



Rushcliffe
Borough Council

Environment & Waste Management Service

Update of the Air Quality Action Plan 2007



Photo of Trent Bridge showing peak flow out of the city

February 2010

www.rushcliffe.gov.uk

FURTHER INFORMATION

Alternative Format or Language Required?

If you would like a copy of this document in a different format, such as large print, Braille, audio tape or language, please contact the Customer Services Team on:

Telephone : 0115 9819911

Email: customerservices@rushcliffe.gov.uk

Post: Rushcliffe Borough Council
Civic Centre
Pavilion Road
West Bridgford
Nottingham
NG2 5FE

Rushcliffe Borough Council is registered with 'Language Line' to ensure our services are accessible to all our customers.

CHINESE

CHINESE
中文

進一步資料

需要不同的格式或語言？

如果閣下想要一份這文件的不同格式，例如大字體，盲人用點字法，錄音磁帶或語言，請聯絡顧客服務組：

電話： 0115 9819911

電郵： customerservices@rushcliffe.gov.uk

郵寄： Rushcliffe Borough Council
Civic Centre
Pavilion Road
West Bridgford
Nottingham
NG2 5FE

Rushcliffe Borough Council 已向“電話傳譯”登記去確保我們的服務能夠被我們全部的顧客取用。

FARSI

اطلاعات بیشتر

مورد احتیاج در شکلهای و زبانهای مختلف ؟

اگر شما مایل به فتوکپی از این مدرک در شکلهای مختلف مثل چاپ درشت چاپ مخصوص نابینایان و نوار شنوایی و یا زبان دیگر هستید لطفاً با تیم خدمات مشتریان در ذیل تماس بگیرید .

0115 9819911

تلفن :

customerservices@rushcliffe.gov.uk

آدرس ایمیل :

Rushcliffe Borough Council آدرس پست :

Civic Centre
Pavillion Road
West Bridgford
Nottingham
NG2 5FE

کنسل ناحیه Rushcliffe ثبت شده در Language Line است تا اطمینان دهد که خدمات ما قابل دسترسی به تمام مشتریان ما قرار میگیرد .

FRENCH – Format ou Langue alternative exigé

Si vous voudriez une copie de ce document dans un format différent, tel que la grande copie, le Braille, la bande sonore ou la langue, contactez svp l'équipe de services de la clientèle sur : Téléphone: 0115 9819911 ; Email: customerservices@rushcliffe.gov.uk, Poste: Rushcliffe Borough Council, Civic Centre, Pavilion Road, West Bridgford, Nottingham, NG2 5FE.

Le conseil municipal de Rushcliffe est inscrit à la ligne de langue de 'pour assurer que nos services sont accessible à tous nos clients.'

POLISH

Jeżeli chcieliby Państwo otrzymać kopię tego dokumentu w innym formacie, np. napisane dużym drukiem, alfabetem Braille'a, na kasecie audio lub w innym języku, prosimy skontaktować się z Biurem Obsługi Klienta (Customer Services Team): Telefonicznie pod numerem: 0115 9819911, Email-em: customerservices@rushcliffe.gov.uk, Listownie pod adresem: Rushcliffe Borough Council, Civic Centre, Pavilion Road, West Bridgford, Nottingham NG2 5FE.

Celem zapewnienia wszystkim naszym klientom dostępu do naszych usług, Rushcliffe Borough Council udostępnił Państwu korzystanie z telefonicznej linii językowej - 'Language Line'.

GUJARATI

વધુ માહિતી

બીજી કોઈ ફોર્મેટ અથવા ભાષામાં જોઈએ ?

જો તમને આ દસ્તાવેજની એક નકલ બીજી કોઈ ફોર્મેટ જોઈતી હોય, દા.ત. મોટા અક્ષરોમાં, બ્રેઈલમાં, ઓડીઓ ટેઈપમાં અથવા બીજી ભાષામાં, તો કૃપા કરીને કસ્ટમર સર્વિસીસ ટીમનો અહીં સંપર્ક સાધો :

ટેલિફોન : 0115 9819911

ઈમેઈલ : customerservices@rushcliffe.gov.uk

ટપાલ :
Rushcliffe Borough Council
Civic Centre
Pavilion Road
West Bridgford
Nottingham
NG2 5FE

અમારી સેવાઓ અમારા બધા ગ્રાહકોને ઉપલબ્ધ હોય તે નિશ્ચિત કરવા માટે રશ્ક્લીફ બરા કાઉન્સિલ 'લેન્ગ્વેજ લાઈન' સાથે રજિસ્ટર્ડ છે.

HINDI

और ज्यादा जानकारी

जानकारी कोई दूसरी भाषा या फोरमेट में ?

यदि यह दस्तावेज आपको किसी दूसरी भाषा या फारमेट में, जैसे कि बड़े अक्षरों में, बरेयल (अन्धे लोगो के लिये) में, सुनने वाली टेप पर, चाहिये तो आप कसटमर सर्विस टीम को निम्नलिखित टैलीफोन नम्बर व डाक पते पर सम्पर्क करके प्राप्त कर सकते हैं ।

टैलीफोन नम्बर: 0115 9819911 customerservices@rushcliffe.gov.uk

डाक पता: Rushcliffe Borough Council
Civic Centre
Pavilion Road
West Bridgford
Nottingham
NG2 5FE

रशक्लिफ बरोअ काऊंसिल 'लैन्गुएज लाईन'(एजैन्सी जो कि दूसरी भाषा में अनुवाद कराने में मदद करती है) के साथ रजिस्टर है यह निश्चित करने के लिये कि हम्हारी सेवाएँ सभी लोगो के लिये प्राप्य है ।

URDU

مزید معلومات

کیا کسی دوسری صورت یا زبان میں درکار ہیں ؟

اگر آپ کو اس اشاعت کی ضرورت کسی دوسری صورت، مثلاً بڑے پرنٹ، نابینا افراد کی لکھائی بریل، آواز کی کیسٹ یا کسی اور زبان میں درکار ہوں تو براہ مہربانی کسٹمر سروسز ٹیم سے رابطہ کیجئے:

0115 9819911

ٹیلیفون نمبر:

customerservices@rushcliffe.gov.uk

ای میل:

Rushcliffe Borough Council
Civic Centre
Pavillion Road
West Bridgford
Nottingham
NG2 5FE

پوسٹ:

رشکلف براہ کلاؤنسل زبان کی سہولت کیلئے 'لینگویج لائن' کے ساتھ رجسٹرڈ ہے تاکہ یقین دہانی ہو سکے کہ ہمارے تمام صارفین کو ہماری سروسز تک رسائی حاصل ہے۔

Table of contents

Contact Information.....	7
Acknowledgements.....	7
1. Executive Summary	8
2. Introduction.....	9
3. Air Quality Strategies	12
4. Local Transport Plan for Greater Nottingham 2006 – 2011	14
5. Air Quality Management Areas.....	16
6. Monitoring results for 2009 and predictions for 2010 and 2011 (Bias Adjustment value of 0.95 is provisional).....	19
7. Summary of changes from AQAP 2007	24
8. Update on AQMA interventions	26
9. Appendix 1 NO2 monitoring locations.....	59
10. Glossary of terms.....	70
11. Reference Bibliography.	72

List of Tables

Table 1 2009 diffusion tube results and predictions for 2010 and 2011.....	20
Table 2 Results of Automatic Monitoring for Nitrogen Dioxide.....	23
Table 3 AQAP interventions programmed to be introduced during RBC	28
Table 4 Rushcliffe BC Air Quality Action Plan indicators	33
Table 5 Traffic flows in AQMA's(and main roads into AQMA's).....	37
Table 6 AQAP interventions programmed to be introduced NCC	39
Table 7 Indicators and targets from the LTP, NCC.....	53

Contact Information

This report has been produced by:-

Environment & Waste Management Service
Rushcliffe Borough Council
Civic Centre
Pavilion Road
West Bridgford
Nottingham
NG2 5FE

Tel: 0115 9148322

Copies of the report are available on the Rushcliffe Borough Council Web Site www.rushcliffe.gov.uk, or by writing to the above address.

Specific comments or information can be obtained by contacting the following Officers:-

Officer	Designation	Tel. Number	E-mail
Mr Martin Hickey	Environmental Health Officer	0115 9148486	mhickey@rushcliffe.gov.uk
Mr John Pembrington	Technical Officer	0115 9148556	jpembrington@rushcliffe.gov.uk
Mr Phil Scotney	Protection & Safety Team Leader	0115 9148242	pscotney@rushcliffe.gov.uk

Acknowledgements

The Council would like to acknowledge the help and co-operation of the many organisations and businesses who have contributed information and provided assistance to enable the Progress Report to be undertaken.

1. Executive Summary

The Environment Act 1995, Part IV, requires local authorities to assess the air quality in their areas and report the findings annually to Defra through the Local Air Quality Management requirements (LAQM). Where air quality is shown to be above the published Air Quality Standards for any of the named pollutants the Local Authority is obliged to declare an Air Quality Management Area and introduce an Air Quality Action Plan to work toward the lowering of the pollutant in question.

Rushcliffe has in previous rounds of the LAQM declared an AQMA for West Bridgford covering the roads and areas around Wilford Lane/Loughborough Road, Trent Bridge, Radcliffe Road and Lady Bay; this area being covered by AQMA 1.

A further AQMA 2 was declared covering the A52 from Clifton Bridge to the Nottingham Knight Island.

The original AQAP was published in 2007 and contained a number of measures that are to be implemented by Rushcliffe corporately and the Transport Planners at the County Council by implementing measures in the Local Transport Plan.

Periodically these measures are required to be updated and amended where necessary. This document sets out the current status of the measures outlined in the AQAP 2007 and summarises the changes, including any new measures, that have taken place to the plan since the published date. The NCC have not changed any measures in this time but have provided additional reporting information as requested by Defra.

Rushcliffe have a requirement to “*lead by example*” and have made progress with some measures in the plan but still have further work to do to achieve this goal. The list of changes to the plan is contained in chapter 7 which provides a tabular summary of these changes. Despite the need to undertake further work the levels of the principle pollutant of concern, NO₂ has fallen in recent years. Predictions indicate the levels should be compliant in the existing AQMA’s by the end of 2010 with a number of sites just falling below the AQS levels in recent monitoring. Unfortunately Trent House Flats has increased in level from last year and this site shows the variability that can take place in pollution monitoring. The County Council is to produce an options appraisal for this site to determine if any local traffic measures are feasible at this site if deemed necessary.

A full list of measures and how the implementation of these measures is to be assessed is contained in chapters 8. The progress of the measure from the original 2007 plan is also shown.

Although currently not in an AQMA this service has assessed the A52/Stragglethorpe Road junction as high and further monitoring and assessment (detailed assessment) will take place at this site to determine if an AQMA is to be declared around this site.

2. Introduction.

The Environment Act 1995, Part IV, requires local authorities 'from time to time to review and assess current and future air quality in their areas against air quality objectives detailed in the National Air Quality Strategy and to report annually on the progress made with any air quality action plan in place. The air quality objectives' are based on health based standards. Where it is unlikely that an air quality objective will be met in an area, a local authority must declare the area an 'air quality management area' (AQMA) and put in place an action plan setting out measures it intends to take in pursuit of the air quality objective. This process is known as the 'local air quality management process (LAQM)'.

The original Air Quality Action Plan was published in 2007 and sets out the actions to be undertaken by Rushcliffe and partner organisations to work toward reducing the pollutant levels at relevant receptor locations in the district to below the Air Quality Standards levels. There is a requirement to keep the AQAP up to date and to amend the plan from time to time. This document updates the original AQAP as a result of greater experience in this area and additional guidance from Defra since the original plan was published and aims to provide an indication as to whether further measures are required to be implemented to achieve the necessary reductions in traffic pollution. It is not the intention of this report to revisit the original Air Quality Action Plan and decision process in total as such the AQAP May 2007 should be read in conjunction with this update to attain a full understanding of the AQAP for Rushcliffe. This report however will provide progress on the implementation of measures to date and describe the measures that have ceased, been amended or been introduced into the action plan.

The most significant measures are undertaken by the Nottinghamshire County Council through the integration of the AQAP measures into the Local Transport Plan for the Nottinghamshire area. However, there is a requirement that RBC lead by example and ensure that its own impact on air quality is reduced and through the use of existing legal powers encourage residents to use the planning system and other resources to reduce their impact also.

No measures were specified for the Highways Agency to undertake in the AQAP as the levels of pollutants on roads in their responsibility, close to relevant receptors, was expected to be in compliance by the 2010 compliance date. Results for 2009 demonstrate that AQMA2 monitoring results around the A52 have shown a downward trend since the original AQAP and levels at these sites are now at or very close to being below the AQS but still exceeding in some areas. Predictions indicate that all sites in AQMA 2 should be complaint without further measures in 2011 provided traffic levels do not increase significantly and the trend in NO₂ reduction continues. It is therefore important that air quality impacts are fully understood on developments that take place that could lead to traffic build up in these areas and mitigation and other emission reduction measures implemented where necessary.

2.1. Overview of the local air quality management in Rushcliffe.

Summary of Rushcliffe Borough Councils Local Air Quality Management 2000 – 2009.

The following information can be viewed or downloaded from the Rushcliffe Borough Council Web Site www.rushcliffe.gov.uk

2.2. Air Quality Review and Assessment 2000.

In 2000, Rushcliffe Borough Council reported the findings of its original Review and Assessment of local air quality. This was a 3-stage process, concluding that with the exception of particulates, there was no need to proceed beyond Stages 1 and 2.

A more detailed Stage 3 assessment was carried out for particulates (PM₁₀), due to both potential inaccuracies in the atmospheric dispersion modeling and the predicted concentrations being close to the objective. Monitoring data was used to validate the computer modeling. It determined that the objective would be unlikely to be exceeded. It was therefore concluded that there was no need to declare an Air Quality Management Area (AQMA).

2.3. Updating and Screening Assessment. Review and Assessment of Local Air Quality 2003.

The 2003 Updating and Screening Assessment showed that a detailed assessment was required for traffic related nitrogen dioxide around some roads in West Bridgford, and for sulphur dioxide emissions from the kiln operations at Lafarge UK Ltd cement works in Barnstone.

2.4. Air Quality Review and Assessment Progress Report – 2005.

The purpose of the Progress Report was to provide an annual review and update on air quality issues, and included developments that might be significant to air quality and an update on the ongoing air quality monitoring within the Borough since the last Updating and Screening Assessment.

2.5. Air Quality Action Plan 2007

The Air Quality Action Plan was accepted by DEFRA on May 2007 and outlines the options that the council and partner organisations need to undertake to work towards reducing the levels of nitrogen dioxide to below the National Air Quality Objectives. The Action Plan feeds directly into the Nottinghamshire County Council Local Transport Plan, which will contribute to improvements in air quality.

The main measures of the draft Action Plan are:

- Information and awareness.
- Consideration of alternative means of transport.

- Road network management.
- Management of emissions.

The Action Plan was consulted on and the published plan took on-board the comments received from Department for the Environment, Food and Rural Affairs (DEFRA), consultees and stakeholders.

2.6. Air Quality Review and Assessment And Air Quality Action Plan 2008 Progress Report

The 2008 progress report was accepted by Defra with certain recommendations being made for future reports.

2.7. Updating and screening Assessment 2009

This report identifies if any areas of the district have undergone any significant changes since the last updating and screening assessment requiring further monitoring or modeling or investigation (detailed assessment). No areas were identified in the Rushcliffe area.

2.8. Air Quality Action plan Progress report 2009

The air quality action plan progress report is the annual update on the implementation of the AQAP sent to Defra with this report containing revised monitoring indicators following advice from Defra. This report indicated RBC has certain measures still to move forward on corporately.

3. Air Quality Strategies

3.1. Nottinghamshire Air Quality Strategy.

In 2007 the strategy was revised and updated and the new, revised strategy entitled 'A breath of fresh air for Nottinghamshire, An Air Quality Improvement strategy for the next Decade' was launched on April 25th 2008.

The strategy seeks to fulfil the following main objectives:

- Minimise air pollution and the impact of global warming and climate change.
- Encourage sustainable development in Nottinghamshire to protect the health and wellbeing of the population.
- To work with businesses, stakeholders and the residents of Nottinghamshire to encourage sustainable improvements in air quality.
- Support and maintain the work of the Nottinghamshire Air Quality Steering Group.
- Complement other county wide groups and strategies adopted and supported by Local Authorities and the County Council and other organisations such as the Environment Agency, Primary Care Trusts, Highways Agency and the Health Protection Agency.
- Ensure that the strategy to improve air quality in Nottinghamshire is reviewed by 2011.

A copy of the document is now available for download from www.rushcliffe.gov.uk

3.2. Rushcliffe Borough Council Air Quality Strategy

The revised and recently published Nottinghamshire air quality strategy, "A Breath of Fresh Air" has now been formally adopted by Rushcliffe Borough Council and supersedes the Rushcliffe Borough Council's 2002 strategy.

3.3. Nottinghamshire Environmental Protection Working Group

The Council continues to be a member of the Nottinghamshire Environmental Protection Working Group (NEPWG) formed in partnership with Nottinghamshire County Council, Ashfield District Council, Bassetlaw District Council, Broxtowe Borough Council, Gedling Borough Council, Mansfield District Council, Newark and Sherwood District Council Nottingham City Council, Environment Agency, Health Protection Agency and the Highways Agency.

The NEPWG works under the direction of the Nottinghamshire Chief Environmental Health Officers Group. The NEPWG enables the authorities to work collaboratively on the full range of pollution issues, demonstrating that liaison on a technical level is already well established. This group meets several times in a year and Rushcliffe regularly attends and hosts these meetings. These meetings have continued since the AQAP was published.

3.4. The Nottinghamshire Air Quality Steering Group

The Nottinghamshire Air Quality Steering Group was formed in 1998 and comprises representatives from each local authority, Health Protection Agency, Highways Agency, Nottinghamshire County Council, University of Nottingham and the power generators. The group acts as a consultation body to advise local authorities of procedures, to ensure wide consultation in relation to air quality issues, and in particular air quality reviews and assessments.

Since the AQAP 2007 was published the Nottinghamshire Authorities have agreed to employ a single laboratory to undertake the supply and analysis of diffusion tubes as part of a 3 year contract with Gradko Laboratories. Over 2008 this has meant a change in tube preparation for Rushcliffe from 50% TEA to 20% TEA NO₂ diffusion tubes. This will enable the authorities to effectively compare results over the whole of the county and also with any assessments undertaking for planning purposes by consultants as well as making financial savings in this area. The 20% tubes are more widely used and the use of a different preparation can make comparisons with other studies difficult.

The AQSG has over 2008 introduced a new website to display data from those LA that have real time monitors and has the intention to include all other air quality data and links to reports. This will enable a single area where residents and others interested in the air quality work in Nottingham can go to attain past and current information. Work needs to be undertaken to further develop this site and a sub group has been set up to complete this task. The new Envista software to manage the data from real time monitors is to be used by Rushcliffe, Gedling, Mansfield, Nottingham City and Ashfield Councils. The software will ensure that those Councils in the Nottinghamshire area with real time monitors are carrying out data collection and processing to the same QA/QC procedures with data being able to be accessed by members of the public via the web link. Rushcliffe have used this software over 2008 and into 2009. Work is still required in 2009 to fully utilise this software by Rushcliffe and some of the partner Authorities still require to make the change over to Envista. The web site can be accessed at www.nottinghamaqm.net.

4. Local Transport Plan for Greater Nottingham 2006 – 2011

Nottinghamshire County Council, in partnership with Nottingham City Council has produced the Local Transport Plan and the main function of the Plan is to set out the local transport strategy and priority areas for investment over a five year period.

The plan area includes Rushcliffe, the City of Nottingham, and the neighbouring boroughs of Broxtowe, Gedling, and part of Ashfield. The objectives of the plan are based on the Governments “Shared Priority for Transport” as well as three locally determined objectives. The three relevant themes for the Plan are managing congestion and improving air pollution and improving quality of life.

The LTP Objectives are:

- A. To increase sustainable accessibility to the City Centre and district centres in ways which enhance economic activity, encourage development in and reduce social exclusion from these centres,
- B. To reduce traffic growth and to encourage modal change away from the private car particularly for work journeys to the City Centre,**
- C. To encourage safe walking and cycling for short journeys including travel to schools, shops and other local facilities
- D. To improve integration and interchange between modes
- E. To integrate land-use and transport planning by ensuring all new major development is well connected to the public transport system and accessible by foot / cycle,
- F. To maintain and enhance Greater Nottingham’s accessibility to regional, national and international markets, particularly by modes other than the car
- G. To reduce social exclusion and to improve the accessibility to transport for disadvantaged groups, particularly disabled people
- H. To relieve communities from the adverse effects of through traffic, particularly heavy goods vehicles,**
- I. To maximise the efficiency and maintain the structural integrity of existing transport networks,
- J. To increase transport choice in rural areas,
- K. To improve air quality within the Plan area and to alleviate other transport impacts upon health, and**
- L. To improve road safety, particularly for vulnerable road users.

Road transport is the major source of pollution in Rushcliffe and the Greater Nottingham Local Transport Plan (LTP) has played an important role in working towards improving air quality, and the main focus of the air quality action plan has been linked around the measures in the LTP to reduce transport emissions in AQMA 1 and 2.

Rushcliffe Council regularly meets with the Local Transport Plan Manager at the Nottinghamshire County Council to discuss the progress of the measures set out in the AQAP. The aim of the meeting is to move forward the key objectives set out in the action plan looking at such matters as improving traffic flows, park and ride systems, bus priority routes, improvements to public transport and considering air quality impacts from major developments. The meetings enable this authority to link into the LTP and influence transport planning to improve air quality within the Borough that may be directly outside of its control. A target has been set to meet with the LTP on three occasions annually.

The Local Transport Plan for Greater Nottingham 2006 – 2011 can be viewed or downloaded from

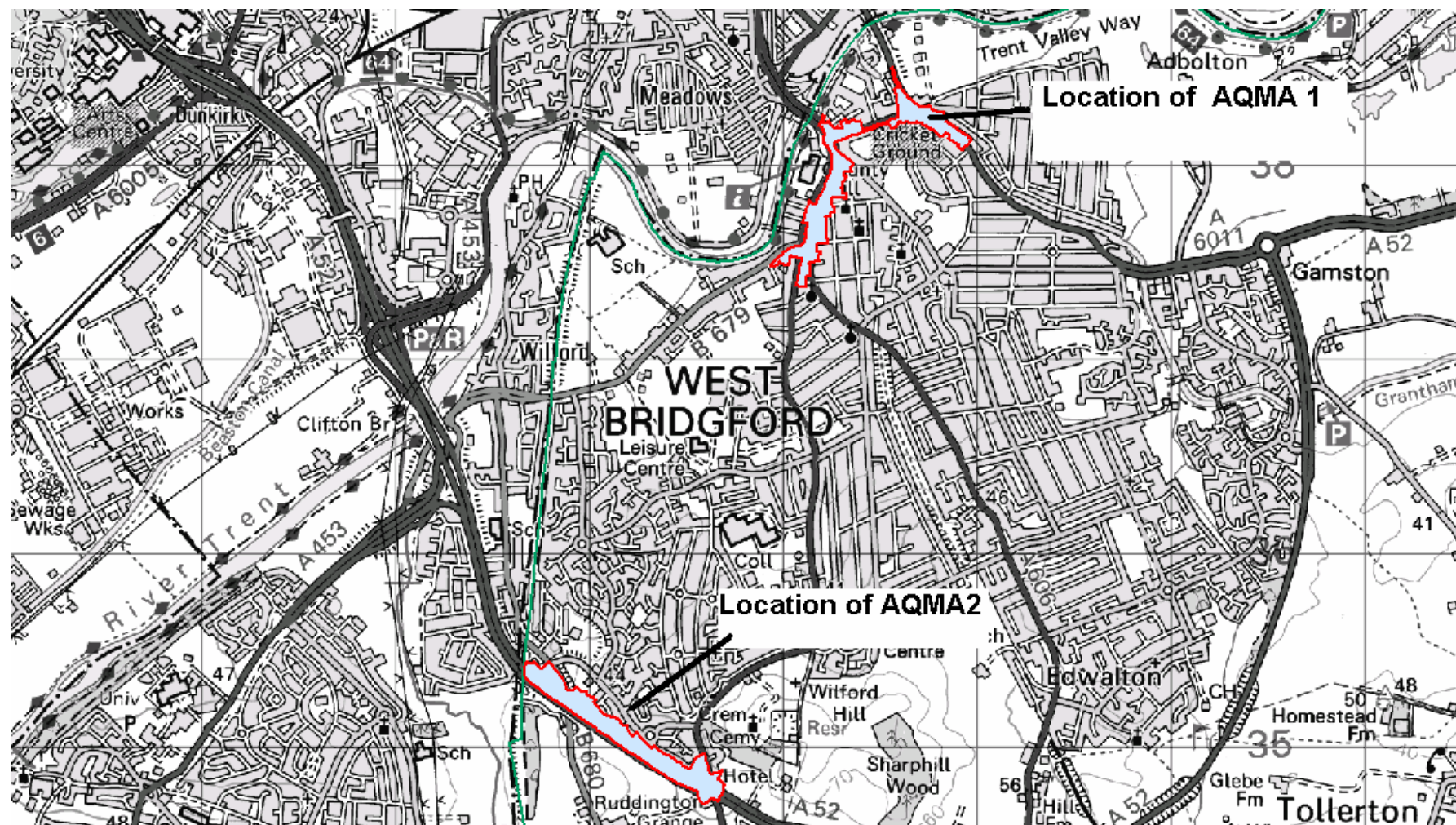
http://www.nottinghamshire.gov.uk/home/traffic_and_travel/strategy-policy/ltp.htm

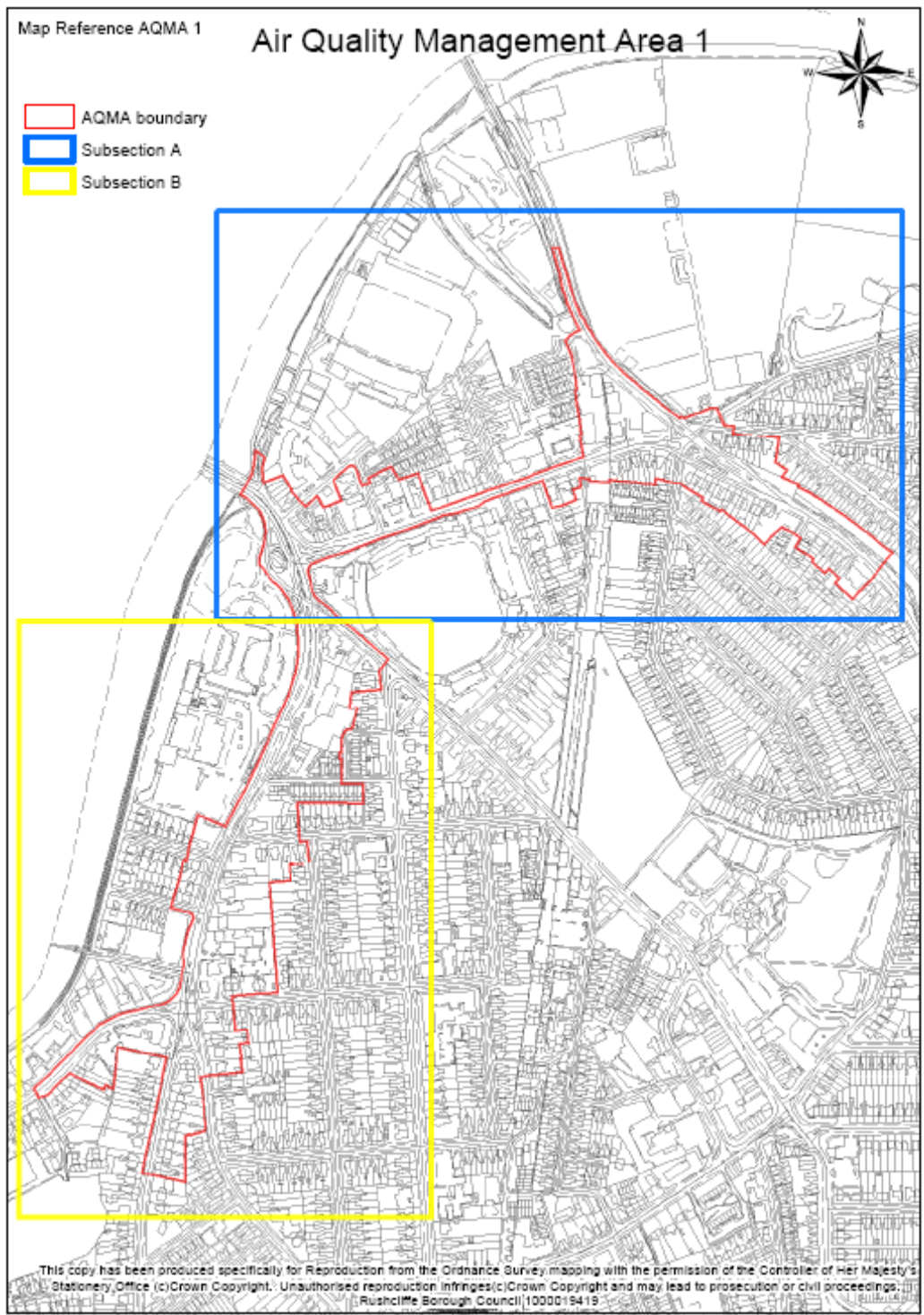
The existing Local Transport Plans expire on 31 March 2011 and the NCC transport planners are currently developing the replacement; the third Local Transport Plan. (LTP3)

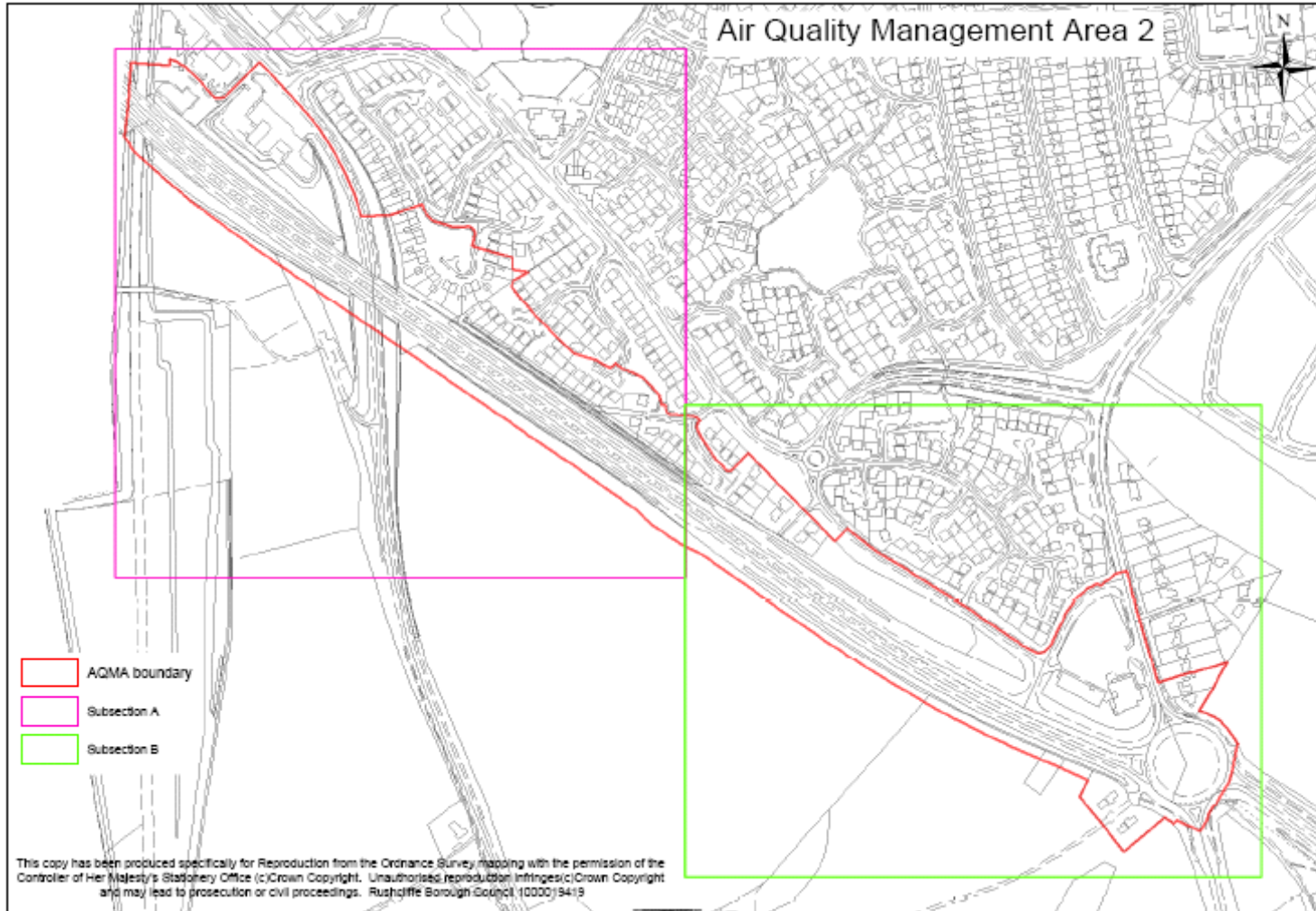
The third Local Transport Plan will cover the whole of the county and will run from 1 April 2011. The NCC is currently deciding what should be Nottinghamshire's transport priorities and a consultation process is ongoing

5. Air Quality Management Areas

The areas of the AQMA's are shown in the 3 plans below:







Rushcliffe - great place, great lifestyle, great sport.



6. Monitoring results for 2009 and predictions for 2010 and 2011 (Bias Adjustment value of 0.95 is provisional)

Rushcliffe have a network of diffusion tubes that measure the pollutant NO₂ which is primarily derived from vehicle engines but also occurs with any combustion process. It is however the traffic derived pollution that is the cause of the AQS breaches.

The tables below show the 2009 diffusion tube monitoring data for the AQMA's and the district as a whole. The AQS for NO₂ at receptor locations is 40 micrograms/m³. If the levels exceed these standards when adjusted for any distance and bias then the site is non compliant.

The table shows the raw unadjusted result for each diffusion tube site, the result adjusted for distance (where appropriate) and then the bias application. It is this final figure that should be compared to the AQS. Due to vehicle improvements in engine technology emissions from motor vehicles should reduce in time. Consequently a prediction can be undertaken of the site levels at road sides of the sites in question. This assumes the bias factor is the same and that traffic levels remain unchanged. The predictions suggest that all sites should be compliant in 2010 and levels continuing to fall in 2011.

Table 1 Showing 2009 diffusion tube results (provisional) and predictions for 2010 and 2011

Grid Reference	AQMA	Name	Location	Mean 2009 unadjusted ug/mg3	Mean 2009 value corrected for distance to receptor	2009 Mean value Bias adjusted (0.95)	2010 Roadside bias corrected 2010(0.95) estimate	2011 Roadside bias corrected 2011(0.95) estimate
458174, 337771.5	1	1 LOUGHB'H RD W/B	NA3	35.34	37.1	35.2	32.0	30.1
458716, 338238	1	EDWARD ROAD, LADY BAY	ER	36.36	36.4	34.5	31.4	29.5
458126, 337727	1	LOUGHBOROUGH ROAD (RES)	LR	37.14	37.4	35.5	32.3	30.4
458090, 337527	1	PARTICULATE MONITOR	PM10	35.69	34.4	32.7	29.7	27.9
458284, 338150	1	RADCLIFFE ROAD	RR	42.25	42.2	40.1	36.5	34.3
458919, 338120	1	SWANS HOTEL	SH	34.52	34.7	33.0	29.9	28.2
458114, 337518	1	THE POINT	POINT	30.63	31.3	29.7	27.0	25.4
458752, 338278	1	TRENT BOULEVARD A	TBLA	38.93	38.9	37.0	33.6	31.6
458756, 338267	1	TRENT BOULEVARD B	TBLB	42.42	42.4	40.3	36.6	34.4
458252, 338146	1	TRENT BRIDGE	TB	62.12	42.3	40.2	36.5	34.4
458274, 338117	1	TRENT BRIDGE INN	TBI	56.83	56.8	54.0	49.0	46.1
458227, 338197	1	TRENT HOUSE	THF2	45.57	45.6	43.3	39.3	37.0
458134, 337581	1	WILFORD LANE 3	WL3	46.27	39.4	37.4	34.0	32.0
458540, 338218	1	Roam(Acorn hotel lamp post)	Roam(Acorn)	43.38	39.5	37.5	34.1	32.1
456970, 335222	2	8 SALTBY GREEN	SG	28.45	28.5	27.0	24.5	23.1
457612, 334813	2	A60/A52 JUNCTION (Nott Knight)	NK	51.95	37.2	35.3	32.1	30.2
457222, 335016	2	BOTANY CLOSE	A52/WB	61.68	42.2	40.1	36.4	34.3
457266, 335008	2	3 BOTANY CLOSE	3BT	38.45	38.5	36.5	33.2	31.2
457223, 335033	2	CLOVERLANDS	CL2a	39.42	41.2	39.1	35.6	33.5
457225, 335043	2	CLOVERLANDS 2	CL2	31.04	34.2	32.5	29.5	27.8
456785, 335359	2	LANDMERE NURSING HOME	LL	30.71	30.7	29.2	26.5	24.9

457651, 334840	2	WINDYWAYS	WW	40.84	40.8	38.8	35.2	33.2
451697, 330925	No	A453	A453	46.47	34.1	32.4	29.4	27.7
470371,342046(april 08 on)	No	A46 EAST BRIDGFORD 2	A46/EB2	28.39	29.5	28.0	25.5	24.0
460662.7, 336513.5	No	A52 LINGS BAR Hospital	GLB HOS	23.68	23.7	22.5	20.4	19.2
466630, 339652	No	A52 SAXONDALE	A52/S	38.82	30.1	28.6	26.0	24.4
465929, 335543	No	A52 SOUTH AVE, RADCLIFFE	A52/SA	36.61	36.6	34.8	31.6	29.7
463008, 338215	No	A52 HOME HOUSE, STRAGGLETHORPE	A52/HH	64.84	56.3	53.5	48.6	45.7
464644, 338730	No	RADCLIFFE A52	A52/RT	41.13	36.6	34.8	31.6	29.7
463540, 338219	No	A52 HOME HOUSE(façade) STRAGGLETHORPE	A52/HHF1,2,3	52.94	54.0	51.3	46.6	43.9
463005, 338204	No	STRAGGLETHORPE ROAD	SR	38.22	38.2	36.3	33.0	31.0
456893, 336768	No	21 HEATHERVALE	HV	31.01	32.9	31.3	28.4	26.7
458501, 337854	No	34 BRIDGFORD ROAD	BR	29.02	29.0	27.6	25.0	23.6
457873, 337426	No	39/41 WILFORD LANE	WLR/2	31.72	31.7	30.1	27.4	25.8
458326, 336714	No	HAMPTON ROAD	HR	22.97	23.0	21.8	19.8	18.7
458049, 337340	No	HICKORY HOUSE	HH	31.37	31.4	29.8	27.1	25.5
458453, 338211	No	MIDLANDS COMM (Radcliffe Rd)	MC	42.76	42.0	39.9	36.2	34.1
458457, 338215	No	37 RADCLIFFE ROAD	37RR	37.11	38.8	36.9	33.5	31.5
458399, 337172	No	PEVERIL COURT 1 & 2	PC2	31.69	31.7	30.1	27.4	25.8
457701, 337342	No	THE BEECHES HOTEL	BH	31.50	31.8	30.2	27.4	25.8

The predictions for 2010 and 2011 are derived from the future years prediction factors published Defra and available from [http://www.airquality.co.uk/laqm/tools/Chapter 2 Box 2.1 update 22-01-10.doc](http://www.airquality.co.uk/laqm/tools/Chapter_2_Box_2.1_update_22-01-10.doc) . This particular method is used to forecast roadside NO2 levels which incorporates the majority of sites covered by the monitoring programme in Rushcliffe. Roadside locations are typically within 1 to 5 metres of the kerbside, but may extend up to 15 metres depending upon the road configuration and traffic flow.

As can be seen from the data tables above that currently six monitoring locations in the AQMA's exceed the 40 limit for the annual mean. 4 of these exceed by less than 0.5 micrograms. Trent House flats exceeds by 3 micrograms but is expected to be compliant in the following year.

Since the AQAP 2007 the diffusion tube sites have undergone a number of changes to reflect new guidance, a common approach to monitoring and a greater understanding of the pollution hot spots in the area. A plan of the location of the sites for 2009 is shown in appendix 1.

Trent Bridge is not a relevant receptor location for the 40ug/m³ limit, however when corrections have been made for this site exposure is below the AQS objective at the nearest relevant receptor. Trent Bridge site has been stopped from the end of 2009 and a new site at the Trent Bridge Inn has been established. This is however subject to people spending regular time outside in the general vicinity of the monitoring site, as such the AQS objective of 200ug/m³ over a 1 hour period should not be exceeded. This is empirically linked to an annual mean of 60ug/m³. It can therefore be assumed that if this site does not exceed the annual mean value of 60ug/m³ then the 1hour limit will not be exceeded. Data for this site is currently insufficient to draw a conclusion with any certainty as data only covers 2 months results.

From the data above it can be seen that the site presenting the most concern is Trent House flats although this too is expected to be compliant in 2010 if reductions in emission factors occur as expected.

Outside of the AQMA's monitoring site at Stragglethorpe Road/A52 is very high. This site is not in a current AQMA and this Authority is undertaking further monitoring at this site and will be producing a detailed assessment as required under the LAQM requirements.

Rushcliffe predict that all sites in the current AQMA will be compliant with the AQS objectives by the end of 2010.

Table 2 Results of Automatic Monitoring for Nitrogen Dioxide

Location	Within AQMA Y/N	Description	Annual Mean Concentrations ($\mu\text{g}/\text{m}^3$)				
			2005	2006	2007	2008	2009
Millicent Road/Loughborough Road, West Bridgford	Y	Annual Mean $\text{NO}_2 > 40 \mu\text{g}/\text{m}^3$	39.3	n/a	43.2	38.4	34.1
		NO_2 Hourly Mean $> 200 \mu\text{g}/\text{m}^3$ for more than 18 times per year	n/a	n/a	0	2	0
		% Data Capture(Target $>90\%$)	n/a	n/a	89	88	77

The real time chemiluminescence monitor has been located at Millicent Road/ Loughborough Road for number of reporting years. The table above demonstrates the values at this site from 2007 to 2009. Due to data losses mostly associated with equipment failure the most recent results are only 77% data capture, a figure of 90% is the aim to achieve to provide a satisfactory degree of certainty in the results. It is expected that data capture will be improved in future years due to a new monitor being installed at this site in February 2010. The real time monitor provides a better level of certainty to the pollution levels in the area when compared to the diffusion tube samplers used extensively in the Borough. The monitor enables a local bias factor to be established to be used in the diffusion tube assessment above which is reported annually to Defra. The results in 2009 indicate a reduction in NO_2 although as noted data capture reduces the certainty of this result.

7. Summary of changes from AQAP 2007

Since the original publishing of the AQAP in May 2007 the AQAP has been subject to a number of changes as policy in this area and guidance from Government has been received. In addition certain measures undertaken by Rushcliffe are no longer undertaken and therefore cannot be relied upon in the AQAP. Principle this is the EMAS scheme in place at Rushcliffe at the start of the AQAP but no longer in place in 2009.

A summary of the changes applied to the plan are shown below

measure	Comment	update
EMAS scheme	The EMAS scheme was formerly ended in 2008.	National Indicators are now used to demonstrate the ongoing commitment to emissions reduction in the LA and enable progress to be measured. NI185, NI,186,NI 187, NI 194 This has resulted in the creation of a climate change action group and the associated climate change action plan which will ensure a corporate implementation of the above national indicators.
Further monitoring indicators have been introduced	The 2009 AQAP progress report introduced new key monitoring indicators. These aim to demonstrate the work that is being undertaken to reduce impacts on air quality. The indicators also list key monitoring points which, if all in the area are below the AQS then consideration can be given to formerly revoking the AQAM.	New indicators other than NI's are LIEWM20, AQ1,AQ2, AQ3,AQ4,AQ5,AQ6,AQ7,AQ7/2 and AQ8; a description of these indicators is contained Table 4 Rushcliffe BC Air Quality Action Plan indicators below.
Local Air Quality Strategy	The Local Air Quality Strategy has been replaced with the Nottinghamshire Air quality Strategy, A Breath of Fresh Air , which has been adopted at all the Nottinghamshire LA	Available from www.rushcliffe.gov.uk
Monitoring locations	A number of monitoring locations have been changed since the AQAP	Tubes around Lady bay, Trent Bridge, A52 West Bridgford, Wilford Lane, 37 Radcliffe Road and East

	2007 was published. Some sites have been ended and others have been added. This is part of the ongoing assessment process of air quality monitoring and reflects the changing guidance from Defra and the improvements in certain areas such that monitoring is considered not necessary.	Bridgford have been moved to more relevant locations (or as a result of effects from other sources) Locations have been added at Stragglethorpe Road/A52 and Radcliffe on Trent. To gain a more certain result some diffusion tubes have been doubled up or tripled to reduce sampling error.
Traffic flows in the AQMA 1	Traffic levels in AQMA 1 are now analysed and reported on to determine increases or decreases in the AQMA	See Table 5 traffic flows in AQMA's(and main roads into AQMA's)
A52 study	The HA are in the process on undertaking a study on the A52 which will incorporate the air quality impacts	This has been added as an action to the AQAP for 2010 and is expected to report by 2010/11
NCC changes	Changes have only occurred in the detail of reporting and indicators following further guidance from Defra. No actions have changed	Changes have been made are included in the updated NCC table below.
NCC Changes	Insertion of new measure to undertake an options appraisal on the Trent Bridge/Radcliffe road Junction	To determine if local measures are feasible should additional measures be considered necessary at this site.
Renew of monitoring equipment	Renew PM10 and NO2 monitors in 2009/2010 period	Monitoring equipment in the AQMA's has aged and the NO2 monitor, in particular, has suffered data loss due to downtime. Both monitors have been renewed in 2009/2010

8. Update on AQMA interventions

The air quality action plan was drawn up to outline what actions can be taken by Rushcliffe BC and other partner organisations to work toward reducing nitrogen dioxide levels within the declared AQMA's to below the National Air Quality Objectives at relevant receptor locations. The main measures of the action plan are to:

- provide information and awareness
- consideration of alternative means of transport
- road network management
- management of emissions
- planning considerations

Within Rushcliffe and for most Local Authorities road transport is the major source of NO₂ and is the underlying cause of the declaration of AQMA's.

The LTP sets out the local transport strategy and priority areas for investment over a five year period and includes the City of Nottingham, the boroughs of Broxtowe, Gedling, Rushcliffe and part of Ashfield. The integration of the Action Plan with the Greater Nottingham Local Transport Plan (LTP) was and will continue to be the main focus of this action plan and will revolve around

- Measures to reduce congestion,
- Promotion of alternatives to car travel and
- General reduction measures to reduce transport emissions.

LTP is currently in the process of being developed by the County Council and will supercede the LTP2 in 2011.

The following tables indicate the interventions programmed to be undertaken as part of the AQAP by Rushcliffe Borough Council and other partner organisations (NCC & HA) and the progress made in implementing each measure to date. Each table will be updated in an annual progress report on the AQAP which will be submitted to Defra. Depending on the status of the LAQM process an additional report will be required annually to fulfil the LAQM requirements; this may be an air quality progress report covering the whole area or an updating and screening assessment periodically. In addition if areas of high pollution are shown to exist, additional detailed assessments and further reports will be required. Where possible the two reports will be part of a single report. Previous reports in this process have been highlighted in chapter 2.1 of this report.

In line with previous correspondence from Defra indicators have been added to these measures to help plot the progress of the implementation of the measures and how successful they are. A number of the measures implemented by Rushcliffe are unlikely to have any significant effect on traffic in the AQMA due to the main cause of the exceedences of the NO₂ limit being commuter traffic going into and out of Nottingham over the bridge crossings

and these roads being controlled by the Nottinghamshire County Council. However, the Rushcliffe Borough Council has been encouraged to “*lead by example*” in recent responses from Defra. It is expected that National Indicators the Authority have now implemented will be a better measure of the progress made with reducing the Authorities impacts on air pollution in this area than detailed break down of individual measures. Some individual measures do not lend themselves to be measured quantitatively in respect to their impact on NO2 and to do so would require additional officer time with little additional gain being met. Where possible some form of surrogate indicator has been applied to denote the extent that work is being undertaken in this area to improve air quality.

Table 3 indicates the measures that have been identified for Rushcliffe to implement and provides an update on the progress made. Table 4 contains the indicator data which contains the results of the most recent information at the time of publication. In subsequent reports the monitoring and indicator data will become more complete to enable the work being undertaken by the E&WMS to be viewed and the contribution to the work makes to reducing emissions in general and in particular in AQMA's.. Table 6 lists the measures identified in the Local Transport Plan, which are primarily being implemented by the Nottinghamshire County Council.

Table 3 AQAP interventions programmed to be introduced during 2006/07-2010/11 RBC

measure	Focus	responsibility	Air Quality Impact	Time scale	Indicator	Progress to date
RBC Travel Plan	Reduce impact of RBCs business and staff travel.	P Philips	L	M	Implementation of travel plan.	Progress has been made as expected on the staff travel plan. As part of the collection of data for other NI's data is being collected to reflect vehicle mileage in the LA. It is proposed to introduce an indicator related to mileage claimed.
Nottinghamshire Air Quality Strategy	Review the strategy through the Nottinghamshire Air Quality Steering Group	E&WMS (M Hickey)	L	n/a	Adoption of strategy	Strategy was adopted in 2008 Strategy was adopted by RBC in 2008. NFA required
Remote home working	Expand to other Service areas as appropriate		L	S	AQ3	Environmental Health staff currently undertake a significant proportion of work from home negating the need to travel through the AQMA areas. No further progress made
RBC EMAS	Consolidate objectives and integrate with management systems. Reduce NOx emissions. Promote walking, cycling car sharing	N/A	n/a	n/a	n/a	n/a The EMAS has been ended corporately. This element of the action plan is being replaced by the Climate change action group and specifically NI 186

Energy efficiency	Reduce emissions of greenhouse gases and nitrogen dioxide from RBC premises and domestic premises and establish targets	P Philips (Sheila Hood)	L	2009/2010	NI185 NI 187	An energy strategy is in place for the period 2000-2010 with the aim of reducing energy usage in general. This measure is now part of the Climate Change Action Group remit NI 187 Progress – we are feeding our action plan into the county action plan under the LAA. At the moment RBC are continuing with actions from 2008/9. The county NI 187 group have secured money to fund further initiatives into 2011.
Climate change action group	Air quality – % reduction in NOx and primary PM10 emissions through local authority's estate and operations.	P Philips	L	2009/2010	NI 194 NI 185 NI 186	Commenced Sept 2008. Steering group set up which meets periodically. Energy Saving Trust questionnaire completed by all departments- action plan developed with targets incorporated to lower Co2 and Pm10. Progress report discussed at group – regular agenda item for future. Contributions made to the Air Quality Action Plan.
RBC procurement	Implement a green corporate procurement strategy to reduce pollution	Procurement officer (David Hayes)	L	S		The Council published 'Green purchasing guidelines' in Jan 2004. The Council requires pre-qualification of suppliers to ensure that they practice equal opportunities and environmental policies. A procurement strategy is in place covering 2006-2009. Currently RBC is working toward a regional Sustainable Procurement with Improved environmental performance across the range of goods purchased being a key aim. No further progress to report

Local Plans. Development Control Strategies.	Develop Supplementary Planning Documents. Ensure air quality is a material consideration for key developments in the Borough. Prevention of a worsening of air quality through inappropriate development in or around the AQMA's	Development control (Richard Mappletoft) E&WMS (M Hickey)	M	2009 Ongoing ongoing	Production of final guidance AQ4 AQ5 AQ6	Draft guidance produced. Planners have policy in place to refer applications with air quality impacts	Air quality is a material consideration in planning matters and specific conditions relating to land use and traffic impacts are being commented on and attached as planning conditions currently. A draft informal SPD has been drafted by EH&WM but requires further revision prior to consultation. An un adopted guide for developers is likely to be published this year but formal adoption by development control is yet to be discussed
Control of industrial emissions	Liaise with Environment Agency to ensure that air quality is considered as part of the IPPC regime/ enforcement of ppc controls to air	E&WMS (M Hickey)	L	ongoing	LIEWM20	Incorporated into existing procedures. Measure implemented	
Bonfires	Encourage composting recycling and enforce bonfire controls on demolition sites	E&WMS, neighbourhood (P Scotney)	L	ongoing	AQ2	Policies are already in place to investigate complaints within 5 days	
Smoke control	Enforce the requirements of the Smoke Control Areas In West Bridgford	E&WMS, neighbourhood (P Scotney)	L	ongoing	AQ1	Policies are already in place to investigate complaints within 5 days	
AQ monitoring/ information	Continued monitoring throughout the borough. Development of County wide AQ website and develop consistent monitoring procedures. Air quality monitoring data and reports published on Rushcliffe.gov.uk web site	E&WMS (M Hickey)	L	Implemented Updates in 2009 Annually June July 2009	Web site going live. Updates to web site design Published on web	Envitec & Casella employed by AQSG to install	Further training on the use of the software has been undertaken in 2008/09. Further web development needs to take place though the AQSG to further enhance the service. Initial meetings arranged to discuss updates made for July 2009 Web site went live in 2008. RBC real time data is now published on the web for Loughborough Road NO2. Previous data and reports are on RBC website. Meetings have continued in 2009 and further development is expected in 2010 and publicity given to the new site.

Local Strategic Partnership	Develop key actions on air quality improvement within the Environmental Issues Group	P Scotney/ P Philips	L	M	NI85 N194	Rushcliffe Community Partnership have developed an Action Plan ' A Better Future for Rushcliffe – Protecting and Improving Our Environment' Key actions with the aim of reducing Rushcliffe's Eco footprint and air quality being one aspect of the action plan. To be implemented over 08/09	
Liaison with the Highways Agency	Develop further actions for the improvement of air quality within the AQMA's	E&WMS(M Hickey / Sarah Cairns)	L	2009/2010	Meet with HA at least annually. Forward any Air quality reports to the HA as a consultee Contact the Route manager in 2009 if necessary	The HA were contacted in 2008 and invited to discuss the previous Review and assessment report. No comments were received back in 2008. The HA are invited to attend the AQSG meetings by the chair of the group. The HA have attended one meeting of the AQSG in early 2009 and provided an update on air quality from their perspective to the group as a whole. Regarding RBC the HA are of the opinion that the levels of NO2 along the A52 in AQMA2 are expected to fall below the AQS objectives before projects such as the A453 become live. This is based on an Air Quality assessment undertaken by consultants on their behalf for the A453 widening project. HA are to undertake study in 2009/2010 as indicated in the following measure	
A52 Traffic Study	Determine traffic levels and air quality impacts along A52 from Widmerpool to Clifton and associated junctions.	Highways Agency	H	By end of 2010	Production of final report	Study ongoing at this time.	
VOSA vehicle emissions testing	Liaise with NCC and evaluate feasibility of enforcement of emission standards within AQMA's	E&WMS (M Hickey)	L	2009/2010	Under take monitoring	The action was raised at the AQSG. 2 LA's agreed to part take in a joint scheme. This was insufficient to fund the project.	Item will remain open but no further progress has been made.

RBC fleet and fuel policy	Use good vehicle management. Evaluate cleaner fuels/vehicles	E&WMS (Robert Yarnall)	L	M	NI194 Review of fuel policy	Fleet operated on bio diesel mix. Currently have 1 Euro V vehicle with 2 more to be delivered in June 08. Older vehicles on 8 year rolling programme of change. Has 1 electric all terrain vehicles for country park. To review fuel policy again in 2009. Driver awareness training in place Progress on fleet composition to be update annually by RBC Fleet Manager
LTP integration	Reduction/prevention of traffic increase in AQMA 1 through the LTP	LTP transport Planners (Sean Parks)	H	April 2010 During 2009	Production of indicators and targets for each LTP measure annually AQ7	LTP table reported in 2008 Met with LTP on 2 occasions in 2008. New table supplied by LTP with targets and indicators added for 2009 see Table 6 Update on AQAP interventions programmed to be introduced during 2006/07-2010/11 NCC
Reduction in NO2 in AQMA's	Measure NO2 concentrations at key receptor locations in AQMA's	E&WMS (M Hickey)	H	ongoing	AQ8 full details of NO2 results reported annually to Defra through R&A	Generally levels increased in 2007. Levels have reduced in 2008 such that a number of key sites are now at or below the annual AQS objectives. 2009 has seen levels fall again. Noted exceptions are the THF. Predictions using the Defra future year's tool suggest that all sites will be compliant in 2011 if traffic growth does not occur.
Reduction in NO2 in AQMA's	Renew NO2 and PM10 monitors in AQMA 1	E&WMS (M Hickey)	H	April 2010	Implemented in 2009 and Jan 2010	New Romon enclosure and new No2 analyser purchased from Casella through a joint procurement with Nottingham City to reduce costs. A grant toward the monitor was applied for and £1500 received from Defra PM10, Sven Leckel EU monitor was renewed in 2009 purchased from Eti the current supplier.
Set up internal AQAP working group	To oversee the integration of the AQAP on related internal activities in the LA	E&WMS (S Cairns)	M	M	Implemented in 2009	One formal meeting has taken place 2009 and one in early 2010.

Table 4 Rushcliffe BC Air Quality Action Plan indicators

Indicator		2006		2007		2008		2009	
		Target	Actual	Target	Actual	Target	Actual	Target	Actual
N185: Percentage CO2 reduction from LA operations		N/A	N/A	N/A	N/A	N/A	*1 Data being collected	*1	*1
N186: Per capita reduction in CO2 emissions in the LA area		N/A	N/A	N/A	N/A	N/A	*1 Data being collected	*1	*1
N187: Tackling fuel poverty - % of people receiving income based benefits living in homes with a low and high energy efficiency rating		N/A	N/A	N/A	<u>2007/8 baseline.</u> SAP below 35 6.32% Sap above 65 33.6	N/A	<u>2008/9 baseline.</u> SAP below 35 5.53% Sap above 65 40.32%	2009/10 SAP below 35 4.8% SAP above 65 43%	
N194: Air quality – % reduction in NOx and primary PM10 emissions through local authority’s estate and operations		N/A	N/A	N/A	N/A	5%	*1 Data being collected	*1	*1
LIEWM20: % of risk based inspections undertaken as part of the annual programme PPC				98%	100%	98%	100%	98%	
AQ1: Number of smoke control complaints investigated		N/A	2	N/A	2	N/A	2		
AQ2: Number of bonfire complaints investigated		N/A	83	N/A	83	N/A	69		
AQ3: Number of RBC staff remote working							25 home workers 21 occasional		
AQ4: Air quality assessments	No of Assessments					n/a	6 see note		

reviewed through the planning process							*2		
AQ4 continued	No of properties affected covered by assessments					n/a	Approx 2125 units & 28,400 m2 business park		
AQ5:	Number of pre application discussions					n/a	4		
	Number of applications commented on for air quality					n/a	9		
AQ6: Number of Travel plans conditioned through the planning process						n/a	1		
AQ7: Number of meetings with LTP						3	2	3	
AQ7/2: Number of meetings with HA				1	0	1	1	1	

Definitions

SAP below 35 = % of people receiving income based benefits living on homes with a low energy efficiency rating.

SAP above 65 = % of people receiving income based benefits living on homes with a high energy efficiency rating.

*1 Air Quality data for NI 185, 186 and 194 currently being collected and submitted to Defra at the time of writing this report – when results are obtained target figures will be set for 09/10

*2 Details of air quality assessments reviewed in 2008:

These sites have been reviewed in 2008 and an update list will be inserted annually:

1. Cotgrave colliery site application description:
Redevelopment of the site for 470-500 dwellings; employment uses (B1, B2 and B8); combined heat and power generating plant, primary school, open space, landscaping and associated works including roads, cycleways, footpaths and car parking
2. Cotgrave Holygate lane:
Development of site to provide residential units (approx 415) (use class C3), a restaurant/public house (use class A3/A4) and ancillary works
3. Tollerton Airfield:
Redevelopment for up to 28,352 sq.m of B1 enterprise park; airport control tower with ancillary facilities, dining and meeting rooms; energy centre; associated access, parking, landscaping and infrastructure works; off site highway improvements
4. Sharphill woods, Edwalton:
Mixed use development of up to 1200 dwellings; primary school; business innovation centre; further education centre; 100 bed hotel; local centre with retail units, community building and health centre, sports facilities and community park; associated road
5. John Brookes Saw Mills, A46 East Bridgford:
Use of composting facility to receive and process wood fuel, up to 10,000 tonnes per annum additional to permitted tonnage of 10,000 tonnes per annum. Retention of 3m wall/fence and lorry loading pit
6. Lady Bay care home:
Construct 4 storey building with fifth storey element and roof garden to provide 38 'housing with care' units (class C2 use) with communal and health support facilities; replacement of wall along Lady Bay Bridge

Rushcliffe BC Air Quality Action Plan indicators -continued

Indicator		2006		2007		2008		2009	
		Target	Actual	Target	Actual	Target	Actual	Target	Actual
			Ug/m3		Ug/m3		Ug/m3		Ug/m3
AQ8: NO2 air quality in AQMA's at receptor locations	Key sites in AQMA								
	NO2 Monitor annual mean, Loughborough Road, West Bridgford		N/A for 2006 2005 was 39.93	No increase	43.2	Reduction by 3.5 ug/m3	38.4	No increase <40	34.1
	Loughborough Road residential		36.14	No increase	45.8	Reduction by 6 ug/m3	40.0	No increase <40	35.5
	Midlands Communications on Radcliffe Road, West Bridgford		40.72	Reduction by 1 ug/m3	48.2	Reduction by 8.5 ug/m3	40.6	Reduction by 0-1 ug/m3 <40 *1	39.9
	Trent House Flats, Trent Bridge		44.67	Reduction by 5 ug/m3	52.5	Reduction by 12.5 ug/m3	39.6	No increase <40	43.3
	Trent Boulevard B, Lady bay area		43.62	Reduction by 4 ug/m3	50.6	Reduction by 11 ug/m3	40.9	<40	40.3
	Clover lands A52		39.84	No increase	48	Reduction by 8 ug/m3	44.2	Reduction by 4.5 ug/m3 <40	39.1
	Windy Ways A52 (Nottingham Knight Island)		41.24	Reduction by 2 ug/m3	44	Reduction by 4 ug/m3	39.3	<40	38.8

*1 this site is on a business premise (Not a relevant receptor). This tube will be mounted on the nearest first floor receptor for the later part of 2009 and on as recommend in the USA 2009..

Table 5 traffic flows in AQMA's (and main roads into AQMA's)

(Nb 2009 traffic data has not been received; when received this data will be used to update the table)

ROAD	LINK	Aqma		AADT	AADT	change	AADT	change	%	%	%
NO.	NO.		LOCATION (FROM - TO)	2006	2007	from 2006	2008	from 2007	OGV1	OGV2	PSV
A 52	54	2	Clifton Boulevard: A 453 Clifton Lane - A 60 (Nottingham Knight roundabout)	50,550	51,600	1,050	50,050	-1,550	3.0	3.1	0.3
A 52	55	2	Clifton Boulevard: A 60 (Nottingham Knight roundabout) - A 606 (Wheatcroft roundabout)	34,150	36,700	2,550	35,650	-1,050	3.3	3.9	0.3
A 52	56		Gamston Lings Bar Road: A 606 (Wheatcroft roundabout) - Ambleside	25,550	24,950	-600	24,650	-300	4.0	6.1	0.2
A 52	57		Gamston Lings Bar Road: Ambleside - A 6011 (Gamston roundabout)	25,650	26,200	550	24,950	-1,250	3.8	4.8	0.3
A 52	58		Radcliffe Road: A 6011 (Gamston roundabout) - Sandy Lane (Holme House)	41,750	42,400	650	40,250	-2,150	3.2	3.5	1.3
A 60	120	1	Trent Bridge, Nottingham: B 685 Meadow Lane - A 6520 Radcliffe Road	46,700	43,100	-3,600	42,850	-250	2.4	*	3.3
A 60	121	1	Loughborough Road, West Bridgford: A 6520 Radcliffe Road - A 606 Melton Road	33,200	33,600	400	31,200	-2,400	1.7	1.3	2.5
A 60	122	1	Loughborough Road, West Bridgford: A 606 Melton Road - Rugby Road	13,050	13,200	150	13,250	50	1.2	0.6	1.9
A 60	123		Loughborough Road, West Bridgford: Rugby Road - Boundary Road	13,500	13,650	150	13,550	-100	1.5	0.5	1.5
A 60	124	2	Loughborough Road, West Bridgford: Boundary Road - A 52 (Nottingham Knight roundabout)	18,450	17,650	-800	17,550	-100	1.5	0.5	1.5
A 606	134	1	Melton Road, West Bridgford: A60 Loughborough Road - Musters Road	14,200	14,350	150	12,600	-1,750	1.4	0.2	1.7
A 606	135		Melton Road, West Bridgford: Musters Road - Boundary Road	12,600	12,750	150	12,650	-100	1.4	0.2	2.3
A 606	136		Melton Road, West Bridgford: Boundary Road - A52 (Lings Bar roundabout)	12,600	12,100	-500	12,050	-50	1.6	0.3	1.9
A 6011	289	1	Lady Bay Bridge, Nottingham: Meadow Lane - A6520 Radcliffe Road	22,400	21,250	-1,150	21,100	-150	3.2	1.4	0.4
A 6011	290	1	Radcliffe Road, West Bridgford: Lady Bay Bridge - Davies Road	26,650	26,950	300	26,800	-150	2.5	1.1	1.0
A 6011	291	1	Radcliffe Road, West Bridgford: Davies Road - Regatta Way	27,850	27,250	-600	27,100	-150	2.5	1.1	1.7
A 6011	292	1	Radcliffe Road, West Bridgford: Regatta Way - A52 (Gamston roundabout)	26,000	26,300	300	25,900	-400	2.5	1.0	1.8
A 6520	343	1	Radcliffe Road, West Bridgford: A60 Loughborough Road - A6011 Lady Bay Bridge	18,650	18,850	200	18,750	-100	1.9	0.5	2.0
B 679	507	1	Wilford Lane: B 680 Ruddington Lane, Wilford - A 60 Loughborough Road, West Bridgford	17,050	17,250	200	15,550	-1,700	1.9	2.0	2.1
				Overall change on all roads listed		-450		-13,650			
				Roads in AQMA1		-3,650		-7,000			
				Roads in AQMA2		2800		-2,700			

AADT: Annual Average Daily Traffic Flow

OGV1 % contains 2 and 3 axle rigid HGV's

OGV2 % contains 4 axle rigid and all articulated HGV's

* indicates that OGV 1 figure includes OGV 2's

Red text used for vehicle percentages indicates that they were estimated from the nearest suitable link where a count has been undertaken (i.e. links where black text is used).

Green text indicates traffic flow reduction from previous year. Purple text indicates traffic flow increase from previous year

Table 6 Update on AQAP interventions programmed to be introduced during 2006/07-2010/11 NCC (date updated May 2009)

Intervention	Measure/ timescales	Progress with measure	Progress since last review	Related targets
Parking	Gamston Park and Ride Feasibility studies - 2006/07 and 2007/08 Planning permission submission - 2007/08 Anticipated scheme completion - 2010/11	Not due for completion until 2011. No outcome from the scheme will be measurable until at least one year after scheme completion.	The County Council has undertaken an Environmental Scoping Assessment and preliminary design works but can not progress the scheme (including the submission of a planning application) any further as, despite extensive modelling and ongoing negotiations, the Highways Agency has still not made a decision concerning access to A52.	NI167 NI177 LTP2 LTP6 L14
	Civil parking enforcement Introduce civil parking enforcement - 2007/08	Draft special parking area (SPA) submitted to DfT May 2005. Negotiations between Borough, County, neighbouring authorities and other stakeholders undertaken 2006/07 and concluded during 2007, at which time a formal application for SPA was submitted. Negotiations and agreement between NCC and the seven borough/district councils were concluded in 2007.	Civil Parking Enforcement was introduced on 12 May 2008. No outcome from the scheme will be measurable until at least one year after scheme implementation.	NI167 LTP2 LTP6 L14
	Off-street parking	Develop off-street pricing policy to encourage use of public transport, cycling and walking		
Smarter Choices	NCC travel plan 1996 and ongoing	The NCC travel plan has been in operation for the past 10 years and has been incorporated into the climate change action plan for the County Council.	In 2007 NCC employees based at campuses in West Bridgford travelled to work by the following means - 9% cycled; 13% walked; 14% by public transport; and 10% car share. These figures are much better than the mode of travel to work for all people in Nottinghamshire detailed in the 2001 census (3% cycled; 10% walked; 12% by public transport). Whilst new NI185 does not require the County Council to report on commuter travel the Council intends to continue monitoring the mode split of travel to work bi-annually. 2009 is the first year of reporting on NI185 and has therefore taken priority for resource allocation (which has been significant due to setting up the new reporting systems). Consequently, whilst it was planned to undertake staff travel surveys bi-annually it is unlikely that one will be undertaken in 2009 due to the limited resources. A variety of measures have been undertaken to promote alternatives to the car, including involvement in 'walk week', 'bike week', personalised travel planning etc.	NI167 NI175 NI176 NI177 LTP2 LTP3 LTP6 L3 L14
	Investigate staff car park charging and its implications	A car park focus group has been established for NCC staff to ensure equality of any implications. A	Charging at 'off-site' car parks introduced April 2008. There has been significant reductions in the numbers of observed vehicles parking in the car	NI167 LTP2

Intervention	Measure/ timescales	Progress with measure	Progress since last review	Related targets
	Investigation to be completed by 2007/08	decision on any 'on-site' charging regime has been delayed, however, due to an impending change in Chief Executive in 2008. Staff car park charging has been introduced for NCC employees at 'off-site' nearby previously free parking facilities.	parks but there is no evidence to demonstrate that this parking has not just been displaced on-street.	LTP6 L14
	Undertake measures to deliver 1% per year increase in cycle mode share 2007/08 and ongoing	All of the work undertaken by the NCC travel plan co-ordinator (eg, publicity campaigns, personalised travel planning etc.) aim to deliver increases in cycle mode share. The NCC Carbon Management Plan was approved in April 2007 and new baseline data was gathered in July 2007 (7% of all NCC employees currently cycling to work).	Whilst new NI185 does not require the County Council to report on commuter travel the Council intends to monitor cycling levels at the County Council as part of the Carbon Management Plan. 2009 is the first year of reporting on NI185 and has therefore taken priority for resource allocation (which has been significant due to setting up the new reporting systems). Consequently, whilst it was planned to undertake staff travel surveys bi-annually it is unlikely that one will be undertaken in 2009 due to the limited resources. Across Greater Nottingham (including within the City) there has been a decrease in cycling between 2006 and 2007 (2008 figures for the whole of Greater Nottingham are not available yet). Cycling levels in 2007 were affected by wet weather particularly in June and July which affected the overall cycling levels. Increases in cycling levels has, however, been seen in the county part of Greater Nottingham in which the AQMA is sited. Between 2005 and 2008 there has been 2% increase in cycling levels (with 0.5% increase between 2007 and 2008).	NI167 NI175 NI176 LTP2 LTP3 LTP6 L14
	Undertake measures to deliver 1% per year reduction in business mileage 2007/08 and ongoing	Various measures are underway to help deliver the reductions in business mileage including new terms and conditions which affect business mileage rates and driver training to help motorists drive more sustainably. The NCC Carbon Management Plan was approved in April 2007 and new baseline data was gathered in July 2007.	Whilst new NI185 does not require the County Council to report on commuter travel the Council intends to monitor business mileage at the County Council as part of the Carbon Management Plan. 2009 is the first year of reporting on NI185 and has therefore taken priority for resource allocation (which has been significant due to setting up the new reporting systems). Consequently, whilst it was planned to undertake staff travel surveys bi-annually it is unlikely that one will be undertaken in 2009 due to the limited resources. Across Greater Nottingham the area wide road traffic mileage has, been restricted to 0% growth between 2003 and 2007.	NI167 NI175 NI176 NI177 LTP2 LTP3 LTP6 L14
	RBC travel plan			NI167 NI175 NI176 NI177 LTP2 LTP3 LTP6 L3 L14

Intervention	Measure/ timescales	Progress with measure	Progress since last review	Related targets
	<p>Workplace travel plans</p> <p>Develop workplace travel plans with businesses in the vicinity of the AQMA - 2006/07 and ongoing</p> <p>Develop plans with Environment Agency and Nottingham Forest Football Club - 2007/08</p>	<p>Nottingham Forest has developed an approved travel plan which covers not only its employees but also supporters. Match day smarter choices promotion has been undertaken and discussions are now underway on hard measures to support the travel plan.</p> <p>27 workplace travel plans have been developed in Rushcliffe Borough.</p>	<p>A further 3 travel plans have been developed in Rushcliffe Borough during 2008/09. Two residential development travel plans have been approved for potential housing developments (with several others in development).</p>	<p>NI167 NI175 NI176 NI177 LTP2 LTP3 LTP6 L3 L14</p>
	<p>School travel plans</p> <p>Develop school travel plans with schools in West Bridgford - 2001 and ongoing</p> <p>Contact the remaining schools concerning the development of a travel plan - 2007/08</p>	<p>All schools within West Bridgford have been contacted. NCC's school travel plan officers are currently working with 12 of the 13 schools in West Bridgford.</p>	<p>Approved travel plans have been developed at 12 of the 13 schools in West Bridgford.</p> <p>The numbers of both primary and secondary pupils travelling to school has decreased year on year for the last three years. In 2007/08 21.1% of secondary and 24.5% of primary aged pupils travelled to school by car.</p>	<p>NI167 NI175 NI176 NI177 NI198 LTP2 LTP3 LTP6 L4 L14</p>
	<p>Marketing campaigns</p> <p>Investment in the 'Big Wheel' which markets public transport as well as the benefits of walking and cycling - 2003/04 and ongoing</p>	<p>NCC has committed to a funding contribution to the 'Big Wheel' and a service level agreement between the two parties is in place for the period 2007/08. 'Big Wheel' has undertaken various marketing campaigns throughout the year including 'Stan's Plan', which is a lay person's guide to the local transport plan.</p>	<p>Cycling numbers within the county part of Greater Nottingham area have increased by 2% between 2005 and 2008 (with 0.5% increase between 2007 and 2008).</p> <p>Public transport patronage in Greater Nottingham has increased year on year since 2000. Further increases of 3% were seen in the county part of Greater Nottingham between 2006/07 and 2007/08.</p> <p>Smarter choices marketing campaigns have been undertaken during 2008/09 at all of the major sporting venues which could impact on the AQMA (Nottinghamshire County Cricket Club, Nottingham Forest Football Club and Nottingham Rugby Club), have also taken part in various smarter choices promotional activities at matches during the 2008/09 seasons.</p>	<p>NI167 NI175 NI176 NI177 NI198 LTP2 LTP3 LTP6 L3 L4 L14</p>
	<p>Car clubs</p> <p>Investigate the introduction/promotion of car sharing schemes at NCC - 2007/08</p>	<p>nottinghamshare.com was launched in April 2006.</p>	<p>The number of registered users on the website has increased from 1,000 to 1500. 68% of those registered previously drove to work on their own. A total of 376 NCC staff and 1 RBC staff are registered on the website. NCC staff have made estimated savings of 307,589miles; 101.2 metric tonnes of CO₂; 146kg nitrogen oxides; 9.6kg particulate matter as a result of car sharing through the website.</p>	<p>NI167 LTP2 LTP6 L14</p>
	<p>Car sharing</p>	<p>A feasibility study was undertaken by consultants on</p>	<p>No outcome from the scheme will be measurable until at least one year after</p>	

Intervention	Measure/ timescales	Progress with measure	Progress since last review	Related targets
	Investigate the feasibility of the introduction of car share club at County Hall - 2007/08 Establishment of Greater Nottingham Car Club - 2008/09	the merits of introducing such a scheme. The study concluded that the greatest benefits would be seen by a scheme evolving out of the car share club introduced in the City. A feasibility study was undertaken on the merits of introducing such a scheme. The City Council are currently in discussions with service providers.	scheme completion.	
	Personalised travel planning A pilot 'travel smart' scheme was undertaken in the Meadows and Lady Bay areas adjoining the AQMA in 2003/04, a further travel smart scheme is due to be undertaken - 2008/09		Due to staff resource issues this measure was not undertaken in 2008/09 and will be reviewed later during this financial year.	
Planning	Development control	Co-ordination of land use planning and transport infrastructure through the Local Development Framework		
	Guidance for developers on residential developments Create guidance for developers to provide travel plans as part of the planning process for residential developments - 2006/07	No work has been undertaken on this by NCC as yet but you'll need to check with your planning department to determine what work they have undertaken on this.		
	Guidance for developers on leisure developments Create guidance for developers to provide travel plans as part of the planning process for leisure developments - 2007/08	No work has been undertaken on this by NCC as yet but you'll need to check with your planning department to determine what work they have undertaken on this.		
	Personalised travel planning Integrate personalised travel	No work has been undertaken on this by NCC as yet but you'll need to check with your planning department to determine what work they have		

Intervention	Measure/ timescales	Progress with measure	Progress since last review	Related targets
	planning into planning conditions - 2007/08	undertaken on this, and the number of applications that have included this as a planning condition.		
	Development control contributions Use of collected development control contributions to provide cycling, walking and public transport improvements within the AQMA - 2007/08 and ongoing	At the end of 2007, RBC had collected sums in excess of almost £800K through this process. Two schemes have been implemented using this money at a cost of approximately £100K.	During 2008/09 one further scheme was implemented at a cost of £300K. Two new posts have been created within the County Council improve the s106 process and consistency with the districts.	NI167 NI175 NI176 NI177 NI198 LTP2 LTP3 LTP6 L3 L4 L7 L14
Walking	Develop walking map for West Bridgford employees Develop walking map for West Bridgford employees - 2006/07	A walking map was developed and distributed to employees in West Bridgford. The map was launched to coincide with 2007 Walk Week. 8,500 maps have been distributed in the West Bridgford area (2,500 to employees at the three largest employers; 2,500 to libraries; and 3,500 to households in the area.	The maps remain available on-line to download and in local libraries.	NI167 NI175 NI176 NI198 LTP2 LTP6 L3 L4 L14
	Greater Nottingham walk week and walk to work day Involvement and promotion of Greater Nottingham walk week and walk to work day - 2006/07 and ongoing	Involvement in Walk Week during May 2008 included guided walks, a chance to try out activities.	A number of events were held during walk week included sponsored walks in Sherwood Forest; urban Nordic walking; a celebration event in the Market Square to promote health; and walk to work events. Walk week also coincided with national walk to school week which was promoted by the County Council in all schools across the county. It is hoped that the events in Walk Week will encourage people to continue walking and lead healthier lifestyles.	NI167 NI175 NI176 NI198 LTP2 LTP6 L14
Cycling	Cycle maps of Greater Nottingham area Develop and distribute cycle maps of Greater Nottingham area - 1999 and ongoing	Maps continue to be distributed throughout the county, and are available as a hard copy and on-line.	Cycling numbers within the county part of Greater Nottingham area have increased by 2% between 2005 and 2008 (with 0.5% increase between 2007 and 2008).	NI167 NI175 NI176 NI177 NI198 LTP2 LTP3 LTP6 L3 L4 L14

Intervention	Measure/ timescales	Progress with measure	Progress since last review	Related targets
	Cycle training Deliver adult and child cycle training - Ongoing	The County Council offers nationally accredited cycle training to people of all ages and abilities.	Cycle training continues to be offered free of charge to children in the county. Adult training is also available free to members of the public, whilst training is offered at workplaces at a cost to employers. 12 additional trainers were trained to accredited standards in 2008 to meet the national guidelines.	NI167 NI175 NI176 NI198 LTP2 LTP3 LTP6 L3 L4 L14
	Advance cycle stop lines Advance cycle stop lines introduced at all feasible junctions within the AQMA - 2006/07	Advance cycle stop lines have been installed at all feasible major signal junctions within the AQMA.	This action has been completed.	NI167 NI175 NI176 NI198 LTP2 LTP3 LTP6 L14
	Wilford Lane cycle route Wilford Lane cycle route to be installed - 2007/08	A 330m off-road 3m wide shared-use cycle route was installed on Wilford Lane during 2007/08.	Cycling figures from the cycling counter will not be available until May 2009.	NI167 NI175 NI176 NI198 LTP2 LTP3 LTP6 L3 L4 L7 L14
	Lady Bay Bridge cycle lane To be implemented as part of Eastside Regeneration scheme - 2010/11	This scheme is not due for implementation until 2010/11.	The measure is not due to commence yet and therefore there is no progress or outcomes to report.	
	Cycle lane on approach to Lady Bay Bridge This measure will only be delivered once the Lady Bay Bridge cycle lane has been delivered - 2010/11	This measure will only be implemented once the Lady Bay Bridge cycle lane has been delivered.	The measure is not due to commence yet and therefore there is no progress or outcomes to report.	
Public transport	SkyLink bus service	The service began operating in May 2004 and in	Since beginning of this service in May 2004 the service has seen passenger	NI167

Intervention	Measure/ timescales	Progress with measure	Progress since last review	Related targets
	Introduction of SkyLink direct 24 hour bus service to the airport - 2004/05 and ongoing	February 2006, the Skylink service became 24-hour, operating every 30minutes and was re-routed via Trent Bridge.	figures increase over 100% year on year. In 2007 over 350,000 passengers used the service.	NI175 NI176 NI177 LTP2 LTP6 L14
	Ticketing Introduction of ITSO smartcard ticketing - 2007/08	It was planned to introduce ITSO smartcards in replacement of the NCC legacy concessions smartcard in March/April 2007 and this was carried out in the Bassetlaw District. When government announced the introduction of the English National Concessions Scheme (ENCTS) commencing 1st April 2008 it was decided, however, that, rather than carrying out two complete card re-issues, the ITSO and ENCTS cards would be introduced together. Scholars' cards were issued in ITSO format starting July 2007.	130,000 concessions cards (including 21,000 in Rushcliffe) were produced and distributed to pass holders during 2008.	NI167 NI175 NI176 NI177 NI178 LTP2 LTP6 L7 L8 L14
	Concessionary fare schemes for the over 60s and disabled Free countywide off-peak concessionary fare schemes for the over 60s and disabled to be introduced - 2006/07	A free countywide off-peak concessionary fare scheme for the over 60s and disabled was introduced on 1 April 2006.	In 2007/08 over 85% of those eligible in Greater Nottingham had taken up a concessionary fare pass (an increase of 15% from 2006/07).	NI167 NI175 NI176 NI177 NI178 LTP2 LTP6 L7 L8 L14
	Concessionary fares for young people Consideration of introduction of concessionary fares for young people - 2010/11	A pathfinder bid to progress the introduction of concessionary fares for young people at an earlier date than planned was submitted to Government in December 2007. The pathfinder bid was unsuccessful which means that the consideration of introduction of such a scheme will remain as 2010/11.	The measure is not due to commence yet and therefore there is no progress or outcomes to report.	
	Information Investigate and publicise web based journey planners - 2006/07	Nottinghamshire is now part of the national, multi-modal Traveline journey planner. Web links to the Traveline site are publicised and available from the County Council's website. In addition to this, links to all of the area's public transport operators' journey planner information are also available from NCC's website.	This action has been completed. Links to the Traveline journey planner and operators' journey planner information continue to be available are available from NCC's website.	NI167 NI175 NI176 NI177 NI198 LTP2 LTP6 L3

Intervention	Measure/ timescales	Progress with measure	Progress since last review	Related targets
				L4 L7 L14
	Public transport infrastructure Install/ replace flagpoles/ timetable cases along key AQMA corridors - 2006/07	Flagpoles and timetable cases have been installed/replaced along the key AQMA corridors.	This action has been completed.	NI167 NI175 NI176 NI177 NI178 NI198 LTP2 LTP6 L3 L4 L7 L14
	Construction of the East Midlands Parkway station on the A453 with adjoining park and ride site Scheme completion - 2008/09	Construction started at the site in December 2007 with a projected opening in December 2008.	Parkway station opened in January 2009. Approximately 3,800 passengers are using the station each week. No outcome from the scheme will be measurable until at least one year after scheme completion.	NI167 NI175 NI176 LTP2 LTP6 L14
	Bus priority on the A60 Further bus lane priority will be considered on the A60 - 2008/09	A 0.4km bus lane has been installed on the A60 in both directions south of Trent Bridge. Improvements to the 'bus gate' signals on the southerly approach are being considered to improve bus priority.	The further improvements have not been implemented yet and therefore there is no progress or outcomes to report.	NI167 NI175 NI176 NI177 NI178 NI198 LTP2 LTP6 L3 L4 L6 L7 L14
	Encourage operators to take-up cleaner vehicles through partnership working Cleaner fleet vehicles - 2010/11	Operators are encouraged to take-up cleaner vehicles through partnership working. Due to the sustained high level of investment by the two main operators the average age of the bus fleet operating in the AQMA is already less than six years old and by the end of 2007 all of the two main operators	Partnerships with all of the major bus operators are ongoing including the establishment of a new transport development group which is held every two months. The group will help determine future service and public transport scheme improvements.	

Intervention	Measure/ timescales	Progress with measure	Progress since last review	Related targets
		fleet were low-emission Euro2, 3 or 4 standards.		
	Capacity increases on the GO2 services along the A60 corridor Capacity increases on the GO2 services along the A60 corridor to be implemented - 2008/09	The measure is not due to commence yet and therefore there are no progress or outcomes to report.		
	Install 'real time' bus information along key AQMA corridors - 2010/11		The measure is not due to commence yet and therefore there is no progress or outcomes to report.	
Cleaner vehicles				
	Develop and implement an action plan to improve NCC's fleet 2010/11		The measure is not due to commence yet and therefore there is no progress or outcomes to report.	
	Introduce increasing proportion of bio-fuels to NCC's fleet 2008/09 and ongoing		The measure is not due to commence yet and therefore there is no progress or outcomes to report.	
Network management	Traffic control and information Jointly fund the traffic control centre that monitors traffic movement and provides real time traffic control over many traffic signal installations - Ongoing	The County and City Councils jointly fund the traffic control centre that monitors traffic movement and provides real time traffic control over many traffic signal installations. Real time information is conveyed onto the local media and disseminated via NCC's web site. A review of the Travelwise Centre was undertaken in early 2007 which resulted in a complete restructuring of Travelwise in May 2007. The review included how the traffic and travel information is conveyed to the public, taking into account advances in communication systems, the internet, mobile phones, satellite navigation and radio broadcasting. The existing Travelwise web site was completely rebuilt and developed to become the central real time information hub for reporting road conditions, congestion, road works, events, incidents, travel information and useful advice for the travelling public.	The Travelwise centre remains in operation 24hrs a day, every day.	NI167 NI175 NI176 NI177 NI178 NI198 LTP2 LTP3 LTP6 L3 L4 L6 L7 L14
	Introduction of SCOOT/MOVA	SCOOT/MOVA and other traffic signal efficiency		NI167

Intervention	Measure/ timescales	Progress with measure	Progress since last review	Related targets
	SCOOT/MOVA - Ongoing Introduction of MOVA at junction of Radcliffe Road/ Ambleside - 2006/07	improvements, including CCTV at junctions within AQMA. MOVA was installed at the junction of Radcliffe Road/ Ambleside during 2007/08.	No outcome from the scheme will be measurable until at least one year after scheme completion.	LTP2 LTP5 LTP6 L6 L14
	Co-ordination of streetworks - Effective co-ordination of streetworks to minimise traffic disruption and unnecessary congestion as part of NCC's network management duty County Council's network management duty - Ongoing	Systems for notice management and coordination have been upgraded to enhance noticing handling, monitoring of works proposals, coordination of works and directing timing of works. Staff awareness and training has been undertaken to ensure that powers are used effectively. Promoters of highway works have been made aware of the requirement to manage works to minimise the impact on traffic to reduce disruption. A review of street designations and network hierarchy has commenced to improve data quality for works promoters and network managers and to prioritise works management. Regular coordination meetings have been held between all works promoters in conjunction with the City Council and HA and also additional regular meetings between the HA and the local authorities of Nottinghamshire, Nottingham, Derbyshire and Derby to create a composite framework programme of planned works affecting major routes in the region. In addition, workshops have been held with major works promoters including utility companies to promote good practice and to encourage alternative working methods with a review to reducing peak period working and thereby address the most disruptive aspect of working on the highway.	Detailed journey time monitoring of key corridors (including the A60, A6011 and A6520 which lie within the AQMA) has been undertaken in 2007 as part of the Greater Nottingham Congestion Delivery Plan and Road User Charging feasibility study. This data will be used as a baseline to monitor congestion through journey times in future years. The average journey time per mile has not increased since 2005 and Nottinghamshire County and Nottingham City Councils remain on track to meet their national congestion target. Between 2007 and 2008 there were no significant increases in journey times along the monitored routes in the AQMA.	NI167 NI175 NI176 NI177 NI178 NI198 LTP2 LTP3 LTP6 L3 L4 L6 L7 L14
	Incident management - Effective management of incidents to minimise traffic disruption and unnecessary congestion as part of NCC's network management duty County Council's network	As indicated under Traffic Control and Information, the joint County/City control centre and travelwise web site have been comprehensively revised. This has improved the manner in which incident information can be dealt with to ensure that communication about the incident is passed effectively to those who need to deal with the matter and also to the road user. The local operating	Detailed journey time monitoring of key corridors (including the A60, A6011 and A6520 which lie within the AQMA) has been undertaken in 2007 as part of the Greater Nottingham Congestion Delivery Plan and Road User Charging feasibility study. This data will be used as a baseline to monitor congestion through journey times in future years. The average journey time per mile has not increased since 2005 and Nottinghamshire County and Nottingham City Councils remain on track to meet	NI167 NI175 NI176 NI177 NI178 NI198 LTP2 LTP3

Intervention	Measure/ timescales	Progress with measure	Progress since last review	Related targets
	management duty - Ongoing	agreement between the authority and the HA has been comprehensively reviewed to identify the relevant parts of the network which have interaction on each authority and to put in place appropriate communication channels for management of incident information.	their national congestion target. Between 2007 and 2008 there were no significant increases in journey times along the monitored routes in the AQMA.	LTP6 L3 L4 L6 L7 L14
	Contingency planning - Effective contingency planning to minimise traffic disruption and unnecessary congestion as part of NCC's network management duty County Council's network management duty - Ongoing	Working in close collaboration with the City and HA, tactical diversion routes have been developed for the emergency diversion of traffic from any part of the trunk road network, to reduce the delay in implementation of alternative routes and to ease congestion at the time of incidents. Key locations on the local network are being identified and associated diversion routes investigated in line with the developing network hierarchy.	Detailed journey time monitoring of key corridors (including the A60, A6011 and A6520 which lie within the AQMA) has been undertaken in 2007 as part of the Greater Nottingham Congestion Delivery Plan and Road User Charging feasibility study. This data will be used as a baseline to monitor congestion through journey times in future years. The average journey time per mile has not increased since 2005 and Nottinghamshire County and Nottingham City Councils remain on track to meet their national congestion target. Between 2007 and 2008 there were no significant increases in journey times along the monitored routes in the AQMA.	NI167 NI178 LTP2 LTP6 L6 L14
	Traffic management Trent Bridge gateway - 2009/10		The measure is not due to commence yet and therefore there is no progress or outcomes to report.	
	Highway direction signing To be upgraded to improve accessibility, safety and make best use of existing networks - 2010/11		The measure is not due to commence yet and therefore there is no progress or outcomes to report.	
	ParkSmart directional signing Introduce interactive ParkSmart directional signing to zones within the City - 2010/11		The measure is not due to commence yet and therefore there is no progress or outcomes to report.	

Major schemes			
Intervention	Measure/timescales	Progress with measure	Progress with last review
	A52 ring road upgrade	A business case has been submitted to DfT by the City Council but no decision has been made on its success or progression.	The Regional Funding Allocations were reviewed and priorities were submitted to DfT in February 2009. The A52 Ring Road upgrade was included in the priorities with funding allocated for a scheme start date of 2011.
	NET phase 2 - timescales subject to all feasibility, funding and approvals	Nottingham City and Nottinghamshire County Councils were granted 'programme entry approval' for Phase 2 of the Nottingham Express Transit (NET) in October 2006. This decision by the Department for Transport has allowed the authorities to progress the extension of the tram system to incorporate two new lines to the south and west of the city centre totalling 17km in length. A public inquiry into the proposals closed on 16 January 2008.	The Inspector presented his findings on the NET Public Inquiry to the Secretary of State for Transport whom approved the Transport and Works Act Order (TWAO) for the NET Phase Two proposals on 30 March 2009. Preparatory costs for the introduction of the two new lines were allocated funding through the second round of Regional Funding Allocations in February 2009. Construction could start in 2010 with trams running on the extended NET system by 2013.
	A453 widening	The first Regional Funding Allocation in January 2006 identified the A453 widening as a medium priority. The proposed scheme aims to improve the A453 trunk road between the M1 junction 24 and the A52 in Nottingham, to ease existing highway congestion and improve road safety.	The A453 widening scheme was prioritised as part of the recent Regional Funding Allocation review. The Highways Agency has recently published draft legal Orders and an Environmental Statement, which is part of the Statutory process for delivering this scheme. Public exhibitions have been held on the proposals and the consultation period ends on 30 April 2009. The Highways Agency have indicated that construction could commence in Autumn 2010 and the scheme could be open to traffic in Winter 2012.
	A46 duelling	The first Regional Funding Allocation in January 2006 allocated funding for only a quarter of the scheme which was due to be built by 2019.	During the recent Regional Funding Allocation review (RFA2), Government, as part of its response to the national economic situation, offered additional funding to the Region to pay 50% (£174m) of the cost of the A46 scheme to facilitate a start to be made in 2009/10 as a single phase construction with completion in 2011/12. Although the offer meant that the Region would need to fund the remaining 50% of the scheme costs from the RFA2 budget, it provides the only affordable means for the Region to secure the A46 improvement at the earliest opportunity and avoids the need to phase construction over a lengthy period. The Region's financial commitment to the A46 has now been brought forward and it will now be possible to deliver the full scheme within three years. Current advice from Highways Agency suggests that work will commence in June 2009.
	New River Trent crossing	The AQMA encompasses two of the three bridges crossing the River Trent within the Greater Nottingham LTP area. A fourth bridge crossing is not planned until after the 'dualling' of the A52 between Clifton Bridge and Saxondale island, including grade separated junctions between these two locations. The work on the A52 does not, however, feature as a regional priority for the period up to 2020.	The new River Trent Crossing was not considered a regional priority for the period up to 2013/14. Priorities beyond this date will be considered at a later date but it is unlikely they will be made earlier than late 2011 to ensure that they deliver the regional priorities determined as part of the development of the Delivering a Sustainable Transport System for the East Midlands.
	Road user charging	The Three Cities Partnership which includes Derbyshire, Leicestershire and Nottinghamshire County Councils and the respective City Councils and other regional partners received Government	The feasibility study was completed in the spring of 2008. At that point, the six local authorities considered all of the evidence collected. For further investigations on a potential road user charging scheme to progress all of the partners needed to approve. Some of the six authorities did not, however, wish to proceed with further investigations at this time.

		<p>pump priming funding as part of the second round of the Transport Innovation Fund programme. The funding was allocated to the partnership for an in-depth investigation into the possible options for tackling congestion problems and improving roads and public transport across the sub-region. The funds were used to consider the potential for road pricing schemes and other transport options to reduce congestion and support economic growth over the next 15 years.</p> <p>The effectiveness of the alternative options in tackling congestion was assessed primarily through transport models. These models were developed and validated and the outputs considered alongside other key issues such as estimates of implementation costs and initial views from a programme of key stakeholder engagement.</p>	
	Workplace parking levy - timescales subject to all feasibility, funding and approvals	<p>The public consultation on the proposals for a Workplace Parking Levy (WPL) in Nottingham closed on 12th October 2007 following a 12 week consultation period. As part of the consultation there was a five day Public Examination of the WPL proposals by an independent chairman. He presented an independent report of his findings, together with responses from the consultation, to the Council in December 2007. Councillors considered the conclusions of the public consultation and the Public Examination of the WPL proposals at the City Council's Executive Board on 18th December 2007 and decided to proceed, in principle, with developing the details of the scheme.</p>	<p>The scheme was ratified by Full Council in May 2008, and a revised Business Case was subsequently submitted to the Department for Transport (DfT). The decision to approve the scheme order is pending from DfT and should be received during the 2009/10 financial year. It is intended to introduce WPL in Nottingham from April 2010 subject to feasibility, funding and approvals.</p>

Organisations
City Council = Nottingham City Council
NCC = Nottinghamshire County Council
RBC = Rushcliffe Borough Council
6Cs = Derbyshire, Leicestershire, Nottinghamshire County Councils and Derby, Leicester, Nottingham City Councils
HA = Highways Agency

The indicator tables below give targets and actual figures for the whole of the Greater Nottingham Plan area including Nottingham City unless otherwise detailed. Where more localised figures are available they have been included in the text within the table above.

Table 7 Indicators and targets from the LTP showing progress with implementing AQAP.

Progress against Trajectory Legend:	
	Going strongly in the right direction
	No clear trend/slowly going in the right direction, perhaps not fast enough to meet agreed targets
	Going in wrong direction

Definitions	Year Type	Units	Plan Area	Year	Value	Actual and Trajectory Data						Progress	Comments	
						2005	2006	2007	2008	2009	2010			Notes
NI 167 Congestion - average journey time per mile during the morning peak	Academic	Minutes and Seconds	Joint Plan Area	Base Data	2005	3.8 mins	Actual Figures	3.8 mins	3.9mins	3.8 mins				Replaces LTP2 Mandatory Indicator LTP7. Source: Council monitoring. Forms part of shared LAA for Nottingham City Council and Nottinghamshire County Councils.
				Target Data	2010	4.2mins	Trajectory	3.8mins	3.9mins	4.0mins	4.0mins	4.1mins		
NI 175 Access to services and facilities by public transport, walking and cycling	Financial	Percentage	Joint Plan Area	Base Data	2006	93.00%	Actual Figures	N/A	93.00%	94.00%	94.00%			Replaces LTP2 Mandatory Indicator LTP1. However, the LTP1 definition has been retained as per the NI guidance - 'Accessibility of Town Centres - % of households within 30 minutes travel time of a town centre by bus, train or tram with no more than a 400 metre walk to a stop'. This is a joint authority indicator and target.
				Target Data	2010	93.00%	Trajectory	N/A	93.00%	93.00%	93.00%	93.00%		
NI 176 Working age people with access to employment by public transport (and other specified modes)	Calendar	Percentage	City	Base Data	2007	90.4%	Actual Figures	N/A	N/A	90.4%			New NI introduced April 2008. Replaces 2005 Accessibility Planning Core Indicator. Forms part of Nottinghamshire County Council LAA. Source: DfT National dataset. Data uses DfT's 'continuous' measure calculation rather than the time thresholds, as for Nottingham City these are already 100%. 2007 data used as baseline and target set to remain at 90% for th remainder of the Plan period.. Although 2005 figures have been released, they are subject to revision due to improvements made to the methodology for assessment. Data is unavailable for 2006.	
				Target Data	2010	90.0%	Trajectory	N/A	N/A	90.0%	90.0%			90.0%
			County	Base Data	2007	83.0%	Actual Figures	N/A	N/A	87.0%				
				Target Data	2010		Trajectory	N/A	N/A	83.0%	83.0%			84.0%
NI 177 Local bus and light rail passenger journeys originating in the authority area	Financial	Total Passenger Journeys	City	Base Data	2007/08	55,960,000	Actual Figures	54,110,000	55,450,000	55,960,000			Replaces LTP2 Mandatory Indicator BVPI 102. Source: Operator returns. Base year set using 2007/08 data, calculated with new NI method of apportioning boardings in City/County authority areas. Targets for 2008/09 - 2010/11 for each authority set based on 1% increase year on year from 2007/08. This is inline with the LTP2 mandatory indicator total patronage targets. Couoty figures related to Countywide	
				Target Data	2010/11	57,400,000	Trajectory	N/A	N/A	55,960,000	56,500,000			56,900,000
			County	Base Data	2006/07	34,028,525	Actual Figures	32,559,000	34,028,525	35,135,170	35,436,400			
				Target Data	2010/11	35,410,218	Trajectory	32,559,000	34,028,525	34,368,810	34,712,498	35,059,622		

NI 178 Bus services running on time	% of non-frequent services on time	Financial	Percentage	City	Base Data	2007/08	84%	Actual Figures
					Target Data	2010/11	87%	Trajectory
		Financial	Percentage	County	Base Data	2007/08	86%	Actual Figures
					Target Data	2010/11	86%	Trajectory
	Excess waiting time of frequent services	Financial	Minutes	City	Base Data	2007/08	0.61 mins	Actual Figures
					Target Data	2010/11	0.60 mins	Trajectory
		Financial	Minutes	County	Base Data	2007/08	0.68 mins	Actual Figures
					Target Data	2010/11	0.68 mins	Trajectory
NI 198 Children travelling to school	Mode of travel usually used:	Financial	Percentage	City	Base Data	2007/08	21.1%	Actual Figures
					Target Data	2010/11	20.0%	Trajectory
	percentage of which Car (including vans and taxis)							Actual Figures
	percentage of which Car Share							Actual Figures
	percentage of which Public Transport							Actual Figures
	percentage of which Walking							Actual Figures
	percentage of which Cycling							Actual Figures
	percentage of which Other							Actual Figures
	Mode of travel usually used:	Financial	Percentage	County	Base Data	2006/07	25.1%	Actual Figures
					Target Data	2010/11	22.8%	Trajectory
percentage of which Car (including vans and taxis)							Actual Figures	
percentage of which Car Share							Actual Figures	

2005	2006	2007	2008	2009	2010		patronage levels as reported in the North Nottinghamshire LTP Delivery Report.
87%	86%	84%					<p>Replaces LTP2 Mandatory Indicator LTP5.</p> <p>Source: Council monitoring and Operators data, collected quarterly. The baselines were derived from data collected in quarters 3 and 4 of 2005/06 only. More detailed data became available through the Punctuality Improvement Plan (PIP) adopted in April 2006.</p> <p>The Traffic Commissioners minimum standards are for 70% of non-frequent services to be within 1 minute early or 5 minutes late of scheduled time. The DfT target is for 90% of services to be within this time frame by 2014 and the authorities trajectories are based on this target. For frequent services the bus operators' current performance is well within the the maximum excess waiting time of 1.25 minutes set by the Traffic Commissioners. As such a minimum target has been set for a year on year increase.</p>
N/A	N/A	84%	85%	86%	87%		
81%	84%	86%	83%				
N/A	N/A	86%	87%	88%	89%		
0.71 mins	0.59 mins	0.61 mins					
N/A	N/A	0.61 mins	0.60 mins	0.60 mins	0.60 mins		
0.71 mins	0.55 mins	0.68 mins	0.77mins				
N/A	N/A	1min	1min	1min	1min		
2005/06	2006/07	2007/08	2008/09	2009/10	2010/11		Notes
26.0%	24.5%	21.1%					<p>Replaces LTP2 Mandatory Indicator LTP4.</p> <p>Source: 2005/06 used Hands Up returns. 2006/07 and 2006/07 and 2007/08 returns are based on DfES PLASC data.</p> <p>City target set to 2007/08 PLASC return, with a 1.1% decrease in mode travel to school by car by 2010/11.</p>
N/A	N/A	21.1%	21.0%	20.0%	20.0%		
26.0%	20.7%	19.0%					
0.0%	3.8%	2.2%					
16.0%	11.8%	10.8%					
53.0%	62.2%	65.7%					
1.0%	1.4%	1.1%					
NA	0.7%	1.2%					
NA	25.1%	24.8%					
N/A	25.1%	24.5%	24.0%	23.4%	22.8%		
NA	25.1%	24.8%					
N/A	1.6%	2.2%					

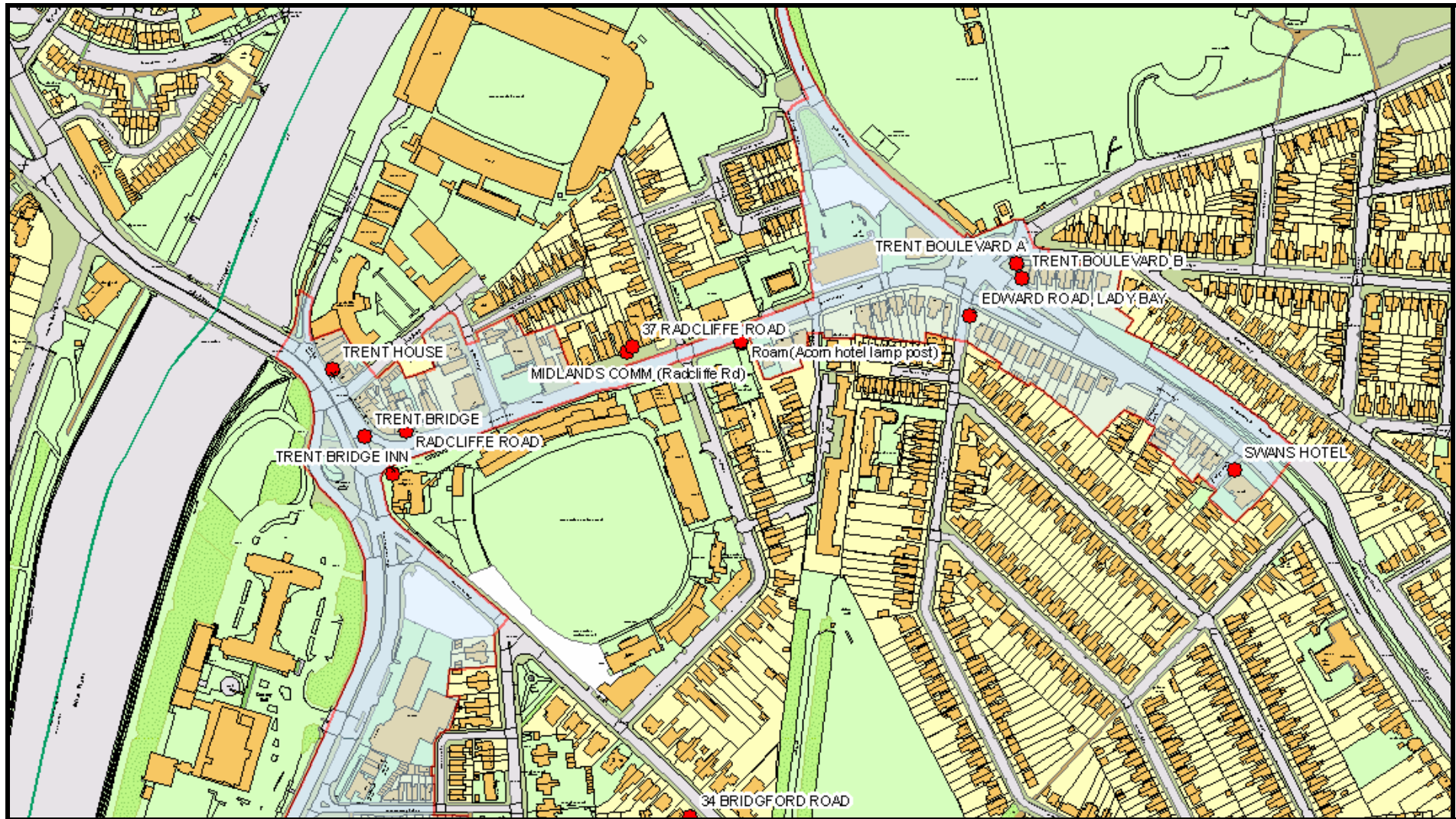
percentage of which Public Transport	Actual Figures	N/A	11.7%	15.2%				
percentage of which Walking	Actual Figures	N/A	58.9%	55.8%				
percentage of which Cycling	Actual Figures	N/A	2.6%	1.7%				
percentage of which Other	Actual Figures	N/A	0.1%	0.3%				

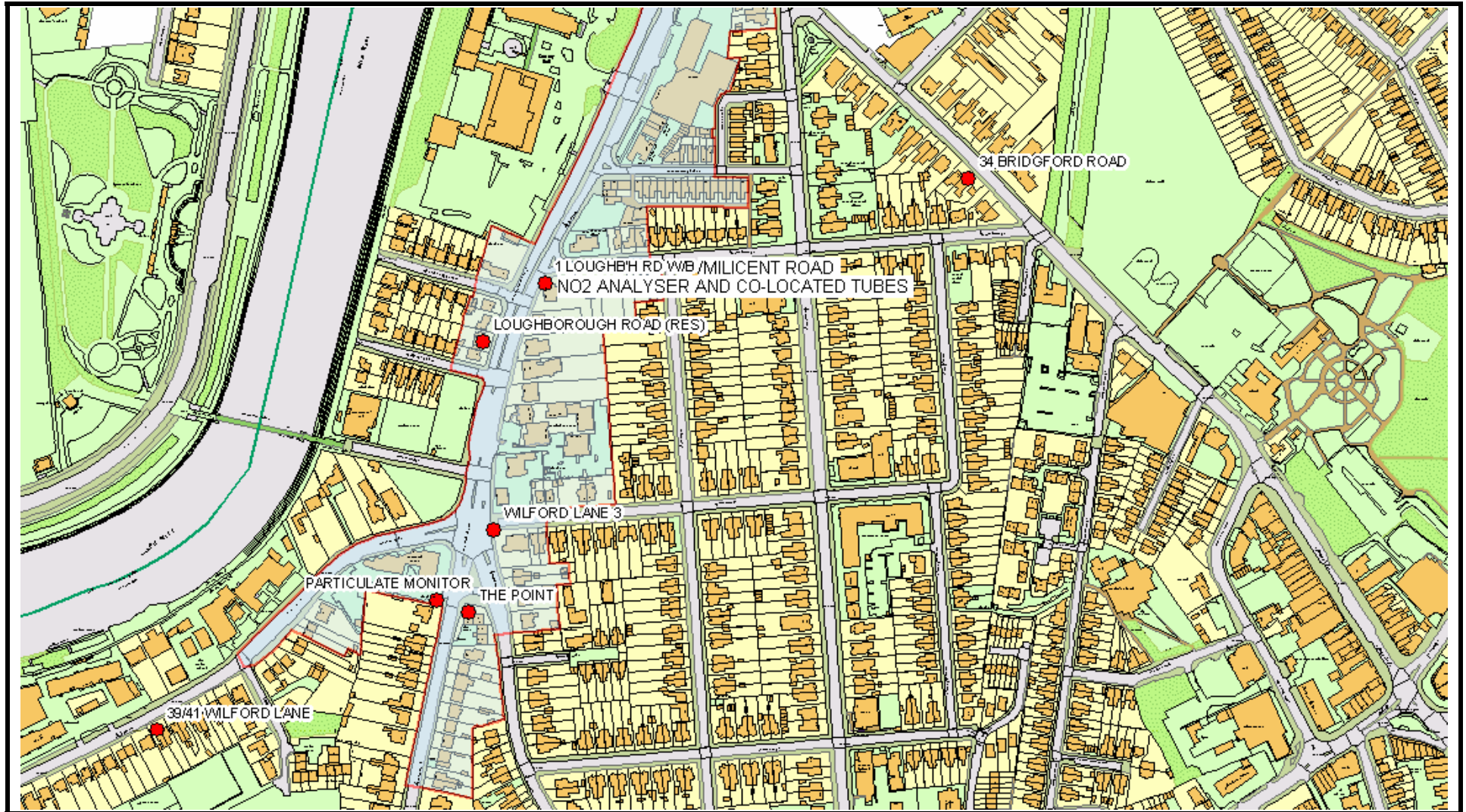
Progress against Trajectory Legend:	
	Going strongly in the right direction
	No clear trend/slowly going in the right direction, perhaps not fast enough to meet agreed targets
	Going in wrong direction

Core Indicator	Definitions	Year Type	Units	Plan Area	Year	Value		Actual and Trajectory Data										Notes
								2003	2004	2005	2006	2007	2008	2009	2010			
LTP2 - Change in area wide road traffic mileage		Calendar	Million Vehicle Kilometres per annum	Joint Plan Area	Base Data	2004	2,933	Actual Figures	2,929	2,933	2,921	2,921	2,917	2,852			Source: Council monitoring using DfT National Traffic Census and locally collected data. The target equates to a 6% increase in traffic from the baseline on the local authority managed road network.	
					Target Data	2010	3,109	Trajectory	2,929	2,933	2,962	2,992	3,021	3,050	3,079	3,109		
LTP3 - Cycling trips (annualised index)		Calendar	Index based on 2003 = 100	Joint Plan Area	Base Data	2003	100	Actual Figures	100	104.7	105.3	103.8	94.8			Source: Council monitoring Surveys are undertaken at 33 points on the Greater Nottingham cycle network, between April and September.. This methodology was established in 2005. The 2003 and 2004 figures are derived from 12 of these points. 2007 data affected by wet weather, particularly in June/July.		
					Target Data	2010	107	Trajectory	100	101	102	103	104	105	106		107	
LTP6 - Changes in peak period traffic flows to urban centres		Calendar	Number of vehicles	Joint Plan Area	Base Data	2003	34,590	Actual Figures	34,590	34,000	33,770	33,990	34,050			Source: Council monitoring in October of each year at the Urban Centre cordon. The figure relates to the AM Peak Period (07:00 - 10:00) Mon-Fri average inbound vehicle flow.		
					Target Data	2010	34,590	Trajectory	34,590	34,590	34,590	34,590	34,590	34,590	34,590		34,590	
L3: Commuter travel plans	% of employees covered by a commuter travel plan	Calendar	Percentage	Joint Plan Area	Base Data	2005	15%	Actual Figures	N/A	N/A	15%	22%	36%			Source: Council monitoring Total number of employees in 2005 = 287,000 Employees covered by a travel plan 2005 = 43,000 Est. total number of employees in 2010 = 294,000 Employees covered by a travel plan 2010 = 59,500		
					Target Data	2010	20%	Trajectory	N/A	N/A	15%	16%	17%	18%	19%		20%	
L4: School travel plans	% of schools with an approved travel plan	Financial	Percentage	Joint Plan Area	Base Data	2004/5	15%	Actual Figures	N/A	15%	36%	52%	61%			Source: Council monitoring The target is based upon		

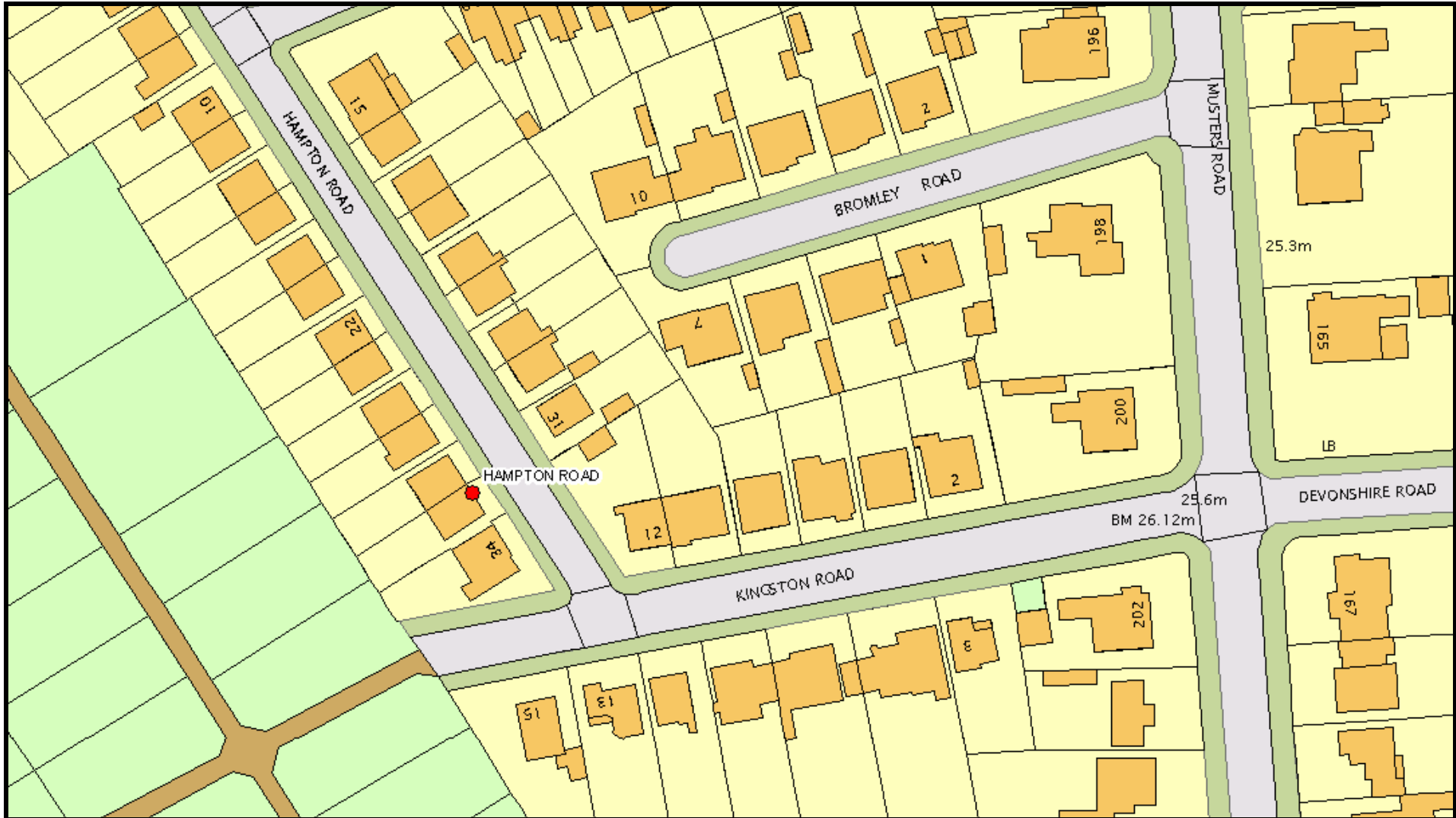
					Target Data	2010/11	80%	Trajectory		N/A	15%	26%	37%	47%	58%	69%	80%			
L6: Bus reliability	% of scheduled bus services operating										2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11		Notes Source: Bus operators Based upon the reliability of all scheduled services throughout the year. The target corresponds to the national target set by the Traffic Commissioners. The baseline figure has been derived from performance in the last quarter of 2005 only.
		Financial	Percentage	Joint Plan Area	Base Data	2005/06	99.60%	Actual Figures		N/A	N/A	99.60%	99.70%	awaited						
					Target Data	2010/11	99.50%	Trajectory		N/A	N/A	99.50%	99.50%	99.50%	99.50%	99.50%	99.50%	99.50%		
L7: Accessibility of healthcare	% of households within 45 minutes of hospital by bus or tram										2003	2004	2005	2006	2007	2008	2009	2010		Notes Source: Accession software The indicator applies to the two major hospitals in the LTP area, the QMC and City Hospital. The travel time includes walking links to and from bus stops and any waiting time incurred en route.
		Calendar	Percentage	Joint Plan Area	Base Data	2006	87%	Actual Figures		N/A	N/A	N/A	87%	89%	89%					
					Target Data	2010	90%	Trajectory		N/A	N/A	N/A	87%	87%	88%	89%	90%			
L8: Accessibility for the elderly	% of eligible population taking up concessionary fares entitlements										2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11		Notes Source: Council monitoring The baseline figure is derived from 83,653 concessionary pass holders aged 60 and over, out of a eligible population of 134,638.
		Financial	Percentage	Joint Plan Area	Base Data	2004/05	62%	Actual Figures		N/A	N/A	62%	70%	85%						
					Target Data	2010/11	70%	Trajectory		N/A	N/A	62%	64%	66%	67%	69%	70%			
L14: Carbon dioxide emissions	Volume of carbon dioxide emitted by vehicles in Greater Nottingham										2003	2004	2005	2006	2007	2008	2009	2010		Notes Source: Council monitoring The target equates to an 8% increase and relates to the anticipated 6% increase in traffic on the local authority managed road network and 12% growth on the motorway / trunk road network in the Plan area.
		Calendar	Tonnes	Joint Plan Area	Base Data	2004	248,000	Actual Figures		N/A	248,000	247,000	248,000	248,000						
					Target Data	2010	269,000	Trajectory		N/A	248,000	251,500	255,000	258,500	262,000	265,500	269,000			

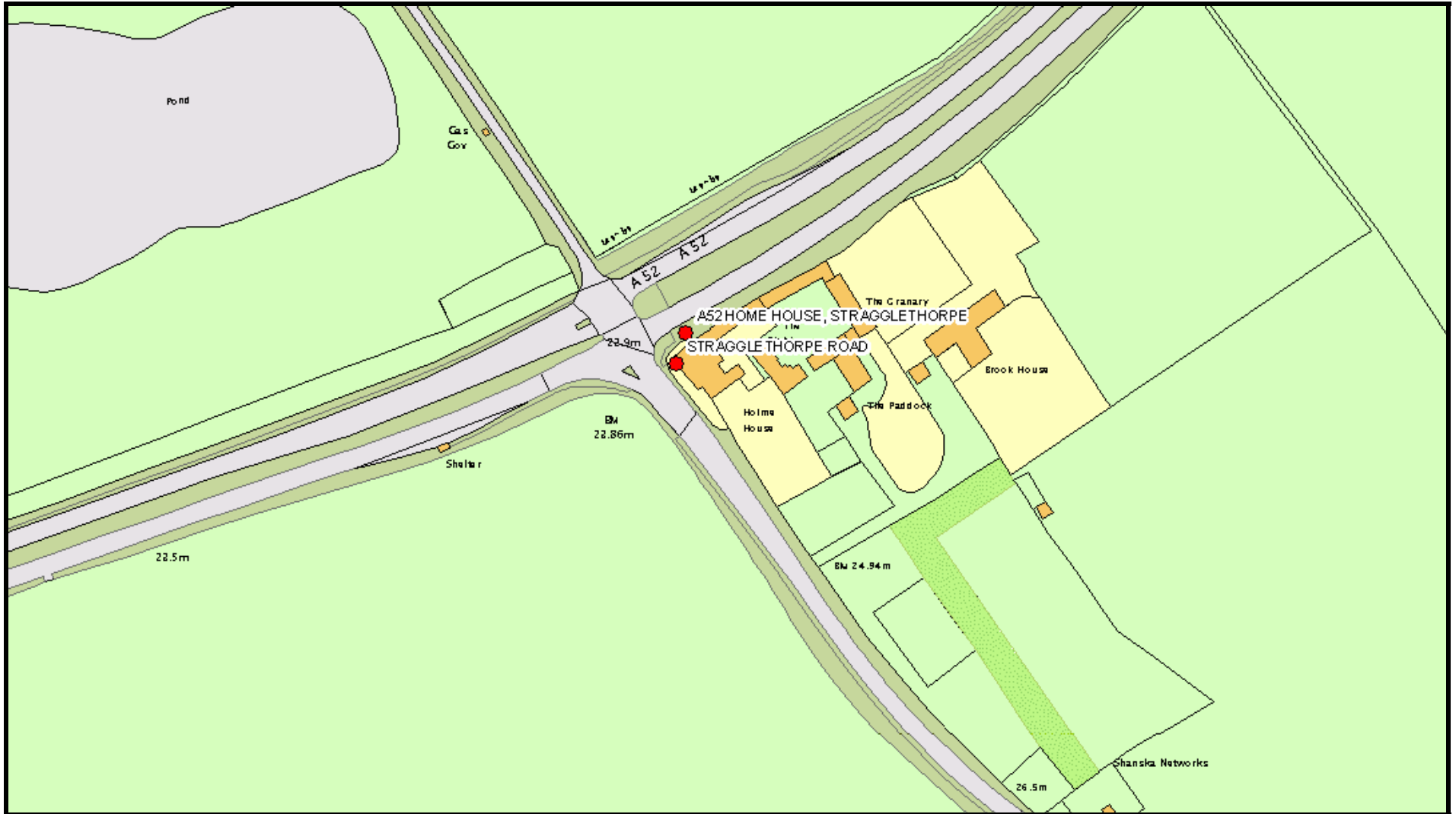
9. Appendix 1 NO2 monitoring locations.(AQMA's are greyed out and bordered in red)

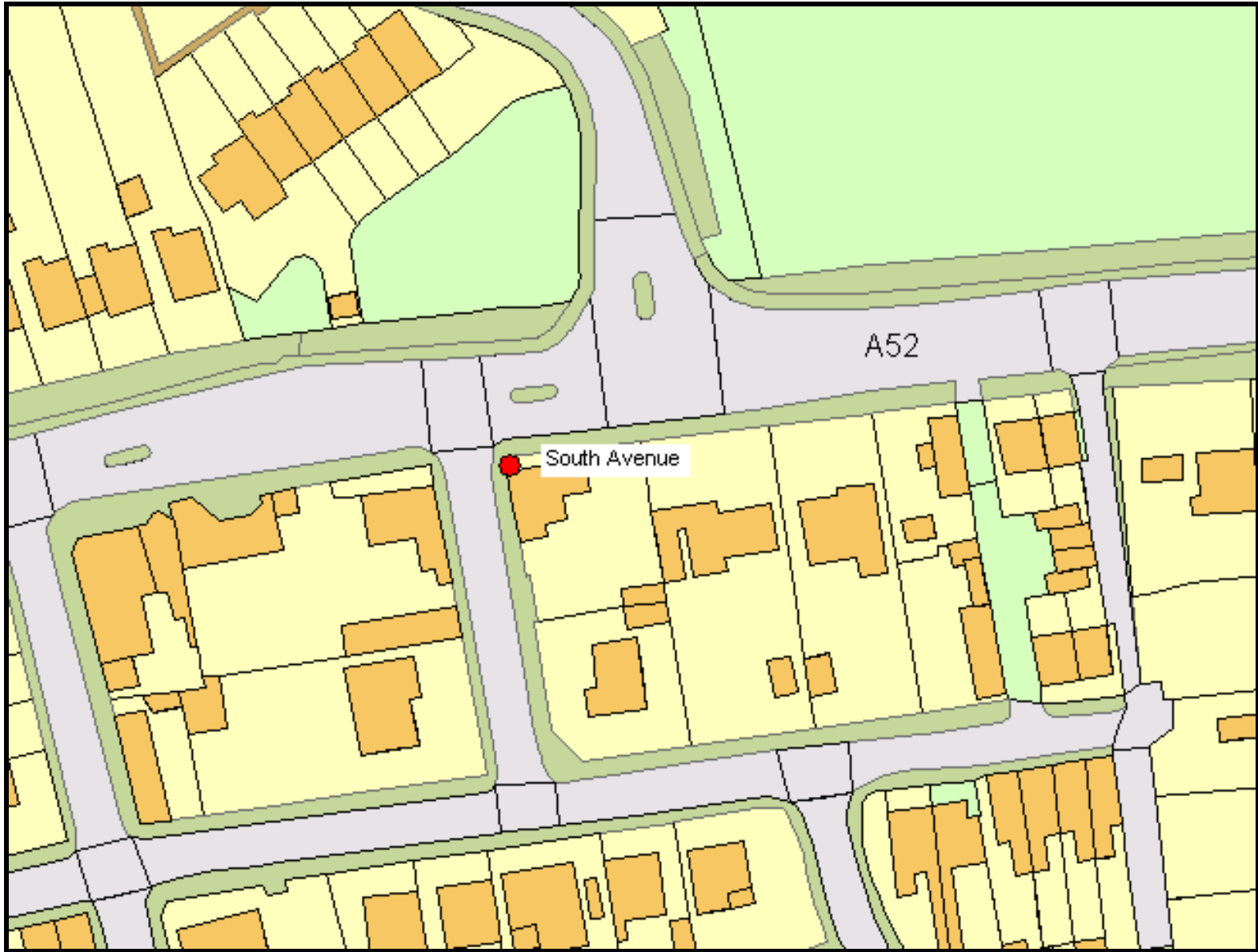


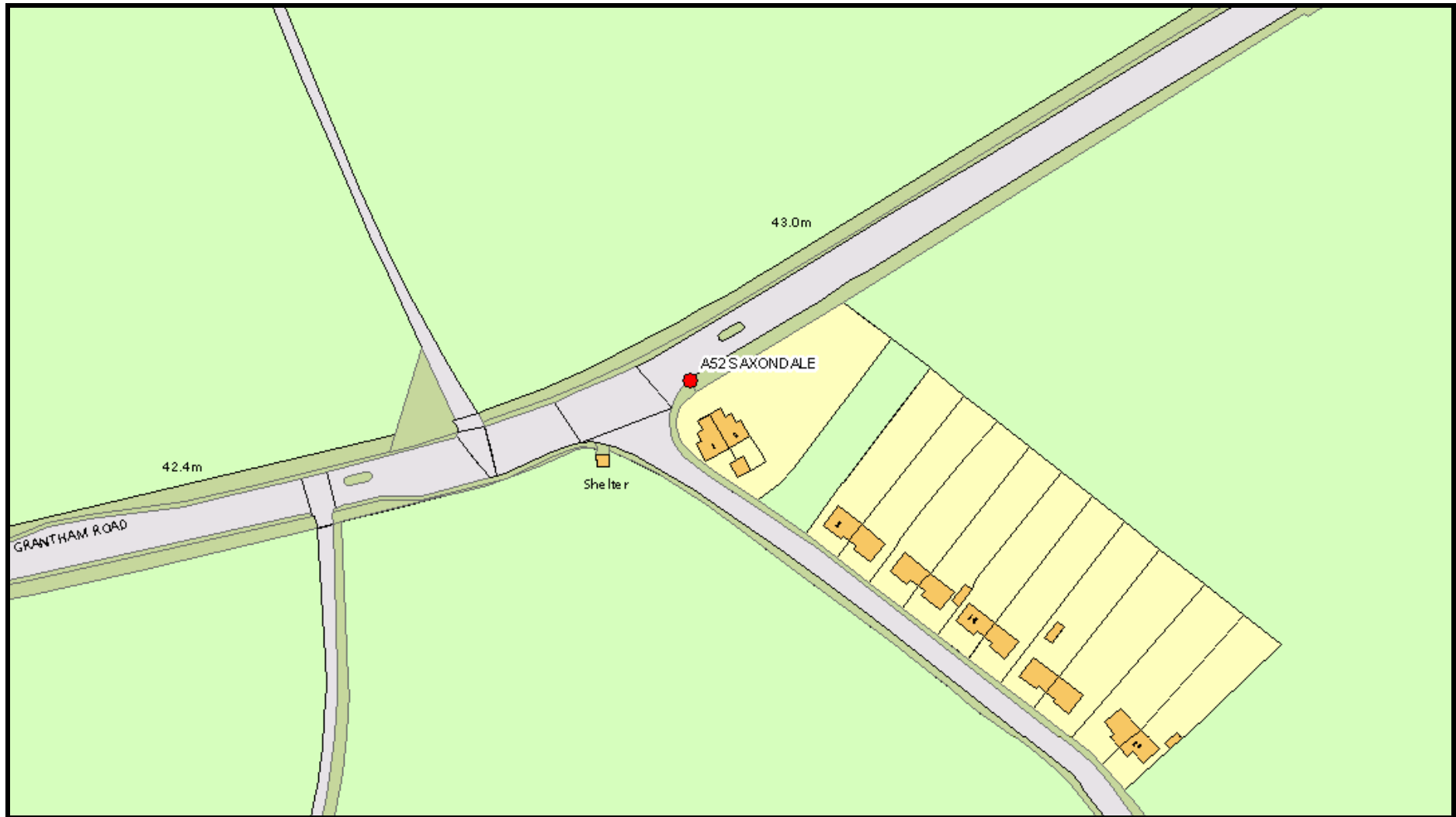


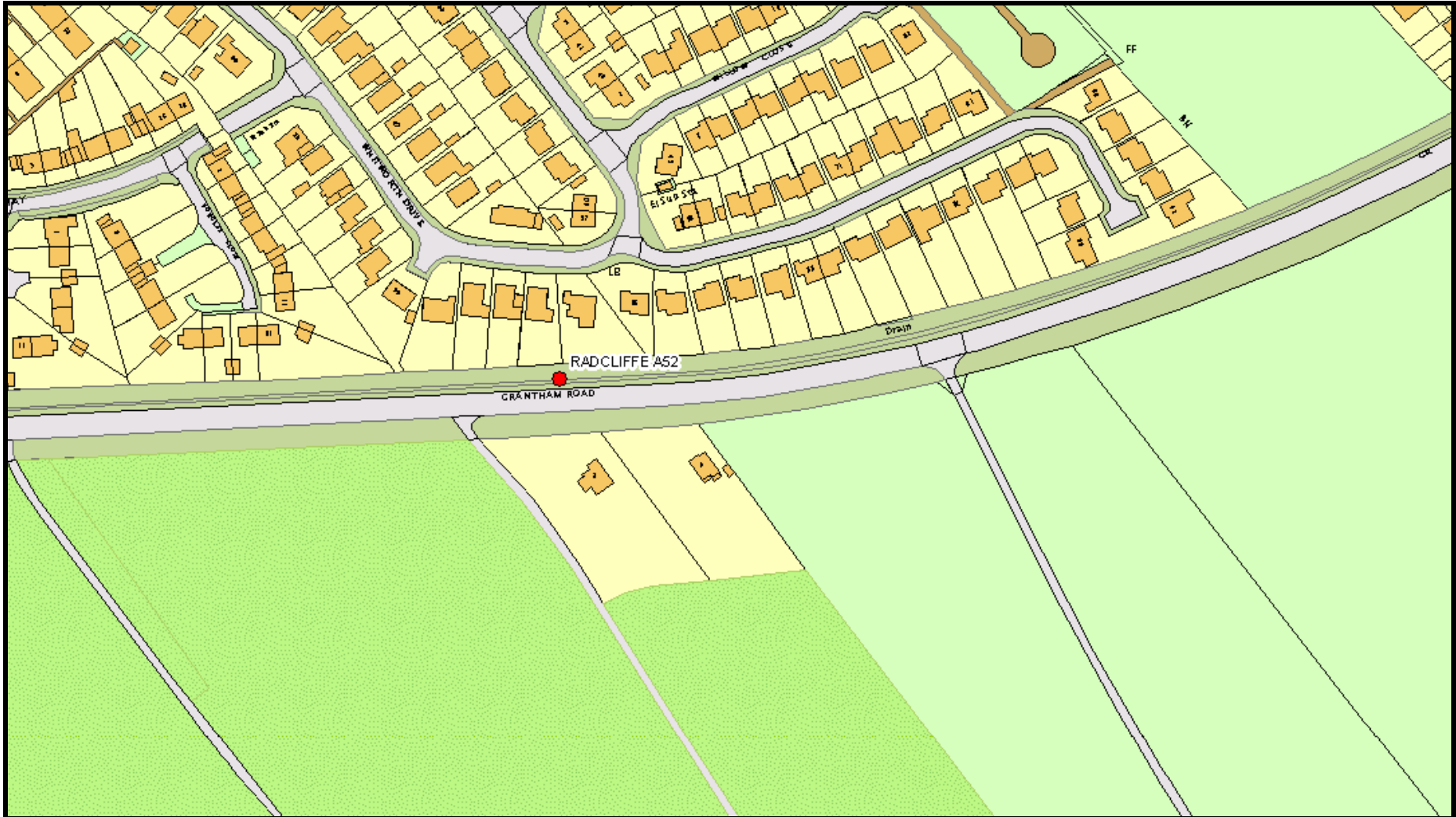






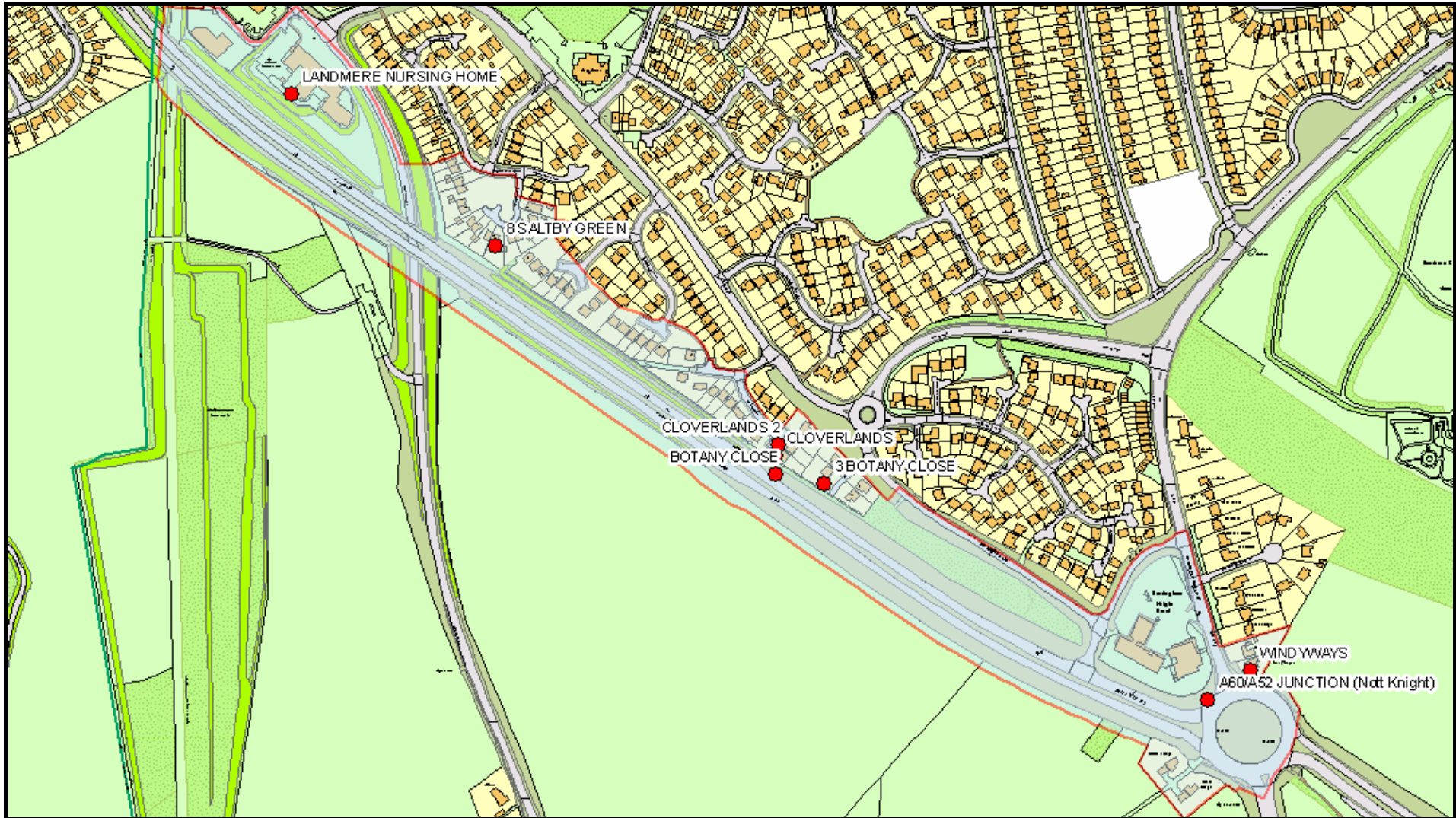












10. Glossary of terms.

Air Quality Standard – these standards represent minimal/no risk health based standards, for ambient concentrations of pollutants. They are based purely on medical evidence, taking no account of costs, benefits or technical feasibility.

Air Quality Objective – these objectives take account of both costs and benefits, forming benchmarks in time, against which “Air Quality Standards” can be achieved.

Annual mean – The average of the concentrations measured or calculated for each pollutant for one calendar year.

AQMA – Air Quality Management Area

Assessment – The consideration of whether estimated levels for the relevant future period are likely to exceed the levels set in the objectives.

AURN – Automated Urban and Rural Network of air quality monitoring stations

Background concentration – Concentration of a particular pollutant thought to be present in an area, which cannot be accounted for by dispersion modelling from local emissions. It is generally caused by transportation of pollutants over long distances.

CO – Carbon Monoxide

Data Capture – The percentage of all the possible measurements for a given period that were validly measured

DEFRA – Department for Environment, Food and Rural Affairs

DETR – Department for the Environment and the Regions (Now DEFRA)

Emissions Inventory – A full list of sources that emit pollutants into the atmosphere over a sustained period of time.

Exceedences – A period of time where the concentration of a pollutant is greater than, or equal to, the appropriate air quality objective.

IPPC – Integrated Pollution, Prevention and Control Act 2000

Maximum hourly average – The highest hourly reading of air pollution obtained during the time period under study.

NETCEN – National Environmental Technology Centre

NO₂ – Nitrogen Dioxide

NO_x – Nitrogen Oxides

Part A installations – Large emitters of pollution, which are regulated by either the Environment Agency (A1) or Local Authorities (A2)

Part B installations – Smaller emitters of pollution, which are regulated by local authorities

Percentile – A value found by listing a set of numbers in order and calculating the number below which a certain percent of the data set lies. For example, the 99th percentile of values in a data set, is the value below which 99% of the data falls.

PM₁₀ – Particulate Matter with a diameter of 10µm or less.

QA/QC – Quality Assurance/Quality Control.

Running Mean – A mean or series of means, calculated for overlapping time periods. For example, a daily running 8 hour mean equals any 8 hour period within that day.

SO₂ – Sulphur Dioxide.

µg/m³ – Microgrammes per cubic metre of air. A measure of concentration in terms of mass per unit volume. A concentration of 1µg/m³ means that one cubic metre of air contains one microgram (millionth of a gram) of pollutant.

11. Reference Bibliography.

Sources of references used in this report

1. Air Quality Review and Assessment Helpdesk - www.uwe.ac.uk/aqm/review/
2. Rushcliffe Borough Council (2009) "Updating and Screening Assessment of Local Air Quality". www.rushcliffe.gov.uk
3. Rushcliffe Borough Council (2009) "Air Quality Review and Assessment – Progress Report with AQAP". www.rushcliffe.gov.uk
4. Rushcliffe Borough Council (2008) "Air Quality Review and Assessment – Progress Report". www.rushcliffe.gov.uk
5. Rushcliffe Borough Council (2007) "Air Quality Review and Assessment – Progress Report". www.rushcliffe.gov.uk
6. Rushcliffe Borough Council (2000) "Air Quality Review and Assessment" www.rushcliffe.gov.uk
7. Rushcliffe Borough Council (2003) "Updating and Screening Assessment of Local Air Quality". www.rushcliffe.gov.uk
8. Rushcliffe Borough Council (2005) "Detailed Assessment of Sulphur Dioxide and Nitrogen Dioxide". www.rushcliffe.gov.uk
9. Rushcliffe Borough Council (2005) "Air Quality Review and Assessment – Progress Report". www.rushcliffe.gov.uk
10. Rushcliffe Borough Council (2007), "Air Quality Action Plan for Rushcliffe". www.rushcliffe.gov.uk
11. Rushcliffe Borough Council (2007), "Air Quality Review and Assessment: Progress Report", www.rushcliffe.gov.uk
12. Updating and Screening Assessment, Review and Assessment of Local Air Quality 2006.
13. Nottinghamshire Atmospheric Emissions Inventory 2004. www.rushcliffe.gov.uk
14. National Atmospheric Emissions Inventory - www.naei.org.uk
15. The UK National Air Quality Archive - www.airquality.co.uk/archive
16. DEFRA "Review and Assessment: Policy Guidance LAQM TG(09)". <http://www.defra.gov.uk>
17. Gradko International Limited – QA/QC Information provided with diffusion tube monitoring data.
18. TES Bretby – QA/QC information provided with gravimetric sampling data.
19. The Local Transport Plan for Greater Nottingham 2006 – 2011 can be viewed or downloaded from www.nottinghamshire.gov.uk