{-3}$	2006 Annual mean nitrogen dioxide $\mu\text{g m}^{-3}$	2005 Annual mean particulate matter $\mu\text{g m}^{-3}$	2006 Annual mean particulate matter $\mu\text{g m}^{-3}$
333500	373500	27.6	26.9	27.7	27.3

4.2.2 Road traffic data

Twenty four hour road traffic flows, composition and speeds were collected over the period 27th November to 28th November. One automatic traffic count survey was placed at the rail road bridge close to Roden Street monitoring flows east and west. Average traffic speeds were taken to be the same as that recorded by the Radar gun survey carried out at the Shaftesbury Square end of Donegall Road (Figure 8). Full data is given in Appendix 2.

Table 11. Summarised traffic flow data for the Donegall Road

Survey Location	Flow Direction	24 hour AADT	Percentage Light Vehicle	Percentage Heavy Goods Vehicle	Average Speed (kmph)
12	Donegall Road east bound	8,238	91	9	30
12	Donegall Road west bound	9,053	91	9	30

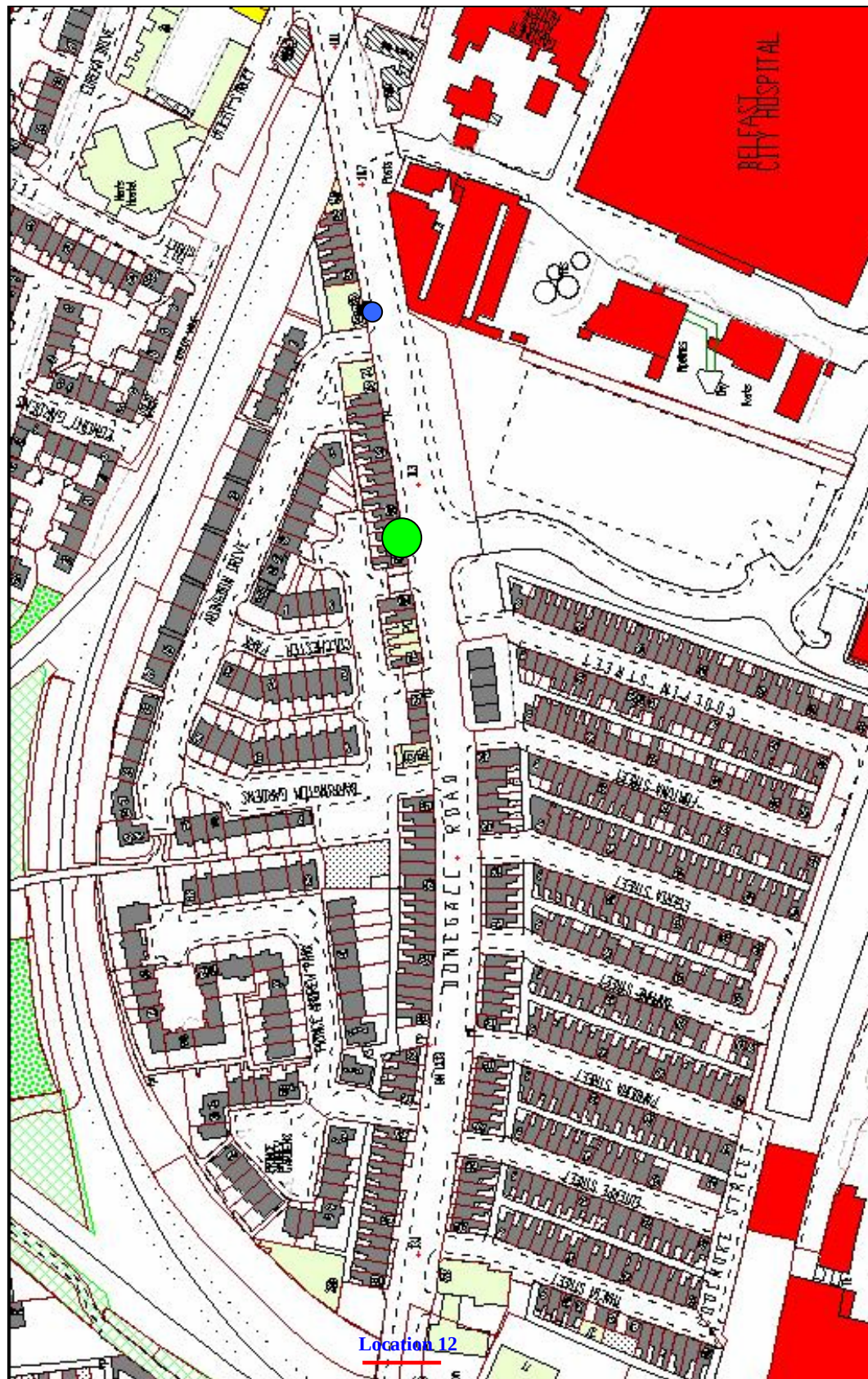


Figure 8. Donegall Road, Traffic count locations, nitrogen dioxide diffusion tube monitoring location (blue circle) and receptor (green circle).

4.3 DMRB Screening Assessment

Nitrogen dioxide and particulate matter predicted concentrations for receptors along the Donegall Road were 34.4 ug m^{-3} nitrogen dioxide and 30.9 ug m^{-3} particulate matter with 31 days where levels exceed 50 ug m^{-3} . Input and Output sheets are given in Appendix 3.

4.4 Dispersion Modelling Assessment

Although the screening assessment gave no indication that an exceedance of the Objectives for nitrogen dioxide and particulate matter were likely a run of the dispersion model was conducted to confirm that this was true for the entire study area. Site specific input data includes road width, elevation and street canyon. For this assessment road widths were measured as 5 meters (each way) and street canyon and elevation were kept at zero. Although the road is flanked by two story residential properties the dispersal is relatively un-inhibited and therefore the inclusion of a street canyon factor in the model was deemed inappropriate. Surface roughness was set at 1 (Cities and Woodland) and the Chemical Reaction Scheme option was chosen.

4.4.1 Annual mean nitrogen dioxide

Figure 9 graphically represents the dispersion model outputs for mean nitrogen dioxide concentrations along the Donegall Road. Exceedences of the 40 ug m^{-3} level do occur in the centre of the road but predicted levels at the adjacent properties range from 32 to 34.5 ug m^{-3} , well below the Objective. In order to verify the accuracy of this model run the results were compared with monitored data for the same year against data derived from previous year bias adjustment figures. The difference between monitored data and modelled data for 2006 is 6.6% giving confidence that the model is an over prediction of the mean concentrations experienced during 2006. Using a range of locally derived bias adjustment factors monitoring results range from 29.9 to 35.6 ug m^{-3} . The 2006 modelled result of 35.2 ug m^{-3} is 0.4 ug m^{-3} below the upper predicted concentration.

Modelled background concentrations in this area were 27.8 ug m^{-3} some 57% higher than that monitored at Urban Background sites over the same period. This is further evidence that the model predictions for this area during 2006 are over estimation of the actual concentrations.



Figure 9. Donegall Road, Modelled annual mean nitrogen dioxide concentrations, 2006.

Table 12. Modelled mean nitrogen dioxide concentrations for the Donegal Road

	NIOS X	NIOS Y	Measured Annual Mean $\mu\text{g m}^{-3}$	Modelled Annual Mean $\mu\text{g m}^{-3}$	Percentage Difference	Exceedence of the Objective
Monitoring Location	333,058	373,131	33 Data Capture 83%	35.2	+6.6	No
Monitoring Results Range	-	-	29.9 to 35.6	35.2	-1 to +15	-
Receptor	332,977	373,119	-	34.4	-	No
Background Concentrations	-	-	12 to 24	27.8	+16 to +57	-

4.4.2 Annual mean particulate matter

The verification process conducted during the nitrogen dioxide assessment gives confidence that the input data used in the modelling process is accurate and representative. Using this input data the model was re-run for the mean particulate matter predictions. Using this input data the model was run for mean particulate matter predictions. Background concentrations were measured in gravimetric equivalence and hence the 1.3 conversion factor was not applied to the modelling run. Figure 10 graphically represents the particulate matter concentrations along the Donegall Road. Annual mean concentrations ranged from 27.6 to 28.4 $\mu\text{g m}^{-3}$. The predicted concentrations at the chosen receptor was 27.9 $\mu\text{g m}^{-3}$ no exceedence of the 24 hour mean was predicted. Background concentrations in this area were predicted to be 26 $\mu\text{g m}^{-3}$, higher than the background concentrations monitored at Belfast Centre (Lombard Street 18 $\mu\text{g m}^{-3}$) and Clara Street (22 $\mu\text{g m}^{-3}$). This would give confidence that these modelled concentrations are an over estimation of the concentrations encountered along the Donegall Road during 2006.

4.5 Conclusion

The 2006 Updating and Screening Assessment identified the Donegall Road as an area where potentially exceedences of the annual mean objective for particulate matter could occur. This area was identified because the updated modelled background concentrations had experienced a slight increase and previous Review and Assessments had identified the area as being potentially close to the Objective. Based on site specific and up-to-date meteorological data both a DMRB assessment and a Detailed Dispersion Modelled assessment has confidently shown that no exceedence of the nitrogen dioxide and particulate matter Objectives occur along the Donegall Road. Consequently, it is considered unnecessary to declare this area an Air Quality Management Area.



Figure 10. Donegal Road, Modelled annual mean particulate matter concentrations, 2006.

5.0 The Albertbridge Road

5.1 Background

The 2006 USA process identified this busy road as an area where potential exceedences of the particulate matter annual mean could occur. Previous Review and Assessments had identified this area as being close to the particulate matter Objective. In January 2006, modelled background concentrations in this area predicted a small increase (+1.3 percent) and consequently the potential for an exceedence of the Objective required further consideration. The area is already declared an Air Quality Management Area (AQMA) on the basis that the mean nitrogen dioxide concentrations would exceed the 2005 Objective (Figure 11). This review was to determine whether that AQMA would need to be extended to include particulate matter. Figure 12 shows the area in detail and the nearest existing receptors.



Figure 11. Declared AQMA around the Albertbridge Road.

5.2 Site Specific Input Data

5.2.1 Background data

Background data was sourced from the 2006 updated UK Air Quality Archive for the 1 kilometre grid square appropriate to the area. Background concentrations for the year 2006 were calculated from the modelled 2005 background levels using the Year Adjustment Calculator.

Table 11. Background nitrogen dioxide and particulate matter concentrations for the Albertbridge Road area

NIOS X	NIOS Y	2005 Annual mean nitrogen dioxide $\mu\text{g m}^{-3}$	2006 Annual mean nitrogen dioxide $\mu\text{g m}^{-3}$	2005 Annual mean particulate matter $\mu\text{g m}^{-3}$	2006 Annual mean particulate matter $\mu\text{g m}^{-3}$
334500	373500	26.5	25.9	28.3	27.9

5.2.2 Road traffic data

Twenty four hour road traffic flows, composition and speeds were collected over the period 29th November to 30th November. One automatic traffic count survey was placed at the west end of the Albertbridge Road recording east and west bound (Figure 12). Full data is given in Appendix 2.

Table 12. Summarised traffic flow data for the Albertbridge Road

Survey Location	Flow Direction	24 hour AADT	Percentage Light Vehicle	Percentage Heavy Goods Vehicle	Average Speed (kmph)
13	Albertbridge Rd east bound	14,587	92	8	33
13	Albertbridge Rd west bound	15,709	91	9	33

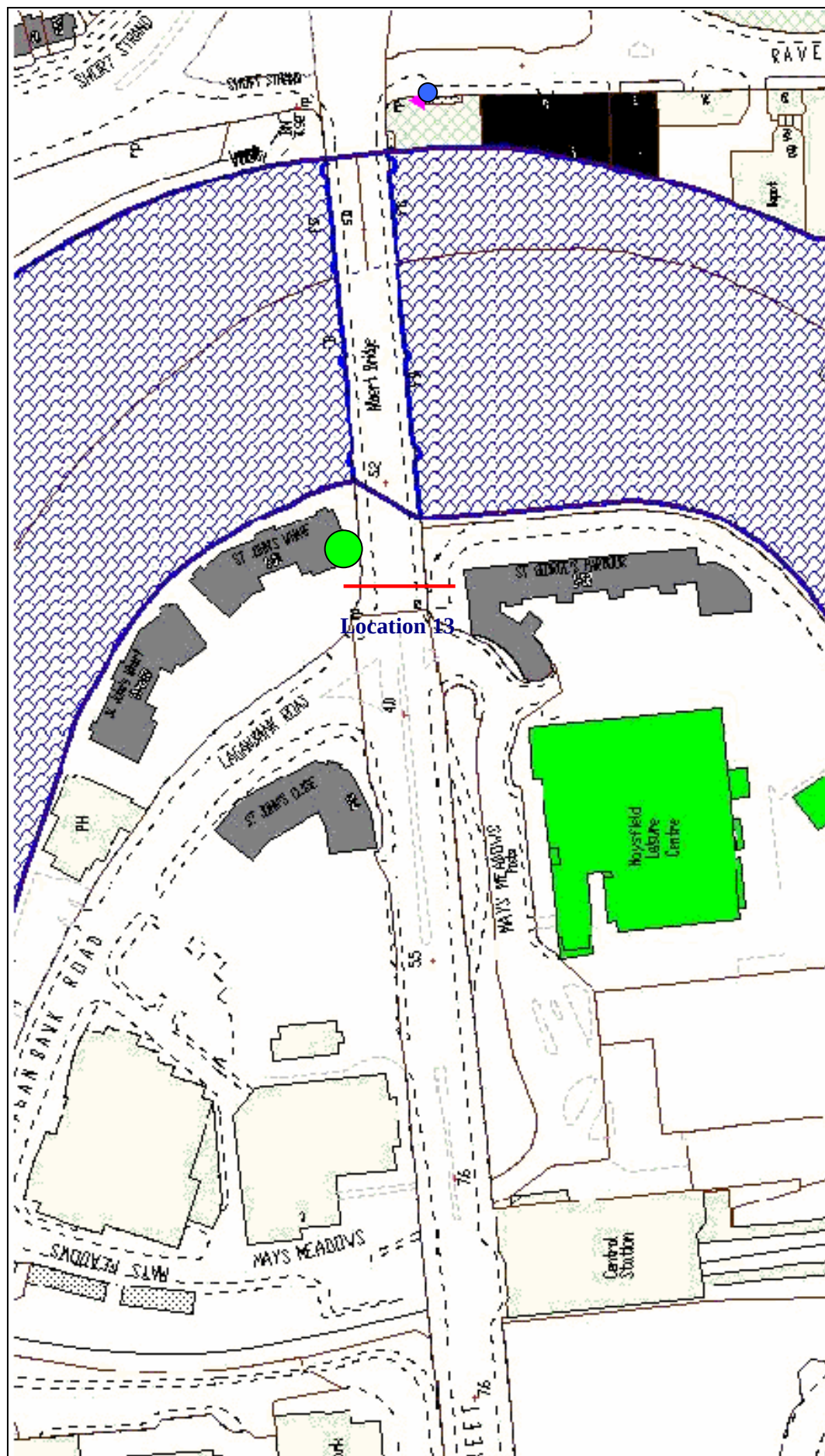


Figure 12. Albertbridge Road. Traffic count locations, nitrogen dioxide diffusion tube monitoring location (blue circle) and receptor (green circle).

5.3 DMRB Screening Assessment

Nitrogen dioxide and particulate matter predicted concentrations for the identified receptor on the Albertbridge Road were 34.3 ug m^{-3} nitrogen dioxide and 31.6 ug m^{-3} particulate matter with 34 days where levels exceed 50 ug m^{-3} . Input and Output sheets are given in Appendix 3.

5.4 Dispersion Modelling Assessment

Although the screening assessment gave no indication that an exceedence of the Objectives for nitrogen dioxide and particulate matter were likely a run of the dispersion model was conducted to confirm that this was true for the entire study area. Site specific input data includes road width, elevation and street canyon. For this assessment road widths were measured as 10 meters (each way) and street canyon and elevation were kept at zero as the surrounding area is open and free from tall obstructions that may influence the dispersal of pollutants. Surface roughness was set at 0.5 (Open Sub-urban) and the Chemical Reaction Scheme option was chosen.

5.4.1 Annual mean nitrogen dioxide

Figure 13 graphically represents the dispersion model outputs for mean nitrogen dioxide concentrations along the Albertbridge Road. Exceedences of the 40 ug m^{-3} level do occur in the centre of the road and bordering adjacent properties. However, this area is already declared an AQMA on the basis that the Objective for mean nitrogen dioxide is exceeded. In order to verify the accuracy of this model run the results were compared with monitored data for the same year and against data derived from previous year bias adjustment figures. The difference between monitored data and modelled data for 2006 is 6.6% giving confidence that the model is a relatively accurate prediction of the mean concentrations experienced during 2006. Using a range of locally derived bias adjustment factors monitoring results ranged from 31 to 37.2 ug m^{-3} . The 2006 modelled concentrations of 37.3 ug m^{-3} lies above this range. Modelled background concentrations in this area were 28 ug m^{-3} some 57% higher than that monitored at Urban Background sites over the same period. This is further evidence that the model predictions for this area during 2006 are over estimation of the actual concentrations.

Figure 13. Albertbridge Road, Modelled annual mean nitrogen dioxide concentrations, 2006.

Table 13. Modelled mean nitrogen dioxide concentrations for the Albertbridge Road

	NIOS X	NIOS Y	Measured Annual Mean $\mu\text{g m}^{-3}$	Modelled Annual Mean $\mu\text{g m}^{-3}$	Percentage Difference	Exceedence of the Objective
Monitoring Location	335,013	373,926	35 Data Capture 83%	37.3	+6.6	No
Monitoring Results Range	-	-	31 to 37.2	37.3	-0.3 to +17	-
Receptor	334,875	373,963	-	36.9	-	No
Background Concentrations	-	-	12 to 24	28	+16 to +57	-

5.4.2 Annual mean particulate matter

The verification process conducted during the nitrogen dioxide assessment gives confidence that the input data used in the modelling process is accurate and representative. Using this input data the model was re-run for the mean particulate matter predictions. Background concentrations were measured in gravimetric equivalence and hence the 1.3 conversion factor was not applied to the modelling run. Figure 14 graphically represents the particulate matter concentrations along the Albertbridge Road. Annual mean concentrations range from 28.5 to 30.3 $\mu\text{g m}^{-3}$. Predicted concentration at the nearest receptor was 28.9 $\mu\text{g m}^{-3}$ and no exceedence of the 24 hour mean was predicted. Background concentrations in this area were predicted to be 27.9 $\mu\text{g m}^{-3}$, more than the background concentrations monitored at Belfast Centre (Lombard Street 18 $\mu\text{g m}^{-3}$) and Clara Street (22 $\mu\text{g m}^{-3}$). This would give confidence that these modelled concentrations are a slight over estimation of the concentrations encountered along the Albertbridge Road during 2006.

5.5 Conclusion

The 2006 Updating and Screening Assessment identified the Albertbridge Road as an area where potentially exceedences of the annual mean objective for particulate matter could occur. This area was identified because the updated modelled background concentrations in 2006 had experienced a slight increase and previous Review and Assessments had identified the area as being potentially close to the Objective. Based on site specific and up-to-date meteorological data both a DMRB assessment and a Detailed Dispersion Modelled assessment has confidently shown that no exceedence of the particulate matter Objective occurs along the Albertbridge Road. Consequently, it is considered unnecessary to extend the current AQMA to include particulate matter.

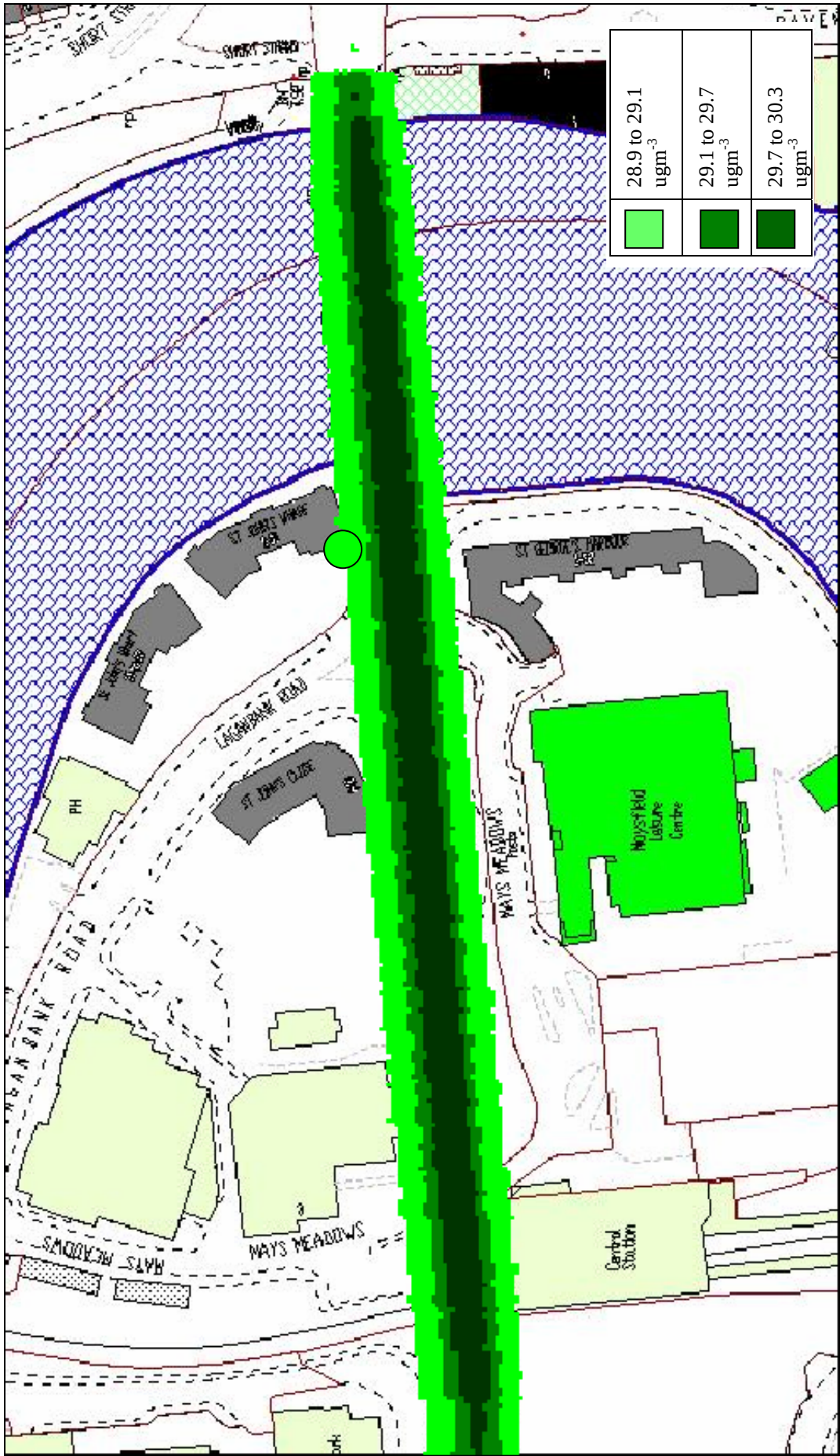


Figure 14. Albertbridge Road, Modelled annual mean particulate matter concentrations, 2006.

6.0 Belfast City Centre

6.1 Background

The 2006 USA process identified the City Centre as an area where potential exceedences of the nitrogen dioxide annual mean could occur. Exceedences of the annual mean nitrogen dioxide Objective are regularly monitored at roadside locations within the city centre. Additionally, previous Review and Assessments predicted nitrogen dioxide exceedences but at locations where no relevant exposure occurred. In the years preceding this assessment numerous new apartments and residential developments have occurred throughout the city centre. Consequently, the 2006 USA concluded that there was the potential for annual mean nitrogen dioxide exceedences to be occurring in areas where there was now relevant exposure. Figure 15 shows the area in detail and some of the relevant receptors.

6.2 Site Specific Input Data

6.2.1 Background data

Background data was sourced from the 2006 updated UK Air Quality Archive for the 1 kilometre grid squares appropriate to the area. The city centre falls within four 1 km grids, consequently the highest modelled concentrations were used to represent the worst case scenario. Background concentrations for the year 2006 were calculated from the modelled 2005 background levels using the Year Adjustment Calculator.

Table 16. Background nitrogen dioxide and particulate matter concentrations for Belfast City Centre

NIOS X	NIOS Y	2005 Annual mean nitrogen dioxide $\mu\text{g m}^{-3}$	2006 Annual mean nitrogen dioxide $\mu\text{g m}^{-3}$	2005 Annual mean particulate matter $\mu\text{g m}^{-3}$	2006 Annual mean particulate matter $\mu\text{g m}^{-3}$
333500	374500	27.7	27.0	27.8	27.4

6.2.2 Road traffic data

Twenty four hour road traffic flows, composition and speeds were collected over the period 28th November to 29th November. Eleven survey locations (Figure 15) using an Automatic Traffic Counter, video cameras and a radar gun survey were used to derive traffic flow data throughout the centre. Full data is given in Appendix 3. For roads where no traffic flow counts were available an over estimate was made extrapolated from nearby counts.

Table 17. Summarised traffic flow data for Belfast City Centre

Survey Location	Flow Direction	24 hour AADT	Percentage Light Vehicle	Percentage Heavy Goods Vehicle	Average Speed (kmph)	Road Width (meters)	Street Canyon (meters)
14	Cromac Street north bound	24,116	97	3	34	10	0
14	Cromac Street south bound	18,210	98	2	38	10	0
15	East Bridge Street east bound	10,601	94	6	33	10	0
15	East Bridge Street west bound	27,654	97	3	34	10	0
16	Victoria Street north bound	22,959	97	3	26	15	30
17	Dunbar Link north bound	16,902	96	4	43	20	15
17	Dunbar Link south bound	14,607	96	4	30		
18	Waring Street east bound	31,271	97	3	35	15	15
19	Victoria Street north bound	33,566	97	3	35	15	30
20	Great Victoria Street north bound	16,086	92	8	25	20	30
20	Great Victoria Street south bound	10,323	88	12	29		
21	Howard Street west bound	17,682	91	9	26	10	30
22	College Square East north bound	26,484	93	7	28	20	30
22	College Square East south bound	7,028	96	4	24		
23	Grosvenor Road east bound	2,342	95	5	38	15	15
23	Grosvenor Road west bound	6,331	96	4	28		

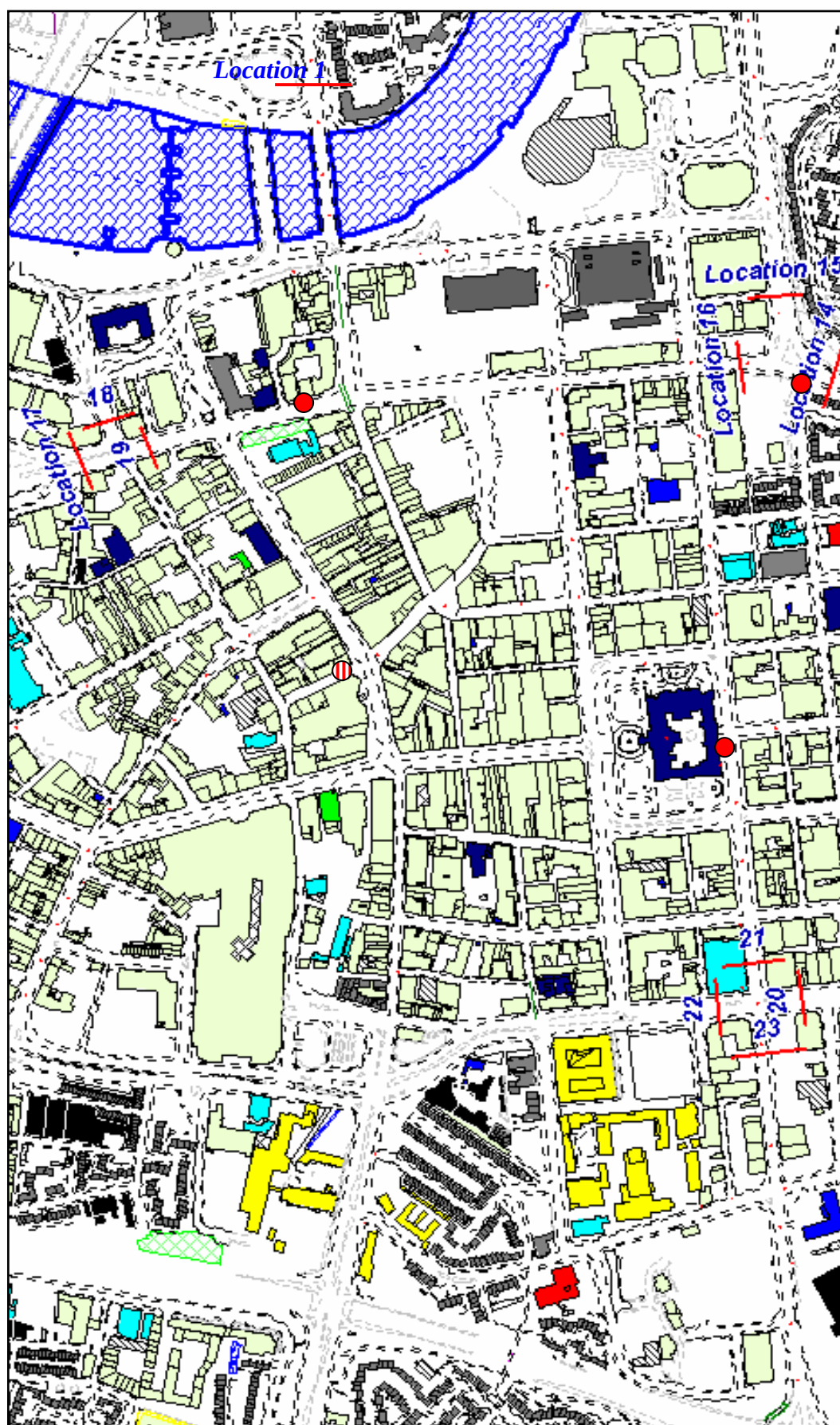


Figure 15. Belfast City Centre. Traffic count locations and nitrogen dioxide diffusion tube monitoring location (red circles):

6.3 DMRB Screening Assessment

Due to the size and complexity of the study area a DMRB assessment was not deemed suitable for the City Centre. Therefore, the Assessment moved straight to a detailed air dispersion modelling exercise.

6.4 Dispersion Modelling Assessment

6.4.1 Annual mean particulate matter

Site specific input data includes road width, elevation and street canyon, these are summarised in Table 15. Atmospheric dispersal within the City Centre is heavily influenced by numerous tall buildings flanking either side of relatively narrow roads. For this reason Street Canyon influences were included in the model runs and surface roughness was set at 1 (Cities and Woodlands).

Table 18. Modelled mean nitrogen dioxide concentrations for Belfast City Centre

	NIOS X	NIOS Y	Measured Annual Mean $\mu\text{g m}^{-3}$	Modelled Annual Mean $\mu\text{g m}^{-3}$	Percentage Difference	Exceedence of the Objective
Victoria Street Monitoring Location	334,234	374,377	48 Data Capture 92%	47.0	-2	Yes
Victoria Street Range	-	-	43 to 51	47.0	-8.5 to +8.5	-
Cromac Street Monitoring Location	334,246	373,855	45 Data Capture 100%	47.8	+6	Yes
Cromac Street Range	-	-	41 to 48	47.8	-0.4 to +14	-
Donegal Square South Monitoring Location	333,885	373,949	41 Data Capture 100%	40.8	-0.5	Yes
Donegal Sq South Range	-	-	37.5 to 44	40.8	-8 to +8	-
Background Concentrations	-	-	12 to 24	28.5	+16 to +58	-

Figure 16 graphically represents the dispersion model outputs for mean nitrogen dioxide concentrations throughout Belfast City Centre. Figure 17 represents areas of exceedence (red areas) and relevant exposure (yellow shaded areas). Modelled exceedences of the annual mean nitrogen dioxide occur around the residential properties along Cromac Street and East Bridge Street (Area 1 on Figure 17) and range from 39 to 43.8 $\mu\text{g m}^{-3}$. This area is already declared an AQMA (Figure 11). Significant modelled exceedences occur along May Street, Donegal Square South, Howard Street and the junction with Great Victoria Street and College Square East.

However, no relevant exposure (as defined by the Technical Guidance LAQM TG(03)) occurs in these areas. Likewise, modelled exceedences in the Waring Street and Dunbar Link areas occur where no public exposure exists. This area was identified during the 2004 Detailed Assessment and since then no new developments have occurred.

Areas where predicted exceedences occur close to residential properties include the flats to the east of Queen's Bridge (Area 2 on Figure 17) and the apartments on Victoria Street next to the Albert Clock (Area 3 on Figure 17). Predicted concentrations along the roadside adjacent to these properties range from 35 to 39.3 $\mu\text{g m}^{-3}$.

In order to verify the accuracy of these roadside modelled results a comparison is made with the 2006 diffusion tube roadside monitoring results and a range of results derived from the last five years of bias adjustment factors with those predicted by the model. Verification of the modelled background concentrations is made by comparing monitored diffusion tube background concentrations and the continuous Urban Background analyser located in Derry with the predicted modelled background concentrations.

Modelled results differ from the 2006 monitored roadside results by an underestimate of 2% to an over estimate of 6%. The range of monitoring results using previous bias adjustment factors would indicate that the Victoria Street and the Donegal Square monitoring results reflect the mean concentrations of this range, and the Cromac Street monitoring result is 0.2 $\mu\text{g m}^{-3}$ from the upper range. This would give further support to the assumption that the modelled city centre roadside results are a true reflection of the actual roadside concentrations experienced during 2006.

Modelled background concentrations within the City Centre were 28.5 $\mu\text{g m}^{-3}$. This is between 16 and 26% higher than that monitored at Belfast's urban background diffusion tubes and 58% higher than that monitored at the continuous urban background site in Derry. This is further evidence that the model predictions for this area during 2006 are an over estimation of the actual concentrations.

Although these levels suggest that exceedences of the relevant Objectives do not occur at the premises identified in Figure 17 as Area 2 and Area 3 Belfast City Council will establish new diffusion tube monitoring locations at the nearest receptor

to the roads and continually assess and monitor the results to ensure that this determination is valid.

6.5 Conclusion

The 2006 Updating and Screening Assessment identified Belfast City Centre as an area where potentially exceedences of the annual mean objective for nitrogen dioxide could occur. Monitoring data and new residential exposure gave rise to concerns regarding possible exposure to exceedences. Based on site specific and up-to-date meteorological data a Detailed Dispersion Modelled assessment has identified areas where the Objective was predicted to be exceeded. The accuracy of these predictions was assessed against monitored roadside diffusion tube results and monitored background concentrations. This assessment was demonstrated to be a robust and accurate reflection of mean nitrogen dioxide concentrations in Belfast City Centre during 2006.

Exceedences were predicted in areas already declared an AQMA and in areas where no public exposure occurs. In the areas where mean concentrations were close to the Objective and close to relevant public exposure Belfast City Council will establish new monitoring points and continually reassess the situation.

Consequently, it is considered unnecessary to declare Belfast City Centre an AQMA on the grounds of nitrogen dioxide.

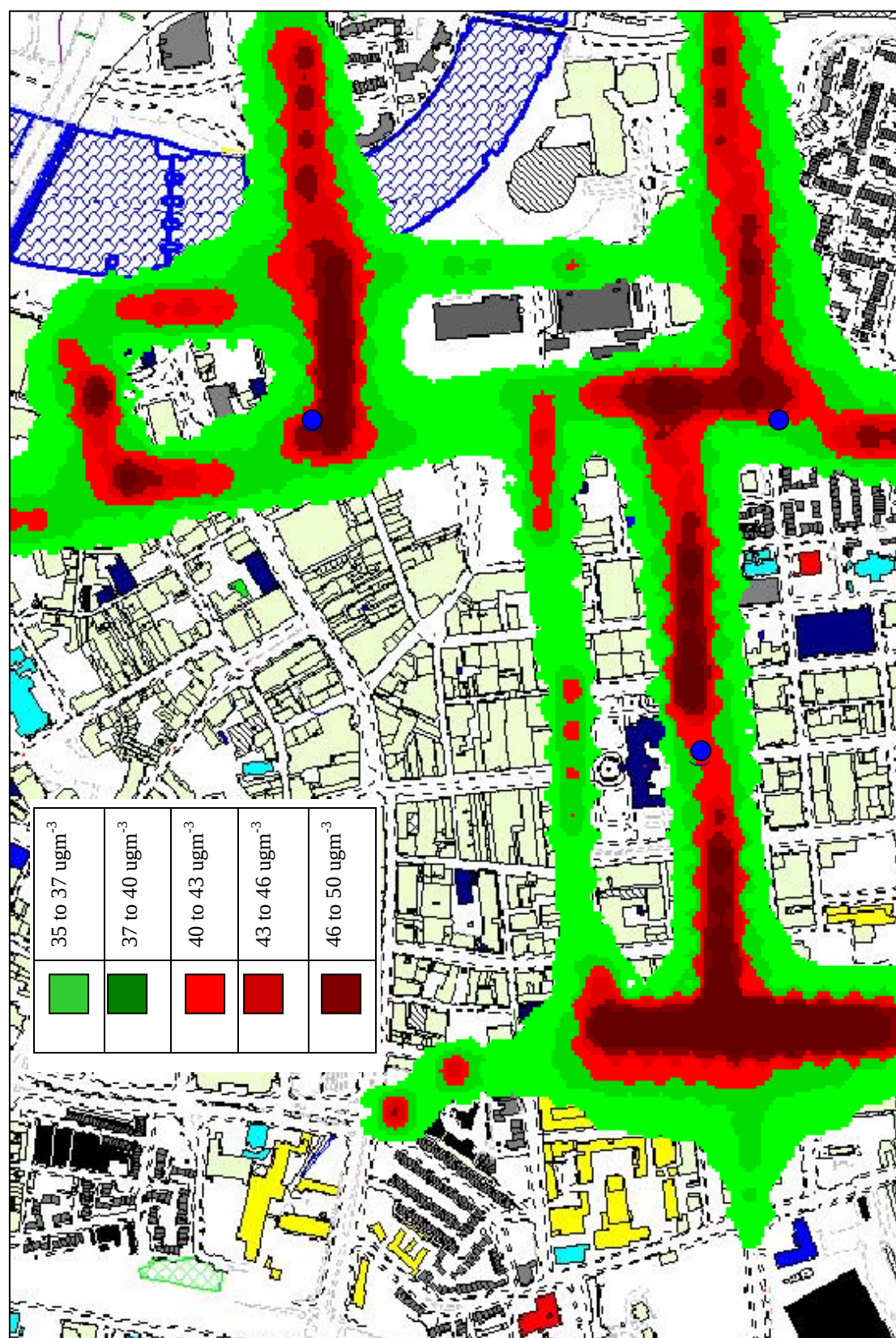


Figure 16. Belfast City Centre, Modelled annual mean nitrogen dioxide concentrations, 2006.

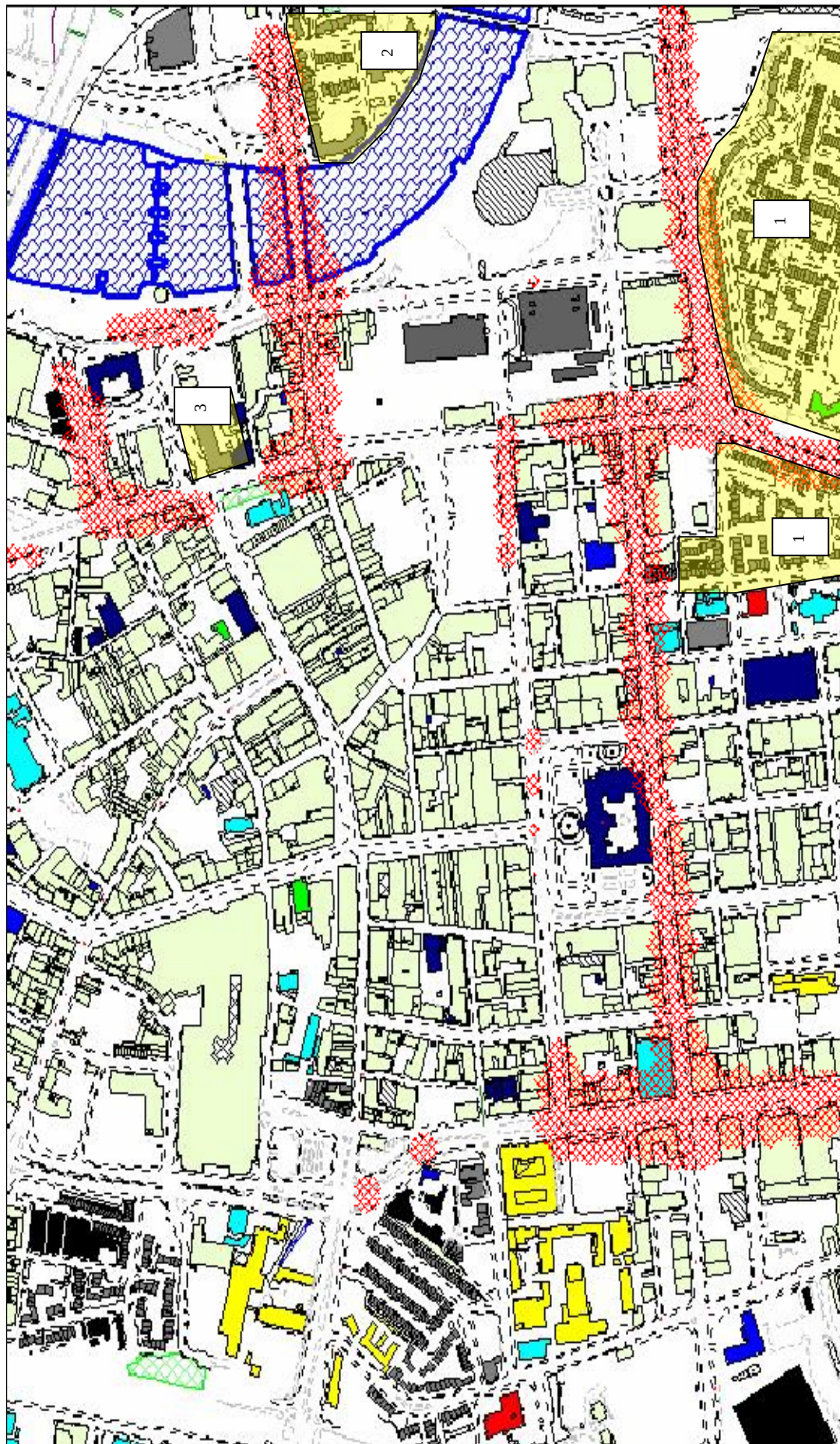


Figure 17. Belfast City Centre, Modelled exceedences of the annual mean nitrogen dioxide concentrations and relevant public exposure, 2006.

7.0 Conclusions for the 2007 Detailed Air Quality Assessment

The 2006 Updating and Screening Assessment identified five areas where potential exceedences of the National Air Quality Objectives could occur. Consequently, in 2007 Belfast City Council carried out a Detailed Assessment of the following areas:

1. The junction of the Sydenham Bypass with the Lower Newtownards Road (named in the 2006 USA as Junction 1) for nitrogen dioxide and particulate matter associated with road traffic.
2. The Shaftesbury Square area (named in the 2006 USA as Junction 3) for particulate matter associated with road traffic.
3. The Donegall Road for particulate matter associated with road traffic.
4. The Albertbridge Road for particulate matter associated with road traffic.
5. The City Centre for annual mean nitrogen dioxide associated with road traffic.

Detailed dispersion modelling software (ADMS) was employed to predict concentrations of nitrogen dioxide and particulate matter within these study areas. Site specific input data included; traffic flow data, background nitrogen dioxide and particulate matter concentrations, meteorological data, surface roughness, road width and street canyons. For each assessment the worst case scenario was selected. The 2006 weather was a particularly poor year for air quality with record temperatures and dry periods being experienced (Section 1.2.1). The air quality indicators released by DEFRA in January 2007 also contributes the high number of Moderate or High pollution episodes in 2006 as being due to the hot summer¹. Modelled background concentrations used were consistently shown to be higher than that actually monitored. Where street canyons and building heights were required for dispersal factors an over estimate of actual building heights were employed. Consequently, it is considered that each of the individual assessments is a reflection of the worst case situations that could have occurred in 2006.

The model verification process included a comparison with 2006 bias adjusted diffusion tube monitoring results and continuous analyser results. To increase the confidence of the diffusion tube results a range of bias adjustment factors were used. This range of was derived from a five year collocation study with the continuous analyser at Lombard Street. For each of the individual assessments the modelled

results were shown to have a true correlation or over prediction of the actual monitored results.

Belfast City Council is confident that the information used in this assessment is robust and accurate and can therefore make the following conclusions:

1. There occurs no exceedence of the annual mean nitrogen dioxide objective at the current residential properties at the junction of the Sydneham Bypass with the Lower Newtownards Road (Junction 1). The annual and 24 hour mean objectives for particulate matter are also not exceeded.
2. There occurs no exceedence of the annual mean nitrogen dioxide objective at the potential receptors on the Shaftesbury Square junction (Junction 3). The annual and 24 hour mean objectives for particulate matter are also not exceeded.
3. There occurs no exceedence of the annual and 24 hour mean particulate matter objectives along the Donegal Road.
4. There occurs no exceedence of the annual and 24 hour mean particulate matter objectives along the Albertbridge Road.
5. Exceedences of the annual mean nitrogen dioxide objective occur in areas of Belfast City Centre where an AQMA already exists and where there is no relevant public exposure.

As a result the 2007 Detailed Assessment for Belfast City Council concludes that there is no need to neither expand the existing AQMAs nor declare any new AQMAs for nitrogen dioxide or particulate matter.

1. Air Quality Indicators for Sustainable Development, 2006 (provisional). Available at: <http://www.defra.gov.uk/news/2007/070123a.htm>

Appendix 1.

Bias Adjusted Nitrogen Dioxide Diffusion Tube Monitoring Results for 2005 and 2006.

2005:

Checking Precision and Accuracy of Triplicate Tubes



Diffusion Tubes Measurements										Automatic Method		Data Quality Check	
Period	Start Date dd/mm/yyyy	End Date dd/mm/yyyy	Tube 1 μgm^{-3}	Tube 2 μgm^{-3}	Tube 3 μgm^{-3}	Triplicate Mean	Standard Deviation	Coefficient of Variation (CV)	95% CI of mean	Period Mean	Data Capture (DC)	Tubes Precision Check	Automatic Monitor Data Capture Check
1	05/01/2005	01/02/2005	35.0	22.0	34.0	30	7.2	24	18.0	25	99	Poor Precision	Good
2	01/02/2005	02/03/2005	24.0	21.0	23.0	23	1.5	7	3.8	31	99	Good	Good
3	02/03/2005	30/03/2005	31.0	34.0	34.0	33	1.7	5	4.3	30	93	Good	Good
4	30/03/2005	03/05/2005	8.0	6.0	7.0	7	1.0	14	2.5	43	11	Good	Poor Data Capture
5	03/05/2005	31/05/2005	23.0	21.0	23.0	22	1.2	5	2.9	0	0	Good	Poor Data Capture
6	31/05/2005	28/06/2005	24.0	19.0	19.0	21	2.9	14	7.2	0	0	Good	Poor Data Capture
7	28/06/2005	02/08/2005	25.0	19.0	19.0	21	3.5	16	8.6	0	0	Good	Poor Data Capture
8	02/08/2005	31/08/2005	31.0	32.0	24.0	29	4.4	15	10.8	0	0	Good	Poor Data Capture
9	31/08/2005	04/10/2005	21.0	26.0	21.0	23	2.9	13	7.2	23	76	Good	Good
10	04/10/2005	02/11/2005	33.0	30.0	31.0	31	1.5	5	3.8	33	98	Good	Good
11	02/11/2005	29/11/2005	43.0	38.0	30.0	37	6.6	18	16.3	44	99	Good	Good
12	29/11/2005	04/01/2006	43.0	42.0	36.0	40	3.8	9	9.4	46	99	Good	Good
13													

It is necessary to have results for at least two tubes in order to calculate the precision of the measurements

Site Name/ ID: Lombard Street (Nos 16, 19, 20)

Overall survey ->

Precision 11 out of 12 periods have a CV smaller than 20%

(Check average CV & DC from Accuracy calculations)

Accuracy (with 95% confidence)

without periods with CV larger than 20%

Bias calculated using 6 periods of data

Bias factor A 1.118 +/- 0.168

Bias B -8 +/- 15 %

Diffusion Tubes Mean: 31 μgm^{-3}

Mean CV (Precision): 9

Automatic Mean: 34 μgm^{-3}

Data Capture for periods used: 94

Adjusted Tubes Mean: 35 +/-5 μgm^{-3}

Accuracy (with 95% confidence)

with all the data

Bias calculated using 7 periods of data

Bias factor A 1.082 +/- 0.161

Bias B -4 +/- 15 %

Diffusion Tubes Mean: 31 μgm^{-3}

Mean CV (Precision): 12 caution

Automatic Mean: 33 μgm^{-3}

Data Capture for periods used: 95

Adjusted Tubes Mean: 34 +/-5 μgm^{-3}

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 Version 01 - April 2005

[illegible]

2006:

Checking Precision and Accuracy of Triplicate Tubes


AEA Energy & Environment
 From the AEA group

Diffusion Tubes Measurements								
Period	Start Date dd/mm/yyyy	End Date dd/mm/yyyy	Tube 1 μgm^{-3}	Tube 2 μgm^{-3}	Tube 3 μgm^{-3}	Triplicate Mean	Standard Deviation	Coefficient of Variation (CV) %
1	04/01/2006	31/01/2006	39.0	35.0	33.0	36	3.1	9
2	31/01/2006	28/02/2006	33.0	29.0	29.0	30	2.3	8
3	28/02/2006	04/04/2006	26.0	23.0	26.0	25	1.7	7
4	04/04/2006	03/05/2006	16.0	23.0	14.0	18	4.7	27
5	03/05/2006	01/06/2006	24.0	24.0	19.0	22	2.9	13
6	01/06/2006	03/07/2006	31.0	26.0	16.0	24	7.6	31
7	03/07/2006	01/08/2006	15.0	20.0	27.0	21	6.0	29
8	01/08/2006	30/08/2006	20.0	27.0	19.0	22	4.4	20
9	30/08/2006	03/10/2006	28.0	39.0	30.0	32	5.9	18
10	03/10/2006	31/10/2006	44.0	33.0	40.0	39	5.6	14
11	31/10/2006	30/11/2006	43.0	36.0	39.0	39	3.5	9
12	30/11/2006	04/01/2007	40.0	34.0	34.0	36	3.5	10
13								

It is necessary to have results for at least two tubes in order to calculate the precision of the measurements

Automatic Method		Data Quality Check	
Period	Data Capture (% DC)	Tubes Precision Check	Automatic Monitor Data
46	86	Good	Good
41	95	Good	Good
34	89	Good	Good
25	90	Poor Precision	Good
30	95	Good	Good
26	95	Poor Precision	Good
26	96	Poor Precision	Good
20	95	Poor Precision	Good
31	70	Good	or Data Capture
38	97	Good	Good
42	92	Good	Good
41	93	Good	Good

Overall survey -->

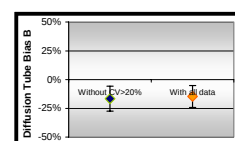
Poor precision

Good Overall
DC(Check average CV & DC from
Accuracy calculations)

Site Name/ID: Lombard Street

Accuracy (with 95% confidence interval)	
without periods with CV larger than 20%	
Bias calculated using 7 periods of data	
Bias factor A	1.2 (1.06 - 1.37)
Bias B	-16% (-27% - -6%)
Diffusion Tubes Mean:	33 μgm^{-3}
Mean CV (Precision):	10
Automatic Mean:	39 μgm^{-3}
Data Capture for periods used:	92%
Adjusted Tubes Mean:	39 (34 - 45) μgm^{-3}

Accuracy (with 95% confidence interval)	
WITH ALL DATA	
Bias calculated using 11 periods of data	
Bias factor A	1.18 (1.06 - 1.33)
Bias B	-15% (-25% - -6%)
Diffusion Tubes Mean:	28 μgm^{-3}
Mean CV (Precision):	16 caution
Automatic Mean:	34 μgm^{-3}
Data Capture for periods used:	93%
Adjusted Tubes Mean:	34 (30 - 38) μgm^{-3}



Jaume Targa

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Version 03 - November 2006

Adjustment of SINGLE Tubes


AEA Energy & Environment
 From the AEA group

Diffusion Tube Measurements															
Site Name/ID	Periods													Raw Mean	Valid periods
	1	2	3	4	5	6	7	8	9	10	11	12	13		
Royal Vicotria Hopsital 1	22.0	23.0	17.0		21.0	23.0	17.0	14.0	20.0		28.0	7.0		19.2	10
Cromic Street 3	39.0	47.0	35.0	33.0	20.0	16.0	32.0	26.0	58.0	53.0	50.0	47.0		38.0	12
Ravenhill Road 4	39.0	44.0		30.0	28.0	14.0	18.0		28.0	39.0	23.0	30.0		29.3	10
North Road 6	19.0	17.0	33.0	12.0	10.0		8.0	11.0	12.0	29.0	18.0	25.0		17.6	11
Donegal Square North 7	42.0	29.0	29.0	24.0	30.0	26.0	33.0	32.0	39.0	53.0	41.0	42.0		35.0	12
Short Strand 9	17.0	30.0		44.0	26.0	17.0	30.0			39.0	48.0	48.0		33.2	9
Victoria Street 18	47.0	46.0	25.0	31.0		47.0	44.0	25.0	39.0	51.0	45.0	46.0		40.5	11
Whitewell Road 25	12.0	28.0	24.0	16.0	20.0	27.0	20.0	14.0	24.0	22.0	18.0	21.0		20.5	12
Donegal Road 26			25.0	31.0	10.0	27.0	21.0	33.0	31.0	25.0	35.0	42.0		28.0	10
Shaftsbury Avenue 15							30.0	16.0	36.0	36.0	65.0	53.0		39.3	6

The bias adjustment factor used in these calculations include all the data and no screening of data due to poor precision has been applied.

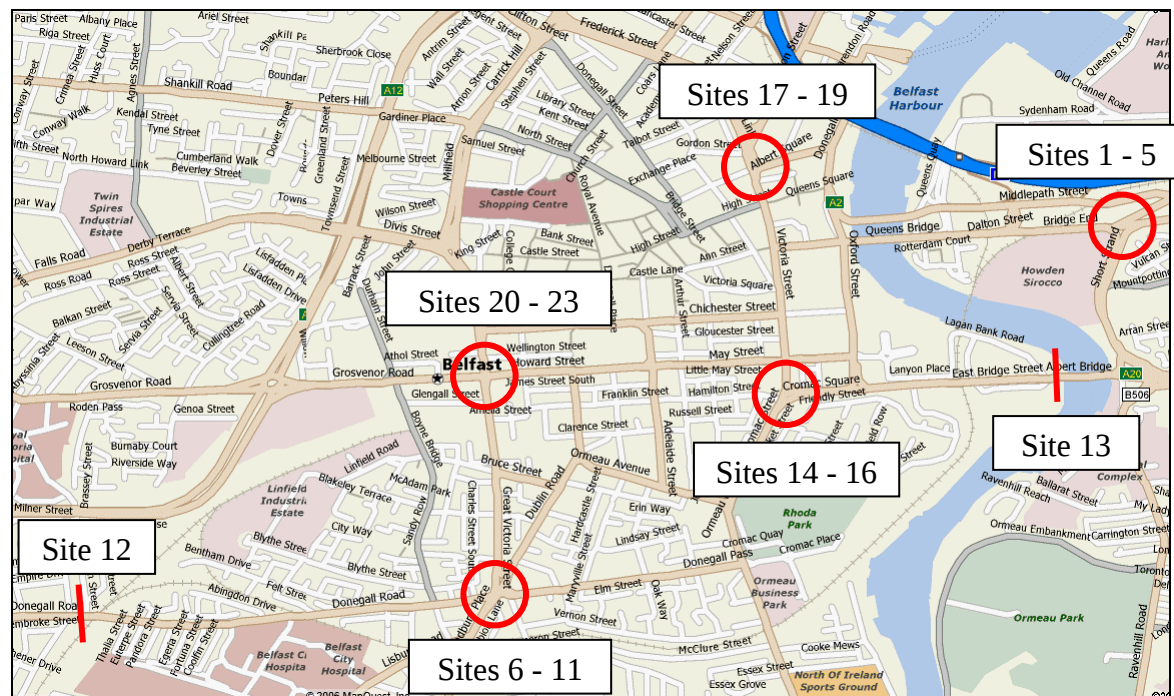
Adjusted measurement (95% confidence interval) with all the data	
11 periods used in this calculations	
Bias Factor A 1.18 (1.06 - 1.33)	
Bias B -15% (-25% - -6%)	
Tube Precision: 16	Automatic DC: 93%
Adjusted with 95% CI	23 (20 - 26)
Adjusted with 95% CI	45 (40 - 51)
Adjusted with 95% CI	35 (31 - 39)
Adjusted with 95% CI	21 (19 - 23)
Adjusted with 95% CI	41 (37 - 47)
Adjusted with 95% CI	39 (35 - 44)
Adjusted with 95% CI	48 (43 - 54)
Adjusted with 95% CI	24 (22 - 27)
Adjusted with 95% CI	33 (30 - 37)
Adjusted with 95% CI	46 (42 - 52)

Appendix 2.

Traffic Count Data.

INTRODUCTION

Count On Us was commissioned by Belfast City Council to undertake a series of manual classified counts, automatic traffic counts and speed surveys around Belfast City.



(Map – Mapquest.com)

SITE LOCATIONS

Site 1	Bridge End (west)
Site 2	Sydenham Flyover
Site 3	Bridge End (east)
Site 4	Short Strand (southbound)
Site 5	Short Strand (northbound)
Site 6	Donegall Road (west of Shaftesbury Square)
Site 7	Bradbury Place
Site 8	Botanic Avenue
Site 9	Donegall Pass
Site 10	Dublin Street
Site 11	Great Victoria Street (north of Shaftesbury Square)
Site 12	Donegall Road (between Richview Street and Roden Street)
Site 13	Albert Bridge
Site 14	Cromac Street
Site 15	East Bridge Street
Site 16	Victoria Street (north of East Bridge Street)
Site 17	Dunbar Link
Site 18	Waring Street
Site 19	Victoria Street (south of Waring Street)
Site 20	Great Victoria Street (South of Grosvenor Road)
Site 21	Howard Street
Site 22	College Square East
Site 23	Grosvenor Road

CLASSIFIED COUNTS

Counts were undertaken at sites 1, 3, 5, 7 to 11 and 14 to 23 detailed above on Wednesday 29th November 2006. The survey period was midnight to midnight 24 hours later. Flow counts were recorded at all sites and data was collected in 15 minute intervals.

A 2-fold classification was used.

- Cars and Light Goods Vehicles (**LV**)
- Heavy Goods Vehicles and Buses(**HV**)

SPEED SURVEYS

Speed surveys were conducted at the same sites as the classified counts. Sites 1, 3 and 5 were undertaken on Tuesday 28th November, sites 7 to 11 on Wednesday 29th November, sites 14, 16, 20 to 23 Thursday 30th November and sites 15 and 17 to 19 on Friday 1st December 2006. The survey period varied from site to site and is detailed with the data. A radar speed gun was used to record the speed of 200 vehicles travelling in both directions. For each traffic flow the average speed, median speed and 85th percentile speed were calculated.

SITE REPORTS

Weather Tuesday 28th – Cloudy and dry throughout the day.
Wednesday 29th – Cloudy and dry with sunny spells.
Thursday 30th – Cloudy with occasional showers.
Friday 1st – Cloudy in the morning. Showers in the afternoon and evening.

Accidents There were no accidents observed during the survey periods.

Roadworks There were no roadworks.

Queues There was very heavy queuing on all days at all sites during both the AM and PM peak periods. Between these periods queuing was less extensive.

Pedestrians There was some pedestrian activity which did not interfere with traffic flow.

Observations There were no other incidents to report.

AUTOMATIC TRAFFIC COUNTS

Counts were undertaken at the sites 2, 4, 6, 12 and 13 detailed above for a continuous 24 hour period. Sites 2, 4 and 13 were recorded on Wednesday 29th November, site 6 on Tuesday 28th November and site 12 on Monday 27th November 2006.

To undertake the counts, a set of parallel pneumatic road tubes were installed at each location. The tubes were then connected to a Metro Count automatic traffic counter which was set to obtain the direction, classification and speed of traffic flows in hourly intervals.

Notes

Due to high traffic volumes throughout the week the counters were all installed on Sunday 26th November with the intention of using the data recorded on Wednesday 29th November to coincide with the classified counts. The tubes on the counters at sites 6 and 12 were vandalised so the latest 24 hour period recorded was reported for each counter.

CLASSIFICATION, DATA AND TOTALS**A 13-fold classification was used**

MCL	Motorcycles
CAR	Cars
LGV	Light Goods Vehicles
PSV	Buses and Coaches
2R	2-Axle Rigid Heavy Goods Vehicles
3R	3-Axle Rigid Heavy Goods Vehicles
4R	4-Axle Rigid Heavy Goods Vehicles
4A	3 & 4-Axle Articulated Heavy Goods Vehicles
5A	5-Axle Articulated Heavy Goods Vehicles
6A	6-Axle Articulated Heavy Goods Vehicles
5M	5-Axle Multiple Section Heavy Goods Vehicles
6M	6-Axle Multiple Section Heavy Goods Vehicles
7/+	Heavy Goods Vehicles of any format with 7 or more axles

Other Data Types

Mean	Average speed of vehicles for the period
85th%	85 th percentile speed of vehicles for the period
>PSL%	Percentage of vehicles exceeding the posted speed limit

Totals

07-19	12 hour total for the period 07:00 to 19:00 hours
06-22	16 hour total for the period 06:00 to 22:00 hours
06-00	18 hour total for the period 06:00 to 00:00 hours the next day
00-00	24 hour total for the period 00:00 to 00:00 hours the next day

SURVEY RESULTS

CLASSIFIED COUNTS

VEHICLE SPEEDS

AUTOMATIC COUNTS

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 1

DATE: 29 NOV 2006

LOCATION: BRIDGE END (WEST)

DAY: WEDNESDAY

TIME	WESTBOUND		TOT	TIME	WESTBOUND		TOT	TIME	WESTBOUND		TOT
	LV	HV			LV	HV			LV	HV	
00:00	53	0	53	08:00	1082	35	1117	16:00	672	36	708
00:15	45	3	48	08:15	1159	35	1194	16:15	645	42	687
00:30	33	1	34	08:30	1038	37	1075	16:30	695	20	715
00:45	41	0	41	08:45	1144	32	1176	16:45	750	24	774
H/TOT	172	4	176	H/TOT	4423	139	4562	H/TOT	2762	122	2884
01:00	44	2	46	09:00	1061	48	1109	17:00	718	20	738
01:15	49	1	50	09:15	951	58	1009	17:15	678	15	693
01:30	28	2	30	09:30	925	49	974	17:30	637	15	652
01:45	28	0	28	09:45	841	47	888	17:45	610	11	621
H/TOT	149	5	154	H/TOT	3778	202	3980	H/TOT	2643	61	2704
02:00	19	2	21	10:00	651	47	698	18:00	584	13	597
02:15	21	2	23	10:15	609	53	662	18:15	528	14	542
02:30	21	0	21	10:30	589	48	637	18:30	517	11	528
02:45	16	2	18	10:45	585	41	626	18:45	544	13	557
H/TOT	77	6	83	H/TOT	2434	189	2623	H/TOT	2173	51	2224
03:00	11	3	14	11:00	553	40	593	19:00	518	10	528
03:15	18	3	21	11:15	563	49	612	19:15	505	5	510
03:30	14	2	16	11:30	576	38	614	19:30	400	6	406
03:45	17	3	20	11:45	567	41	608	19:45	422	5	427
H/TOT	60	11	71	H/TOT	2259	168	2427	H/TOT	1845	26	1871
04:00	18	1	19	12:00	528	48	576	20:00	388	6	394
04:15	18	7	25	12:15	613	51	664	20:15	335	4	339
04:30	23	5	28	12:30	573	49	622	20:30	335	5	340
04:45	25	5	30	12:45	597	55	652	20:45	279	5	284
H/TOT	84	18	102	H/TOT	2311	203	2514	H/TOT	1337	20	1357
05:00	37	9	46	13:00	609	43	652	21:00	373	7	380
05:15	46	3	49	13:15	578	42	620	21:15	298	5	303
05:30	102	8	110	13:30	569	38	607	21:30	270	5	275
05:45	106	13	119	13:45	573	50	623	21:45	204	5	209
H/TOT	291	33	324	H/TOT	2329	173	2502	H/TOT	1145	22	1167
06:00	119	11	130	14:00	567	56	623	22:00	206	4	210
06:15	158	13	171	14:15	531	38	569	22:15	207	2	209
06:30	205	20	225	14:30	562	44	606	22:30	165	4	169
06:45	192	31	223	14:45	601	32	633	22:45	141	2	143
H/TOT	674	75	749	H/TOT	2261	170	2431	H/TOT	719	12	731
07:00	531	30	561	15:00	537	38	575	23:00	126	1	127
07:15	709	38	747	15:15	590	39	629	23:15	111	3	114
07:30	978	40	1018	15:30	587	42	629	23:30	85	1	86
07:45	1064	33	1097	15:45	617	27	644	23:45	68	1	69
H/TOT	3282	141	3423	H/TOT	2331	146	2477	H/TOT	390	6	396
								P/TOT	39929	2003	41932

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Tuesday 28th November 2006

TIME : 10:00 - 12:00

SITE : 1 - Bridge End (West)

SPEED LIMIT : 30 mph

WESTBOUND STATISTICS			
Average Speed (mph)	21.0	Maximum Speed (mph)	39
Median Speed (mph)	19.9	Minimum Speed (mph)	11
85 %ile (mph)	24.9	Number Speeding	17 8.5%

WESTBOUND SPEEDS (mph)							
17	19	18	16	18	19	19	15
17	19	18	17	21	23	25	21
17	22	21	22	23	17	14	30
32	25	21	23	19	19	11	14
30	19	21	24	34	39	18	19
17	32	19	21	18	22	20	19
24	14	17	20	29	18	16	25
17	21	22	24	19	20	17	11
20	19	19	25	18	31	22	24
23	30	21	13	22	34	32	17
19	23	16	22	35	28	32	29
31	19	19	17	22	21	22	19
21	21	22	21	22	21	19	19
19	18	15	29	20	22	20	18
32	29	22	22	17	20	18	19
22	21	23	17	18	14	18	19
21	17	26	19	16	24	18	19
17	22	24	21	19	19	21	21
22	19	17	19	19	17	34	20
14	37	14	21	22	19	19	16
11	21	27	19	18	19	19	24
29	28	21	21	22	23	22	19
25	18	22	18	25	17	14	14
18	21	20	21	21	16	17	19
17	36	29	21	17	18	22	16

Count On Us**BELFAST CITY
AUTOMATIC TRAFFIC COUNTS****NOVEMBER 2006
32968**

Site: 2 - Sydenham Flyover, 100 metres east of Bridge End
 Filter time: 00:00 29 November 2006 => 00:00 30 November 2006
 Direction: West (bound)
 Speed limit: 30 mph

* 29 November 2006

Date and Time	MCL	CAR	LGV	PSV	2R	3R	4R	4A	5A	6A	5M	6M	7/+	Total	Mean	85th%	>PSL%
29/11/2006 00:00	1	20	0	0	0	0	0	0	0	0	0	0	0	21	30.7	36.9	66.7
29/11/2006 01:00	1	20	1	0	0	0	0	0	0	0	0	0	0	22	36.7	45.0	86.4
29/11/2006 02:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13	35.7	42.1	92.3
29/11/2006 03:00	0	3	2	0	0	0	0	0	1	0	0	0	0	6	34.4	-	66.7
29/11/2006 04:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4	35.4	-	75.0
29/11/2006 05:00	0	31	1	0	0	1	0	0	0	0	0	0	0	33	33.9	41.6	69.7
29/11/2006 06:00	4	91	5	0	2	1	0	0	0	0	0	0	0	103	28.4	37.4	37.9
29/11/2006 07:00	4	529	11	1	2	0	1	2	0	0	0	0	0	550	22.5	32.4	21.5
29/11/2006 08:00	12	800	15	1	0	6	5	3	0	1	3	0	0	846	19.6	27.7	10.5
29/11/2006 09:00	11	711	25	1	2	5	2	2	0	0	0	0	0	759	20.9	30.0	15.4
29/11/2006 10:00	2	469	22	0	3	1	1	0	0	0	1	0	0	499	24.1	33.1	26.9
29/11/2006 11:00	2	364	23	0	4	1	0	0	0	0	0	0	0	394	25.1	34.0	28.9
29/11/2006 12:00	7	377	23	0	4	2	0	1	0	1	0	0	0	415	24.9	34.7	28.2
29/11/2006 13:00	5	384	20	0	6	1	0	0	0	0	0	0	0	416	25.9	34.7	33.7
29/11/2006 14:00	1	348	21	0	5	1	0	1	0	0	0	0	0	377	26.0	36.5	35.8
29/11/2006 15:00	1	319	18	0	2	0	1	0	0	0	0	0	0	341	25.7	35.1	33.1
29/11/2006 16:00	3	292	12	3	5	2	1	1	0	1	0	0	0	320	22.7	31.5	21.9
29/11/2006 17:00	2	288	7	1	3	0	0	0	0	0	0	0	0	301	22.1	31.1	18.3
29/11/2006 18:00	1	300	2	0	2	0	1	3	0	0	0	0	0	309	24.4	33.6	24.6
29/11/2006 19:00	4	266	4	0	1	2	0	1	0	0	0	0	0	278	25.4	34.4	29.9
29/11/2006 20:00	3	163	3	0	1	0	0	0	0	0	0	0	0	170	26.3	34.9	29.4
29/11/2006 21:00	0	132	4	0	3	0	0	0	0	0	0	0	0	139	26.9	35.8	36.7
29/11/2006 22:00	0	89	0	0	1	0	0	0	0	0	0	0	0	90	30.7	38.0	54.4
29/11/2006 23:00	0	53	2	0	0	0	0	0	0	0	0	0	0	55	29.8	39.1	50.9
07-19	51	5181	199	7	38	19	12	13	0	3	4	0	0	5527	23.1	32.7	23.1
06-22	62	5833	215	7	45	22	12	14	0	3	4	0	0	6217	23.5	32.9	24.1
06-00	62	5975	217	7	46	22	12	14	0	3	4	0	0	6362	23.7	33.1	24.8
00-00	64	6066	221	7	46	23	12	14	1	3	4	0	0	6461	23.8	33.3	25.6

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 3

DATE: 29 NOV 2006

LOCATION: BRIDGE END (EAST)

DAY: WEDNESDAY

TIME	WESTBOUND		TOT	TIME	WESTBOUND		TOT	TIME	WESTBOUND		TOT
	LV	HV			LV	HV			LV	HV	
00:00	43	0	43	08:00	638	45	683	16:00	615	43	658
00:15	47	1	48	08:15	753	43	796	16:15	521	54	575
00:30	31	0	31	08:30	624	42	666	16:30	526	30	556
00:45	43	0	43	08:45	742	40	782	16:45	601	36	637
H/TOT	164	1	165	H/TOT	2757	170	2927	H/TOT	2263	163	2426
01:00	27	1	28	09:00	747	46	793	17:00	532	28	560
01:15	27	1	28	09:15	656	52	708	17:15	546	27	573
01:30	20	2	22	09:30	646	43	689	17:30	544	29	573
01:45	21	1	22	09:45	610	47	657	17:45	562	31	593
H/TOT	95	5	100	H/TOT	2659	188	2847	H/TOT	2184	115	2299
02:00	19	2	21	10:00	451	38	489	18:00	431	19	450
02:15	13	2	15	10:15	465	43	508	18:15	430	17	447
02:30	19	1	20	10:30	451	41	492	18:30	431	20	451
02:45	14	1	15	10:45	434	32	466	18:45	484	20	504
H/TOT	65	6	71	H/TOT	1801	154	1955	H/TOT	1776	76	1852
03:00	7	1	8	11:00	429	41	470	19:00	420	10	430
03:15	16	2	18	11:15	419	34	453	19:15	397	9	406
03:30	10	1	11	11:30	420	31	451	19:30	325	8	333
03:45	13	3	16	11:45	438	39	477	19:45	376	12	388
H/TOT	46	7	53	H/TOT	1706	145	1851	H/TOT	1518	39	1557
04:00	15	3	18	12:00	424	38	462	20:00	324	7	331
04:15	18	3	21	12:15	461	44	505	20:15	306	7	313
04:30	15	3	18	12:30	461	41	502	20:30	284	8	292
04:45	22	4	26	12:45	437	39	476	20:45	250	8	258
H/TOT	70	13	83	H/TOT	1783	162	1945	H/TOT	1164	30	1194
05:00	29	4	33	13:00	461	26	487	21:00	324	8	332
05:15	35	5	40	13:15	453	28	481	21:15	252	6	258
05:30	58	6	64	13:30	463	28	491	21:30	233	7	240
05:45	58	12	70	13:45	455	38	493	21:45	186	6	192
H/TOT	180	27	207	H/TOT	1832	120	1952	H/TOT	995	27	1022
06:00	123	13	136	14:00	419	35	454	22:00	176	0	176
06:15	140	13	153	14:15	426	32	458	22:15	175	2	177
06:30	141	15	156	14:30	460	46	506	22:30	151	7	158
06:45	101	20	121	14:45	511	32	543	22:45	118	6	124
H/TOT	505	61	566	H/TOT	1816	145	1961	H/TOT	620	15	635
07:00	437	38	475	15:00	457	29	486	23:00	96	0	96
07:15	530	32	562	15:15	519	40	559	23:15	104	0	104
07:30	685	36	721	15:30	504	40	544	23:30	70	2	72
07:45	713	31	744	15:45	586	26	612	23:45	62	0	62
H/TOT	2365	137	2502	H/TOT	2066	135	2201	H/TOT	332	2	334
								P/TOT	30762	1943	32705

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Tuesday 28th November 2006

TIME : 10:00 - 11:00

SITE : 3 - Bridge End (East)

SPEED LIMIT : 30 mph

WESTBOUND STATISTICS			
Average Speed (mph)	22.6	Maximum Speed (mph)	44
Median Speed (mph)	22.0	Minimum Speed (mph)	9
85 %ile (mph)	28.2	Number Speeding	18 9.0%

WESTBOUND SPEEDS (mph)							
26	24	22	23	22	22	27	24
27	32	29	28	25	20	23	25
34	27	26	19	25	28	29	31
22	17	24	23	27	21	18	19
30	26	24	25	27	23	32	31
23	30	24	19	16	18	15	20
19	29	18	26	9	19	29	26
21	22	44	29	21	18	25	33
24	20	14	15	26	15	20	17
21	18	20	33	23	19	20	23
33	15	30	27	23	19	27	25
18	17	20	21	19	23	26	14
19	27	32	30	14	23	18	21
17	31	11	15	19	18	19	18
11	25	22	23	28	32	27	22
13	24	24	19	27	12	19	23
23	27	22	19	19	16	18	22
20	13	11	23	31	32	19	20
14	16	23	29	24	20	20	25
17	33	28	25	19	19	22	22
20	21	24	26	23	17	21	24
21	11	15	19	24	17	41	27
23	16	20	31	19	28	25	24
17	13	28	11	25	30	22	21
18	22	22	25	17	24	29	34

Count On Us**BELFAST CITY
AUTOMATIC TRAFFIC COUNTS****NOVEMBER 2006
32968**

Site: 4 - Short Strand, 20 metres south of Bridge End
 Filter time: 00:00 29 November 2006 => 00:00 30 November 2006
 Direction: South (bound)
 Speed limit: 30 mph

* 29 November 2006

Date and Time	MCL	CAR	LGV	PSV	2R	3R	4R	4A	5A	6A	5M	6M	7/+	Total	Mean	85th%	>PSL%
29/11/2006 00:00	1	82	2	0	0	0	0	1	0	0	0	0	0	86	30.1	32.9	45.3
29/11/2006 01:00	0	27	1	0	0	0	0	1	0	0	2	0	0	31	29.4	32.4	41.9
29/11/2006 02:00	1	23	1	0	0	0	0	1	0	1	0	0	0	27	30.7	34.9	59.3
29/11/2006 03:00	0	17	2	0	0	0	0	0	0	0	1	0	0	20	30.0	33.3	45.0
29/11/2006 04:00	0	26	5	0	0	1	0	1	0	1	3	0	1	38	29.0	32.4	39.5
29/11/2006 05:00	2	63	8	0	4	4	0	1	0	2	4	0	0	88	28.7	32.2	34.1
29/11/2006 06:00	3	238	29	3	6	6	0	11	0	4	12	0	0	312	28.8	32.9	38.8
29/11/2006 07:00	8	853	61	5	10	22	21	23	0	6	8	1	7	1025	23.7	30.0	15.8
29/11/2006 08:00	10	922	50	17	4	41	34	14	3	9	7	0	11	1122	15.1	23.5	2.4
29/11/2006 09:00	2	864	96	3	34	29	10	28	0	6	12	0	4	1088	25.5	29.8	14.8
29/11/2006 10:00	6	678	109	5	27	13	6	15	0	4	11	0	3	877	26.4	30.6	19.5
29/11/2006 11:00	7	684	90	4	28	12	5	22	0	8	7	0	3	870	26.1	30.6	21.4
29/11/2006 12:00	3	678	101	8	23	17	11	18	3	8	9	0	5	884	26.8	30.9	21.2
29/11/2006 13:00	5	795	96	5	23	15	5	8	3	3	11	0	2	971	26.4	31.1	21.4
29/11/2006 14:00	5	745	97	7	22	21	3	14	0	7	11	0	2	934	26.2	30.9	21.7
29/11/2006 15:00	11	895	106	5	29	16	8	19	1	4	8	0	0	1102	26.2	31.1	19.5
29/11/2006 16:00	9	1279	94	5	12	37	21	32	0	10	6	0	6	1511	24.2	29.1	10.1
29/11/2006 17:00	8	1225	45	5	17	31	18	21	0	7	3	0	5	1385	23.3	28.6	9.9
29/11/2006 18:00	5	947	23	0	28	13	11	16	1	3	0	0	1	1048	27.1	30.9	22.7
29/11/2006 19:00	0	705	15	0	11	6	8	4	0	2	0	0	4	755	28.2	31.8	29.1
29/11/2006 20:00	4	498	10	0	4	7	3	2	0	1	2	0	0	531	28.7	32.4	30.7
29/11/2006 21:00	1	438	12	2	10	4	5	2	0	2	4	0	0	480	28.5	32.0	31.0
29/11/2006 22:00	1	316	7	0	7	1	1	4	0	2	0	0	1	340	29.3	32.4	36.2
29/11/2006 23:00	0	166	5	0	6	0	0	1	0	0	2	0	0	180	29.6	33.1	41.7
07-19	79	10565	968	69	257	267	153	230	11	75	93	1	49	12817	24.6	30.0	16.0
06-22	87	12444	1034	74	288	290	169	249	11	84	111	1	53	14895	25.1	30.4	18.1
06-00	88	12926	1046	74	301	291	170	254	11	86	113	1	54	15415	25.3	30.6	18.8
00-00	92	13164	1065	74	305	296	170	259	11	90	123	1	55	15705	25.3	30.6	19.2

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 5

DATE: 29 NOV 2006

LOCATION: SHORT STRAND

DAY: WEDNESDAY

TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT
	LV	HV			LV	HV			LV	HV	
00:00	26	0	26	08:00	483	20	503	16:00	326	22	348
00:15	14	2	16	08:15	445	22	467	16:15	393	17	410
00:30	18	1	19	08:30	453	25	478	16:30	438	19	457
00:45	14	0	14	08:45	441	22	463	16:45	418	17	435
H/TOT	72	3	75	H/TOT	1822	89	1911	H/TOT	1575	75	1650
01:00	18	2	20	09:00	368	31	399	17:00	432	18	450
01:15	23	1	24	09:15	349	35	384	17:15	378	14	392
01:30	9	1	10	09:30	333	35	368	17:30	339	12	351
01:45	8	0	8	09:45	285	29	314	17:45	294	6	300
H/TOT	58	4	62	H/TOT	1335	130	1465	H/TOT	1443	50	1493
02:00	3	1	4	10:00	275	28	303	18:00	321	10	331
02:15	11	1	12	10:15	219	29	248	18:15	266	13	279
02:30	5	0	5	10:30	213	26	239	18:30	254	7	261
02:45	5	2	7	10:45	226	28	254	18:45	228	9	237
H/TOT	24	4	28	H/TOT	933	111	1044	H/TOT	1069	39	1108
03:00	8	2	10	11:00	222	20	242	19:00	209	8	217
03:15	6	1	7	11:15	242	36	278	19:15	219	4	223
03:30	8	1	9	11:30	254	28	282	19:30	186	6	192
03:45	8	0	8	11:45	227	23	250	19:45	157	1	158
H/TOT	30	4	34	H/TOT	945	107	1052	H/TOT	771	19	790
04:00	10	0	10	12:00	198	34	232	20:00	150	4	154
04:15	7	6	13	12:15	246	31	277	20:15	115	2	117
04:30	15	4	19	12:30	206	32	238	20:30	137	2	139
04:45	10	3	13	12:45	254	40	294	20:45	115	2	117
H/TOT	42	13	55	H/TOT	904	137	1041	H/TOT	517	10	527
05:00	18	9	27	13:00	270	34	304	21:00	128	5	133
05:15	21	2	23	13:15	247	31	278	21:15	125	5	130
05:30	54	6	60	13:30	228	27	255	21:30	116	4	120
05:45	58	5	63	13:45	240	29	269	21:45	97	5	102
H/TOT	151	22	173	H/TOT	985	121	1106	H/TOT	466	19	485
06:00	39	8	47	14:00	267	41	308	22:00	89	8	97
06:15	61	10	71	14:15	224	26	250	22:15	91	4	95
06:30	107	15	122	14:30	221	18	239	22:30	73	1	74
06:45	134	21	155	14:45	209	20	229	22:45	82	0	82
H/TOT	341	54	395	H/TOT	921	105	1026	H/TOT	335	13	348
07:00	189	16	205	15:00	248	31	279	23:00	59	3	62
07:15	274	30	304	15:15	239	21	260	23:15	36	5	41
07:30	388	28	416	15:30	251	24	275	23:30	44	1	45
07:45	446	26	472	15:45	199	23	222	23:45	35	3	38
H/TOT	1297	100	1397	H/TOT	937	99	1036	H/TOT	174	12	186
								P/TOT	17147	1340	18487

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Tuesday 28th November 2006

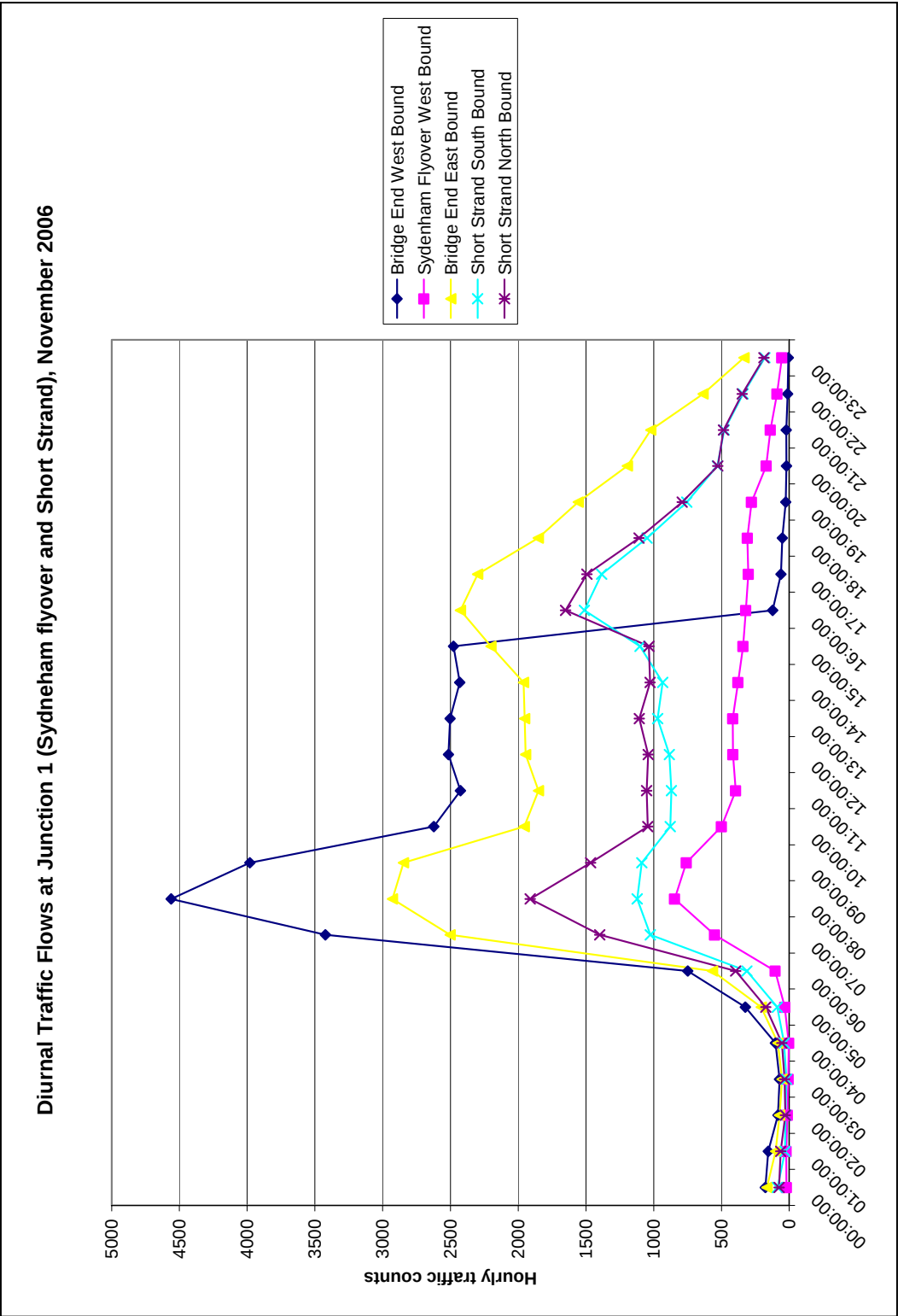
TIME : 12:00 - 14:00

SITE : 5 - Short Strand

SPEED LIMIT : 30 mph

NORTHBOUND STATISTICS			
Average Speed (mph)	20.0	Maximum Speed (mph)	110
Median Speed (mph)	19.0	Minimum Speed (mph)	10
85 %ile (mph)	25.2	Number Speeding	9 4.5%

NORTHBOUND SPEEDS (mph)							
15	20	27	21	25	31	27	23
16	29	13	23	21	23	26	25
19	16	19	21	10	20	18	26
26	27	21	19	14	16	15	15
13	15	22	18	15	20	16	23
23	14	15	20	16	20	27	23
13	20	20	19	18	21	30	18
18	26	21	16	17	23	18	23
21	36	23	14	21	19	17	14
23	17	15	21	10	24	23	17
11	11	26	25	20	22	21	17
16	27	21	17	25	10	14	25
17	17	15	16	33	20	19	12
18	15	24	25	26	22	28	27
16	24	16	10	12	17	11	20
18	12	17	27	24	24	23	24
20	25	21	18	28	24	11	10
22	24	27	17	22	24	28	17
13	16	19	31	12	17	13	22
19	13	11	12	13	16	10	11
25	24	20	13	15	16	30	22
22	17	15	19	13	19	26	19
10	11	11	110	15	13	13	16
11	15	12	21	21	19	17	20
20	14	39	36	42	43	16	19



Count On Us**BELFAST CITY
AUTOMATIC TRAFFIC COUNTS****NOVEMBER 2006
32968**

Site: 6 - Donegall Road, 50 metres west of Shaftesbury Square
 Filter time: 00:00 28 November 2006 => 00:00 29 November 2006
 Direction: East (bound)
 Speed limit: 30 mph

* 28 November 2006

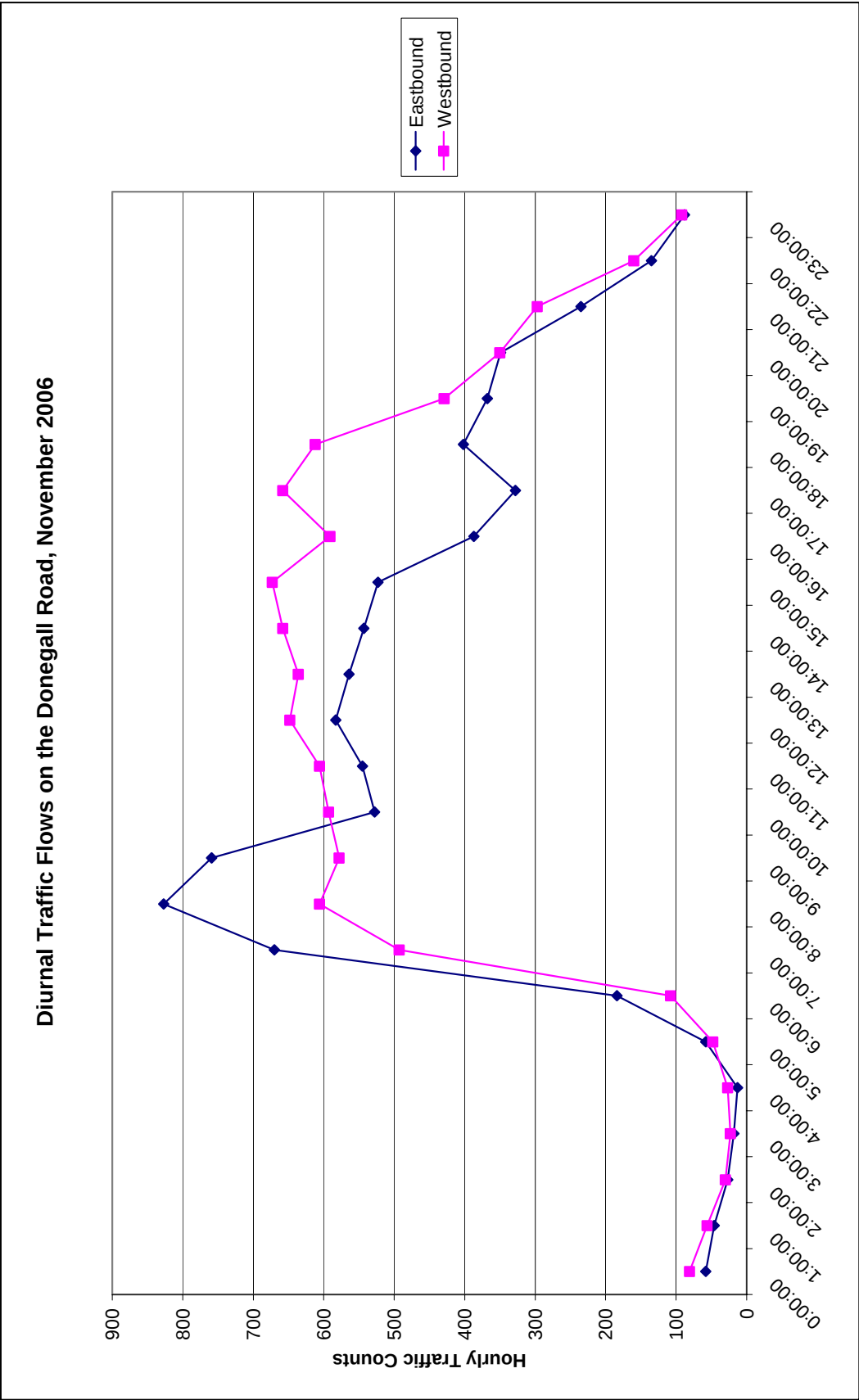
Date and Time	MCL	CAR	LGV	PSV	2R	3R	4R	4A	5A	6A	5M	6M	7/+	Total	Mean	85th%	>PSL%
11/28/2006 0:00	0	30	0	0	0	1	0	0	0	0	0	0	0	31	22.2	25.7	6.5
11/28/2006 1:00	0	24	1	0	0	0	0	0	0	0	0	0	0	25	22.5	28.2	16.0
11/28/2006 2:00	1	12	2	0	0	0	0	0	0	0	0	0	0	15	24.8	28.4	13.3
11/28/2006 3:00	0	10	0	0	0	0	0	0	0	0	0	0	0	10	26.1	-	10.0
11/28/2006 4:00	0	4	0	0	0	0	0	0	0	0	1	0	0	5	25.3	-	20.0
11/28/2006 5:00	0	21	2	0	2	0	0	0	0	0	1	0	0	26	23.9	28.4	15.4
11/28/2006 6:00	1	60	9	1	1	1	0	1	0	0	0	0	0	74	22.8	27.7	8.1
11/28/2006 7:00	2	235	18	0	2	4	2	0	0	0	1	0	0	264	18.3	22.8	0.8
11/28/2006 8:00	4	262	17	2	0	2	0	4	0	0	1	0	0	292	16.8	22.1	0.7
11/28/2006 9:00	4	288	11	0	2	3	0	2	0	1	0	0	0	311	17.2	21.7	1.6
11/28/2006 10:00	1	249	15	1	3	2	0	1	0	0	0	0	0	272	17.5	21.5	1.5
11/28/2006 11:00	3	248	22	3	3	4	0	2	0	0	0	0	0	285	14.5	18.3	0.7
11/28/2006 12:00	3	209	11	2	2	6	0	3	0	0	1	0	0	237	15.1	19.2	0.0
11/28/2006 13:00	1	204	22	5	2	3	0	2	0	1	0	0	0	240	15.5	20.6	0.0
11/28/2006 14:00	1	177	15	1	1	4	0	2	0	0	0	0	0	201	16.8	21.7	0.0
11/28/2006 15:00	3	208	25	2	5	1	0	0	0	0	0	0	0	244	16.8	21.3	0.4
11/28/2006 16:00	0	168	9	0	1	1	0	0	0	0	0	0	0	179	18.2	23.0	1.7
11/28/2006 17:00	1	170	7	0	2	4	0	2	0	0	0	0	0	186	18.9	22.6	2.7
11/28/2006 18:00	3	175	4	2	0	3	0	0	0	0	0	0	0	187	18.0	22.4	2.1
11/28/2006 19:00	2	209	8	1	1	2	0	0	0	0	0	0	0	223	17.9	21.7	0.4
11/28/2006 20:00	2	160	9	0	1	0	0	1	0	0	0	0	0	173	18.9	23.0	1.2
11/28/2006 21:00	0	166	4	2	0	1	0	0	0	0	0	0	0	173	17.0	20.8	0.6
11/28/2006 22:00	1	100	3	0	0	0	0	0	0	0	0	0	0	104	19.4	23.0	1.9
11/28/2006 23:00	1	68	3	0	0	2	0	0	0	0	0	0	0	74	22.2	27.5	4.1
07-19	26	2593	176	18	23	37	2	18	0	2	3	0	0	2898	16.9	21.7	1.0
06-22	31	3188	206	22	26	41	2	20	0	2	3	0	0	3541	17.2	21.9	1.1
06-00	33	3356	212	22	26	43	2	20	0	2	3	0	0	3719	17.3	22.1	1.2
00-00	34	3457	217	22	28	44	2	20	0	2	5	0	0	3831	17.5	22.6	1.5

Count On Us**BELFAST CITY
AUTOMATIC TRAFFIC COUNTS****NOVEMBER 2006
32968**

Site: 6 - Donegall Road, 50 metres west of Shaftesbury Square
 Filter time: 00:00 28 November 2006 => 00:00 29 November 2006
 Direction: West (bound)
 Speed limit: 30 mph

* 28 November 2006

Date and Time	MCL	CAR	LGV	PSV	2R	3R	4R	4A	5A	6A	5M	6M	7/+	Total	Mean	85th%	>PSL%
11/28/2006 0:00	0	61	1	0	0	0	0	0	0	0	0	0	0	62	21.0	25.1	0.0
11/28/2006 1:00	0	33	0	0	0	0	0	0	0	0	1	0	0	34	21.3	27.5	5.9
11/28/2006 2:00	1	20	0	0	0	0	0	0	0	0	0	0	0	21	23.9	26.6	9.5
11/28/2006 3:00	0	19	0	0	0	0	0	0	0	0	0	0	0	19	27.9	30.0	21.1
11/28/2006 4:00	1	10	2	0	1	0	0	0	0	0	0	0	0	14	24.2	28.0	14.3
11/28/2006 5:00	2	17	5	0	1	0	0	1	0	0	0	0	0	26	23.6	28.2	7.7
11/28/2006 6:00	1	52	11	0	1	3	0	0	0	0	1	0	0	69	22.8	27.1	1.4
11/28/2006 7:00	4	295	17	4	5	3	0	2	0	1	0	0	0	331	18.8	22.6	0.3
11/28/2006 8:00	1	353	23	1	8	0	0	0	0	0	0	0	0	386	16.5	21.0	0.5
11/28/2006 9:00	3	318	23	3	4	1	1	0	0	1	0	0	0	354	17.1	21.5	0.0
11/28/2006 10:00	4	272	28	3	3	2	1	0	1	0	0	0	0	314	16.6	21.3	0.3
11/28/2006 11:00	5	279	17	5	5	2	0	1	0	2	0	0	0	316	13.6	18.6	0.0
11/28/2006 12:00	5	329	25	2	4	3	1	1	0	0	0	0	0	370	14.5	19.0	0.0
11/28/2006 13:00	8	318	13	2	3	4	0	0	0	0	0	0	0	348	15.3	19.7	0.3
11/28/2006 14:00	4	279	15	3	1	0	1	0	0	0	0	0	0	303	16.0	21.0	0.3
11/28/2006 15:00	5	332	26	3	1	2	0	2	0	0	0	0	0	371	15.9	20.6	0.0
11/28/2006 16:00	6	313	12	5	2	2	1	1	0	0	0	0	0	342	9.8	13.6	0.0
11/28/2006 17:00	3	353	8	3	0	1	0	3	0	1	0	0	0	372	15.7	20.4	0.0
11/28/2006 18:00	6	367	8	0	2	1	0	1	0	0	1	0	0	386	16.9	21.3	0.3
11/28/2006 19:00	2	353	5	1	1	0	0	0	0	1	0	0	0	363	16.7	20.8	0.3
11/28/2006 20:00	3	260	7	1	1	1	0	3	0	0	0	0	0	276	17.8	22.4	0.4
11/28/2006 21:00	0	168	4	0	1	1	0	0	0	0	0	0	0	174	19.2	23.3	0.0
11/28/2006 22:00	1	146	1	1	0	0	0	0	0	0	0	0	0	149	19.0	23.5	0.7
11/28/2006 23:00	0	107	0	0	0	0	0	0	0	0	0	0	0	107	20.8	24.4	1.9
07-19	54	3807	215	34	38	21	5	11	1	5	1	0	0	4192	15.6	20.6	0.2
06-22	60	4641	242	36	42	26	5	14	1	6	2	0	0	5075	16.0	21.0	0.2
06-00	61	4894	243	37	42	26	5	14	1	6	2	0	0	5331	16.2	21.3	0.2
00-00	65	5054	251	37	44	26	5	15	1	6	3	0	0	5507	16.4	21.5	0.5



COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 7

DATE: 29 NOV 2006

LOCATION: BRADBURY PLACE

DAY: WEDNESDAY

TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT
	LV	HV			LV	HV			LV	HV	
0:00	73	0	73	8:00	311	15	326	16:00	244	15	259
0:15	63	1	64	8:15	335	17	352	16:15	209	13	222
0:30	69	2	71	8:30	306	14	320	16:30	133	9	142
0:45	71	0	71	8:45	303	16	319	16:45	250	7	257
H/TOT	276	3	279	H/TOT	1255	62	1317	H/TOT	836	44	880
1:00	51	0	51	9:00	293	21	314	17:00	190	10	200
1:15	56	2	58	9:15	299	19	318	17:15	160	7	167
1:30	63	0	63	9:30	214	18	232	17:30	180	6	186
1:45	56	4	60	9:45	198	28	226	17:45	176	12	188
H/TOT	226	6	232	H/TOT	1004	86	1090	H/TOT	706	35	741
2:00	50	1	51	10:00	194	15	209	18:00	194	5	199
2:15	35	0	35	10:15	208	15	223	18:15	173	9	182
2:30	26	1	27	10:30	180	24	204	18:30	197	2	199
2:45	15	0	15	10:45	207	17	224	18:45	238	5	243
H/TOT	126	2	128	H/TOT	789	71	860	H/TOT	802	21	823
3:00	14	1	15	11:00	203	25	228	19:00	179	4	183
3:15	11	0	11	11:15	253	25	278	19:15	182	3	185
3:30	8	1	9	11:30	186	20	206	19:30	208	4	212
3:45	7	2	9	11:45	219	27	246	19:45	182	5	187
H/TOT	40	4	44	H/TOT	861	97	958	H/TOT	751	16	767
4:00	9	2	11	12:00	226	23	249	20:00	166	1	167
4:15	3	0	3	12:15	226	22	248	20:15	171	4	175
4:30	8	2	10	12:30	230	20	250	20:30	168	3	171
4:45	7	2	9	12:45	207	19	226	20:45	178	3	181
H/TOT	27	6	33	H/TOT	889	84	973	H/TOT	683	11	694
5:00	13	2	15	13:00	221	15	236	21:00	157	3	160
5:15	10	5	15	13:15	220	16	236	21:15	141	2	143
5:30	29	3	32	13:30	225	18	243	21:30	136	2	138
5:45	14	3	17	13:45	198	18	216	21:45	146	1	147
H/TOT	66	13	79	H/TOT	864	67	931	H/TOT	580	8	588
6:00	23	4	27	14:00	229	13	242	22:00	124	2	126
6:15	18	5	23	14:15	174	16	190	22:15	142	1	143
6:30	31	5	36	14:30	218	15	233	22:30	118	2	120
6:45	61	7	68	14:45	242	16	258	22:45	118	2	120
H/TOT	133	21	154	H/TOT	863	60	923	H/TOT	502	7	509
7:00	69	9	78	15:00	197	21	218	23:00	107	2	109
7:15	141	15	156	15:15	253	11	264	23:15	94	0	94
7:30	232	11	243	15:30	167	12	179	23:30	74	0	74
7:45	292	17	309	15:45	239	15	254	23:45	69	0	69
H/TOT	734	52	786	H/TOT	856	59	915	H/TOT	344	2	346
								P/TOT	14213	837	15050

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 7

DATE: 29 NOV 2006

LOCATION: BRADBURY PLACE

DAY: WEDNESDAY

TIME	SOUTHBOUND		TOT	TIME	SOUTHBOUND		TOT	TIME	SOUTHBOUND		TOT
	LV	HV			LV	HV			LV	HV	
0:00	66	0	66	8:00	265	25	290	16:00	227	1	228
0:15	64	0	64	8:15	306	20	326	16:15	224	0	224
0:30	73	2	75	8:30	288	18	306	16:30	264	0	264
0:45	53	0	53	8:45	241	19	260	16:45	286	0	286
H/TOT	256	2	258	H/TOT	1100	82	1182	H/TOT	1001	1	1002
1:00	62	2	64	9:00	202	14	216	17:00	324	0	324
1:15	41	3	44	9:15	192	17	209	17:15	324	0	324
1:30	54	1	55	9:30	212	16	228	17:30	291	0	291
1:45	38	0	38	9:45	193	15	208	17:45	351	0	351
H/TOT	195	6	201	H/TOT	799	62	861	H/TOT	1290	0	1290
2:00	44	0	44	10:00	173	19	192	18:00	309	10	319
2:15	24	1	25	10:15	138	22	160	18:15	230	3	233
2:30	30	1	31	10:30	159	15	174	18:30	300	8	308
2:45	12	1	13	10:45	149	13	162	18:45	195	3	198
H/TOT	110	3	113	H/TOT	619	69	688	H/TOT	1034	24	1058
3:00	12	0	12	11:00	142	17	159	19:00	222	6	228
3:15	10	4	14	11:15	135	15	150	19:15	213	3	216
3:30	4	0	4	11:30	139	12	151	19:30	155	5	160
3:45	7	0	7	11:45	159	18	177	19:45	185	3	188
H/TOT	33	4	37	H/TOT	575	62	637	H/TOT	775	17	792
4:00	4	1	5	12:00	171	19	190	20:00	173	5	178
4:15	7	0	7	12:15	181	24	205	20:15	167	2	169
4:30	5	4	9	12:30	168	19	187	20:30	200	4	204
4:45	9	2	11	12:45	185	15	200	20:45	171	4	175
H/TOT	25	7	32	H/TOT	705	77	782	H/TOT	711	15	726
5:00	5	0	5	13:00	193	13	206	21:00	170	1	171
5:15	7	1	8	13:15	178	18	196	21:15	174	2	176
5:30	4	0	4	13:30	193	17	210	21:30	143	4	147
5:45	15	2	17	13:45	190	14	204	21:45	115	2	117
H/TOT	31	3	34	H/TOT	754	62	816	H/TOT	602	9	611
6:00	15	6	21	14:00	196	14	210	22:00	120	0	120
6:15	21	1	22	14:15	206	0	206	22:15	139	2	141
6:30	28	7	35	14:30	240	0	240	22:30	140	4	144
6:45	30	6	36	14:45	225	0	225	22:45	129	0	129
H/TOT	94	20	114	H/TOT	867	14	881	H/TOT	528	6	534
7:00	56	8	64	15:00	204	1	205	23:00	130	3	133
7:15	103	12	115	15:15	203	2	205	23:15	115	0	115
7:30	182	15	197	15:30	235	1	236	23:30	121	0	121
7:45	229	20	249	15:45	223	0	223	23:45	93	0	93
H/TOT	570	55	625	H/TOT	865	4	869	H/TOT	459	3	462
								P/TOT	13998	607	14605

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Wednesday 29th November 2006 TIME : 13:00 - 15:00

SITE : 7 - Bradbury Place SPEED LIMIT : 30 mph

NORTHBOUND STATISTICS			
Average Speed (mph)	19.4	Maximum Speed (mph)	33
Median Speed (mph)	19.4	Minimum Speed (mph)	9
85 %ile (mph)	23.8	Number Speeding	2 1.0%

NORTHBOUND SPEEDS (mph)							
12	11	11	11	22	22	20	18
20	31	13	24	24	18	17	21
16	18	13	17	24	24	19	23
24	23	21	27	21	28	23	22
15	19	22	26	25	14	14	21
19	24	18	19	20	26	21	14
13	14	17	19	14	18	25	16
14	19	17	17	18	17	15	16
26	22	26	25	24	22	22	18
23	22	15	21	14	19	21	13
13	12	14	18	18	19	20	24
9	20	23	23	26	24	21	24
16	18	18	18	24	14	18	16
19	23	24	15	21	21	16	23
19	33	18	20	19	19	19	18
21	20	19	16	17	23	25	18
14	16	13	26	18	18	19	26
12	19	16	15	22	21	22	16
19	23	24	24	17	20	18	15
25	19	20	22	29	14	16	19
25	27	23	24	25	23	23	19
16	16	16	18	18	20	23	17
21	25	20	23	19	20	23	23
16	23	21	22	16	21	21	19
12	10	19	14	16	18	16	15

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Wednesday 29th November 2006 TIME : 13:00 - 15:00

SITE : 7 - Bradbury Place SPEED LIMIT : 30 mph

SOUTHBOUND STATISTICS			
Average Speed (mph)	18.0	Maximum Speed (mph)	30
Median Speed (mph)	17.0	Minimum Speed (mph)	10
85 %ile (mph)	22.0	Number Speeding	0 0.0%

SOUTHBOUND SPEEDS (mph)							
15	17	18	16	17	17	16	16
18	19	17	17	17	14	19	14
10	17	16	17	19	22	12	15
14	16	22	13	11	19	16	18
16	17	22	16	17	18	12	15
16	15	14	18	24	19	22	14
14	15	17	22	21	13	14	19
14	12	15	16	17	18	22	23
22	19	13	19	16	14	17	16
15	16	18	20	21	20	17	18
22	17	20	19	14	17	18	14
16	21	21	24	25	19	15	10
22	24	25	22	13	26	16	19
26	24	20	29	14	17	12	29
12	14	19	21	16	17	18	26
24	14	20	16	11	19	15	20
18	20	16	21	16	18	17	16
21	20	20	17	26	14	15	15
16	14	19	14	15	15	10	16
15	23	22	27	17	15	21	17
17	20	18	25	17	24	16	14
16	14	17	20	23	15	17	25
18	26	23	18	17	25	22	16
13	17	21	26	30	21	19	18
22	23	18	15	18	14	11	15

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 8

DATE: 29 NOV 2006

LOCATION: BOTANIC AVENUE

DAY: WEDNESDAY

TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT
	LV	HV			LV	HV			LV	HV	
0:00	18	0	18	8:00	61	6	67	16:00	59	6	65
0:15	20	0	20	8:15	58	8	66	16:15	36	4	40
0:30	30	0	30	8:30	72	10	82	16:30	51	3	54
0:45	15	0	15	8:45	57	14	71	16:45	60	3	63
H/TOT	83	0	83	H/TOT	248	38	286	H/TOT	206	16	222
1:00	24	0	24	9:00	57	6	63	17:00	40	2	42
1:15	26	1	27	9:15	42	7	49	17:15	54	6	60
1:30	18	1	19	9:30	44	10	54	17:30	53	2	55
1:45	20	0	20	9:45	38	7	45	17:45	39	4	43
H/TOT	88	2	90	H/TOT	181	30	211	H/TOT	186	14	200
2:00	13	0	13	10:00	36	6	42	18:00	48	4	52
2:15	15	1	16	10:15	40	6	46	18:15	46	1	47
2:30	17	0	17	10:30	34	8	42	18:30	47	2	49
2:45	9	0	9	10:45	41	5	46	18:45	46	2	48
H/TOT	54	1	55	H/TOT	151	25	176	H/TOT	187	9	196
3:00	8	0	8	11:00	40	7	47	19:00	55	2	57
3:15	9	0	9	11:15	41	4	45	19:15	60	6	66
3:30	4	0	4	11:30	39	8	47	19:30	28	1	29
3:45	4	0	4	11:45	44	9	53	19:45	26	1	27
H/TOT	25	0	25	H/TOT	164	28	192	H/TOT	169	10	179
4:00	5	1	6	12:00	40	7	47	20:00	50	2	52
4:15	4	0	4	12:15	36	7	43	20:15	57	3	60
4:30	0	0	0	12:30	49	5	54	20:30	40	1	41
4:45	3	0	3	12:45	42	6	48	20:45	43	2	45
H/TOT	12	1	13	H/TOT	167	25	192	H/TOT	190	8	198
5:00	3	0	3	13:00	52	10	62	21:00	36	1	37
5:15	2	0	2	13:15	47	6	53	21:15	50	1	51
5:30	2	0	2	13:30	43	9	52	21:30	46	3	49
5:45	3	0	3	13:45	39	11	50	21:45	32	1	33
H/TOT	10	0	10	H/TOT	181	36	217	H/TOT	164	6	170
6:00	5	1	6	14:00	59	6	65	22:00	46	1	47
6:15	7	2	9	14:15	37	5	42	22:15	34	0	34
6:30	10	1	11	14:30	49	5	54	22:30	25	1	26
6:45	4	9	13	14:45	51	2	53	22:45	30	0	30
H/TOT	26	13	39	H/TOT	196	18	214	H/TOT	135	2	137
7:00	11	2	13	15:00	54	4	58	23:00	27	1	28
7:15	20	6	26	15:15	56	3	59	23:15	28	0	28
7:30	34	5	39	15:30	37	5	42	23:30	23	0	23
7:45	46	3	49	15:45	50	2	52	23:45	16	0	16
H/TOT	111	16	127	H/TOT	197	14	211	H/TOT	94	1	95
								P/TOT	3225	313	3538

COUNT ON US

BELFAST CITY
MANUAL CLASSIFIED COUNTS

NOVEMBER 2066
32826

SITE: 8

DATE: 29 NOV 2006

LOCATION: BOTANIC AVENUE

DAY: WEDNESDAY

TIME	SOUTHBOUND		TOT	TIME	SOUTHBOUND		TOT	TIME	SOUTHBOUND		TOT
	LV	HV			LV	HV			LV	HV	
0:00	31	0	31	8:00	56	1	57	16:00	82	2	84
0:15	34	0	34	8:15	56	6	62	16:15	103	1	104
0:30	18	0	18	8:30	63	2	65	16:30	79	5	84
0:45	20	0	20	8:45	66	4	70	16:45	110	1	111
H/TOT	103	0	103	H/TOT	241	13	254	H/TOT	374	9	383
1:00	20	0	20	9:00	39	2	41	17:00	118	7	125
1:15	19	0	19	9:15	58	4	62	17:15	115	3	118
1:30	19	0	19	9:30	43	4	47	17:30	111	2	113
1:45	25	0	25	9:45	47	7	54	17:45	98	2	100
H/TOT	83	0	83	H/TOT	187	17	204	H/TOT	442	14	456
2:00	20	1	21	10:00	51	5	56	18:00	116	4	120
2:15	14	0	14	10:15	45	8	53	18:15	89	1	90
2:30	11	0	11	10:30	44	5	49	18:30	82	1	83
2:45	12	0	12	10:45	50	6	56	18:45	62	1	63
H/TOT	57	1	58	H/TOT	190	24	214	H/TOT	349	7	356
3:00	10	0	10	11:00	51	7	58	19:00	80	2	82
3:15	6	0	6	11:15	59	10	69	19:15	79	1	80
3:30	8	0	8	11:30	53	7	60	19:30	65	1	66
3:45	8	1	9	11:45	49	9	58	19:45	82	1	83
H/TOT	32	1	33	H/TOT	212	33	245	H/TOT	306	5	311
4:00	2	0	2	12:00	54	8	62	20:00	68	3	71
4:15	3	0	3	12:15	46	9	55	20:15	64	1	65
4:30	4	0	4	12:30	50	8	58	20:30	53	1	54
4:45	6	0	6	12:45	58	7	65	20:45	59	1	60
H/TOT	15	0	15	H/TOT	208	32	240	H/TOT	244	6	250
5:00	3	0	3	13:00	74	5	79	21:00	54	1	55
5:15	6	1	7	13:15	66	7	73	21:15	57	1	58
5:30	2	0	2	13:30	61	7	68	21:30	45	1	46
5:45	8	4	12	13:45	48	10	58	21:45	49	0	49
H/TOT	19	5	24	H/TOT	249	29	278	H/TOT	205	3	208
6:00	7	1	8	14:00	68	1	69	22:00	43	1	44
6:15	11	0	11	14:15	71	1	72	22:15	36	0	36
6:30	12	2	14	14:30	69	6	75	22:30	40	1	41
6:45	11	2	13	14:45	84	3	87	22:45	44	0	44
H/TOT	41	5	46	H/TOT	292	11	303	H/TOT	163	2	165
7:00	17	2	19	15:00	66	5	71	23:00	47	0	47
7:15	31	4	35	15:15	60	5	65	23:15	26	0	26
7:30	49	4	53	15:30	77	5	82	23:30	41	0	41
7:45	60	6	66	15:45	57	2	59	23:45	25	0	25
H/TOT	157	16	173	H/TOT	260	17	277	H/TOT	139	0	139
								P/TOT	4568	250	4818

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Wednesday 29th November 2006 TIME : 12:00 - 14:00

SITE : 8 - Botanic Avenue SPEED LIMIT : 30 mph

NORTHBOUND STATISTICS			
Average Speed (mph)	17.7	Maximum Speed (mph)	30
Median Speed (mph)	17.5	Minimum Speed (mph)	8
85 %ile (mph)	21.9	Number Speeding	0 0.0%

NORTHBOUND SPEEDS (mph)							
16	16	11	18	16	15	20	18
18	18	26	28	26	24	18	20
18	19	19	23	21	20	19	20
13	16	14	14	11	16	18	18
21	20	25	17	16	16	16	17
17	17	13	25	12	18	20	23
26	21	11	11	14	17	16	14
26	21	18	15	16	11	14	16
19	19	17	19	11	9	17	18
8	11	13	16	12	16	14	21
14	18	15	13	19	19	17	16
17	21	26	18	26	12	15	24
21	18	24	18	19	18	19	18
12	20	14	10	18	18	16	18
22	13	21	18	24	18	11	16
14	18	19	22	18	19	16	14
16	19	13	16	26	21	12	17
26	18	20	19	19	16	16	16
13	18	21	15	12	19	21	18
19	17	11	15	17	23	16	28
15	18	30	13	14	14	15	18
11	14	15	21	23	15	14	12
20	16	23	16	11	14	24	16
21	19	18	24	21	19	24	19
19	28	27	28	23	12	12	16

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Wednesday 29th November 2006 TIME : 12:00 - 14:00

SITE : 8 - Botanic Avenue SPEED LIMIT : 30 mph

SOUTHBOUND STATISTICS			
Average Speed (mph)	17.5	Maximum Speed (mph)	34
Median Speed (mph)	17.0	Minimum Speed (mph)	9
85 %ile (mph)	22.0	Number Speeding	3 1.5%

SOUTHBOUND SPEEDS (mph)							
17	21	23	16	18	22	25	22
20	11	15	18	26	19	21	23
16	20	18	33	18	14	16	13
14	16	12	13	9	18	21	17
16	33	11	25	24	17	15	20
20	14	12	10	18	18	15	14
12	14	22	17	18	14	14	10
16	15	14	13	15	14	11	21
23	17	10	34	18	27	15	18
21	19	15	16	14	18	17	13
19	22	26	18	15	14	11	18
17	19	21	15	14	16	23	14
26	15	15	21	12	19	16	21
19	15	18	15	24	18	12	14
19	13	15	17	13	26	15	22
26	21	16	13	27	17	23	15
23	20	29	19	15	18	15	23
12	11	21	27	18	21	22	16
24	16	24	16	27	12	12	15
10	14	14	21	19	14	10	15
19	17	18	19	12	13	11	19
19	14	18	14	17	24	16	13
12	22	19	20	22	17	14	20
13	11	14	15	15	10	18	16
15	22	21	16	28	11	16	19

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 9

DATE: 29 NOV 2006

LOCATION: DONEGALL PASS

DAY: WEDNESDAY

TIME	EASTBOUND		TOT	TIME	EASTBOUND		TOT	TIME	EASTBOUND		TOT
	LV	HV			LV	HV			LV	HV	
0:00	10	0	10	8:00	38	6	44	16:00	29	0	29
0:15	9	0	9	8:15	24	7	31	16:15	18	1	19
0:30	5	0	5	8:30	29	3	32	16:30	35	0	35
0:45	6	0	6	8:45	36	1	37	16:45	29	0	29
H/TOT	30	0	30	H/TOT	127	17	144	H/TOT	111	1	112
1:00	8	0	8	9:00	26	1	27	17:00	22	0	22
1:15	12	0	12	9:15	16	2	18	17:15	36	0	36
1:30	5	0	5	9:30	32	3	35	17:30	25	0	25
1:45	5	0	5	9:45	29	2	31	17:45	25	0	25
H/TOT	30	0	30	H/TOT	103	8	111	H/TOT	108	0	108
2:00	4	0	4	10:00	22	2	24	18:00	27	0	27
2:15	5	0	5	10:15	20	4	24	18:15	27	0	27
2:30	1	0	1	10:30	14	2	16	18:30	28	0	28
2:45	2	0	2	10:45	21	2	23	18:45	34	0	34
H/TOT	12	0	12	H/TOT	77	10	87	H/TOT	116	0	116
3:00	3	0	3	11:00	20	6	26	19:00	12	0	12
3:15	0	0	0	11:15	26	7	33	19:15	30	0	30
3:30	1	0	1	11:30	26	3	29	19:30	14	0	14
3:45	0	0	0	11:45	33	1	34	19:45	14	0	14
H/TOT	4	0	4	H/TOT	105	17	122	H/TOT	70	0	70
4:00	0	0	0	12:00	44	6	50	20:00	14	0	14
4:15	1	0	1	12:15	37	3	40	20:15	18	0	18
4:30	0	0	0	12:30	28	5	33	20:30	20	0	20
4:45	1	1	2	12:45	29	3	32	20:45	27	0	27
H/TOT	2	1	3	H/TOT	138	17	155	H/TOT	79	0	79
5:00	2	0	2	13:00	34	4	38	21:00	20	0	20
5:15	1	0	1	13:15	39	4	43	21:15	19	0	19
5:30	2	0	2	13:30	28	5	33	21:30	15	0	15
5:45	4	0	4	13:45	31	2	33	21:45	28	0	28
H/TOT	9	0	9	H/TOT	132	15	147	H/TOT	82	0	82
6:00	1	1	2	14:00	29	0	29	22:00	21	0	21
6:15	3	2	5	14:15	30	3	33	22:15	36	0	36
6:30	5	3	8	14:30	30	3	33	22:30	12	0	12
6:45	10	2	12	14:45	41	0	41	22:45	13	0	13
H/TOT	19	8	27	H/TOT	130	6	136	H/TOT	82	0	82
7:00	12	2	14	15:00	40	2	42	23:00	15	0	15
7:15	11	4	15	15:15	37	1	38	23:15	11	0	11
7:30	24	2	26	15:30	30	1	31	23:30	10	0	10
7:45	17	2	19	15:45	68	2	70	23:45	12	0	12
H/TOT	64	10	74	H/TOT	175	6	181	H/TOT	48	0	48
								P/TOT	1853	116	1969

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 9

DATE: 29 NOV 2006

LOCATION: DONEGALL PASS

DAY: WEDNESDAY

TIME	WESTBOUND		TOT	TIME	WESTBOUND		TOT	TIME	WESTBOUND		TOT
	LV	HV			LV	HV			LV	HV	
0:00	15	0	15	8:00	42	3	45	16:00	53	3	56
0:15	13	0	13	8:15	29	4	33	16:15	50	0	50
0:30	18	0	18	8:30	20	0	20	16:30	49	0	49
0:45	9	0	9	8:45	23	0	23	16:45	45	0	45
H/TOT	55	0	55	H/TOT	114	7	121	H/TOT	197	3	200
1:00	8	0	8	9:00	32	1	33	17:00	46	0	46
1:15	15	0	15	9:15	43	1	44	17:15	45	0	45
1:30	9	0	9	9:30	22	0	22	17:30	57	0	57
1:45	13	0	13	9:45	34	2	36	17:45	86	0	86
H/TOT	45	0	45	H/TOT	131	4	135	H/TOT	234	0	234
2:00	4	1	5	10:00	38	5	43	18:00	34	0	34
2:15	2	0	2	10:15	40	2	42	18:15	65	1	66
2:30	4	0	4	10:30	34	4	38	18:30	58	1	59
2:45	4	0	4	10:45	38	6	44	18:45	55	0	55
H/TOT	14	1	15	H/TOT	150	17	167	H/TOT	212	2	214
3:00	5	0	5	11:00	41	4	45	19:00	67	0	67
3:15	2	0	2	11:15	50	6	56	19:15	65	1	66
3:30	4	0	4	11:30	37	3	40	19:30	74	0	74
3:45	1	0	1	11:45	42	2	44	19:45	45	0	45
H/TOT	12	0	12	H/TOT	170	15	185	H/TOT	251	1	252
4:00	3	0	3	12:00	51	0	51	20:00	76	0	76
4:15	4	0	4	12:15	39	5	44	20:15	37	0	37
4:30	0	0	0	12:30	47	5	52	20:30	31	0	31
4:45	1	0	1	12:45	44	5	49	20:45	43	0	43
H/TOT	8	0	8	H/TOT	181	15	196	H/TOT	187	0	187
5:00	6	3	9	13:00	44	1	45	21:00	35	0	35
5:15	3	0	3	13:15	39	6	45	21:15	41	0	41
5:30	5	1	6	13:30	40	4	44	21:30	39	0	39
5:45	9	0	9	13:45	43	3	46	21:45	37	0	37
H/TOT	23	4	27	H/TOT	166	14	180	H/TOT	152	0	152
6:00	8	1	9	14:00	40	0	40	22:00	31	0	31
6:15	10	2	12	14:15	48	0	48	22:15	25	1	26
6:30	16	1	17	14:30	62	2	64	22:30	15	0	15
6:45	23	1	24	14:45	65	0	65	22:45	17	0	17
H/TOT	57	5	62	H/TOT	215	2	217	H/TOT	88	1	89
7:00	23	3	26	15:00	68	0	68	23:00	29	0	29
7:15	52	2	54	15:15	52	2	54	23:15	23	0	23
7:30	41	3	44	15:30	67	2	69	23:30	17	0	17
7:45	59	2	61	15:45	59	1	60	23:45	16	0	16
H/TOT	175	10	185	H/TOT	246	5	251	H/TOT	85	0	85
								P/TOT	3168	106	3274

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Wednesday 29th November 2006 TIME : 10:00 - 12:00

SITE : 9 - Donegall Pass SPEED LIMIT : 30 mph

EASTBOUND STATISTICS			
Average Speed (mph)	18.6	Maximum Speed (mph)	32
Median Speed (mph)	18.8	Minimum Speed (mph)	9
85 %ile (mph)	24.4	Number Speeding	5 2.5%

EASTBOUND SPEEDS (mph)							
29	19	21	12	13	26	14	21
18	23	23	24	16	14	18	16
18	25	21	11	13	9	14	9
12	11	16	19	22	16	13	11
14	18	14	12	26	19	11	23
26	13	16	16	12	21	16	19
13	23	32	23	10	20	30	23
11	31	24	13	13	24	20	26
21	26	19	18	25	11	19	10
19	21	14	18	12	26	21	24
18	13	24	17	12	19	24	11
30	16	20	23	26	19	13	12
26	21	13	23	18	14	24	21
24	10	31	17	23	19	14	20
26	17	13	20	15	21	19	24
14	19	22	13	17	19	27	21
13	15	13	16	31	10	21	27
32	26	21	13	15	22	13	18
18	19	18	18	14	12	9	19
10	23	19	29	18	21	15	26
18	21	13	23	14	11	18	14
17	26	11	20	26	21	20	17
23	18	18	10	9	21	23	9
18	18	21	29	23	19	9	21
23	27	19	28	24	18	19	11

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Wednesday 29th November 2006 TIME : 10:00 - 12:00

SITE : 9 - Donegall Pass SPEED LIMIT : 30 mph

WESTBOUND STATISTICS			
Average Speed (mph)	19.1	Maximum Speed (mph)	35
Median Speed (mph)	19.0	Minimum Speed (mph)	9
85 %ile (mph)	24.0	Number Speeding	1 0.5%

WESTBOUND SPEEDS (mph)							
14	13	11	10	13	16	17	15
21	21	24	17	20	15	13	11
17	19	20	25	16	22	19	21
20	22	18	21	24	17	10	22
17	26	23	16	12	11	13	12
11	21	27	18	22	19	21	26
17	14	13	19	35	13	17	22
16	21	20	11	24	24	22	16
24	22	26	17	19	20	24	27
21	20	13	19	20	21	17	14
20	21	20	19	22	14	15	19
24	21	21	23	22	16	19	15
17	18	19	17	16	19	18	16
22	16	23	10	19	17	11	22
25	17	21	23	27	14	23	25
24	15	19	24	22	26	20	20
12	21	23	28	23	18	15	22
19	14	18	21	18	22	17	24
14	18	25	18	14	21	15	14
25	27	25	17	23	23	15	11
27	20	24	16	23	21	24	17
25	20	24	27	22	20	19	15
19	14	18	26	15	18	22	27
18	17	9	20	22	16	20	20
14	15	14	19	19	14	15	19

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 10

DATE: 29 NOV 2006

LOCATION: DUBLIN STREET

DAY: WEDNESDAY

TIME	SOUTHBOUND		TOT	TIME	SOUTHBOUND		TOT	TIME	SOUTHBOUND		TOT
	LV	HV			LV	HV			LV	HV	
0:00	123	0	123	8:00	421	28	449	16:00	397	13	410
0:15	112	0	112	8:15	451	36	487	16:15	356	13	369
0:30	101	1	102	8:30	426	24	450	16:30	398	14	412
0:45	74	0	74	8:45	381	32	413	16:45	494	11	505
H/TOT	410	1	411	H/TOT	1679	120	1799	H/TOT	1645	51	1696
1:00	103	2	105	9:00	325	20	345	17:00	499	21	520
1:15	80	3	83	9:15	308	25	333	17:15	482	17	499
1:30	82	2	84	9:30	352	25	377	17:30	463	10	473
1:45	66	0	66	9:45	322	25	347	17:45	498	11	509
H/TOT	331	7	338	H/TOT	1307	95	1402	H/TOT	1942	59	2001
2:00	66	1	67	10:00	296	24	320	18:00	503	15	518
2:15	51	1	52	10:15	265	33	298	18:15	436	5	441
2:30	43	1	44	10:30	267	25	292	18:30	396	7	403
2:45	30	1	31	10:45	280	25	305	18:45	342	8	350
H/TOT	190	4	194	H/TOT	1108	107	1215	H/TOT	1677	35	1712
3:00	23	0	23	11:00	276	25	301	19:00	327	9	336
3:15	17	4	21	11:15	266	32	298	19:15	342	7	349
3:30	13	2	15	11:30	300	24	324	19:30	287	6	293
3:45	13	3	16	11:45	283	28	311	19:45	311	4	315
H/TOT	66	9	75	H/TOT	1125	109	1234	H/TOT	1267	26	1293
4:00	6	2	8	12:00	312	34	346	20:00	287	8	295
4:15	10	0	10	12:15	305	32	337	20:15	279	4	283
4:30	13	3	16	12:30	301	21	322	20:30	300	6	306
4:45	17	3	20	12:45	337	27	364	20:45	282	5	287
H/TOT	46	8	54	H/TOT	1255	114	1369	H/TOT	1148	23	1171
5:00	10	1	11	13:00	361	22	383	21:00	270	2	272
5:15	13	2	15	13:15	317	21	338	21:15	260	4	264
5:30	11	0	11	13:30	317	23	340	21:30	206	4	210
5:45	26	9	35	13:45	307	18	325	21:45	196	3	199
H/TOT	60	12	72	H/TOT	1302	84	1386	H/TOT	932	13	945
6:00	29	7	36	14:00	338	22	360	22:00	195	1	196
6:15	33	5	38	14:15	335	21	356	22:15	208	2	210
6:30	48	12	60	14:30	362	27	389	22:30	215	5	220
6:45	62	9	71	14:45	387	18	405	22:45	197	0	197
H/TOT	172	33	205	H/TOT	1422	88	1510	H/TOT	815	8	823
7:00	105	13	118	15:00	346	23	369	23:00	223	4	227
7:15	183	19	202	15:15	325	20	345	23:15	190	0	190
7:30	315	23	338	15:30	388	17	405	23:30	185	0	185
7:45	373	31	404	15:45	380	18	398	23:45	131	0	131
H/TOT	976	86	1062	H/TOT	1439	78	1517	H/TOT	729	4	733
								P/TOT	23043	1174	24217

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Wednesday 29th November 2006 TIME : 15:00 -17:00

SITE : 10 - Dublin Street SPEED LIMIT : 30 mph

SOUTHBOUND STATISTICS			
Average Speed (mph)	19.7	Maximum Speed (mph)	33
Median Speed (mph)	19.1	Minimum Speed (mph)	9
85 %ile (mph)	23.8	Number Speeding	3 1.5%

SOUTHBOUND SPEEDS (mph)							
12	15	33	21	24	14	19	19
17	18	23	26	18	26	27	24
14	16	17	19	18	18	24	26
24	18	21	18	19	23	29	26
18	18	17	22	33	22	26	26
15	13	19	16	18	21	27	31
23	18	21	19	20	19	23	21
14	19	12	13	18	13	16	17
19	19	21	19	18	23	23	25
23	25	23	24	22	28	23	24
24	24	27	20	18	21	19	11
18	28	23	18	15	18	15	23
16	15	20	24	18	17	23	24
18	16	12	16	15	29	26	23
19	27	29	28	24	23	18	16
22	16	18	23	21	18	22	17
23	24	22	20	24	21	22	19
9	18	16	19	17	16	14	18
15	18	22	19	19	20	19	19
14	11	13	13	13	16	18	24
11	13	14	13	17	16	12	19
15	18	19	19	23	24	28	26
11	17	23	24	18	19	18	17
20	18	19	18	21	18	14	23
16	19	23	20	21	19	20	18

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 11

DATE: 29 NOV 2006

LOCATION: GREAT VICTORIA STREET

DAY: WEDNESDAY

TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT
	LV	HV			LV	HV			LV	HV	
0:00	102	0	102	8:00	432	28	460	16:00	349	15	364
0:15	101	0	101	8:15	445	29	474	16:15	317	18	335
0:30	103	2	105	8:30	428	26	454	16:30	197	14	211
0:45	94	1	95	8:45	455	36	491	16:45	334	8	342
H/TOT	400	3	403	H/TOT	1760	119	1879	H/TOT	1197	55	1252
1:00	94	0	94	9:00	466	29	495	17:00	331	13	344
1:15	91	3	94	9:15	449	28	477	17:15	241	9	250
1:30	104	1	105	9:30	383	34	417	17:30	279	12	291
1:45	94	4	98	9:45	319	31	350	17:45	277	14	291
H/TOT	383	8	391	H/TOT	1617	122	1739	H/TOT	1128	48	1176
2:00	71	0	71	10:00	313	28	341	18:00	293	9	302
2:15	56	2	58	10:15	316	20	336	18:15	288	13	301
2:30	44	1	45	10:30	270	38	308	18:30	311	3	314
2:45	25	0	25	10:45	304	31	335	18:45	334	8	342
H/TOT	196	3	199	H/TOT	1203	117	1320	H/TOT	1226	33	1259
3:00	26	1	27	11:00	305	32	337	19:00	300	6	306
3:15	24	0	24	11:15	326	30	356	19:15	301	4	305
3:30	13	1	14	11:30	317	32	349	19:30	329	6	335
3:45	12	2	14	11:45	319	27	346	19:45	326	8	334
H/TOT	75	4	79	H/TOT	1267	121	1388	H/TOT	1256	24	1280
4:00	13	4	17	12:00	328	26	354	20:00	260	6	266
4:15	5	1	6	12:15	326	29	355	20:15	263	4	267
4:30	12	4	16	12:30	354	29	383	20:30	239	5	244
4:45	12	3	15	12:45	311	26	337	20:45	270	4	274
H/TOT	42	12	54	H/TOT	1319	110	1429	H/TOT	1032	19	1051
5:00	19	1	20	13:00	373	25	398	21:00	239	4	243
5:15	18	4	22	13:15	336	18	354	21:15	235	3	238
5:30	43	4	47	13:30	326	22	348	21:30	218	4	222
5:45	29	3	32	13:45	320	26	346	21:45	208	3	211
H/TOT	109	12	121	H/TOT	1355	91	1446	H/TOT	900	14	914
6:00	39	5	44	14:00	335	15	350	22:00	191	2	193
6:15	34	11	45	14:15	324	20	344	22:15	198	1	199
6:30	63	7	70	14:30	329	20	349	22:30	170	4	174
6:45	100	8	108	14:45	327	23	350	22:45	170	2	172
H/TOT	236	31	267	H/TOT	1315	78	1393	H/TOT	729	9	738
7:00	121	13	134	15:00	347	22	369	23:00	172	2	174
7:15	230	19	249	15:15	362	16	378	23:15	146	0	146
7:30	343	23	366	15:30	306	18	324	23:30	124	0	124
7:45	432	20	452	15:45	378	20	398	23:45	105	0	105
H/TOT	1126	75	1201	H/TOT	1393	76	1469	H/TOT	547	2	549
								P/TOT	21811	1186	22997

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

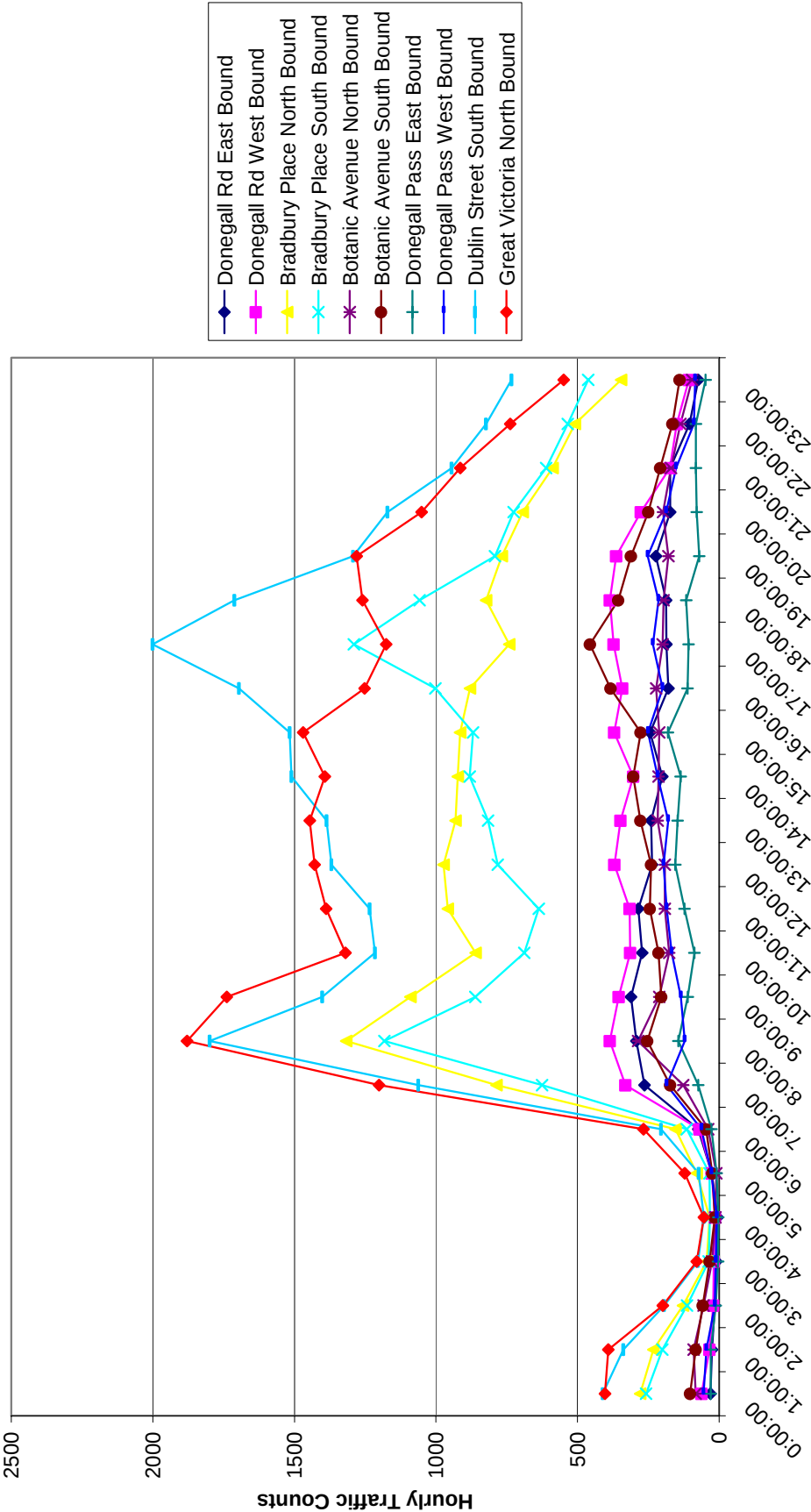
DATE : Wednesday 29th November 2006 TIME : 15:00 - 17:00

SITE : 11 - Great Victoria Street SPEED LIMIT : 30 mph

NORTHBOUND STATISTICS			
Average Speed (mph)	20.1	Maximum Speed (mph)	38
Median Speed (mph)	20.0	Minimum Speed (mph)	2
85 %ile (mph)	25.0	Number Speeding	4 2.0%

NORTHBOUND SPEEDS (mph)							
22	24	22	23	18	17	17	21
21	21	23	11	12	14	12	18
18	19	14	16	10	17	24	21
18	13	15	19	20	24	28	22
16	16	17	13	20	18	20	17
28	10	11	16	16	12	26	23
20	22	22	23	21	38	21	22
16	17	17	17	19	15	13	15
15	21	21	22	14	17	20	21
21	17	17	23	25	29	31	24
26	28	21	27	24	21	23	20
21	23	24	2	27	29	2	17
23	24	20	18	20	24	13	19
30	27	27	15	16	13	28	26
19	25	32	27	24	26	37	30
23	19	21	27	29	28	24	19
20	25	21	20	24	24	22	25
24	21	20	17	15	18	19	18
18	14	19	23	2	20	30	26
17	18	23	20	16	17	17	21
17	19	24	23	23	22	23	24
15	13	12	14	16	17	25	20
22	27	25	24	25	17	12	18
18	22	15	18	20	15	26	22
19	19	17	18	19	17	18	18

Diurnal Traffic Flows at Junction 3, Shaftesbury Avenue, November 2006



Count On Us**BELFAST CITY
AUTOMATIC TRAFFIC COUNTS****NOVEMBER 2006
32968**

Site: 12 - Donegall Road, 10 metres east of Richview Street
Filter time: 00:00 27 November 2006 => 00:00 28 November 2006
Direction: East (bound)
Speed limit: 30 mph

* 27 November 2006

Date and Time	MCL	CAR	LGV	PSV	2R	3R	4R	4A	5A	6A	5M	6M	7/+	Total	Mean	85th%	>PSL%
11/27/2006 0:00	0	55	1	0	0	1	0	1	0	0	0	0	0	58	24.8	29.1	8.6
11/27/2006 1:00	0	45	0	0	0	1	0	0	0	0	0	0	0	46	23.9	30.2	19.6
11/27/2006 2:00	1	25	0	0	0	1	0	0	0	0	0	0	0	27	27.3	33.1	37.0
11/27/2006 3:00	0	18	0	0	0	0	0	0	0	0	0	0	0	18	33.3	36.7	94.4
11/27/2006 4:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13	31.9	38.9	76.9
11/27/2006 5:00	0	52	1	0	1	2	0	1	0	0	1	0	0	58	25.4	31.5	27.6
11/27/2006 6:00	3	161	6	0	2	9	0	2	0	0	0	0	1	184	22.8	30.2	17.4
11/27/2006 7:00	8	612	3	0	0	19	0	8	2	5	3	0	10	670	19.2	23.3	1.0
11/27/2006 8:00	4	760	10	0	0	16	0	8	2	9	3	0	15	827	16.7	19.5	0.5
11/27/2006 9:00	4	681	8	0	1	22	0	15	2	8	4	0	14	759	15.7	19.2	0.0
11/27/2006 10:00	3	476	3	0	0	14	0	9	2	2	3	0	16	528	16.5	19.9	0.0
11/27/2006 11:00	3	499	5	0	2	14	0	5	2	3	6	0	6	545	17.1	20.8	0.0
11/27/2006 12:00	8	535	6	0	0	13	0	9	1	1	4	0	6	583	17.5	20.8	0.0
11/27/2006 13:00	6	513	3	0	0	16	0	9	3	6	3	0	5	564	17.7	21.7	0.7
11/27/2006 14:00	4	503	6	0	0	13	0	7	1	1	4	1	3	543	16.9	20.6	0.2
11/27/2006 15:00	4	478	5	0	1	14	0	8	2	4	4	0	3	523	17.0	20.4	0.0
11/27/2006 16:00	3	340	1	0	1	20	2	10	2	2	2	0	4	387	16.8	21.3	0.3
11/27/2006 17:00	0	285	2	0	0	20	0	9	2	3	1	0	6	328	18.3	20.8	0.9
11/27/2006 18:00	5	359	0	0	0	23	1	5	2	1	2	0	4	402	17.7	20.1	0.5
11/27/2006 19:00	2	330	1	0	0	18	0	8	0	5	1	0	3	368	19.0	23.7	0.8
11/27/2006 20:00	0	315	1	0	0	18	2	4	3	3	2	0	1	349	19.2	23.5	3.2
11/27/2006 21:00	1	213	2	0	0	11	0	4	0	1	0	0	3	235	20.8	26.4	3.0
11/27/2006 22:00	1	116	0	0	0	10	0	1	2	2	2	0	1	135	20.1	27.3	5.2
11/27/2006 23:00	1	79	0	0	0	6	0	1	0	1	0	0	0	88	22.6	27.7	8.0
07-19	52	6041	52	0	5	204	3	102	23	45	39	1	92	6659	17.2	20.6	0.3
06-22	58	7060	62	0	7	260	5	120	26	54	42	1	100	7795	17.6	21.3	1.0
06-00	60	7255	62	0	7	276	5	122	28	57	44	1	101	8018	17.7	21.5	1.1
00-00	61	7463	64	0	8	281	5	124	28	57	45	1	101	8238	17.9	21.9	1.9

Count On Us**BELFAST CITY
AUTOMATIC TRAFFIC COUNTS****NOVEMBER 2006
32968**

Site: 12 - Donegall Road, 10 metres east of Richview Street
Filter time: 00:00 27 November 2006 => 00:00 28 November 2006
Direction: West (bound)
Speed limit: 30 mph

* 27 November 2006

Date and Time	MCL	CAR	LGV	PSV	2R	3R	4R	4A	5A	6A	5M	6M	7/+	Total	Mean	85th%	>PSL%
11/27/2006 0:00	1	70	2	0	0	8	0	0	0	0	0	0	0	81	23.4	30.2	16.0
11/27/2006 1:00	0	48	1	1	0	6	0	0	0	0	0	0	0	56	24.7	30.9	19.6
11/27/2006 2:00	0	29	1	0	0	0	0	0	0	0	0	0	0	30	28.7	34.0	46.7
11/27/2006 3:00	0	19	1	1	0	2	0	0	0	0	0	0	0	23	29.9	39.6	47.8
11/27/2006 4:00	1	20	2	0	1	3	0	0	0	0	0	0	0	27	30.2	41.4	66.7
11/27/2006 5:00	0	43	1	2	1	1	0	0	0	0	0	0	0	48	27.2	35.1	43.8
11/27/2006 6:00	1	84	12	1	3	5	0	2	0	0	0	0	0	108	26.1	32.9	30.6
11/27/2006 7:00	4	437	7	2	4	26	2	2	1	4	1	0	3	493	20.0	23.9	1.0
11/27/2006 8:00	5	544	7	1	2	35	2	2	1	1	3	0	3	606	18.5	20.8	2.3
11/27/2006 9:00	6	528	9	0	3	22	3	1	1	2	2	0	1	578	17.3	20.4	0.0
11/27/2006 10:00	4	503	37	2	5	34	1	2	0	4	1	0	0	593	16.8	20.1	0.2
11/27/2006 11:00	4	517	32	3	8	30	2	7	0	1	1	0	1	606	17.5	20.4	0.3
11/27/2006 12:00	3	554	41	5	5	33	0	3	0	1	3	0	0	648	17.5	20.6	0.0
11/27/2006 13:00	6	556	34	2	3	27	2	4	0	0	2	0	0	636	18.4	21.7	0.2
11/27/2006 14:00	5	580	28	2	12	19	2	4	1	1	3	0	1	658	17.9	21.3	0.3
11/27/2006 15:00	2	591	34	3	5	24	1	9	0	2	2	0	0	673	17.3	20.4	0.1
11/27/2006 16:00	7	544	22	2	1	7	2	4	0	0	2	0	0	591	18.4	21.0	0.0
11/27/2006 17:00	16	621	8	1	2	6	1	3	0	0	0	0	0	658	16.5	20.1	0.0
11/27/2006 18:00	9	575	8	0	2	10	2	4	0	0	2	0	0	612	18.5	21.9	0.5
11/27/2006 19:00	9	408	4	1	0	5	0	1	0	0	1	0	0	429	18.9	22.8	1.4
11/27/2006 20:00	6	329	6	0	0	6	1	1	0	0	1	0	0	350	19.5	22.6	0.0
11/27/2006 21:00	2	281	5	0	2	6	0	0	0	1	0	0	0	297	19.8	23.3	2.0
11/27/2006 22:00	3	145	3	0	1	8	0	0	0	0	0	0	0	160	22.4	27.7	10.6
11/27/2006 23:00	0	81	1	0	0	9	0	0	0	0	1	0	0	92	23.7	29.8	15.2
07-19	71	6550	267	23	52	273	20	45	4	16	22	0	9	7352	17.8	21.0	0.4
06-22	89	7652	294	25	57	295	21	49	4	17	24	0	9	8536	18.1	21.5	0.9
06-00	92	7878	298	25	58	312	21	49	4	17	25	0	9	8788	18.3	21.7	1.2
00-00	94	8107	306	29	60	332	21	49	4	17	25	0	9	9053	18.5	21.9	2.1

Count On Us**BELFAST CITY
AUTOMATIC TRAFFIC COUNTS****NOVEMBER 2006
32968**

Site: 13 - Albert Bridge, 50 metres east of Laganbank Road
 Filter time: 00:00 29 November 2006 => 00:00 30 November 2006
 Direction: East (bound)
 Speed limit: 30 mph

* 29 November 2006

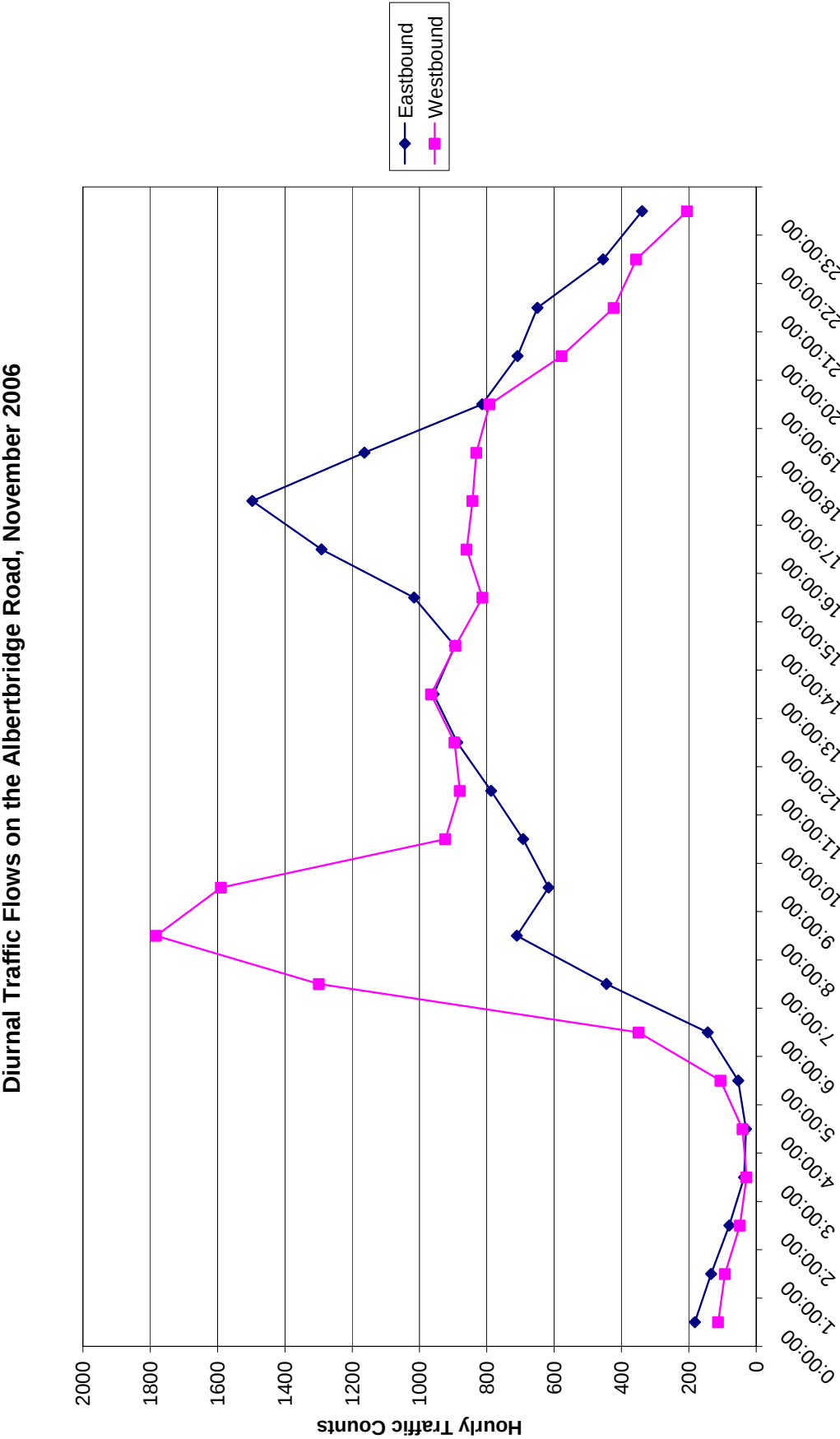
Date and Time	MCL	CAR	LGV	PSV	2R	3R	4R	4A	5A	6A	5M	6M	7/+	Total	Mean	85th%	>PSL%
11/29/2006 0:00	5	171	3	0	0	2	0	1	0	0	0	0	0	182	35.1	40.0	89.6
11/29/2006 1:00	3	129	1	1	0	0	0	0	0	0	0	0	0	134	38.0	42.5	94.0
11/29/2006 2:00	1	72	6	0	1	0	0	0	0	0	0	0	0	80	37.5	44.1	90.0
11/29/2006 3:00	0	34	1	1	0	0	0	0	0	0	0	0	0	36	37.4	42.3	91.7
11/29/2006 4:00	0	24	3	0	1	2	0	0	0	0	0	0	0	30	37.4	43.4	90.0
11/29/2006 5:00	0	45	6	0	2	0	0	0	0	0	0	0	0	53	35.7	43.8	79.2
11/29/2006 6:00	1	127	6	1	6	1	1	0	0	1	0	0	0	144	33.2	38.3	73.6
11/29/2006 7:00	4	404	17	0	8	6	1	1	0	0	0	1	3	445	28.8	35.1	46.1
11/29/2006 8:00	5	691	2	0	4	6	2	1	0	0	0	0	0	711	25.6	30.4	16.3
11/29/2006 9:00	1	579	13	1	9	5	2	3	1	1	1	0	1	617	28.4	35.1	42.5
11/29/2006 10:00	4	609	37	1	19	7	5	7	0	1	2	0	0	692	30.0	35.3	52.0
11/29/2006 11:00	5	689	42	3	17	6	5	15	0	2	2	0	1	787	30.2	34.9	56.3
11/29/2006 12:00	10	786	35	3	13	10	13	8	1	6	1	0	2	888	27.8	32.9	36.7
11/29/2006 13:00	5	866	35	0	17	8	7	12	0	4	2	0	2	958	28.4	33.1	39.0
11/29/2006 14:00	8	784	32	3	17	8	10	17	2	5	4	0	5	895	27.7	32.7	33.4
11/29/2006 15:00	13	902	35	2	16	13	7	12	0	4	5	0	7	1016	27.4	33.1	32.7
11/29/2006 16:00	12	1164	22	3	8	18	17	18	1	15	4	0	9	1291	22.3	26.6	6.0
11/29/2006 17:00	9	1340	11	4	12	29	22	29	2	7	8	0	24	1497	20.6	24.4	2.3
11/29/2006 18:00	7	1071	6	2	9	14	16	20	1	9	2	0	7	1164	24.1	29.1	12.6
11/29/2006 19:00	7	760	6	0	6	11	10	6	0	4	0	0	4	814	28.6	33.3	38.0
11/29/2006 20:00	15	650	7	0	12	13	4	2	0	5	1	0	0	709	30.6	34.7	55.6
11/29/2006 21:00	10	611	6	0	9	4	3	3	0	2	1	0	1	650	30.1	34.9	50.8
11/29/2006 22:00	3	427	2	0	8	4	3	6	0	0	2	0	0	455	32.3	36.2	75.8
11/29/2006 23:00	7	315	4	0	3	3	3	2	0	1	0	0	1	339	32.5	37.8	71.7
07-19	83	9885	287	22	149	130	107	143	8	54	31	1	61	10961	26.0	32.4	27.2
06-22	116	12033	312	23	182	159	125	154	8	66	33	1	66	13278	26.7	32.9	31.0
06-00	126	12774	318	23	193	166	131	162	8	67	35	1	67	14071	27.0	33.3	33.4
00-00	135	13250	338	25	197	170	131	163	8	67	35	1	67	14587	27.4	33.8	35.4

Count On Us**BELFAST CITY
AUTOMATIC TRAFFIC COUNTS****NOVEMBER 2006
32968**

Site: 13 - Albert Bridge, 50 metres east of Laganbank Road
 Filter time: 00:00 29 November 2006 => 00:00 30 November 2006
 Direction: West (bound)
 Speed limit: 30 mph

* 29 November 2006

Date and Time	MCL	CAR	LGV	PSV	2R	3R	4R	4A	5A	6A	5M	6M	7/+	Total	Mean	85th%	>PSL%
11/29/2006 0:00	2	105	1	0	0	5	0	0	0	0	0	0	0	113	36.2	41.8	86.7
11/29/2006 1:00	0	87	2	0	1	3	0	0	0	0	0	0	0	93	36.8	41.8	91.4
11/29/2006 2:00	1	44	2	0	1	0	0	0	0	0	0	0	0	48	37.0	43.8	83.3
11/29/2006 3:00	0	29	0	0	0	0	0	0	0	0	0	0	0	29	36.6	45.0	86.2
11/29/2006 4:00	1	27	7	1	3	1	0	0	0	0	0	0	0	40	37.2	44.3	87.5
11/29/2006 5:00	2	88	13	0	2	1	0	0	0	0	0	0	0	106	34.6	41.6	78.3
11/29/2006 6:00	3	303	16	0	5	13	4	2	0	2	1	0	0	349	31.1	37.1	58.2
11/29/2006 7:00	17	1149	21	2	11	23	17	20	4	12	7	1	15	1299	22.2	30.2	15.9
11/29/2006 8:00	21	1586	15	5	3	41	30	25	6	16	13	1	21	1783	18.0	23.5	2.1
11/29/2006 9:00	23	1403	16	4	17	32	22	32	2	12	7	1	19	1590	19.9	27.1	5.8
11/29/2006 10:00	15	824	22	1	8	15	13	12	0	6	2	1	4	923	25.3	32.7	28.7
11/29/2006 11:00	11	748	34	2	17	16	18	15	3	3	4	1	8	880	27.6	33.8	37.7
11/29/2006 12:00	11	814	14	2	8	12	4	13	2	4	6	1	5	896	25.3	32.0	24.6
11/29/2006 13:00	6	869	26	1	9	14	8	14	2	3	6	0	8	966	23.9	31.5	22.9
11/29/2006 14:00	9	806	19	3	10	14	10	10	4	4	0	0	4	893	25.8	32.0	26.9
11/29/2006 15:00	6	735	23	2	6	13	13	4	3	2	2	0	4	813	26.0	32.9	32.7
11/29/2006 16:00	15	783	12	0	6	13	10	6	4	4	1	0	6	860	22.1	29.3	11.6
11/29/2006 17:00	6	794	7	1	4	10	4	5	1	4	3	0	4	843	18.6	26.8	4.9
11/29/2006 18:00	10	762	11	0	5	19	6	10	1	2	2	0	3	831	24.5	30.6	20.1
11/29/2006 19:00	9	722	8	0	8	16	7	10	1	3	2	0	6	792	25.5	31.3	24.4
11/29/2006 20:00	2	529	9	1	10	16	4	2	0	2	2	0	1	578	28.8	34.0	38.6
11/29/2006 21:00	3	390	5	0	6	8	2	5	0	0	2	0	2	423	30.0	35.3	56.3
11/29/2006 22:00	5	324	3	0	6	7	1	6	2	1	1	0	0	356	31.1	36.2	59.8
11/29/2006 23:00	3	198	2	0	0	2	0	0	0	0	0	0	0	205	33.2	38.3	75.1
07-19	150	11273	220	23	104	222	155	166	32	72	53	6	101	12577	22.7	30.4	17.4
06-22	167	13217	258	24	133	275	172	185	33	79	60	6	110	14719	23.5	31.3	20.7
06-00	175	13739	263	24	139	284	173	191	35	80	61	6	110	15280	23.8	31.8	22.3
00-00	181	14119	288	25	146	294	173	191	35	80	61	6	110	15709	24.1	32.2	24.0



COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 14

DATE: 29 NOV 2006

LOCATION: CROMAC STREET

DAY: WEDNESDAY

TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT
	LV	HV			LV	HV			LV	HV	
0:00	156	0	156	8:00	264	14	278	16:00	515	11	526
0:15	57	0	57	8:15	340	11	351	16:15	589	11	600
0:30	56	0	56	8:30	363	26	389	16:30	484	16	500
0:45	44	0	44	8:45	319	17	336	16:45	588	12	600
H/TOT	313	0	313	H/TOT	1286	68	1354	H/TOT	2176	50	2226
1:00	55	1	56	9:00	332	20	352	17:00	580	13	593
1:15	43	1	44	9:15	343	17	360	17:15	592	14	606
1:30	91	1	92	9:30	269	19	288	17:30	590	17	607
1:45	57	0	57	9:45	279	21	300	17:45	520	11	531
H/TOT	246	3	249	H/TOT	1223	77	1300	H/TOT	2282	55	2337
2:00	37	0	37	10:00	172	21	193	18:00	582	6	588
2:15	27	1	28	10:15	198	24	222	18:15	641	2	643
2:30	22	0	22	10:30	243	17	260	18:30	394	7	401
2:45	18	0	18	10:45	239	19	258	18:45	481	8	489
H/TOT	104	1	105	H/TOT	852	81	933	H/TOT	2098	23	2121
3:00	18	1	19	11:00	264	13	277	19:00	230	9	239
3:15	8	0	8	11:15	205	9	214	19:15	351	6	357
3:30	12	0	12	11:30	249	16	265	19:30	313	7	320
3:45	4	0	4	11:45	296	12	308	19:45	321	5	326
H/TOT	42	1	43	H/TOT	1014	50	1064	H/TOT	1215	27	1242
4:00	11	1	12	12:00	317	14	331	20:00	279	4	283
4:15	10	0	10	12:15	287	8	295	20:15	214	3	217
4:30	1	0	1	12:30	374	14	388	20:30	297	2	299
4:45	4	1	5	12:45	303	7	310	20:45	297	2	299
H/TOT	26	2	28	H/TOT	1281	43	1324	H/TOT	1087	11	1098
5:00	3	0	3	13:00	335	10	345	21:00	344	2	346
5:15	24	1	25	13:15	370	13	383	21:15	314	1	315
5:30	21	2	23	13:30	375	14	389	21:30	277	2	279
5:45	30	1	31	13:45	340	16	356	21:45	225	0	225
H/TOT	78	4	82	H/TOT	1420	53	1473	H/TOT	1160	5	1165
6:00	34	2	36	14:00	326	15	341	22:00	231	2	233
6:15	25	3	28	14:15	351	25	376	22:15	214	3	217
6:30	41	7	48	14:30	284	11	295	22:30	215	0	215
6:45	61	0	61	14:45	407	8	415	22:45	201	2	203
H/TOT	161	12	173	H/TOT	1368	59	1427	H/TOT	861	7	868
7:00	113	3	116	15:00	364	9	373	23:00	229	2	231
7:15	128	10	138	15:15	416	7	423	23:15	161	1	162
7:30	199	1	200	15:30	437	7	444	23:30	185	0	185
7:45	267	3	270	15:45	579	12	591	23:45	58	0	58
H/TOT	707	17	724	H/TOT	1796	35	1831	H/TOT	633	3	636
								P/TOT	23429	687	24116

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 14

DATE: 29 NOV 2006

LOCATION: CROMAC STREET

DAY: WEDNESDAY

TIME	SOUTHBOUND		TOT	TIME	SOUTHBOUND		TOT	TIME	SOUTHBOUND		TOT
	LV	HV			LV	HV			LV	HV	
0:00	69	0	69	8:00	406	7	413	16:00	321	5	326
0:15	39	0	39	8:15	482	4	486	16:15	261	6	267
0:30	52	0	52	8:30	493	5	498	16:30	297	2	299
0:45	27	1	28	8:45	454	5	459	16:45	327	1	328
H/TOT	187	1	188	H/TOT	1835	21	1856	H/TOT	1206	14	1220
1:00	43	0	43	9:00	438	15	453	17:00	323	4	327
1:15	37	0	37	9:15	414	9	423	17:15	357	3	360
1:30	49	0	49	9:30	365	6	371	17:30	320	1	321
1:45	26	0	26	9:45	383	7	390	17:45	347	3	350
H/TOT	155	0	155	H/TOT	1600	37	1637	H/TOT	1347	11	1358
2:00	24	0	24	10:00	260	12	272	18:00	322	1	323
2:15	12	1	13	10:15	252	4	256	18:15	282	1	283
2:30	15	0	15	10:30	263	6	269	18:30	278	2	280
2:45	16	0	16	10:45	225	6	231	18:45	267	3	270
H/TOT	67	1	68	H/TOT	1000	28	1028	H/TOT	1149	7	1156
3:00	9	0	9	11:00	259	6	265	19:00	280	3	283
3:15	8	1	9	11:15	235	8	243	19:15	244	2	246
3:30	11	0	11	11:30	257	7	264	19:30	221	0	221
3:45	4	0	4	11:45	245	7	252	19:45	203	0	203
H/TOT	32	1	33	H/TOT	996	28	1024	H/TOT	948	5	953
4:00	6	1	7	12:00	238	5	243	20:00	161	1	162
4:15	6	0	6	12:15	258	9	267	20:15	171	1	172
4:30	3	1	4	12:30	248	6	254	20:30	181	1	182
4:45	5	3	8	12:45	240	4	244	20:45	157	1	158
H/TOT	20	5	25	H/TOT	984	24	1008	H/TOT	670	4	674
5:00	12	0	12	13:00	226	8	234	21:00	168	0	168
5:15	10	0	10	13:15	257	8	265	21:15	166	1	167
5:30	18	3	21	13:30	287	7	294	21:30	144	2	146
5:45	32	0	32	13:45	260	10	270	21:45	139	0	139
H/TOT	72	3	75	H/TOT	1030	33	1063	H/TOT	617	3	620
6:00	34	2	36	14:00	228	7	235	22:00	138	1	139
6:15	41	4	45	14:15	195	12	207	22:15	102	1	103
6:30	61	2	63	14:30	214	7	221	22:30	100	1	101
6:45	92	3	95	14:45	269	6	275	22:45	110	0	110
H/TOT	228	11	239	H/TOT	906	32	938	H/TOT	450	3	453
7:00	148	2	150	15:00	249	4	253	23:00	95	0	95
7:15	224	5	229	15:15	236	5	241	23:15	78	1	79
7:30	341	0	341	15:30	247	4	251	23:30	60	0	60
7:45	410	10	420	15:45	252	6	258	23:45	62	0	62
H/TOT	1123	17	1140	H/TOT	984	19	1003	H/TOT	295	1	296
								P/TOT	17901	309	18210

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Thursday 30th November 2006

TIME : 14:00 - 15:30

SITE : 14 - Cromac Street

SPEED LIMIT : 30 mph

NORTHBOUND STATISTICS			
Average Speed (mph)	21.4	Maximum Speed (mph)	31
Median Speed (mph)	21.0	Minimum Speed (mph)	9
85 %ile (mph)	26.0	Number Speeding	5 2.5%

NORTHBOUND SPEEDS (mph)							
23	22	24	25	22	19	18	19
23	24	21	25	26	30	31	20
18	17	14	20	16	14	15	22
29	24	25	27	31	31	29	28
20	21	20	22	22	24	22	23
24	24	26	21	23	22	21	18
22	22	25	23	22	19	25	22
28	27	27	21	16	31	23	28
21	21	15	20	26	27	28	29
20	17	18	21	22	19	21	14
15	23	22	27	21	19	17	18
17	19	22	20	14	15	23	21
25	24	26	23	22	18	23	25
21	26	26	24	27	21	23	28
19	14	27	29	24	17	18	16
19	21	23	27	26	17	19	20
25	14	9	13	15	18	19	23
19	18	17	20	21	18	20	24
22	20	19	15	13	20	27	24
21	26	25	21	24	30	22	17
23	17	17	14	11	16	23	17
14	17	20	23	21	22	28	27
21	19	22	20	20	24	31	25
21	15	20	15	16	22	22	21
17	21	21	22	16	27	20	22

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Thursday 30th November 2006

TIME : 14:00 - 15:30

SITE : 14 - Cromac Street

SPEED LIMIT : 30 mph

SOUTHBOUND STATISTICS			
Average Speed (mph)	23.9	Maximum Speed (mph)	35
Median Speed (mph)	23.8	Minimum Speed (mph)	9
85 %ile (mph)	28.8	Number Speeding	15 7.5%

SOUTHBOUND SPEEDS (mph)							
21	26	26	22	26	24	19	29
29	27	26	29	29	15	19	18
26	31	27	24	30	25	33	21
31	28	20	22	18	18	17	18
22	24	26	27	22	23	26	23
32	26	28	14	23	26	23	28
18	26	21	21	29	30	30	26
22	25	26	26	21	21	26	28
17	22	20	22	21	18	31	24
23	23	9	28	24	28	24	29
23	23	19	25	20	21	21	21
26	22	21	18	30	30	26	24
18	19	24	24	33	27	18	18
27	29	19	28	26	23	19	31
28	19	19	23	32	34	28	29
21	29	35	33	21	25	16	19
18	22	21	17	23	21	21	26
35	28	28	27	32	23	28	21
21	21	24	19	28	23	22	21
29	24	21	24	24	23	26	31
24	26	24	26	28	31	27	24
18	20	26	26	23	23	21	21
24	21	24	26	21	23	30	23
20	23	23	23	16	14	26	21
24	26	24	26	17	20	21	27

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 15

DATE: 29 NOV 2006

LOCATION: EAST BRIDGE STREET

DAY: WEDNESDAY

TIME	EASTBOUND		TOT	TIME	EASTBOUND		TOT	TIME	EASTBOUND		TOT
	LV	HV			LV	HV			LV	HV	
0:00	53	0	53	8:00	118	13	131	16:00	185	16	201
0:15	34	0	34	8:15	150	11	161	16:15	99	12	111
0:30	45	0	45	8:30	156	16	172	16:30	118	22	140
0:45	54	0	54	8:45	115	11	126	16:45	235	19	254
H/TOT	186	0	186	H/TOT	539	51	590	H/TOT	637	69	706
1:00	38	1	39	9:00	124	13	137	17:00	224	19	243
1:15	39	1	40	9:15	124	13	137	17:15	218	18	236
1:30	30	0	30	9:30	132	18	150	17:30	224	25	249
1:45	21	0	21	9:45	116	18	134	17:45	246	13	259
H/TOT	128	2	130	H/TOT	496	62	558	H/TOT	912	75	987
2:00	22	0	22	10:00	135	17	152	18:00	205	11	216
2:15	16	0	16	10:15	113	15	128	18:15	215	10	225
2:30	13	0	13	10:30	125	3	128	18:30	181	12	193
2:45	7	0	7	10:45	105	15	120	18:45	162	11	173
H/TOT	58	0	58	H/TOT	478	50	528	H/TOT	763	44	807
3:00	15	1	16	11:00	146	7	153	19:00	162	11	173
3:15	5	0	5	11:15	126	4	130	19:15	154	10	164
3:30	8	0	8	11:30	109	7	116	19:30	123	10	133
3:45	2	0	2	11:45	148	6	154	19:45	148	11	159
H/TOT	30	1	31	H/TOT	529	24	553	H/TOT	587	42	629
4:00	6	2	8	12:00	131	5	136	20:00	91	6	97
4:15	6	0	6	12:15	134	2	136	20:15	49	8	57
4:30	3	0	3	12:30	166	6	172	20:30	120	4	124
4:45	6	1	7	12:45	153	1	154	20:45	126	6	132
H/TOT	21	3	24	H/TOT	584	14	598	H/TOT	386	24	410
5:00	1	0	1	13:00	167	3	170	21:00	150	4	154
5:15	9	0	9	13:15	168	5	173	21:15	142	1	143
5:30	17	0	17	13:30	192	6	198	21:30	110	6	116
5:45	12	0	12	13:45	154	2	156	21:45	98	1	99
H/TOT	39	0	39	H/TOT	681	16	697	H/TOT	500	12	512
6:00	16	1	17	14:00	162	5	167	22:00	84	4	88
6:15	16	1	17	14:15	150	7	157	22:15	105	6	111
6:30	24	3	27	14:30	153	14	167	22:30	98	0	98
6:45	36	0	36	14:45	172	13	185	22:45	80	4	84
H/TOT	92	5	97	H/TOT	637	39	676	H/TOT	367	14	381
7:00	55	4	59	15:00	141	5	146	23:00	78	0	78
7:15	82	6	88	15:15	179	9	188	23:15	62	1	63
7:30	112	9	121	15:30	165	4	169	23:30	54	0	54
7:45	132	5	137	15:45	260	13	273	23:45	28	0	28
H/TOT	381	24	405	H/TOT	745	31	776	H/TOT	222	1	223
								P/TOT	9998	603	10601

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 15

DATE: 29 NOV 2006

LOCATION: EAST BRIDGE STREET

DAY: WEDNESDAY

TIME	WESTBOUND		TOT	TIME	WESTBOUND		TOT	TIME	WESTBOUND		TOT
	LV	HV			LV	HV			LV	HV	
0:00	16	0	16	8:00	665	23	688	16:00	476	17	493
0:15	53	0	53	8:15	756	18	774	16:15	341	13	354
0:30	68	0	68	8:30	715	17	732	16:30	427	13	440
0:45	64	1	65	8:45	672	18	690	16:45	478	17	495
H/TOT	201	1	202	H/TOT	2808	76	2884	H/TOT	1722	60	1782
1:00	51	1	52	9:00	667	28	695	17:00	463	14	477
1:15	48	1	49	9:15	600	30	630	17:15	459	8	467
1:30	11	0	11	9:30	599	30	629	17:30	434	13	447
1:45	8	0	8	9:45	551	27	578	17:45	520	9	529
H/TOT	118	2	120	H/TOT	2417	115	2532	H/TOT	1876	44	1920
2:00	29	0	29	10:00	496	24	520	18:00	415	9	424
2:15	16	1	17	10:15	457	18	475	18:15	371	9	380
2:30	17	0	17	10:30	410	20	430	18:30	378	10	388
2:45	13	0	13	10:45	389	17	406	18:45	391	8	399
H/TOT	75	1	76	H/TOT	1752	79	1831	H/TOT	1555	36	1591
3:00	13	0	13	11:00	393	23	416	19:00	429	7	436
3:15	10	1	11	11:15	376	19	395	19:15	365	7	372
3:30	16	0	16	11:30	397	21	418	19:30	311	3	314
3:45	4	0	4	11:45	393	18	411	19:45	290	6	296
H/TOT	43	1	44	H/TOT	1559	81	1640	H/TOT	1395	23	1418
4:00	8	2	10	12:00	353	13	366	20:00	225	4	229
4:15	5	0	5	12:15	424	17	441	20:15	245	6	251
4:30	11	2	13	12:30	363	19	382	20:30	250	3	253
4:45	13	4	17	12:45	367	10	377	20:45	222	5	227
H/TOT	37	8	45	H/TOT	1507	59	1566	H/TOT	942	18	960
5:00	20	3	23	13:00	353	17	370	21:00	214	4	218
5:15	13	0	13	13:15	395	16	411	21:15	216	4	220
5:30	33	4	37	13:30	417	15	432	21:30	170	7	177
5:45	56	2	58	13:45	417	12	429	21:45	181	2	183
H/TOT	122	9	131	H/TOT	1582	60	1642	H/TOT	781	17	798
6:00	56	3	59	14:00	408	15	423	22:00	180	4	184
6:15	63	8	71	14:15	351	12	363	22:15	154	4	158
6:30	95	4	99	14:30	367	18	385	22:30	131	2	133
6:45	172	9	181	14:45	383	17	400	22:45	140	3	143
H/TOT	386	24	410	H/TOT	1509	62	1571	H/TOT	605	13	618
7:00	242	14	256	15:00	345	14	359	23:00	121	1	122
7:15	406	15	421	15:15	359	21	380	23:15	97	1	98
7:30	582	17	599	15:30	365	16	381	23:30	79	0	79
7:45	671	25	696	15:45	383	12	395	23:45	87	0	87
H/TOT	1901	71	1972	H/TOT	1452	63	1515	H/TOT	384	2	386
								P/TOT	26729	925	27654

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Friday 1st December 2006

TIME : 11:30 - 13:30

SITE : 15 - East Bridge Street

SPEED LIMIT : 30 mph

EASTBOUND STATISTICS			
Average Speed (mph)	20.3	Maximum Speed (mph)	34
Median Speed (mph)	20.6	Minimum Speed (mph)	8
85 %ile (mph)	24.4	Number Speeding	5 2.5%

EASTBOUND SPEEDS (mph)							
21	19	28	18	13	25	19	18
23	19	19	24	22	24	19	18
21	19	18	17	19	24	21	22
11	22	23	18	21	14	18	16
24	23	16	21	16	20	22	17
16	14	17	21	19	18	21	22
21	17	23	12	13	15	22	21
21	23	18	27	23	18	17	21
19	16	19	21	18	19	14	19
19	17	16	21	18	23	17	16
11	8	24	21	21	19	14	18
24	18	18	22	14	23	20	16
19	22	18	18	21	22	16	21
18	21	23	14	23	21	16	19
13	11	13	18	16	25	28	22
25	23	27	24	26	29	32	28
24	20	13	11	14	22	24	19
16	15	16	17	16	24	21	32
12	24	15	23	22	24	26	24
18	25	21	24	26	28	31	25
20	22	22	24	23	27	26	17
23	24	22	20	16	18	21	15
21	23	22	21	23	19	18	23
16	27	23	30	28	25	23	26
25	21	18	34	16	14	29	32

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Friday 1st December 2006

TIME : 11:30 - 13:30

SITE : 15 - East Bridge Street

SPEED LIMIT : 30 mph

WESTBOUND STATISTICS			
Average Speed (mph)	21.4	Maximum Speed (mph)	38
Median Speed (mph)	22.0	Minimum Speed (mph)	11
85 %ile (mph)	26.0	Number Speeding	5 2.5%

WESTBOUND SPEEDS (mph)							
11	15	17	21	14	16	26	18
18	21	23	24	20	17	19	23
13	22	25	23	24	16	19	21
20	20	24	19	25	16	14	18
24	25	25	22	30	22	26	24
23	20	24	31	26	21	22	24
20	21	23	27	14	21	23	26
31	16	19	17	14	18	16	14
25	21	24	25	24	26	27	27
29	15	17	19	20	19	23	22
21	22	26	20	18	28	22	25
30	29	31	25	31	23	26	20
25	20	21	14	24	22	25	22
22	20	16	26	23	24	26	38
25	17	20	15	13	15	18	22
27	30	29	23	25	30	27	28
19	22	20	15	20	17	12	16
23	25	16	25	21	13	16	22
16	23	11	23	19	11	17	14
30	26	18	24	14	22	26	28
15	19	18	23	29	27	24	26
23	28	15	21	18	17	24	28
24	30	26	22	15	28	26	23
18	13	22	17	22	23	14	15
17	23	13	11	19	16	24	19

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 16

DATE: 29 NOV 2006

LOCATION: VICTORIA STREET

DAY: WEDNESDAY

TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT
	LV	HV			LV	HV			LV	HV	
00:00	50	0	50	08:00	405	17	422	16:00	485	7	492
00:15	37	0	37	08:15	464	14	478	16:15	570	6	576
00:30	27	0	27	08:30	429	22	451	16:30	496	5	501
00:45	27	0	27	08:45	422	19	441	16:45	504	9	513
H/TOT	141	0	141	H/TOT	1720	72	1792	H/TOT	2055	27	2082
01:00	25	1	26	09:00	437	20	457	17:00	496	4	500
01:15	15	1	16	09:15	405	25	430	17:15	476	1	477
01:30	23	1	24	09:30	371	25	396	17:30	480	4	484
01:45	18	0	18	09:45	331	23	354	17:45	447	4	451
H/TOT	81	3	84	H/TOT	1544	93	1637	H/TOT	1899	13	1912
02:00	20	0	20	10:00	273	16	289	18:00	470	3	473
02:15	15	1	16	10:15	290	23	313	18:15	515	0	515
02:30	11	0	11	10:30	265	28	293	18:30	313	3	316
02:45	8	0	8	10:45	298	15	313	18:45	443	2	445
H/TOT	54	1	55	H/TOT	1126	82	1208	H/TOT	1741	8	1749
03:00	7	0	7	11:00	252	23	275	19:00	217	2	219
03:15	5	0	5	11:15	220	16	236	19:15	318	1	319
03:30	9	0	9	11:30	280	23	303	19:30	280	0	280
03:45	2	0	2	11:45	296	17	313	19:45	260	0	260
H/TOT	23	0	23	H/TOT	1048	79	1127	H/TOT	1075	3	1078
04:00	7	0	7	12:00	301	17	318	20:00	252	1	253
04:15	3	0	3	12:15	319	14	333	20:15	239	0	239
04:30	6	1	7	12:30	323	21	344	20:30	246	0	246
04:45	6	1	7	12:45	277	12	289	20:45	236	0	236
H/TOT	22	2	24	H/TOT	1220	64	1284	H/TOT	973	1	974
05:00	10	3	13	13:00	295	16	311	21:00	240	2	242
05:15	18	1	19	13:15	340	16	356	21:15	222	3	225
05:30	19	3	22	13:30	313	16	329	21:30	193	1	194
05:45	42	3	45	13:45	343	16	359	21:45	169	1	170
H/TOT	89	10	99	H/TOT	1291	64	1355	H/TOT	824	7	831
06:00	40	2	42	14:00	344	18	362	22:00	189	1	190
06:15	31	6	37	14:15	357	18	375	22:15	161	0	161
06:30	51	6	57	14:30	284	8	292	22:30	148	1	149
06:45	105	6	111	14:45	349	6	355	22:45	151	1	152
H/TOT	227	20	247	H/TOT	1334	50	1384	H/TOT	649	3	652
07:00	152	11	163	15:00	319	14	333	23:00	177	3	180
07:15	228	14	242	15:15	360	14	374	23:15	118	0	118
07:30	328	9	337	15:30	390	15	405	23:30	150	0	150
07:45	396	13	409	15:45	450	5	455	23:45	55	0	55
H/TOT	1104	47	1151	H/TOT	1519	48	1567	H/TOT	500	3	503
								P/TOT	22259	700	22959

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Thursday 30th November 2006

TIME : 15:30 - 17:30

SITE : 16 - Victoria Street

SPEED LIMIT : 30 mph

NORTHBOUND STATISTICS			
Average Speed (mph)	16.2	Maximum Speed (mph)	30
Median Speed (mph)	16.0	Minimum Speed (mph)	9
85 %ile (mph)	20.0	Number Speeding	0 0.0%

NORTHBOUND SPEEDS (mph)							
15	19	18	23	20	24	25	19
16	21	13	15	10	12	14	14
23	13	19	16	17	19	20	22
16	20	14	21	14	16	14	15
19	22	17	21	19	17	18	18
16	15	15	12	18	18	19	19
17	19	14	13	10	10	13	20
20	16	22	18	19	18	15	19
21	16	26	20	14	17	21	15
25	21	21	16	16	13	11	16
11	13	16	15	19	13	17	16
18	24	17	15	17	16	18	15
17	17	15	17	18	19	18	18
9	19	12	15	21	20	15	22
16	10	16	13	12	9	10	9
22	18	18	20	17	16	21	18
15	11	12	12	16	11	14	12
13	28	28	10	12	17	18	12
12	12	10	12	13	15	15	16
10	11	10	11	11	12	12	11
12	16	20	14	27	15	11	11
17	20	18	21	13	14	15	11
18	16	15	12	15	18	16	16
19	11	19	16	14	30	14	16
18	17	16	14	13	14	11	12

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 17

DATE: 29 NOV 2006

LOCATION: DUNBAR LINK

DAY: WEDNESDAY

TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT
	LV	HV			LV	HV			LV	HV	
00:00	42	0	42	08:00	197	10	207	16:00	411	4	415
00:15	30	2	32	08:15	313	18	331	16:15	455	4	459
00:30	28	0	28	08:30	331	20	351	16:30	460	6	466
00:45	29	0	29	08:45	330	14	344	16:45	428	6	434
H/TOT	129	2	131	H/TOT	1171	62	1233	H/TOT	1754	20	1774
01:00	25	1	26	09:00	344	13	357	17:00	437	4	441
01:15	10	0	10	09:15	277	19	296	17:15	441	4	445
01:30	19	0	19	09:30	253	17	270	17:30	417	4	421
01:45	22	3	25	09:45	232	14	246	17:45	383	5	388
H/TOT	76	4	80	H/TOT	1106	63	1169	H/TOT	1678	17	1695
02:00	15	2	17	10:00	252	20	272	18:00	323	4	327
02:15	10	1	11	10:15	206	18	224	18:15	319	1	320
02:30	15	0	15	10:30	210	14	224	18:30	239	2	241
02:45	3	2	5	10:45	215	18	233	18:45	214	0	214
H/TOT	43	5	48	H/TOT	883	70	953	H/TOT	1095	7	1102
03:00	2	0	2	11:00	188	17	205	19:00	217	0	217
03:15	9	0	9	11:15	228	23	251	19:15	203	1	204
03:30	4	2	6	11:30	221	22	243	19:30	171	0	171
03:45	7	1	8	11:45	256	16	272	19:45	152	1	153
H/TOT	22	3	25	H/TOT	893	78	971	H/TOT	743	2	745
04:00	6	0	6	12:00	264	23	287	20:00	171	2	173
04:15	7	1	8	12:15	269	11	280	20:15	145	0	145
04:30	3	0	3	12:30	280	12	292	20:30	131	2	133
04:45	9	1	10	12:45	230	17	247	20:45	124	1	125
H/TOT	25	2	27	H/TOT	1043	63	1106	H/TOT	571	5	576
05:00	5	1	6	13:00	267	16	283	21:00	144	1	145
05:15	9	0	9	13:15	310	13	323	21:15	125	1	126
05:30	11	4	15	13:30	293	18	311	21:30	116	0	116
05:45	25	3	28	13:45	262	13	275	21:45	95	0	95
H/TOT	50	8	58	H/TOT	1132	60	1192	H/TOT	480	2	482
06:00	27	3	30	14:00	283	16	299	22:00	102	1	103
06:15	21	4	25	14:15	258	11	269	22:15	97	1	98
06:30	34	4	38	14:30	267	14	281	22:30	76	0	76
06:45	67	7	74	14:45	262	6	268	22:45	92	3	95
H/TOT	149	18	167	H/TOT	1070	47	1117	H/TOT	367	5	372
07:00	93	6	99	15:00	245	13	258	23:00	99	0	99
07:15	67	7	74	15:15	272	12	284	23:15	67	2	69
07:30	93	6	99	15:30	303	8	311	23:30	68	0	68
07:45	143	10	153	15:45	310	4	314	23:45	51	0	51
H/TOT	396	29	425	H/TOT	1130	37	1167	H/TOT	285	2	287
								P/TOT	16291	611	16902

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 17

DATE: 29 NOV 2006

LOCATION: DUNBAR LINK

DAY: WEDNESDAY

TIME	SOUTHBOUND		TOT	TIME	SOUTHBOUND		TOT	TIME	SOUTHBOUND		TOT
	LV	HV			LV	HV			LV	HV	
00:00	26	0	26	08:00	378	13	391	16:00	252	5	257
00:15	22	0	22	08:15	361	11	372	16:15	283	8	291
00:30	18	0	18	08:30	346	11	357	16:30	322	10	332
00:45	9	0	9	08:45	340	9	349	16:45	320	5	325
H/TOT	75	0	75	H/TOT	1425	44	1469	H/TOT	1177	28	1205
01:00	12	0	12	09:00	317	13	330	17:00	365	4	369
01:15	13	1	14	09:15	304	28	332	17:15	353	2	355
01:30	8	1	9	09:30	288	27	315	17:30	263	5	268
01:45	4	0	4	09:45	278	13	291	17:45	278	3	281
H/TOT	37	2	39	H/TOT	1187	81	1268	H/TOT	1259	14	1273
02:00	6	0	6	10:00	249	17	266	18:00	224	0	224
02:15	4	0	4	10:15	189	13	202	18:15	177	1	178
02:30	6	0	6	10:30	208	11	219	18:30	184	3	187
02:45	6	0	6	10:45	204	16	220	18:45	188	1	189
H/TOT	22	0	22	H/TOT	850	57	907	H/TOT	773	5	778
03:00	4	0	4	11:00	210	15	225	19:00	164	1	165
03:15	4	0	4	11:15	202	13	215	19:15	167	4	171
03:30	3	0	3	11:30	205	14	219	19:30	144	4	148
03:45	1	1	2	11:45	216	16	232	19:45	115	1	116
H/TOT	12	1	13	H/TOT	833	58	891	H/TOT	590	10	600
04:00	1	0	1	12:00	235	12	247	20:00	124	0	124
04:15	3	1	4	12:15	226	17	243	20:15	82	2	84
04:30	1	1	2	12:30	224	10	234	20:30	74	0	74
04:45	7	1	8	12:45	225	20	245	20:45	95	1	96
H/TOT	12	3	15	H/TOT	910	59	969	H/TOT	375	3	378
05:00	6	2	8	13:00	212	13	225	21:00	95	0	95
05:15	9	2	11	13:15	209	11	220	21:15	48	0	48
05:30	6	5	11	13:30	266	11	277	21:30	84	2	86
05:45	17	5	22	13:45	213	10	223	21:45	78	0	78
H/TOT	38	14	52	H/TOT	900	45	945	H/TOT	305	2	307
06:00	18	6	24	14:00	230	13	243	22:00	63	1	64
06:15	28	3	31	14:15	195	21	216	22:15	47	0	47
06:30	34	5	39	14:30	222	12	234	22:30	48	0	48
06:45	73	6	79	14:45	242	13	255	22:45	35	0	35
H/TOT	153	20	173	H/TOT	889	59	948	H/TOT	193	1	194
07:00	97	6	103	15:00	215	8	223	23:00	32	1	33
07:15	209	8	217	15:15	220	8	228	23:15	37	2	39
07:30	279	8	287	15:30	230	11	241	23:30	33	0	33
07:45	368	14	382	15:45	266	6	272	23:45	28	0	28
H/TOT	953	36	989	H/TOT	931	33	964	H/TOT	130	3	133
								P/TOT	14029	578	14607

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Friday 1st December 2006

TIME : 09:30 - 11:30

SITE : 17 - Dunbar Link

SPEED LIMIT : 30 mph

NORTHBOUND STATISTICS					
Average Speed (mph)	26.6	Maximum Speed (mph)	40		
Median Speed (mph)	26.0	Minimum Speed (mph)	16		
85 %ile (mph)	31.0	Number Speeding	35	17.5%	

NORTHBOUND SPEEDS (mph)							
27	29	17	31	26	23	24	30
36	32	31	28	29	29	29	27
28	31	19	24	23	28	24	32
29	23	26	20	37	28	16	23
30	26	30	17	19	33	35	25
24	26	27	28	24	29	30	31
27	26	27	28	28	31	27	28
20	22	23	25	24	24	24	21
27	26	25	26	26	26	23	27
25	29	30	28	23	26	32	30
26	28	28	27	26	33	24	27
26	27	25	22	22	23	26	24
32	31	23	25	24	29	21	16
25	29	40	31	39	27	25	36
22	27	28	24	25	22	24	26
21	26	24	16	33	32	34	24
24	23	27	26	29	28	28	27
33	35	28	28	29	34	26	24
23	23	21	25	24	21	21	20
35	34	34	31	33	29	22	19
24	18	22	29	28	28	25	24
21	29	29	27	24	24	25	31
30	24	26	26	32	28	20	27
24	25	29	22	20	23	24	27
31	33	28	29	32	30	30	25

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Friday 1st December 2006

TIME : 09:30 - 11:30

SITE : 17 - Dunbar Link

SPEED LIMIT : 30 mph

SOUTHBOUND STATISTICS			
Average Speed (mph)	18.8	Maximum Speed (mph)	33
Median Speed (mph)	18.8	Minimum Speed (mph)	9
85 %ile (mph)	24.4	Number Speeding	4 2.0%

SOUTHBOUND SPEEDS (mph)							
20	16	11	24	25	24	10	31
12	13	17	30	26	25	16	15
26	29	24	21	23	21	20	13
18	12	16	14	22	23	21	24
14	17	21	19	16	17	28	12
11	21	24	16	15	21	19	16
23	19	29	24	24	10	9	14
15	11	22	19	26	28	23	28
19	28	26	14	13	11	10	13
16	18	17	13	27	23	20	15
13	10	15	18	20	17	26	21
16	27	26	24	18	14	11	15
23	16	18	18	26	16	25	19
21	20	15	15	23	20	18	22
22	16	13	31	22	23	9	16
11	16	11	22	18	12	11	10
33	21	12	14	25	23	24	16
9	16	13	22	18	22	19	22
10	12	23	14	10	13	22	17
13	23	20	13	19	16	12	19
28	24	19	22	23	21	14	11
19	16	21	21	23	23	23	15
24	23	24	24	20	13	23	18
20	14	21	18	21	16	17	12
23	24	22	18	15	18	21	33

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 18

DATE: 29 NOV 2006

LOCATION: WARING STREET

DAY: WEDNESDAY

TIME	EASTBOUND		TOT	TIME	EASTBOUND		TOT	TIME	EASTBOUND		TOT
	LV	HV			LV	HV			LV	HV	
00:00	81	0	81	08:00	701	23	724	16:00	598	9	607
00:15	83	0	83	08:15	641	14	655	16:15	618	10	628
00:30	63	1	64	08:30	618	16	634	16:30	671	12	683
00:45	37	0	37	08:45	615	18	633	16:45	678	5	683
H/TOT	264	1	265	H/TOT	2575	71	2646	H/TOT	2565	36	2601
01:00	44	0	44	09:00	569	23	592	17:00	792	6	798
01:15	50	1	51	09:15	535	38	573	17:15	792	2	794
01:30	29	1	30	09:30	543	43	586	17:30	664	6	670
01:45	26	1	27	09:45	528	23	551	17:45	660	4	664
H/TOT	149	3	152	H/TOT	2175	127	2302	H/TOT	2908	18	2926
02:00	13	-2	11	10:00	444	27	471	18:00	545	1	546
02:15	14	0	14	10:15	391	24	415	18:15	433	1	434
02:30	11	0	11	10:30	421	25	446	18:30	415	3	418
02:45	11	0	11	10:45	452	27	479	18:45	426	2	428
H/TOT	49	-2	47	H/TOT	1708	103	1811	H/TOT	1819	7	1826
03:00	8	0	8	11:00	442	29	471	19:00	388	1	389
03:15	5	1	6	11:15	454	19	473	19:15	367	6	373
03:30	7	0	7	11:30	474	29	503	19:30	290	4	294
03:45	3	1	4	11:45	469	22	491	19:45	246	1	247
H/TOT	23	2	25	H/TOT	1839	99	1938	H/TOT	1291	12	1303
04:00	5	0	5	12:00	518	15	533	20:00	282	0	282
04:15	3	2	5	12:15	527	24	551	20:15	214	4	218
04:30	7	2	9	12:30	506	16	522	20:30	214	0	214
04:45	19	2	21	12:45	477	26	503	20:45	241	1	242
H/TOT	34	6	40	H/TOT	2028	81	2109	H/TOT	951	5	956
05:00	12	4	16	13:00	502	14	516	21:00	217	1	218
05:15	22	3	25	13:15	505	17	522	21:15	189	0	189
05:30	35	7	42	13:30	560	13	573	21:30	194	2	196
05:45	44	7	51	13:45	493	19	512	21:45	154	0	154
H/TOT	113	21	134	H/TOT	2060	63	2123	H/TOT	754	3	757
06:00	43	7	50	14:00	540	22	562	22:00	131	2	133
06:15	56	2	58	14:15	476	32	508	22:15	135	0	135
06:30	85	8	93	14:30	480	16	496	22:30	132	0	132
06:45	141	8	149	14:45	448	18	466	22:45	104	1	105
H/TOT	325	25	350	H/TOT	1944	88	2032	H/TOT	502	3	505
07:00	172	11	183	15:00	466	16	482	23:00	112	2	114
07:15	398	15	413	15:15	518	13	531	23:15	101	2	103
07:30	581	20	601	15:30	473	14	487	23:30	95	0	95
07:45	736	18	754	15:45	573	10	583	23:45	77	0	77
H/TOT	1887	64	1951	H/TOT	2030	53	2083	H/TOT	385	4	389
								P/TOT	30378	893	31271

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Friday 1st December 2006

TIME : 13:30 - 15:30

SITE : 18 - Waring Street

SPEED LIMIT : 30 mph

EASTBOUND STATISTICS			
Average Speed (mph)	21.5	Maximum Speed (mph)	33
Median Speed (mph)	22.0	Minimum Speed (mph)	11
85 %ile (mph)	25.2	Number Speeding	1 0.5%

EASTBOUND SPEEDS (mph)							
28	30	27	28	24	26	24	18
19	24	19	30	20	19	25	30
23	27	19	25	24	23	13	19
15	17	13	15	13	22	15	15
22	21	25	17	22	25	26	11
19	22	23	25	21	23	19	20
24	21	27	23	15	21	25	26
21	18	19	22	14	17	19	29
19	21	14	13	13	22	20	23
17	18	20	22	25	23	18	22
19	21	23	24	25	18	20	18
23	18	27	20	25	17	23	21
27	29	28	20	19	19	22	18
24	14	19	23	22	20	17	19
25	22	21	23	22	19	21	26
25	22	26	20	20	24	21	23
19	15	22	18	19	25	21	20
20	18	19	22	21	30	27	28
23	33	18	22	21	20	22	23
19	21	26	22	25	30	19	22
26	22	28	27	16	15	18	17
17	23	20	23	22	20	17	17
24	25	27	16	22	23	19	22
20	23	24	24	23	24	21	24
22	29	23	24	24	18	27	17

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 19

DATE: 29 NOV 2006

LOCATION: VICTORIA STREET

DAY: WEDNESDAY

TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT
	LV	HV			LV	HV			LV	HV	
00:00	97	0	97	08:00	520	20	540	16:00	757	8	765
00:15	91	2	93	08:15	593	21	614	16:15	790	6	796
00:30	73	1	74	08:30	603	25	628	16:30	809	8	817
00:45	57	0	57	08:45	605	23	628	16:45	786	6	792
H/TOT	318	3	321	H/TOT	2321	89	2410	H/TOT	3142	28	3170
01:00	57	1	58	09:00	596	23	619	17:00	864	6	870
01:15	47	0	47	09:15	508	29	537	17:15	880	4	884
01:30	40	0	40	09:30	508	33	541	17:30	818	5	823
01:45	44	4	48	09:45	482	24	506	17:45	765	6	771
H/TOT	188	5	193	H/TOT	2094	109	2203	H/TOT	3327	21	3348
02:00	22	0	22	10:00	447	30	477	18:00	644	5	649
02:15	20	1	21	10:15	408	29	437	18:15	575	1	576
02:30	20	0	20	10:30	423	28	451	18:30	470	2	472
02:45	8	2	10	10:45	463	29	492	18:45	452	1	453
H/TOT	70	3	73	H/TOT	1741	116	1857	H/TOT	2141	9	2150
03:00	6	0	6	11:00	420	31	451	19:00	441	0	441
03:15	10	1	11	11:15	480	29	509	19:15	403	3	406
03:30	8	2	10	11:30	490	37	527	19:30	317	0	317
03:45	9	1	10	11:45	509	22	531	19:45	283	1	284
H/TOT	33	4	37	H/TOT	1899	119	2018	H/TOT	1444	4	1448
04:00	10	0	10	12:00	547	26	573	20:00	329	2	331
04:15	7	2	9	12:15	570	18	588	20:15	277	2	279
04:30	9	1	10	12:30	562	18	580	20:30	271	2	273
04:45	21	2	23	12:45	482	23	505	20:45	270	1	271
H/TOT	47	5	52	H/TOT	2161	85	2246	H/TOT	1147	7	1154
05:00	11	3	14	13:00	557	17	574	21:00	266	2	268
05:15	22	1	23	13:15	606	19	625	21:15	266	1	267
05:30	40	6	46	13:30	587	20	607	21:30	226	0	226
05:45	52	5	57	13:45	542	22	564	21:45	171	0	171
H/TOT	125	15	140	H/TOT	2292	78	2370	H/TOT	929	3	932
06:00	52	4	56	14:00	593	25	618	22:00	170	2	172
06:15	49	3	52	14:15	539	22	561	22:15	185	1	186
06:30	85	7	92	14:30	525	18	543	22:30	160	0	160
06:45	135	9	144	14:45	468	11	479	22:45	161	4	165
H/TOT	321	23	344	H/TOT	2125	76	2201	H/TOT	676	7	683
07:00	168	11	179	15:00	496	21	517	23:00	179	1	180
07:15	256	14	270	15:15	570	17	587	23:15	131	2	133
07:30	395	18	413	15:30	546	11	557	23:30	130	0	130
07:45	511	14	525	15:45	617	8	625	23:45	100	0	100
H/TOT	1330	57	1387	H/TOT	2229	57	2286	H/TOT	540	3	543
								P/TOT	32640	926	33566

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Friday 1st December 2006

TIME : 09:30 - 11:30

SITE : 19 - Victoria Street

SPEED LIMIT : 30 mph

NORTHBOUND STATISTICS			
Average Speed (mph)	21.5	Maximum Speed (mph)	42
Median Speed (mph)	21.3	Minimum Speed (mph)	10
85 %ile (mph)	28.1	Number Speeding	18 9.0%

NORTHBOUND SPEEDS (mph)							
27	19	25	18	34	33	17	29
23	24	28	26	32	30	24	25
18	21	21	18	19	21	22	26
15	16	13	16	16	18	33	16
16	37	28	17	18	15	11	21
26	21	23	27	16	25	29	29
23	28	25	17	16	31	30	14
13	21	25	26	21	27	16	26
21	21	21	19	16	26	30	19
34	25	29	18	11	14	14	18
19	14	27	26	20	21	36	24
15	25	26	24	14	27	13	23
14	11	22	24	24	23	22	15
14	16	14	16	16	27	24	21
24	22	19	28	21	18	20	28
15	26	14	11	26	33	34	33
16	14	14	15	21	23	22	23
13	13	11	10	13	12	17	27
22	19	21	18	29	16	16	13
20	19	24	16	17	16	14	11
14	29	23	26	17	26	34	39
29	42	16	10	26	24	20	22
11	19	25	21	23	19	14	11
33	28	25	33	21	34	28	28
18	21	26	34	19	16	20	19

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 20

DATE: 29 NOV 2006

LOCATION: GREAT VICTORIA STREET

DAY: WEDNESDAY

TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT
	LV	HV			LV	HV			LV	HV	
00:00	75	1	76	08:00	288	23	311	16:00	231	30	261
00:15	54	0	54	08:15	251	21	272	16:15	221	14	235
00:30	59	1	60	08:30	287	21	308	16:30	198	28	226
00:45	52	0	52	08:45	257	35	292	16:45	260	21	281
H/TOT	240	2	242	H/TOT	1083	100	1183	H/TOT	910	93	1003
01:00	41	0	41	09:00	282	26	308	17:00	230	17	247
01:15	52	1	53	09:15	257	24	281	17:15	200	22	222
01:30	40	0	40	09:30	282	33	315	17:30	249	22	271
01:45	56	0	56	09:45	203	30	233	17:45	259	22	281
H/TOT	189	1	190	H/TOT	1024	113	1137	H/TOT	938	83	1021
02:00	38	1	39	10:00	181	18	199	18:00	271	15	286
02:15	30	1	31	10:15	247	25	272	18:15	254	17	271
02:30	25	1	26	10:30	189	27	216	18:30	219	6	225
02:45	21	0	21	10:45	222	27	249	18:45	237	11	248
H/TOT	114	3	117	H/TOT	839	97	936	H/TOT	981	49	1030
03:00	20	1	21	11:00	217	32	249	19:00	264	13	277
03:15	18	0	18	11:15	230	27	257	19:15	221	9	230
03:30	12	0	12	11:30	201	32	233	19:30	192	13	205
03:45	12	1	13	11:45	240	27	267	19:45	193	10	203
H/TOT	62	2	64	H/TOT	888	118	1006	H/TOT	870	45	915
04:00	5	4	9	12:00	244	20	264	20:00	170	7	177
04:15	4	1	5	12:15	239	25	264	20:15	192	9	201
04:30	9	3	12	12:30	222	27	249	20:30	162	10	172
04:45	8	2	10	12:45	227	21	248	20:45	162	9	171
H/TOT	26	10	36	H/TOT	932	93	1025	H/TOT	686	35	721
05:00	15	3	18	13:00	242	19	261	21:00	126	5	131
05:15	14	1	15	13:15	264	22	286	21:15	137	9	146
05:30	29	5	34	13:30	241	29	270	21:30	137	7	144
05:45	20	5	25	13:45	197	19	216	21:45	129	4	133
H/TOT	78	14	92	H/TOT	944	89	1033	H/TOT	529	25	554
06:00	28	3	31	14:00	242	25	267	22:00	127	6	133
06:15	28	8	36	14:15	250	32	282	22:15	137	5	142
06:30	52	10	62	14:30	227	24	251	22:30	103	6	109
06:45	66	17	83	14:45	217	30	247	22:45	112	3	115
H/TOT	174	38	212	H/TOT	936	111	1047	H/TOT	479	20	499
07:00	64	22	86	15:00	217	30	247	23:00	112	0	112
07:15	147	21	168	15:15	200	23	223	23:15	93	2	95
07:30	209	25	234	15:30	213	21	234	23:30	85	1	86
07:45	239	29	268	15:45	178	26	204	23:45	65	1	66
H/TOT	659	97	756	H/TOT	808	100	908	H/TOT	355	4	359
								P/TOT	14744	1342	16086

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 20

DATE: 29 NOV 2006

LOCATION: GREAT VICTORIA STREET

DAY: WEDNESDAY

TIME	SOUTHBOUND		TOT	TIME	SOUTHBOUND		TOT	TIME	SOUTHBOUND		TOT
	LV	HV			LV	HV			LV	HV	
00:00	30	0	30	08:00	190	21	211	16:00	117	20	137
00:15	26	0	26	08:15	209	23	232	16:15	142	22	164
00:30	19	0	19	08:30	188	27	215	16:30	131	14	145
00:45	16	0	16	08:45	156	40	196	16:45	105	15	120
H/TOT	91	0	91	H/TOT	743	111	854	H/TOT	495	71	566
01:00	19	1	20	09:00	162	21	183	17:00	144	29	173
01:15	20	1	21	09:15	144	35	179	17:15	154	27	181
01:30	10	1	11	09:30	166	33	199	17:30	119	14	133
01:45	14	0	14	09:45	127	26	153	17:45	136	21	157
H/TOT	63	3	66	H/TOT	599	115	714	H/TOT	553	91	644
02:00	6	0	6	10:00	136	24	160	18:00	148	17	165
02:15	8	0	8	10:15	115	24	139	18:15	148	18	166
02:30	8	0	8	10:30	144	27	171	18:30	165	18	183
02:45	7	0	7	10:45	121	23	144	18:45	130	16	146
H/TOT	29	0	29	H/TOT	516	98	614	H/TOT	591	69	660
03:00	5	0	5	11:00	134	26	160	19:00	144	14	158
03:15	11	4	15	11:15	116	19	135	19:15	138	10	148
03:30	12	0	12	11:30	124	19	143	19:30	124	12	136
03:45	8	1	9	11:45	126	27	153	19:45	114	11	125
H/TOT	36	5	41	H/TOT	500	91	591	H/TOT	520	47	567
04:00	3	2	5	12:00	127	27	154	20:00	105	12	117
04:15	5	2	7	12:15	155	20	175	20:15	106	7	113
04:30	7	2	9	12:30	143	23	166	20:30	104	8	112
04:45	8	1	9	12:45	163	24	187	20:45	112	5	117
H/TOT	23	7	30	H/TOT	588	94	682	H/TOT	427	32	459
05:00	8	3	11	13:00	142	18	160	21:00	104	12	116
05:15	11	0	11	13:15	154	17	171	21:15	60	6	66
05:30	9	1	10	13:30	166	21	187	21:30	79	8	87
05:45	20	4	24	13:45	169	18	187	21:45	56	9	65
H/TOT	48	8	56	H/TOT	631	74	705	H/TOT	299	35	334
06:00	19	2	21	14:00	150	21	171	22:00	83	4	87
06:15	36	1	37	14:15	153	20	173	22:15	91	4	95
06:30	31	7	38	14:30	138	25	163	22:30	75	4	79
06:45	59	6	65	14:45	168	22	190	22:45	59	6	65
H/TOT	145	16	161	H/TOT	609	88	697	H/TOT	308	18	326
07:00	53	15	68	15:00	128	24	152	23:00	46	2	48
07:15	120	13	133	15:15	149	12	161	23:15	54	0	54
07:30	150	17	167	15:30	150	23	173	23:30	39	2	41
07:45	209	22	231	15:45	157	14	171	23:45	36	1	37
H/TOT	532	67	599	H/TOT	584	73	657	H/TOT	175	5	180
								P/TOT	9105	1218	10323

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Thursday 30th November 2006

TIME : 09:30 - 11:30

SITE : 20 - Great Victoria Street

SPEED LIMIT : 30 mph

NORTHBOUND STATISTICS			
Average Speed (mph)	15.8	Maximum Speed (mph)	28
Median Speed (mph)	15.0	Minimum Speed (mph)	9
85 %ile (mph)	20.0	Number Speeding	0 0.0%

NORTHBOUND SPEEDS (mph)							
16	12	16	15	12	11	12	23
10	9	19	18	18	16	10	14
13	14	11	10	10	11	11	10
20	19	21	19	14	16	17	16
13	19	22	19	17	16	22	18
23	20	20	19	18	21	17	22
13	17	19	15	14	13	11	14
18	18	16	14	12	11	11	12
21	10	10	11	10	12	12	10
10	10	14	13	14	12	10	13
16	12	11	11	18	22	21	22
18	16	13	14	13	11	15	17
12	17	18	14	15	17	19	15
16	10	11	12	12	15	17	16
14	17	15	16	16	23	17	18
16	22	23	19	19	20	19	17
12	13	11	18	15	28	23	25
18	13	20	22	18	18	17	19
19	20	21	22	14	15	12	15
15	16	20	15	17	14	11	18
16	20	14	12	11	14	13	12
21	20	23	23	15	12	19	13
23	19	17	15	12	11	13	18
14	12	15	19	24	17	14	12
22	14	12	13	15	14	17	13

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Thursday 30th November 2006

TIME : 09:30 - 11:30

SITE : 20 - Great Victoria Street

SPEED LIMIT : 30 mph

SOUTHBOUND STATISTICS			
Average Speed (mph)	18.1	Maximum Speed (mph)	33
Median Speed (mph)	18.1	Minimum Speed (mph)	8
85 %ile (mph)	22.0	Number Speeding	1 0.5%

SOUTHBOUND SPEEDS (mph)							
17	15	17	21	19	19	24	21
15	16	16	24	23	20	15	16
20	20	23	16	13	13	11	21
18	13	13	14	12	15	19	18
21	11	21	11	18	16	19	21
15	13	14	16	16	21	16	20
19	21	10	14	13	14	14	16
19	18	26	24	19	17	14	13
23	16	18	18	17	19	18	17
20	16	14	19	23	23	23	22
13	16	23	8	17	20	18	33
20	18	17	18	21	18	18	18
21	14	30	28	17	16	19	9
9	19	22	9	15	19	18	18
12	21	22	20	24	19	26	14
22	16	20	18	24	24	20	23
21	20	24	25	16	26	24	19
12	23	16	21	17	19	18	29
18	14	14	19	14	22	16	21
15	19	23	19	18	15	21	24
16	18	13	17	18	16	20	14
21	15	21	13	19	24	19	18
17	19	16	14	22	16	17	18
21	15	18	25	14	18	9	15
13	18	23	21	15	16	18	18

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 21

DATE: 29 NOV 2006

LOCATION: HOWARD STREET

DAY: WEDNESDAY

TIME	WESTBOUND		TOT	TIME	WESTBOUND		TOT	TIME	WESTBOUND		TOT
	LV	HV			LV	HV			LV	HV	
00:00	27	0	27	08:00	307	29	336	16:00	306	26	332
00:15	32	0	32	08:15	349	29	378	16:15	266	32	298
00:30	25	0	25	08:30	280	34	314	16:30	220	22	242
00:45	16	1	17	08:45	323	43	366	16:45	245	20	265
H/TOT	100	1	101	H/TOT	1259	135	1394	H/TOT	1037	100	1137
01:00	18	0	18	09:00	305	34	339	17:00	271	38	309
01:15	15	1	16	09:15	331	45	376	17:15	253	21	274
01:30	18	0	18	09:30	283	53	336	17:30	258	25	283
01:45	19	0	19	09:45	270	33	303	17:45	282	20	302
H/TOT	70	1	71	H/TOT	1189	165	1354	H/TOT	1064	104	1168
02:00	6	0	6	10:00	229	44	273	18:00	277	21	298
02:15	21	0	21	10:15	253	38	291	18:15	240	21	261
02:30	8	0	8	10:30	259	40	299	18:30	248	23	271
02:45	6	0	6	10:45	227	28	255	18:45	260	17	277
H/TOT	41	0	41	H/TOT	968	150	1118	H/TOT	1025	82	1107
03:00	13	0	13	11:00	269	35	304	19:00	250	18	268
03:15	12	1	13	11:15	255	35	290	19:15	214	14	228
03:30	9	0	9	11:30	287	33	320	19:30	216	15	231
03:45	3	0	3	11:45	239	42	281	19:45	181	11	192
H/TOT	37	1	38	H/TOT	1050	145	1195	H/TOT	861	58	919
04:00	8	0	8	12:00	267	37	304	20:00	179	13	192
04:15	5	3	8	12:15	290	32	322	20:15	156	10	166
04:30	10	0	10	12:30	282	28	310	20:30	157	10	167
04:45	4	2	6	12:45	265	31	296	20:45	168	7	175
H/TOT	27	5	32	H/TOT	1104	128	1232	H/TOT	660	40	700
05:00	16	2	18	13:00	293	31	324	21:00	143	12	155
05:15	13	2	15	13:15	241	34	275	21:15	122	7	129
05:30	14	5	19	13:30	301	32	333	21:30	138	8	146
05:45	31	4	35	13:45	291	29	320	21:45	102	11	113
H/TOT	74	13	87	H/TOT	1126	126	1252	H/TOT	505	38	543
06:00	23	1	24	14:00	234	32	266	22:00	122	7	129
06:15	39	5	44	14:15	255	34	289	22:15	90	6	96
06:30	45	9	54	14:30	223	37	260	22:30	102	5	107
06:45	84	7	91	14:45	284	37	321	22:45	102	3	105
H/TOT	191	22	213	H/TOT	996	140	1136	H/TOT	416	21	437
07:00	103	15	118	15:00	272	31	303	23:00	103	5	108
07:15	224	16	240	15:15	249	14	263	23:15	66	0	66
07:30	258	23	281	15:30	248	30	278	23:30	63	2	65
07:45	296	30	326	15:45	292	30	322	23:45	37	0	37
H/TOT	881	84	965	H/TOT	1061	105	1166	H/TOT	269	7	276
								P/TOT	16011	1671	17682

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Thursday 30th November 2006

TIME : 11:30 - 13:30

SITE : 21 - Howard Street

SPEED LIMIT : 30 mph

WESTBOUND STATISTICS			
Average Speed (mph)	15.9	Maximum Speed (mph)	31
Median Speed (mph)	15.0	Minimum Speed (mph)	1
85 %ile (mph)	20.0	Number Speeding	2 1.0%

WESTBOUND SPEEDS (mph)							
10	11	10	20	15	13	12	12
18	10	12	14	12	20	15	14
16	15	12	19	20	14	18	17
13	15	11	22	12	17	12	13
18	16	18	16	13	12	14	10
21	23	14	15	11	12	18	22
10	13	14	17	10	10	13	11
30	20	21	19	13	10	1	10
27	12	13	14	15	27	13	16
18	24	22	27	10	19	17	16
19	15	16	19	23	21	14	15
13	17	19	17	14	11	17	11
12	16	18	20	18	20	21	17
17	13	14	12	27	31	14	15
16	17	15	13	31	9	22	12
13	14	23	16	13	11	10	13
20	19	10	12	11	17	19	11
21	20	19	13	13	14	15	17
16	18	20	22	18	15	11	15
20	10	11	11	11	12	13	11
23	10	9	10	14	17	18	20
15	22	20	13	17	23	14	17
22	18	11	15	20	16	20	18
13	15	21	22	20	23	20	21
20	16	14	10	12	13	19	14

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 22

DATE: 29 NOV 2006

LOCATION: COLLEGE SQUARE EAST

DAY: WEDNESDAY

TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT	TIME	NORTHBOUND		TOT
	LV	HV			LV	HV			LV	HV	
00:00	89	2	91	08:00	446	36	482	16:00	431	32	463
00:15	73	0	73	08:15	429	27	456	16:15	414	23	437
00:30	68	1	69	08:30	406	33	439	16:30	392	34	426
00:45	61	1	62	08:45	438	44	482	16:45	471	26	497
H/TOT	291	4	295	H/TOT	1719	140	1859	H/TOT	1708	115	1823
01:00	52	0	52	09:00	432	39	471	17:00	419	20	439
01:15	59	1	60	09:15	452	41	493	17:15	371	22	393
01:30	49	0	49	09:30	432	54	486	17:30	452	34	486
01:45	58	0	58	09:45	371	43	414	17:45	437	23	460
H/TOT	218	1	219	H/TOT	1687	177	1864	H/TOT	1679	99	1778
02:00	38	1	39	10:00	330	40	370	18:00	458	21	479
02:15	41	1	42	10:15	404	40	444	18:15	420	21	441
02:30	28	1	29	10:30	354	42	396	18:30	369	7	376
02:45	23	0	23	10:45	369	38	407	18:45	399	14	413
H/TOT	130	3	133	H/TOT	1457	160	1617	H/TOT	1646	63	1709
03:00	26	1	27	11:00	370	45	415	19:00	423	15	438
03:15	20	0	20	11:15	388	45	433	19:15	331	14	345
03:30	14	0	14	11:30	388	44	432	19:30	319	18	337
03:45	12	1	13	11:45	395	47	442	19:45	298	12	310
H/TOT	72	2	74	H/TOT	1541	181	1722	H/TOT	1371	59	1430
04:00	10	3	13	12:00	420	34	454	20:00	288	11	299
04:15	7	1	8	12:15	443	38	481	20:15	309	11	320
04:30	16	3	19	12:30	403	38	441	20:30	250	13	263
04:45	11	3	14	12:45	395	32	427	20:45	296	11	307
H/TOT	44	10	54	H/TOT	1661	142	1803	H/TOT	1143	46	1189
05:00	23	3	26	13:00	431	35	466	21:00	233	7	240
05:15	22	2	24	13:15	416	37	453	21:15	212	10	222
05:30	40	11	51	13:30	406	36	442	21:30	217	7	224
05:45	35	5	40	13:45	382	29	411	21:45	202	6	208
H/TOT	120	21	141	H/TOT	1635	137	1772	H/TOT	864	30	894
06:00	40	3	43	14:00	377	40	417	22:00	195	11	206
06:15	44	12	56	14:15	390	50	440	22:15	193	7	200
06:30	71	13	84	14:30	358	36	394	22:30	172	7	179
06:45	95	18	113	14:45	388	43	431	22:45	170	3	173
H/TOT	250	46	296	H/TOT	1513	169	1682	H/TOT	730	28	758
07:00	119	28	147	15:00	415	38	453	23:00	182	3	185
07:15	238	28	266	15:15	357	27	384	23:15	126	2	128
07:30	319	33	352	15:30	378	29	407	23:30	122	1	123
07:45	378	43	421	15:45	389	37	426	23:45	80	0	80
H/TOT	1054	132	1186	H/TOT	1539	131	1670	H/TOT	510	6	516
								P/TOT	24582	1902	26484

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 22

DATE: 29 NOV 2006

LOCATION: COLLEGE SQUARE EAST

DAY: WEDNESDAY

TIME	SOUTHBOUND		TOT	TIME	SOUTHBOUND		TOT	TIME	SOUTHBOUND		TOT
	LV	HV			LV	HV			LV	HV	
00:00	26	0	26	08:00	136	6	142	16:00	97	3	100
00:15	19	0	19	08:15	161	4	165	16:15	108	1	109
00:30	14	0	14	08:30	146	6	152	16:30	114	3	117
00:45	14	0	14	08:45	121	9	130	16:45	110	3	113
H/TOT	73	0	73	H/TOT	564	25	589	H/TOT	429	10	439
01:00	16	1	17	09:00	117	3	120	17:00	115	1	116
01:15	15	0	15	09:15	105	8	113	17:15	117	6	123
01:30	4	1	5	09:30	125	11	136	17:30	100	1	101
01:45	7	0	7	09:45	92	6	98	17:45	100	3	103
H/TOT	42	2	44	H/TOT	439	28	467	H/TOT	432	11	443
02:00	3	0	3	10:00	108	5	113	18:00	122	1	123
02:15	6	0	6	10:15	80	8	88	18:15	118	3	121
02:30	7	0	7	10:30	111	11	122	18:30	132	0	132
02:45	5	0	5	10:45	90	8	98	18:45	95	3	98
H/TOT	21	0	21	H/TOT	389	32	421	H/TOT	467	7	474
03:00	3	0	3	11:00	91	9	100	19:00	110	1	111
03:15	4	3	7	11:15	72	2	74	19:15	101	0	101
03:30	4	0	4	11:30	83	4	87	19:30	82	1	83
03:45	5	1	6	11:45	90	8	98	19:45	79	1	80
H/TOT	16	4	20	H/TOT	336	23	359	H/TOT	372	3	375
04:00	2	1	3	12:00	88	8	96	20:00	88	2	90
04:15	2	0	2	12:15	111	1	112	20:15	90	0	90
04:30	5	2	7	12:30	98	6	104	20:30	87	1	88
04:45	6	0	6	12:45	124	6	130	20:45	95	0	95
H/TOT	15	3	18	H/TOT	421	21	442	H/TOT	360	3	363
05:00	4	3	7	13:00	107	4	111	21:00	87	1	88
05:15	8	0	8	13:15	119	1	120	21:15	47	1	48
05:30	5	1	6	13:30	110	4	114	21:30	59	1	60
05:45	9	0	9	13:45	129	2	131	21:45	45	1	46
H/TOT	26	4	30	H/TOT	465	11	476	H/TOT	238	4	242
06:00	10	1	11	14:00	111	4	115	22:00	59	0	59
06:15	17	0	17	14:15	105	5	110	22:15	65	0	65
06:30	18	0	18	14:30	106	4	110	22:30	57	0	57
06:45	30	1	31	14:45	113	5	118	22:45	36	3	39
H/TOT	75	2	77	H/TOT	435	18	453	H/TOT	217	3	220
07:00	39	3	42	15:00	104	5	109	23:00	36	1	37
07:15	84	5	89	15:15	102	2	104	23:15	40	0	40
07:30	107	5	112	15:30	109	4	113	23:30	25	1	26
07:45	158	6	164	15:45	113	3	116	23:45	29	1	30
H/TOT	388	19	407	H/TOT	428	14	442	H/TOT	130	3	133
								P/TOT	6778	250	7028

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Thursday 30th November 2006

TIME : 09:30 - 11:30

SITE : 22 - College Square East

SPEED LIMIT : 30 mph

NORTHBOUND STATISTICS			
Average Speed (mph)	17.1	Maximum Speed (mph)	26
Median Speed (mph)	17.5	Minimum Speed (mph)	8
85 %ile (mph)	20.0	Number Speeding	0 0.0%

NORTHBOUND SPEEDS (mph)							
23	19	17	15	16	16	15	16
14	14	16	17	13	12	18	14
17	18	19	17	22	18	19	14
16	16	16	19	13	19	18	18
19	15	19	16	14	18	20	19
13	12	13	16	19	14	15	19
20	16	15	18	18	17	20	18
17	23	20	21	20	20	16	13
19	18	23	23	18	17	21	19
20	18	18	20	8	16	14	18
21	16	15	16	19	21	21	19
20	18	21	16	17	16	19	16
16	19	19	21	23	16	19	18
20	19	17	15	13	9	11	18
13	14	17	15	19	20	21	19
21	19	13	23	18	21	19	18
19	20	19	24	23	19	19	15
14	17	18	22	14	16	13	14
15	16	14	16	17	15	13	18
16	15	16	16	22	13	13	20
18	18	14	16	18	16	15	20
18	19	15	19	21	16	17	17
20	16	18	14	13	18	19	18
18	12	10	14	14	12	9	11
18	17	26	21	18	13	12	20

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Thursday 30th November 2006

TIME : 09:30 - 11:30

SITE : 22 - College Square East

SPEED LIMIT : 30 mph

SOUTHBOUND STATISTICS			
Average Speed (mph)	14.8	Maximum Speed (mph)	26
Median Speed (mph)	15.0	Minimum Speed (mph)	10
85 %ile (mph)	18.2	Number Speeding	0 0.0%

SOUTHBOUND SPEEDS (mph)							
16	12	14	15	13	13	11	12
12	10	10	11	10	17	15	17
14	13	12	13	11	13	20	23
12	11	10	10	10	16	14	13
12	12	10	17	13	16	19	19
13	13	12	14	16	17	15	17
16	15	14	10	11	10	20	23
22	20	18	17	12	10	16	15
15	14	14	19	21	17	15	17
12	11	10	17	21	18	16	22
13	10	14	16	10	23	23	17
15	12	14	12	16	16	15	11
16	15	10	13	26	21	19	18
16	10	10	10	19	15	17	18
15	14	12	15	13	16	11	11
11	10	20	20	19	17	14	13
16	14	13	12	11	10	18	19
15	14	13	10	10	16	14	15
11	15	16	12	15	12	13	23
13	15	12	22	10	15	17	12
20	17	15	12	13	22	24	18
22	14	13	15	13	12	13	10
16	14	18	15	16	14	11	16
17	16	13	15	20	19	16	15
16	17	15	15	17	14	12	12

COUNT ON US

BELFAST CITY
MANUAL CLASSIFIED COUNTS

NOVEMBER 2066
32826

SITE: 23

DATE: 29 NOV 2006

LOCATION: GROSVENOR ROAD

DAY: WEDNESDAY

TIME	EASTBOUND		TOT	TIME	EASTBOUND		TOT	TIME	EASTBOUND		TOT
	LV	HV			LV	HV			LV	HV	
00:00	4	1	5	08:00	35	4	39	16:00	49	1	50
00:15	0	0	0	08:15	41	0	41	16:15	50	2	52
00:30	0	0	0	08:30	32	1	33	16:30	67	2	69
00:45	2	0	2	08:45	31	1	32	16:45	47	2	49
H/TOT	6	1	7	H/TOT	139	6	145	H/TOT	213	7	220
01:00	1	0	1	09:00	37	3	40	17:00	58	0	58
01:15	2	0	2	09:15	46	4	50	17:15	62	1	63
01:30	2	0	2	09:30	32	4	36	17:30	62	3	65
01:45	0	0	0	09:45	37	3	40	17:45	51	2	53
H/TOT	5	0	5	H/TOT	152	14	166	H/TOT	233	6	239
02:00	0	0	0	10:00	31	4	35	18:00	55	3	58
02:15	0	0	0	10:15	24	2	26	18:15	37	0	37
02:30	1	0	1	10:30	34	1	35	18:30	25	1	26
02:45	1	0	1	10:45	40	3	43	18:45	24	1	25
H/TOT	2	0	2	H/TOT	129	10	139	H/TOT	141	5	146
03:00	0	0	0	11:00	25	1	26	19:00	30	0	30
03:15	0	0	0	11:15	26	4	30	19:15	23	2	25
03:30	3	0	3	11:30	31	1	32	19:30	27	1	28
03:45	0	0	0	11:45	36	3	39	19:45	18	1	19
H/TOT	3	0	3	H/TOT	118	9	127	H/TOT	98	4	102
04:00	1	0	1	12:00	43	3	46	20:00	25	1	26
04:15	1	0	1	12:15	35	3	38	20:15	36	0	36
04:30	1	0	1	12:30	41	3	44	20:30	23	0	23
04:45	1	0	1	12:45	32	2	34	20:45	31	0	31
H/TOT	4	0	4	H/TOT	151	11	162	H/TOT	115	1	116
05:00	0	0	0	13:00	27	3	30	21:00	28	1	29
05:15	2	0	2	13:15	31	3	34	21:15	12	0	12
05:30	3	1	4	13:30	20	1	21	21:30	12	0	12
05:45	1	0	1	13:45	35	2	37	21:45	19	0	19
H/TOT	6	1	7	H/TOT	113	9	122	H/TOT	71	1	72
06:00	3	0	3	14:00	38	4	42	22:00	11	2	13
06:15	6	1	7	14:15	32	4	36	22:15	17	0	17
06:30	5	1	6	14:30	40	0	40	22:30	11	0	11
06:45	7	1	8	14:45	40	2	42	22:45	5	1	6
H/TOT	21	3	24	H/TOT	150	10	160	H/TOT	44	3	47
07:00	15	3	18	15:00	42	1	43	23:00	6	0	6
07:15	23	1	24	15:15	36	2	38	23:15	2	0	2
07:30	27	2	29	15:30	51	2	53	23:30	5	0	5
07:45	37	3	40	15:45	65	1	66	23:45	3	0	3
H/TOT	102	9	111	H/TOT	194	6	200	H/TOT	16	0	16
								P/TOT	2226	116	2342

COUNT ON US**BELFAST CITY
MANUAL CLASSIFIED COUNTS****NOVEMBER 2066
32826**

SITE: 23

DATE: 29 NOV 2006

LOCATION: GROSVENOR ROAD

DAY: WEDNESDAY

TIME	WESTBOUND		TOT	TIME	WESTBOUND		TOT	TIME	WESTBOUND		TOT
	LV	HV			LV	HV			LV	HV	
00:00	13	0	13	08:00	130	5	135	16:00	135	8	143
00:15	6	0	6	08:15	164	4	168	16:15	89	4	93
00:30	11	0	11	08:30	151	2	153	16:30	76	7	83
00:45	7	0	7	08:45	138	4	142	16:45	86	5	91
H/TOT	37	0	37	H/TOT	583	15	598	H/TOT	386	24	410
01:00	5	0	5	09:00	147	6	153	17:00	111	7	118
01:15	5	0	5	09:15	143	5	148	17:15	107	1	108
01:30	5	0	5	09:30	124	14	138	17:30	98	3	101
01:45	10	0	10	09:45	104	3	107	17:45	119	3	122
H/TOT	25	0	25	H/TOT	518	28	546	H/TOT	435	14	449
02:00	3	0	3	10:00	83	7	90	18:00	119	2	121
02:15	8	0	8	10:15	85	9	94	18:15	81	2	83
02:30	5	0	5	10:30	95	10	105	18:30	90	5	95
02:45	3	0	3	10:45	89	5	94	18:45	87	2	89
H/TOT	19	0	19	H/TOT	352	31	383	H/TOT	377	11	388
03:00	5	0	5	11:00	98	6	104	19:00	87	3	90
03:15	3	0	3	11:15	79	4	83	19:15	90	1	91
03:30	2	0	2	11:30	90	7	97	19:30	74	0	74
03:45	0	0	0	11:45	84	6	90	19:45	59	0	59
H/TOT	10	0	10	H/TOT	351	23	374	H/TOT	310	4	314
04:00	3	0	3	12:00	95	7	102	20:00	69	0	69
04:15	0	1	1	12:15	77	3	80	20:15	59	1	60
04:30	2	0	2	12:30	97	3	100	20:30	75	0	75
04:45	0	0	0	12:45	90	4	94	20:45	48	0	48
H/TOT	5	1	6	H/TOT	359	17	376	H/TOT	251	1	252
05:00	4	2	6	13:00	96	4	100	21:00	47	0	47
05:15	4	1	5	13:15	85	6	91	21:15	46	1	47
05:30	2	0	2	13:30	100	9	109	21:30	50	1	51
05:45	6	0	6	13:45	101	5	106	21:45	37	1	38
H/TOT	16	3	19	H/TOT	382	24	406	H/TOT	180	3	183
06:00	5	0	5	14:00	98	4	102	22:00	41	0	41
06:15	10	1	11	14:15	99	5	104	22:15	25	0	25
06:30	18	0	18	14:30	100	4	104	22:30	26	0	26
06:45	33	2	35	14:45	98	9	107	22:45	26	1	27
H/TOT	66	3	69	H/TOT	395	22	417	H/TOT	118	1	119
07:00	49	0	49	15:00	92	5	97	23:00	29	1	30
07:15	120	2	122	15:15	81	2	83	23:15	21	0	21
07:30	132	5	137	15:30	93	5	98	23:30	17	1	18
07:45	143	3	146	15:45	102	9	111	23:45	18	1	19
H/TOT	444	10	454	H/TOT	368	21	389	H/TOT	85	3	88
								P/TOT	6072	259	6331

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Thursday 30th November 2006

TIME : 13:00 - 14:00

SITE : 23 - Grosvenor Road

SPEED LIMIT : 30 mph

EASTBOUND STATISTICS			
Average Speed (mph)	23.4	Maximum Speed (mph)	38
Median Speed (mph)	23.8	Minimum Speed (mph)	13
85 %ile (mph)	27.5	Number Speeding	5 3.9%

EASTBOUND SPEEDS (mph)							
20	19	28	25	19	22	24	25
24	31	23	21	28	19	21	16
24	21	23	15	38	26	29	25
28	27	21	26	24	22	26	16
28	27	32	18	20	22	23	21
16	26	28	24	19	29	22	24
28	23	19	29	28	19	23	26
26	27	20	27	29	28	19	17
23	29	20	19	20	27	25	23
13	25	26	19	25	27	23	21
24	20	25	24	24	26	18	16
24	21	24	21	24	31	27	26
14	18	22	19	26	28	24	23
25	27	30	14	19	29	27	26
27	24	14	23	32	22	18	19
23	23	25	26	24	29	24	14

COUNT ON US**BELFAST CITY
SPEED SURVEYS****NOVEMBER 2006
32826**

DATE : Thursday 30th November 2006

TIME : 13:00 - 14:00

SITE : 23 - Grosvenor Road

SPEED LIMIT : 30 mph

WESTBOUND STATISTICS			
Average Speed (mph)	17.4	Maximum Speed (mph)	30
Median Speed (mph)	17.0	Minimum Speed (mph)	2
85 %ile (mph)	22.0	Number Speeding	0 0.0%

WESTBOUND SPEEDS (mph)							
18	21	18	17	15	11	15	13
11	20	19	17	13	18	16	14
16	15	13	11	14	13	13	12
22	18	27	28	29	24	19	22
15	13	17	14	19	18	14	12
21	16	18	13	15	15	13	14
12	16	22	21	24	22	25	16
13	16	11	9	17	17	16	14
15	26	28	16	14	15	12	11
17	14	24	16	14	15	12	11
29	17	14	13	22	18	17	19
18	23	20	21	29	21	20	22
10	13	25	22	16	18	19	10
18	16	14	16	11	11	11	22
17	23	19	22	23	21	19	17
29	23	23	21	20	18	15	14
18	17	16	22	19	24	23	15
18	19	2	17	18	12	16	22
14	17	12	15	20	17	16	19
16	13	18	16	17	12	26	18
22	12	20	15	15	14	9	23
22	12	20	15	15	14	9	23
22	30	15	17	18	21	16	15
30	15	17	16				

Appendix 3.

DMRB Input and Output Sheets.

DMRB: Assessment of Local Air Quality					INPUT SHEET																																																																																																																																																																																																																					
Step 1	Receptor name	Junction 1; Sydenham- Newtownards Rd		Receptor number	1		Step 6																																																																																																																																																																																																																			
Step 2	Year	2006		Step 7																																																																																																																																																																																																																						
Step 3	Number of links	5																																																																																																																																																																																																																								
Step 4	Background concentrations for 2006																																																																																																																																																																																																																									
	CO (mg/m ³)	Benzene (µg/m ³)	1,3-butadiene (µg/m ³)	NO _x (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)																																																																																																																																																																																																																				
	0	0	0	42.56	26.65	27.47																																																																																																																																																																																																																				
Step 5	<table border="1"> <thead> <tr> <th rowspan="2">Link number</th> <th rowspan="2">Distance from link centre to receptor (m)</th> <th colspan="2">Traffic flow & speed</th> <th rowspan="2">Road type (A,B,C,D)</th> <th colspan="5">Traffic composition</th> </tr> <tr> <th>AADT (combined, veh/day)</th> <th>Annual average speed (km/h)</th> <th colspan="2">Vehicles <3.5t GVW (LDV)</th> <th colspan="3">Vehicles>3.5t GVW (HDV)</th> </tr> <tr> <th></th> <th></th> <th></th> <th></th> <th></th> <th>% passen-ger cars</th> <th>% light goods vehicles</th> <th>Total % LDV</th> <th>% buses and coaches</th> <th>% rigid HGV</th> <th>% articulated HGV</th> <th>Total % HDV</th> </tr> </thead> <tbody> <tr><td>1</td><td>96</td><td>41932</td><td>34</td><td>A</td><td></td><td></td><td>95</td><td></td><td></td><td></td><td>5</td></tr> <tr><td>2</td><td>48</td><td>6461</td><td>30</td><td>D</td><td>95</td><td>3.4</td><td></td><td>0.1</td><td>1</td><td>0.3</td><td></td></tr> <tr><td>3</td><td>20</td><td>32705</td><td>36</td><td>A</td><td></td><td></td><td>94</td><td></td><td></td><td></td><td>6</td></tr> <tr><td>4</td><td>25</td><td>15705</td><td>30</td><td>A</td><td></td><td></td><td>91</td><td></td><td></td><td></td><td>9</td></tr> <tr><td>5</td><td>60</td><td>18487</td><td>32</td><td>D</td><td>84.4</td><td>6.8</td><td></td><td>0.5</td><td>5</td><td>3.4</td><td></td></tr> <tr><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>12</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>13</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>14</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>15</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>									Link number	Distance from link centre to receptor (m)	Traffic flow & speed		Road type (A,B,C,D)	Traffic composition					AADT (combined, veh/day)	Annual average speed (km/h)	Vehicles <3.5t GVW (LDV)		Vehicles>3.5t GVW (HDV)								% passen-ger cars	% light goods vehicles	Total % LDV	% buses and coaches	% rigid HGV	% articulated HGV	Total % HDV	1	96	41932	34	A			95				5	2	48	6461	30	D	95	3.4		0.1	1	0.3		3	20	32705	36	A			94				6	4	25	15705	30	A			91				9	5	60	18487	32	D	84.4	6.8		0.5	5	3.4		6												7												8												9												10												11												12												13												14												15											
Link number	Distance from link centre to receptor (m)	Traffic flow & speed		Road type (A,B,C,D)	Traffic composition																																																																																																																																																																																																																					
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1	96	41932	34	A			95				5																																																																																																																																																																																																															
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3	20	32705	36	A			94				6																																																																																																																																																																																																															
4	25	15705	30	A			91				9																																																																																																																																																																																																															
5	60	18487	32	D	84.4	6.8		0.5	5	3.4																																																																																																																																																																																																																
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DMRB: Assessment of Local Air Quality					INPUT SHEET																																																																																																																																																																																																			
Step 1	Receptor name	Junction 3; Shaftsbury Sq	Receptor number	1	Step 6																																																																																																																																																																																																			
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