



Department
for Environment
Food & Rural Affairs



Department
for Transport

Air Quality Plan for tackling roadside nitrogen dioxide concentrations in Coventry/Bedworth (UK0017)

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Contents

1	Introduction	3
1.1	This document	3
1.2	Context	3
1.3	Zone status	3
1.4	Plan structure	4
2	General Information About the Zone	4
2.1	Administrative information	4
2.2	Assessment details	6
2.3	Air quality reporting	8
3	Overall Picture for 2015 Reference Year	8
3.1	Introduction	8
3.2	Reference year: NO ₂ _UK0017_Annual_1	8
4	Measures	13
4.1	Introduction	13
4.2	Source apportionment	13
4.3	Measures	13
4.4	Measures timescales	14
5	Baseline Model Projections	14
5.1	Overview of model projections	14
5.2	Baseline projections: NO ₂ _UK0017_Annual_1	15
	Annexes	20
A	References	20
B	Source apportionment graphs	21
C	Tables of measures	23

1 Introduction

1.1 This document

This document is the Coventry/Bedworth agglomeration zone (UK0017) updated air quality plan for tackling roadside nitrogen dioxide (NO₂) concentrations. This is an update to the air quality plan published in December 2015 (<https://www.gov.uk/government/collections/air-quality-plan-for-nitrogen-dioxide-no2-in-uk-2015>).

This plan presents the following information:

- General information regarding the Coventry/Bedworth agglomeration zone
- Details of NO₂ exceedance situation within the Coventry/Bedworth agglomeration zone
- Details of local air quality measures that have been implemented, will be implemented or are being considered for implementation in this agglomeration zone

This air quality plan for the Coventry/Bedworth agglomeration zone should be read in conjunction with the separate UK Air Quality Plan for tackling roadside nitrogen dioxide concentrations (hereafter referred to as the overview document) which sets out, amongst other things, the authorities responsible for delivering air quality improvements and the list of UK and national measures that are applied in some or all UK zones. The measures presented in this zone plan, and the accompanying UK overview document show how the UK will ensure that compliance with the NO₂ limit values is achieved in the shortest possible time.

This plan should also be read in conjunction with the supporting UK Technical Report which presents information on assessment methods, input data and emissions inventories used in the analysis presented in this plan.

1.2 Context

Two NO₂ limit values for the protection of human health have been set in the Air Quality Directive (2008/50/EC). These are:

- The annual mean limit value: an annual mean concentration of no more than 40 $\mu\text{g m}^{-3}$
- The hourly limit value: no more than 18 exceedances of 200 $\mu\text{g m}^{-3}$ in a calendar year

The Air Quality Directive stipulates that compliance with the NO₂ limit values will be achieved by 01/01/2010.

1.3 Zone status

The assessment undertaken for the Coventry/Bedworth agglomeration zone indicates that the annual limit value was exceeded in 2015 but is likely to be achieved by 2022 through the introduction of measures included in the baseline. When combined with the measures outlined in the overview document for the UK we expect this zone to be compliant by 2021.

1.4 Plan structure

General administrative information regarding this agglomeration zone is presented in Section 2.

Section 3 then presents the overall picture with respect to NO₂ levels in this agglomeration zone for the 2015 reference year of this air quality plan. This includes a declaration of exceedance situations within the agglomeration zone and presentation of a detailed source apportionment for each exceedance situation.

An overview of the measures already taken and to be taken within the agglomeration zone both before and after 2015 is given in Section 4.

Baseline modelled projections for each year from 2017 to 2030 for each exceedance situation are presented in Section 5. The baseline projections presented here include, where possible, the impact of measures that have already been taken and measures for which the relevant authority has made a firm commitment to implement. However, it has not been possible to quantify the impact of all the measures. This section therefore also explains which measures have been quantified, and hence included in the model projections, and which measures have not been quantified.

2 General Information About the Zone

2.1 Administrative information

Zone name: Coventry/Bedworth

Zone code: UK0017

Type of zone: agglomeration zone

Reference year: 2015

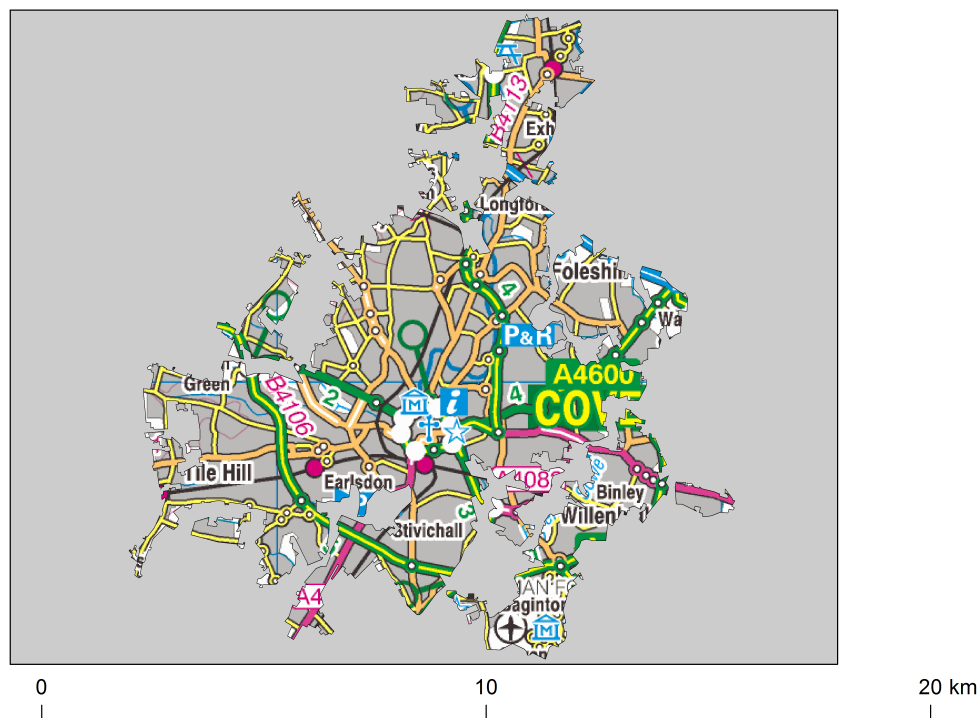
Extent of zone: Figure 1 shows the area covered by the Coventry/Bedworth agglomeration zone.

Local Authorities within the zone: Figure 2 shows the location of Local Authorities within the agglomeration zone. A list of these Local Authorities is also given below. The numbers in the list correspond to the numbers in Figure 2.

1. Coventry City Council
2. Nuneaton and Bedworth Borough Council
3. Rugby Borough Council
4. Warwick District Council

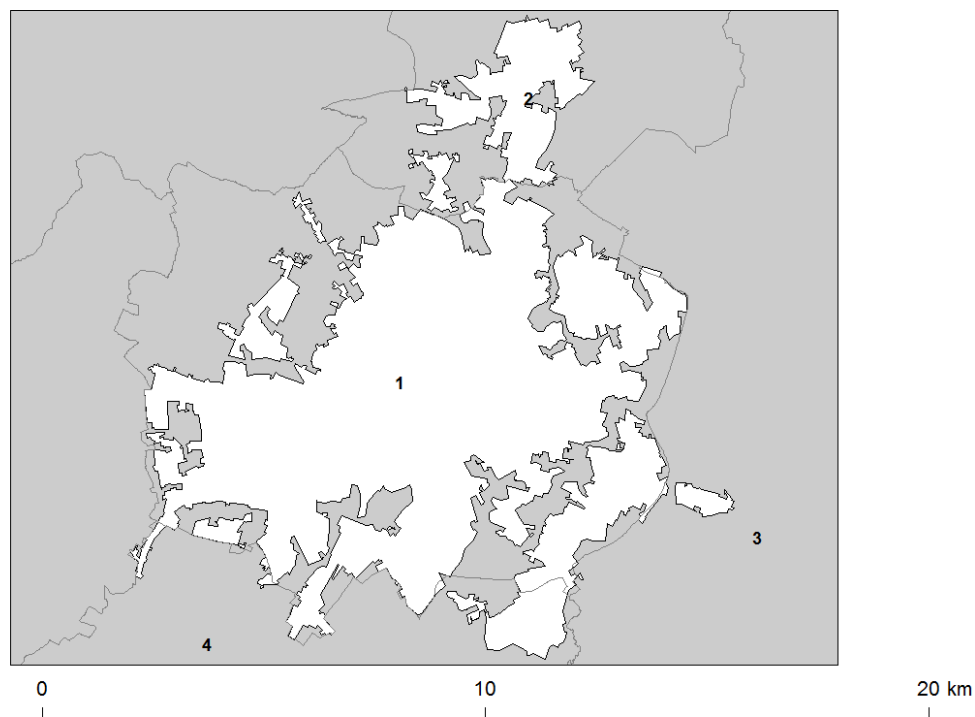
(Note: Local Authority boundaries do not necessarily coincide with zone boundaries. Hence Local Authorities may be listed within more than one zone plan.)

Figure 1: Map showing the extent of the Coventry/Bedworth agglomeration zone (UK0017).



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Figure 2: Map showing Local Authorities within the Coventry/Bedworth agglomeration zone (UK0017).



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2.2 Assessment details

Measurements

NO₂ measurements in this zone were available in 2015 from the following national network monitoring stations (NO₂ data capture¹ for each station in 2015 shown in brackets):

1. Coventry Allesley GB1034A (99%)

Full details of monitoring stations within the Coventry/Bedworth agglomeration zone are available from <http://uk-air.defra.gov.uk/networks/network-info?view=aurn>.

Modelling

Modelling for the 2015 reference year has been carried out for the whole of the UK. This modelling covers the following extent within this zone:

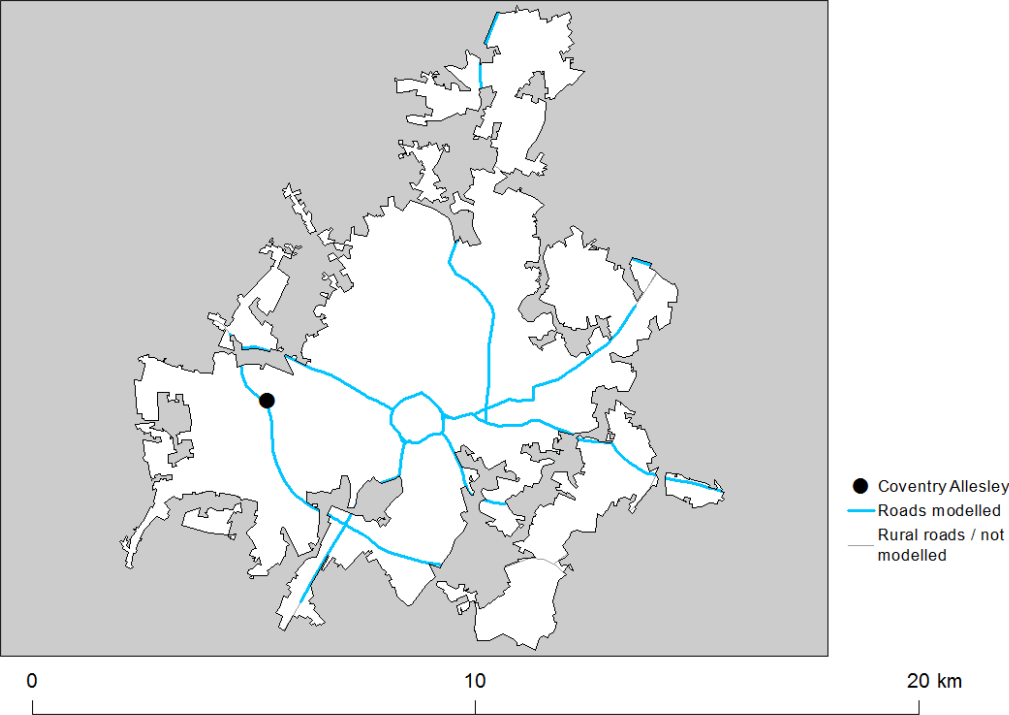
- Total background area within zone (approx): 76 km²
- Total population within zone (approx): 304,515 people

Zone maps

Figure 3 presents the location of the NO₂ monitoring stations within this zone for 2015 and the roads for which NO₂ concentrations have been modelled. NO₂ concentrations at background locations have been modelled across the entire zone at a 1 km x 1 km resolution.

¹Annual data capture is the proportion of hours in a year for which there are valid measurements at a monitoring station, expressed in this document as a percentage. The Implementing Provisions on Reporting (IPR) guidance requires that a minimum data capture of 85% is required for compliance reporting (that is 90% valid data, plus a 5% allowance for data loss due to planned maintenance and calibration). Monitoring stations with at least 75% data capture have been included in the modelling analysis to ensure that a greater number of operational monitoring sites have been used for model calibration and verification purposes. For more information on compliance reporting under European Directives see Section 2.3.

Figure 3: Map showing the location of the NO₂ monitoring stations with valid data in 2015 and roads where concentrations have been modelled within the Coventry/Bedworth (UK0017) agglomeration zone.



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2.3 Air quality reporting

From 2001 to 2012 the UK has reported annually on air quality concentrations using a standard Excel questionnaire (Decision 2004/461/EC). These questionnaires are available online from <http://cdr.eionet.europa.eu/gb/eu/annualair>. Since 2013 reporting has been via an e-reporting system (Decision 2011/850/EU) <http://cdr.eionet.europa.eu/gb/eu/>.

In addition, the UK has reported on air quality plans and programmes (Decision 2004/224/EC) since 2003. The most recent previous UK air quality plan for nitrogen dioxide was published in 2015. The plan and supporting documents are available at <https://www.gov.uk/government/collections/air-quality-plan-for-nitrogen-dioxide-no2-in-uk-2015> and the submission of this plan via e-reporting is published at <http://cdr.eionet.europa.eu/gb/eu/aqd/h/envvryhbq/>. Historic plans and programmes are available on <http://cdr.eionet.europa.eu/gb/eu/aqpp>.

3 Overall Picture for 2015 Reference Year

3.1 Introduction

There are two limit values for the protection of health for NO₂. These are:

- The annual limit value (annual mean concentration of no more than 40 µgm⁻³)
- The hourly limit value (no more than 18 hourly exceedances of 200 µgm⁻³ in a calendar year)

Within the Coventry/Bedworth agglomeration zone the annual limit value was exceeded in 2015. Hence, one exceedance situation for this zone has been defined, NO₂_UK0017_Annual_1, which covers exceedances of the annual limit value. This exceedance situation is described below.

3.2 Reference year: NO₂_UK0017_Annual_1

The NO₂_UK0017_Annual_1 exceedance situation covers all exceedances of the annual mean limit value in the Coventry/Bedworth agglomeration zone in 2015.

Compliance with the annual limit value in this exceedance situation has been assessed using a combination of air quality measurements and modelling. Table 1 presents measured annual concentrations at national network stations in this exceedance situation since the 1st Daughter Directive (1999/30/EC) came into force in 2001. This shows that there were no measured exceedances of the annual limit value in this zone in 2015. Table 2 summarises modelled annual mean NO₂ concentrations in this exceedance situation for the same time period. This table shows that, in 2015, 11.3 km of road length was modelled to exceed the annual limit value. There were no modelled background exceedances of the annual limit value. The maximum measured concentration in the zone varies due to changes in emissions and varying meteorology in different years. However, the models are also updated each year to take into account the most up-to-date science, so the modelled results for different years may not be directly comparable. Maps showing the modelled annual mean NO₂ concentrations for 2015 at background and at roadside locations are presented in Figures 4 and 5 respectively. All modelled exceedances of the annual limit value are coloured orange or red in the maps.

The modelling carried out for this exceedance situation has also been used to determine the annual mean NO_x source apportionment for all modelled locations. Emissions to air are regulated in terms of oxides of nitrogen

(NO_x), which is the term used to describe the sum of nitrogen dioxide (NO₂) and nitric oxide (NO). Ambient NO₂ concentrations include contributions from both directly emitted primary NO₂ and secondary NO₂ formed in the atmosphere by the oxidation of NO. As such, it is not possible to calculate an unambiguous source apportionment specifically for NO₂ concentrations; therefore the source apportionment in this plan is presented for NO_x, rather than for NO₂ (for further details please see the UK Technical Report). Table 3 summarises the modelled NO_x source apportionment for the section of road with the highest NO₂ concentration in this exceedance situation in 2015. This is important information because it shows which sources need to be tackled at the location with the largest compliance gap in the exceedance situation.

Figure B.1 in Annex B presents the annual mean NO_x source apportionment for each section of road within the NO₂_UK0017_Annual_1 exceedance situation (i.e. the source apportionment for all exceeding roads only) in 2015.

Table 1: Measured annual mean NO₂ concentrations at national network stations in NO₂_UK0017_Annual_1 for 2001 onwards, μgm^{-3} (a). Data capture shown in brackets.

Site name (EOI code)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Coventry Memorial Park (GB0739A)	19 (64)	21 (88)	25 (87)	22 (98)	22 (99)	18 (99)	19 (99)	19 (99)	17 (97)	21 (96)	17 (98)	19 (80)	20 (84)	20 (43)	
Coventry Allesley (GB1034A)														23 (48)	23 (99)

(a) Annual Mean Limit Value = 40 μgm^{-3}

Table 2: Annual mean NO₂ model results in NO₂_UK0017_Annual_1 for 2001 onwards.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Road length exceeding (km)	27.0	11.0	28.5	24.2	24.9	20.1	16.5	10.6	15.2	26.1	20.1	15.8	15.0	9.8	11.3
Background exceeding (km ²)	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maximum modelled concentration (μgm^{-3}) (a)	54.7	44.0	52.7	50.6	52.8	50.7	49.1	51.9	85.4	95.8	62	54	52	50	54

(a) Annual Mean Limit Value = 40 μgm^{-3}

Table 3: Modelled annual mean NO_x source apportionment at the location with the highest NO₂ concentration in 2015 in NO2_UK0017_Annual_1 (µgm⁻³) traffic count point 7631 on the A4053; OS grid (m): 433820, 279270) .

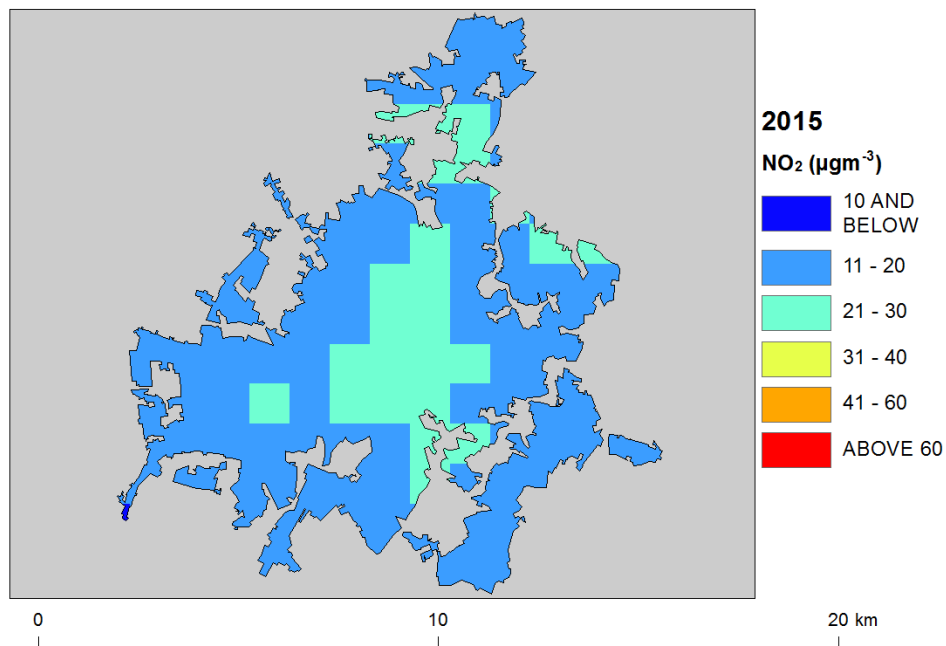
Spatial scale	Component	Concentration at highest road link (a)
Regional background sources NO _x (i.e. contributions from distant sources of > 30 km from the receptor).	Total	6.1
	From within the UK	3.6
	From transboundary sources (includes shipping and other EU member states)	2.5
Urban background sources NO _x (i.e. sources located within 0.3 - 30 km from the receptor).	Total	34.3
	From road traffic sources	18.9
	From industry (including heat and power generation)	3.8
	From agriculture	NA
	From commercial/residential sources	5.1
	From shipping	0.0
	From off road mobile machinery	4.5
	From natural sources	NA
	From transboundary sources	NA
	From other urban background sources	2.0
Local sources NO _x (i.e. contributions from sources < 0.3 km from the receptor).	Total	95.6
	From petrol cars	9.9
	From diesel cars	42.9
	From HGV rigid (b)	14.9
	From HGV articulated (b)	1.3
	From buses	8.9
	From petrol LGVs (c)	0.1
	From diesel LGVs (c)	17.5
	From motorcycles	0.1
	From London taxis	0.0
Total NO _x (i.e. regional background + urban background + local components)		136.0
Total NO ₂ (i.e. regional background + urban background + local components)		54

(a) Components are listed with NO_x concentration of NA when there is no source from this sector.

(b) HGV = heavy goods vehicle

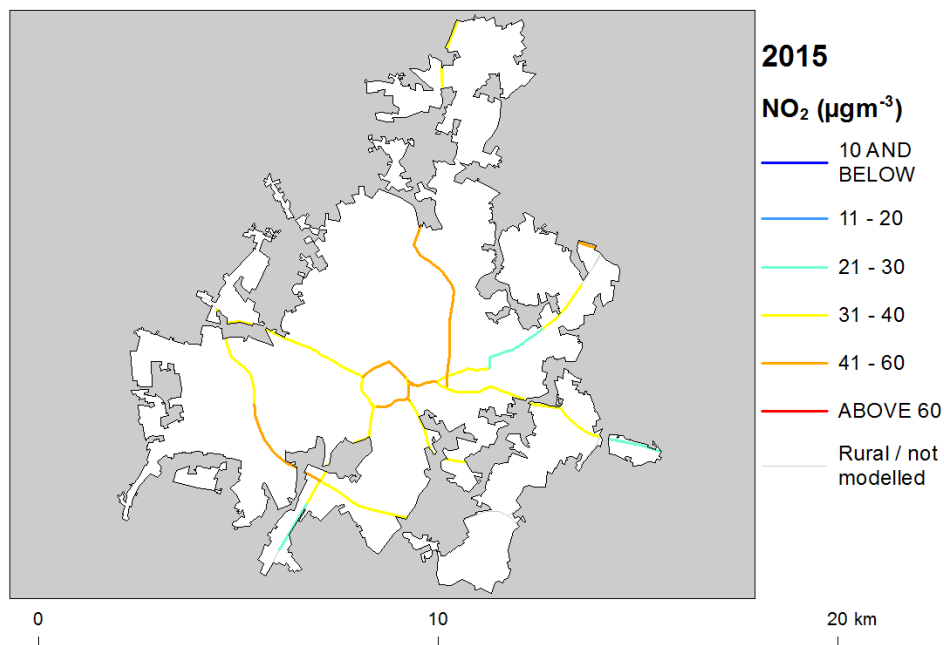
(c) LGV = light goods vehicle

Figure 4: Map of modelled background annual mean NO₂ concentrations 2015. Modelled exceedances of the annual limit value are shown in orange and red.



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Figure 5: Map of modelled roadside annual mean NO₂ concentrations 2015. Modelled exceedances of the annual limit value are shown in orange and red.



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4 Measures

4.1 Introduction

This section gives details of measures that address exceedances of the NO₂ limit values within Coventry/Bedworth agglomeration zone. This includes both measures that have already been taken and measures for which there is a firm commitment that they will be taken.

Section 5 then explains the extent to which it has been possible to incorporate the impacts of these measures into the baseline modelling carried out for this assessment.

4.2 Source apportionment

It is important to understand which sources are responsible for causing the exceedance in order to most effectively tailor measures to address the NO₂ exceedance situation described in Section 3 above. This can be achieved by considering the source apportionment for the exceedance situation, also presented in Section 3. A summary of what the source apportionment shows and the implications for which measures would therefore be appropriate is given here.

Local road traffic was the dominant source in this exceedance location in the reference year. The largest contribution was from diesel cars at the location of maximum exceedance with a contribution of 42.9 μgm^{-3} of NO_x out of a total of 136 μgm^{-3} of NO_x. Diesel cars, diesel LGVs, articulated HGVs and rigid HGVs were important sources on the motorway roads with the highest concentrations in this exceedance situation. Diesel cars, diesel LGVs and on some roads rigid and articulated HGVs or buses were important sources on the primary roads with the highest concentrations.

This indicates that appropriate measures should impact on local road traffic sources in this zone. Other measures to address the urban background sources may also be beneficial.

4.3 Measures

Measures potentially affecting NO₂ in this agglomeration zone have been taken and/or are planned at a range of administrative levels. These are:

- European Union
- National (i.e. England, Scotland, Wales, Northern Ireland or whole UK)
- Local (i.e. UK Local Authorities)

Details of European Union measures (e.g. Euro Standards, Fuel Quality Directives, Integrated Pollution Prevention and Control) can be found on the European Commission's website (http://ec.europa.eu/environment/air/index_en.htm). Details of national measures are given in the UK overview document.

Relevant Local Authority measures within this exceedance situation are listed in Table C.1 (see Annex C). Table C.1 lists measures which a local authority has carried out or is in the process of carrying out, plus additional measures which the local authority is committed to carrying out or is investigating with the expectation of carrying out in the future.

The types of initiatives in place in the zone include modal shifts from using private cars to walking and cycling, workplace and school travel plans and the use of low emission vehicles.

There are many initiatives in the zone that are taking place that help improve air quality. Measures to encourage more cycling, walking, workplace and school travel plans are in place that will reduce the impact of traffic on the transport network by encouraging a shift towards sustainable modes of transport.

To build on these measures, there have been initiatives to improve bus emissions through fleet renewal. Greener methods of travelling are also taking place through the use of electric buses on some routes as part of a park and ride scheme that reduces car use. The zone has an ongoing trial of low emission vehicles and some parts of the zone are using electric cars and hybrid technology.

The Low Emissions Towns and Cities Programme is an Air Quality Grant funded project led by seven West Midlands Authorities, including Coventry. The steering group has produced guidance documents for procurement, planning and a low emissions strategy focused on the uptake of and providing the infrastructure for low emissions vehicles and promoting active and sustainable modes of transport.

4.4 Measures timescales

Timescales for national measures are given in the UK overview document.

Local Authorities report on progress with the implementation of their action plans annually and review action plan measures regularly. Information on local measures was collected in February/March 2015. Local authorities were asked to review and, where necessary, provide updates to measures in March/April 2017. Hence, any Local Authority action plans and measures adopted by Local Authorities after this time have not been included in this air quality plan, unless additional information was provided during the consultation process.

The reference year for this air quality plan is 2015. Where measures started and finished before 2015, then the improvement in air quality resulting from these measures will have already taken place before the reference year and the impact of these measures will have been included in the assessment where the measure has had an impact on the statistics used to compile the emission inventory. Many measures started before the reference year and will continue to have a beneficial impact on air quality well beyond the reference year. Measures with a start date before 2015 and an end date after 2015 may have an impact on concentrations in the reference year and a further impact in subsequent years. Where the Status column in Annex C is 'Implementation', this shows that this measure is already underway or that there is a commitment for this measure to go ahead. Where the Status is 'Planning', 'Preparation' or 'Other' the level of commitment is less clear and it is possible some of these measures may not go ahead.

5 Baseline Model Projections

5.1 Overview of model projections

Model projections for each year from 2017 to 2030, starting from the 2015 reference year described in Section 3, have been calculated in order to determine when compliance with the NO₂ limit values is likely to be achieved on the basis of EU, regional and local measures currently planned. Details of the methods used for the baseline emissions and projections modelling are provided in the UK technical report.

For national measures, it has not been possible to quantify the impact of all measures on emissions and ambient concentrations. The impact for all quantifiable measures has been included in the baseline projections.

The impacts of the individual Local Authority measures have not been explicitly included in the baseline model projections. However, measures may have been included implicitly if they have influenced the traffic counts for 2015 (used as a basis for the compilation of the emission inventory) or in the traffic activity projections to

2020 and beyond (used to calculate the emissions projections). It should be recognised that these measures will have a beneficial impact on air quality, even if it has not been possible to quantify this impact here.

5.2 Baseline projections: NO₂_UK0017_Annual_1

Table 4 presents summary results for the baseline model projections for each year from 2017 to 2030 for the NO₂_UK0017_Annual_1 exceedance situation. This shows that the maximum modelled annual mean NO₂ concentration predicted for 2020 in this exceedance situation is 45 μgm^{-3} . By 2022, the maximum modelled annual mean NO₂ concentration is predicted to drop to 40 μgm^{-3} . Hence, the model results suggest that compliance with the NO₂ annual limit value is likely to be achieved by 2022 under baseline conditions.

Figure 6 and 7 presents maps of projected annual mean NO₂ concentrations at background and roadside locations respectively in 2022, the year at which compliance is achieved. For reference Figures 8 and 9 show maps of projected annual mean NO₂ concentrations in 2020, 2025 and 2030 for background and roadside locations respectively.

It should be noted that the baseline projections presented here include the impacts of some measures, where they can be quantified, that have already been or will be implemented.

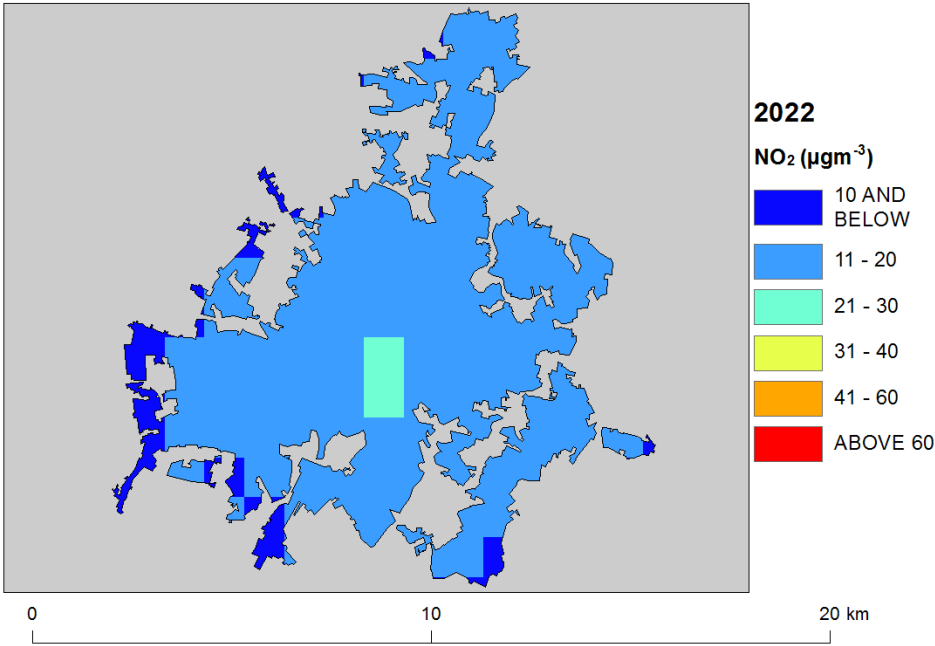
Table 4: Annual mean NO₂ model results in NO₂_UK0017_Annual_1.

	2015	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Road length exceeding (km)	11.3	5.1	1.8	1.3	0.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Background exceeding (km ²)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maximum modelled concentration NO ₂ (μgm ⁻³) (a)	54	51	49	47	45	42	40	38	36	34	33	31	30	29	28
Corresponding modelled concentration NO _x (μgm ⁻³) (b)	136	126	120	113	106	98	91	86	80	75	71	67	64	61	58

(a) Annual Mean Limit Value = 40 μgm⁻³

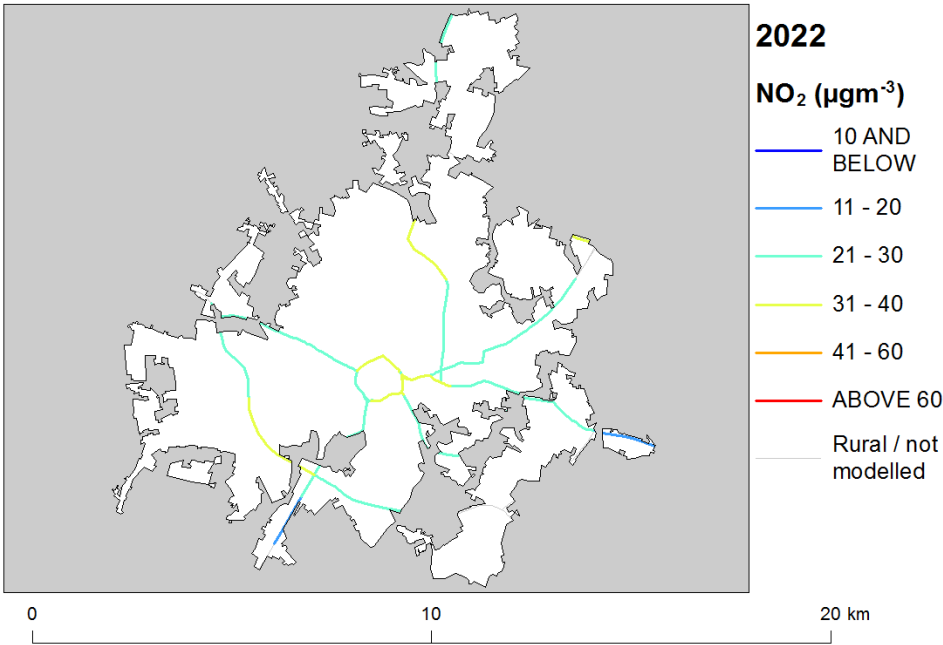
(b) NO_x is recorded here for comparison with the NO_x source apportionment graphs for 2015 presented in Annex B of this plan. Limit values for EU directive purposes are based on NO₂.

Figure 6: Background baseline projections of annual mean NO₂ concentrations in 2022, the year at which compliance is achieved under baseline conditions. Modelled exceedances of the annual limit value are shown in orange and red.



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Figure 7: Roadside baseline projections of annual mean NO₂ concentrations in 2022, the year at which compliance is achieved under baseline conditions. Modelled exceedances of the annual limit value are shown in orange and red.



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Figure 8: Background baseline projections of annual mean NO₂ concentrations in 2020, 2025 and 2030. 2015 is also included here for reference. Modelled exceedances of the annual limit value are shown in orange and red.

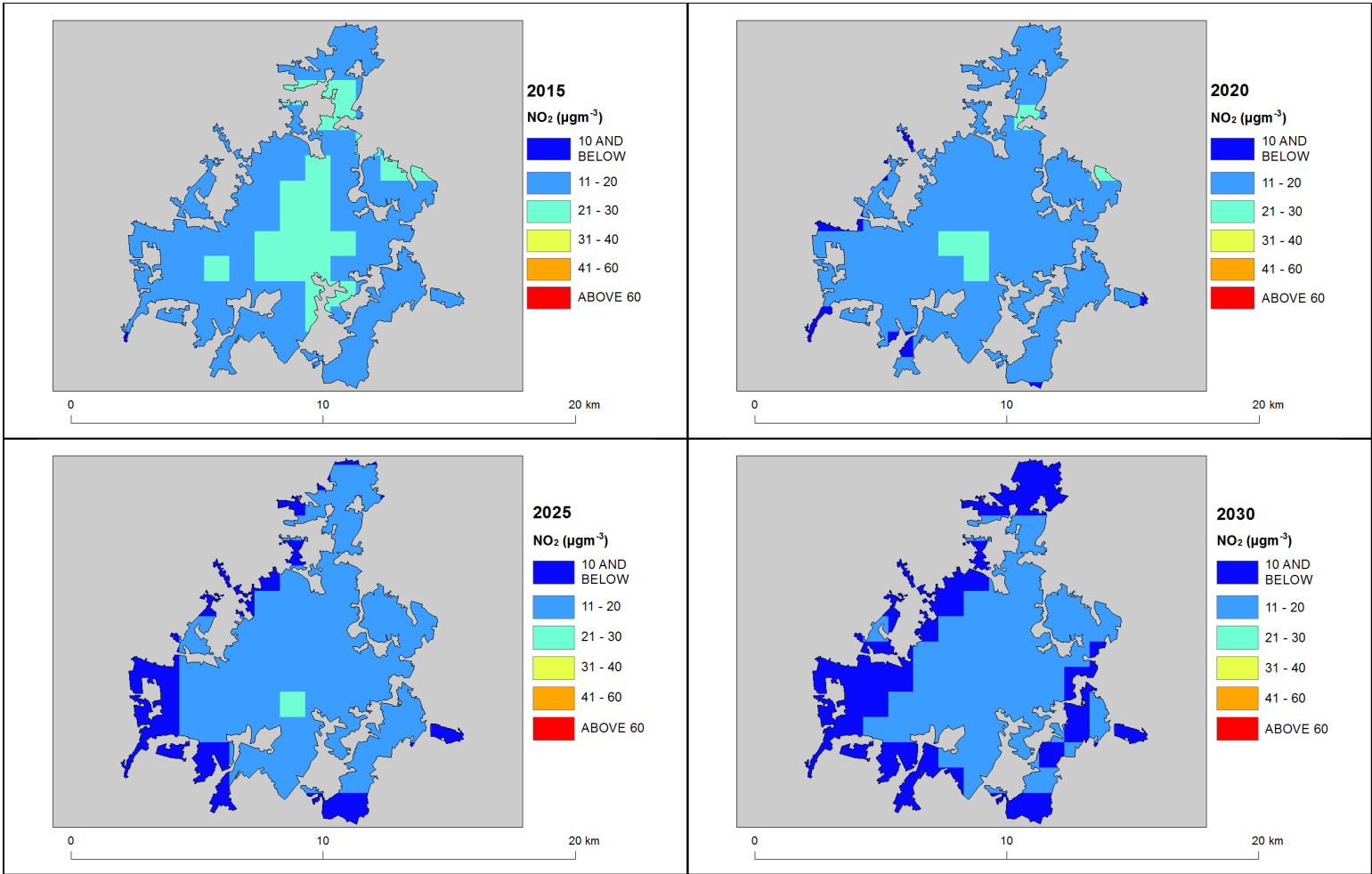
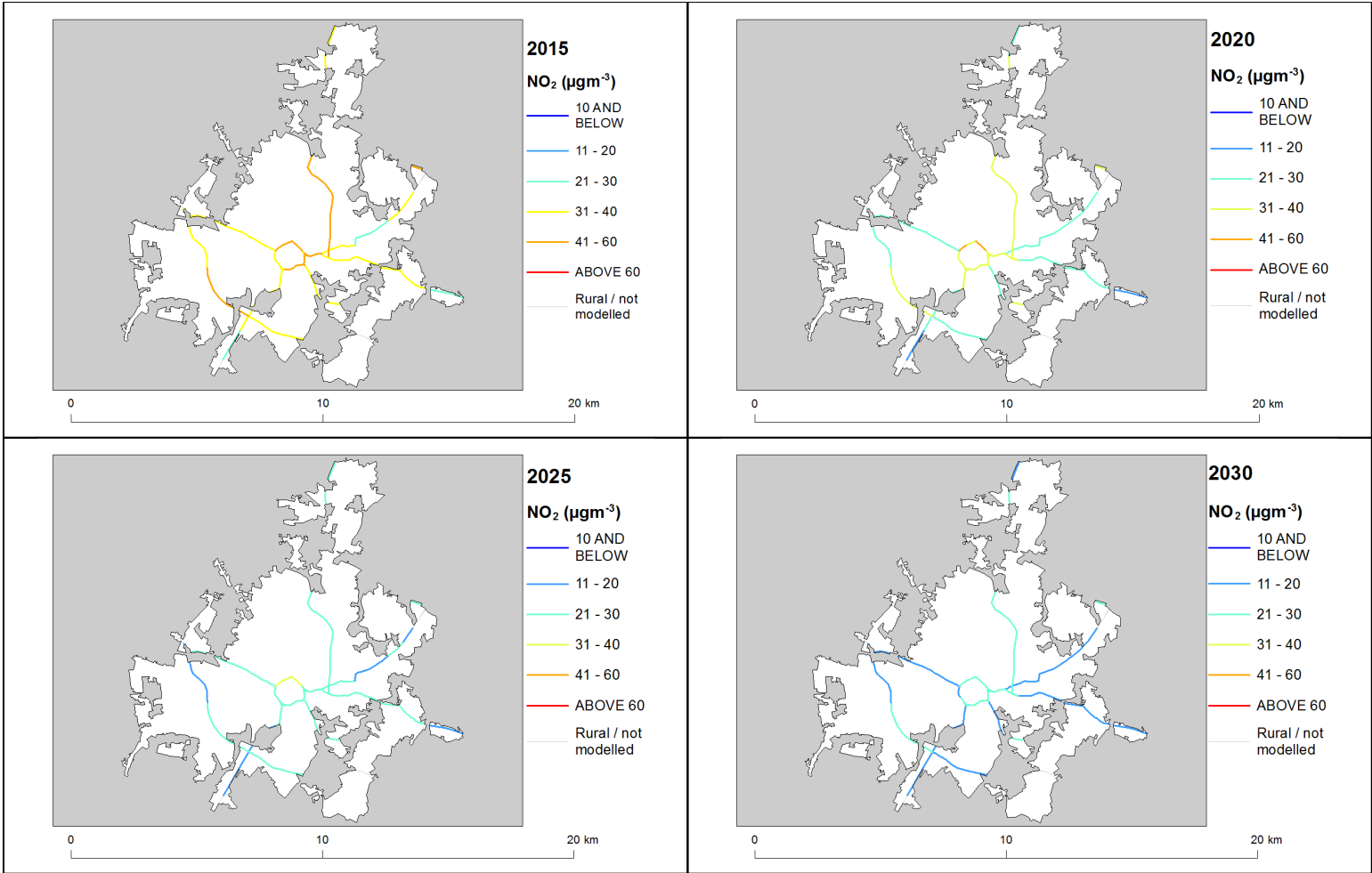


Figure 9: Roadside baseline projections of annual mean NO₂ concentrations in 2020, 2025 and 2030. 2015 is also included here for reference. Modelled exceedances of the annual limit value are shown in orange and red.



Annexes

A References

1st Daughter Directive 1999/30/EC. Council Directive 1999/30/EC, of 22 April 1999 relating to limit values for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead in ambient air (The First Daughter Directive). From the Official Journal of the European Communities, 29.6.1999, En Series, L163/41.

Air Quality Directive 2008/50/EC. Council Directive 2008/50/EC, of 21 May 2008. On ambient air quality and cleaner air for Europe. From the Official Journal of the European Union, 11.6.2008, En Series, L152/1

Air Quality Expert Group (AQEG, 2004). Nitrogen Dioxide in the United Kingdom. <http://uk-air.defra.gov.uk/library/aqeg/publications>

CDR Central Data Repository. <http://cdr.eionet.europa.eu/>

Decision 2004/224/EC. Commission Decision of 20 February 2004 laying down arrangements for the submission of information on plans or programmes required under Council Directive 96/62/EC in relation to limit values for certain pollutants in ambient air. From the Official Journal of the European Union, 6.3.2004, En Series, L68/27

Decision 2004/461/EC. Commission Decision of 29 April 2004 laying down a questionnaire to be used for annual reporting on ambient air quality assessment under Council Directives 96/62/EC and 1999/30/EC and under Directives 2000/69/EC and 2002/3/EC of the European Parliament and of the Council. From the Official Journal of the European Union, 30.4.2004, En Series, L156/78

Decision 2011/850/EU. Commission Implementing Decision of 12 December 2011 laying down rules for Directives 2004/107/EC and 2008/50/EC of the European Parliament and of the Council as regards the reciprocal exchange of information and reporting on ambient air quality. From the Official Journal of the European Union, 17.12.2011, En Series, L335/86

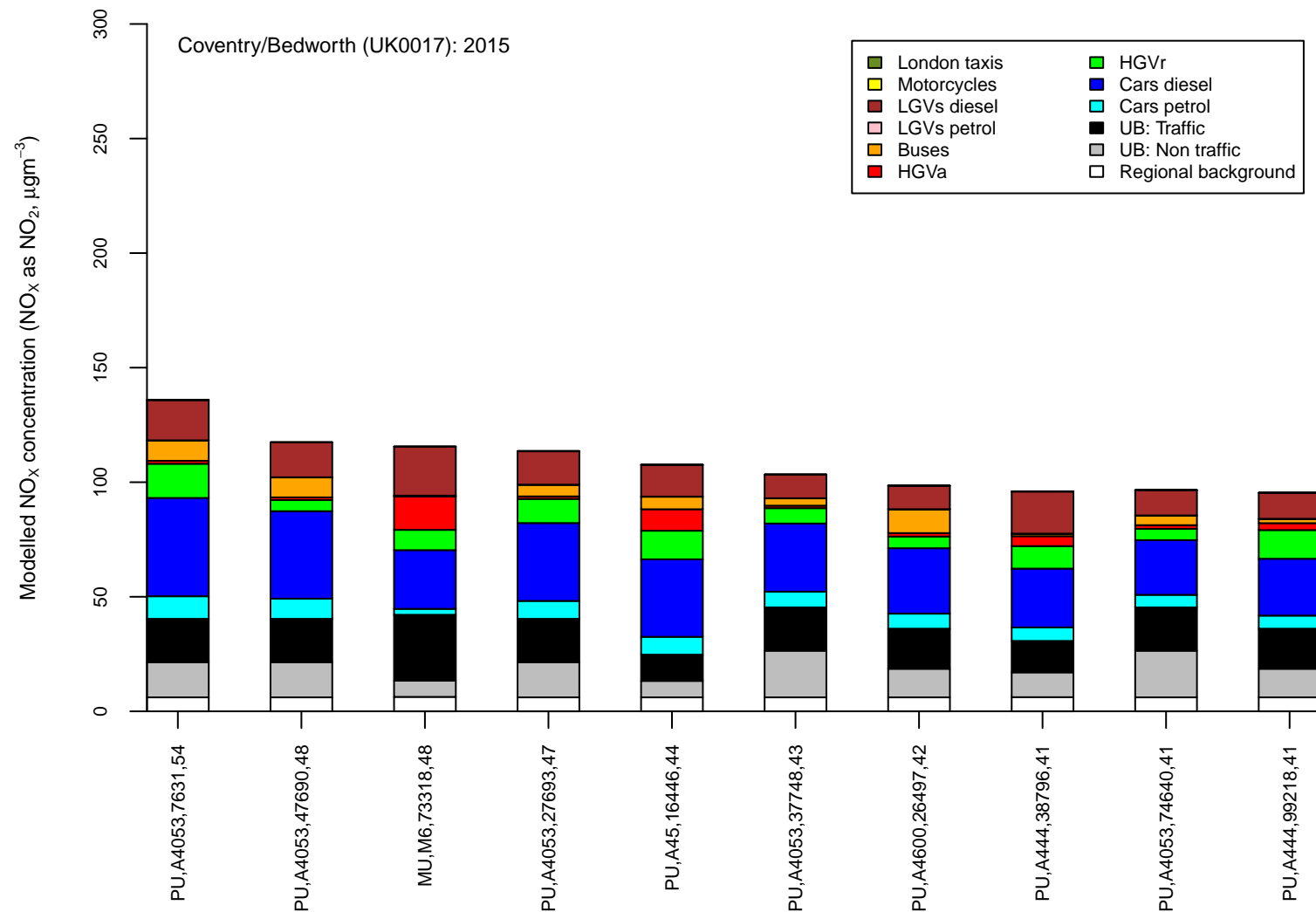
IPR 2013. Guidance on the Commission Implementing Decision laying down rules for Directives 2004/107/EC and 2008/50/EC of the European Parliament and of the Council as regards the reciprocal exchange of information and reporting on ambient air (Decision 2011/850/EU). http://ec.europa.eu/environment/air/quality/legislation/pdf/IPR_guidance1.pdf

UK Air Quality Plan for tackling roadside nitrogen dioxide concentrations and the UK technical report are available at: <http://www.gov.uk/defra>.

B Source apportionment graphs

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Figure B.1: Annual mean roadside NO_x source apportionment plots for all roads exceeding the annual mean NO₂ limit value in 2015.



Road class (MU = motorway, PU = primary road, TU = trunk road), road number, census id 15 and modelled NO₂ concentration (μgm^{-3})

C Tables of measures

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Table C.1 Relevant Local Authority measures within Coventry/Bedworth (UK0017)

Measure code	Description	Focus	Classification	Status	Other information
Coventry City Council_1	Cycle Coventry	New cycle routes, parking	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2012 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: Increased cycling Target emissions reduction: N/A
Coventry City Council_2	Pinch Point	Road Junction improvements	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2012 Expected end date: 2015 Spatial scale: National Source affected: Transport Indicator: Decreased congestion Target emissions reduction: N/A
Coventry City Council_3	Investment in Urban Traffic Control (UTMC)	Hi-tech traffic management technology	Traffic planning and management: Other measure	Implementation	Start date: 2010 Expected end date: 2014 Spatial scale: National Source affected: Transport Indicator: Decreased congestion Target emissions reduction: N/A
Coventry City Council_4	Junction A45/Kenilworth Road improvements	Upgrade has reduced congestion at busy junction	Traffic planning and management: Other measure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Whole agglomeration Source affected: Transport Indicator: Reduced traffic congestion Target emissions reduction: N/A
Coventry City Council_5	Ring road junction 1 improvements	Improve traffic flow and pedestrian/cycle crossing at busy junction 1	Traffic planning and management: Other measure	Planning	Start date: 2014 Expected end date: 2016 Spatial scale: National Source affected: Transport Indicator: Decreased congestion Target emissions reduction: N/A
Coventry City Council_6	Public Realm	City Centre sustainable travel initiative	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2011 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: Increased cycling/walking Target emissions reduction: N/A
Coventry City Council_7	NUCKLE	Improved rail services on major commuter corridor	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2011 Expected end date: 2015 Spatial scale: National Source affected: Transport Indicator: Increased rail journeys Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Coventry City Council_8	Whitley bridge construction	Reduce queuing at Jaguar/Land Rover site	Traffic planning and management: Other measure	Implementation	Start date: 2014 Expected end date: 2015 Spatial scale: National Source affected: Transport Indicator: Decreased congestion Target emissions reduction: N/A
Coventry City Council_9	Friargate bridge construction	New bridge deck over ring road for sustainable travel	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: Increased cycling/walking Target emissions reduction: N/A
Coventry City Council_10	Coventry Station Access Scheme	Access improvements to encourage rail use	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2019 Spatial scale: Whole agglomeration Source affected: Transport Indicator: Increased rail journeys Target emissions reduction: N/A
Coventry City Council_11	Electric vehicles	On-going trial of Low emissions vehicles within the City Councils fleet such as electric cars and hybrid technology	Public procurement: New vehicles, including low emission vehicles	Implementation	Start date: 2010 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: Increased LEV journeys Target emissions reduction: N/A
Coventry City Council_12	Park and Ride South	Reduce car use. The service currently uses electric buses.	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2009 Expected end date: 2010 Spatial scale: Whole agglomeration Source affected: Transport Indicator: Decreased car journeys Target emissions reduction: N/A
Coventry City Council_13	M6 Active Traffic Management	Joint working to reduce traffic congestion	Traffic planning and management: Other measure	Implementation	Start date: 2010 Expected end date: 2015 Spatial scale: National Source affected: Transport Indicator: Decreased congestion Target emissions reduction: N/A
Coventry City Council_14	Tollbar Island Reconstruction	Joint working to reduce queuing on A46/A45.	Traffic planning and management: Other measure	Implementation	Start date: 2013 Expected end date: 2016 Spatial scale: National Source affected: Transport Indicator: Decreased congestion Target emissions reduction: N/A
Coventry City Council_15	Heatline	Low carbon energy from waste	Low emission fuels for stationary and mobile sources: Other measure	Implementation	Start date: 2012 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: Reduced Carbon/NO2 Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Coventry City Council_16	Electric City	Charging points, driverless car initiatives	Public procurement: Other measure	Implementation	Start date: 2012 Expected end date: 2015 Spatial scale: Whole agglomeration Source affected: Transport Indicator: Increased LEV journeys Target emissions reduction: N/A
Coventry City Council_17	Greener City	Green spine to City Centre - promoting walking, cycling	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: Increased cycling/walking Target emissions reduction: N/A
Coventry City Council_18	Deculverting	Introduce more blue infrastructure to City Centre	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2012 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: Increased cycling/walking Target emissions reduction: N/A
Coventry City Council_19	Broadgate square	Pedestrianisation and public open space	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2011 Expected end date: 2012 Spatial scale: Whole town or city Source affected: Transport Indicator: Increased cycling/walking Target emissions reduction: N/A
Coventry City Council_20	Council House Square	Road narrowing and one-way system	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2013 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: Increased cycling/walking Target emissions reduction: N/A
Coventry City Council_21	Liddice Place	Alterations to road junctions to improve traffic flow, widening and re-laying of new pedestrian footpaths.	Traffic planning and management: Other measure	Implementation	Start date: 2012 Expected end date: 2012 Spatial scale: Whole town or city Source affected: Transport Indicator: Decreased congestion Target emissions reduction: N/A
Coventry City Council_22	Gosford Street	Alterations to some road junctions to improve traffic flow and journey times, and widening and re-laying of new pedestrian footpaths.	Traffic planning and management: Other measure	Implementation	Start date: 2012 Expected end date: 2012 Spatial scale: Whole town or city Source affected: Transport Indicator: Decreased congestion Target emissions reduction: N/A
Coventry City Council_23	Belgrade Square	Alterations to some road junctions to improve traffic flow and journey times, and widening and re-laying of new pedestrian footpaths.	Traffic planning and management: Other measure	Implementation	Start date: 2012 Expected end date: 2012 Spatial scale: Whole town or city Source affected: Transport Indicator: Decreased Congestion Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Coventry City Council_24	Fuel Poverty Initiatives	Reduced emissions from domestic boilers	Low emission fuels for stationary and mobile sources: Other measure	Implementation	Start date: 2013 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: Reduced NO2 emission Target emissions reduction: N/A
Coventry City Council_25	Climate change Strategy	To reduce carbon dioxide emissions by 27.5 per cent. Anticipated similar reduction in NOx	Low emission fuels for stationary and mobile sources: Other measure	Implementation	Start date: 2008 Expected end date: 2020 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: Reduced NO2 emission Target emissions reduction: N/A
Coventry City Council_26	OLEV bid	Large-scale roll out of ultra low emission vehicles across Coventry's travel to work area	Public procurement: Other measure	Planning	Start date: 2015 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Increased LEV journeys Target emissions reduction: N/A
Coventry City Council_27	Smarter Network, Smarter Choices	Sustainable Local Transport Fund bid - reducing shorter journeys	Public procurement: Other measure	Planning	Start date: 2015 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Decreased congestion Target emissions reduction: N/A
Coventry City Council_28	Workplace Travel Plans	Monitor and advice service leading to coordination for all major employers	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2012 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Decreased congestion Target emissions reduction: N/A
Coventry City Council_29	Devise Procurement Policy for fleet operators	Encourage low carbon vehicle purchase	Public procurement: New vehicles, including low emission vehicles	Implementation	Start date: 2012 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: Increased low carbon vehicle journeys Target emissions reduction: N/A
Coventry City Council_30	Biofuels in Council fleet	Feasibility study completed	Public procurement: New vehicles, including low emission vehicles	Implementation	Start date: 2012 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: Increased low carbon vehicle journeys Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Coventry City Council_31	EV charging points	Expand City network	Public procurement: Other measure	Implementation	Start date: 2012 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: Increased LEV journeys Target emissions reduction: N/A
Coventry City Council_32	City wide low carbon procurement code	Supply chain development to enhance sustainability	Public procurement: Other measure	Implementation	Start date: 2012 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: Increased low carbon vehicle journeys Target emissions reduction: N/A
Coventry City Council_33	Street Lighting PFI	Centrally controlled dimming street lighting	Other measure: Other measure	Implementation	Start date: 2012 Expected end date: 2012 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: Reduced Carbon/NO2 Target emissions reduction: N/A
Coventry City Council_34	Heatline	N/A	Other measure: Other measure	N/A	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: Reduced Carbon/NO2 Target emissions reduction: N/A
Coventry City Council_35	Traffic Regulation Order	Prohibit Euro I and Euro II buses from passing through the AQMA	Public procurement: Cleaner vehicle transport services	Implementation	Start date: 2011 Expected end date: 2011 Spatial scale: Whole agglomeration Source affected: Transport Indicator: Reduced NO2 emission Target emissions reduction: N/A
Coventry City Council_36	Pool Meadow	Better sustainable transport access to main bus station -greater use of Pool Meadow Bus Station by creating a two-way bus and bicycle only route across the currently pedestrianised areas	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2011 Expected end date: 2011 Spatial scale: Local Source affected: Transport Indicator: Reduced congestion Target emissions reduction: N/A
Coventry City Council_37	Relocation of Taxi ranking	Remove source of emissions in priority areas congested street canyon	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2011 Expected end date: 2011 Spatial scale: Local Source affected: Transport Indicator: Reduced NO2 emission Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Coventry City Council_38	Bus Showcase Route	Showcase service along critical routes Walsgrave / Ansty Road corridor	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2011 Expected end date: 2011 Spatial scale: Local Source affected: Transport Indicator: Increased bus journeys Target emissions reduction: N/A
Coventry City Council_39	On-street parking enforcement	Reduce illegal parking which restricts traffic flows	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2011 Expected end date: 2011 Spatial scale: Whole town or city Source affected: Transport Indicator: Reduced Congestion Target emissions reduction: N/A
Coventry City Council_40	Improvements in taxi fleet	Introduce newer vehicles with less emissions	Public procurement: Cleaner vehicle transport services	Implementation	Start date: 2011 Expected end date: 2011 Spatial scale: Whole town or city Source affected: Transport Indicator: Reduced NO2 emission Target emissions reduction: N/A
Coventry City Council_41	Control of Industrial emissions	Active regulation its processes under the Pollution Prevention and Control Act 2000.	Other measure: Other measure	Implementation	Start date: 2011 Expected end date: 2011 Spatial scale: Whole town or city Source affected: Industry including heat and power production Indicator: Reduced NO2 emission Target emissions reduction: N/A
Coventry City Council_42	Emissions from domestic sources	Enforce the provisions of the Clean Air Act 1993 as applied to stack height provision and dark smoke offences	Low emission fuels for stationary and mobile sources: Other measure	Implementation	Start date: 2011 Expected end date: 2011 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: Reduced NO2 emission Target emissions reduction: N/A
Coventry City Council_43	Bonfires	Enforce the provisions of the Clean Air Act 1993 etc.	Other measure: Other measure	Implementation	Start date: 2011 Expected end date: 2011 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: Reduced NO2 emission Target emissions reduction: N/A
Coventry City Council_44	Public Information	Raise public awareness of air pollution through newsletters and displays around the city	Low emission fuels for stationary and mobile sources: Other measure	Implementation	Start date: 2011 Expected end date: 2011 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: Reduced NO2 emission Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Coventry City Council_45	Rush hour challenge	High profile Corporate sustainable transport event	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2011 Expected end date: 2011 Spatial scale: Whole town or city Source affected: Transport Indicator: Reduced congestion Target emissions reduction: N/A
Coventry City Council_46	Sustainable Schools Steering Group	Education on sustainability to schools	Low emission fuels for stationary and mobile sources: Other measure	Implementation	Start date: 2011 Expected end date: 2011 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: Reduced NO2 emission Target emissions reduction: N/A
Coventry City Council_47	Low Emission Strategy	Overarching Low Emission Strategy for the 7 West Midlands Authorities to improve emissions and concentrations of NO2 and particulates while also seeking to exploit the synergies of CO2 and noise reduction, where possible, through the transformation of the West Midlands vehicle fleet	Other measure: Other measure	Preparation	Start date: 2013 Expected end date: 2015 Spatial scale: Whole agglomeration Source affected: Transport Indicator: Adoption of the Low Emission Strategy within each Local Authority area. Target emissions reduction: N/A
Coventry City Council_48	Planning Guidance	Develop a regional Good Practice Planning Guidance which protect residents of future development schemes from exposure to air pollution. The Guidance promote a simplified assessment criteria and definition of sustainability, Incorporates mitigation as standard to help counter cumulative impacts. Applies a procedure for evaluating additional requirements for mitigation and compensation using cost damage analysis.	Other measure: Other measure	Implementation	Start date: 2011 Expected end date: 2014 Spatial scale: Whole agglomeration Source affected: Transport Indicator: Publication of Guidance and implementation across the West Midlands Target emissions reduction: N/A
Coventry City Council_49	Procurement Guidance	Develop a regional Good Practice Procurement document with the following key policies and benefits: Local sourcing (reduced vehicle mileage), Sustainable fleet demonstration, specification and contract award criteria, including Government Buying Standards considerations. Development of Whole Life Cost model, including damage costs of environmental impact. Innovative procurement. Development of public private partnerships.	Other measure: Other measure	Implementation	Start date: 2011 Expected end date: 2015 Spatial scale: Whole agglomeration Source affected: Transport Indicator: Publication of Guidance and implementation across the West Midlands Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
Coventry City Council_50	Low Emission Zone Feasibility	A technical study into the feasibility of creating a transferable LEZ model for the West Midlands. A range of scenarios were selected (City Centre / Motorway / Street Canyon and Urban Corridor).The study assess the benefits and dis-benefits of emission control policies on key vehicle types for each scenario, including cost benefit analysis and potential costing for implementation, as well as Health Impact Assessment (HIA) of the most effective intervention measures	Traffic planning and management: Low emission zones	Evaluation	Start date: 2013 Expected end date: 2015 Spatial scale: Whole agglomeration Source affected: Transport Indicator: Publication of feasibility study and adoption of measures capable of improving emissions/pollutant concentrations. Target emissions reduction: N/A
Nuneaton and Bedworth Borough Council_1	Identify and bring forward traffic management improvements in Nuneaton town centre, particularly where they will benefit the two AQMAs.	N/A	Traffic planning and management: Other measure	Preparation	Start date: 2012 Expected end date: 2016 Spatial scale: Local Source affected: Transport Indicator: Number of measures implemented or started Target emissions reduction: 1-2 ug/m3
Nuneaton and Bedworth Borough Council_2	Identify measures to reduce the impact of HGV movements within the area.	N/A	Traffic planning and management: Other measure	Other	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Measures to reduce HGV movements Number of measures approved by WCC Number of measures implemented/started Target emissions reduction: 0.2 - 0.5 ug/m3
Nuneaton and Bedworth Borough Council_3	Improvements for pedestrians and cyclists within the area.	N/A	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2005 Expected end date: 2018 Spatial scale: Local Source affected: Transport Indicator: Metres of paths improved / developed for pedestrians and cyclists in Nuneaton particularly in AQMAs. Target emissions reduction: 0.2 - 0.5 ug/m3
Nuneaton and Bedworth Borough Council_4	Integration of public transport in Nuneaton, including improvements for bus, rail and community transport infrastructure and services.	N/A	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2018 Spatial scale: Whole town or city Source affected: Transport Indicator: No. of improvement Target emissions reduction: 0.2 - 0.5 ug/m3

Measure code	Description	Focus	Classification	Status	Other information
Nuneaton and Bedworth Borough Council_5	School and Workplace Travel Plans	N/A	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2008 Expected end date: 2020 Spatial scale: Whole town or city Source affected: Transport Indicator: Number of new travel plans in place. Target emissions reduction: 0.2 - 0.5 ug/m3
Nuneaton and Bedworth Borough Council_6	Work with partners to deliver improvements in vehicle emissions.	N/A	Public procurement: Cleaner vehicle transport services	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Number of new / improved vehicles within fleets Target emissions reduction: 1-2 ug/m3
Nuneaton and Bedworth Borough Council_7	Work together with partners to promote and implement energy efficiency measures	N/A	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Number of consultations provided Council's energy efficiency figures Target emissions reduction: 0 - 0.2 ug/m3
Rugby Borough Council_1	Rugby Western Relief Road	Serve new development at Cawston, Swift Valley, Malpass Farm and Coton Park, and reduce the impact of traffic within the town centre.	Traffic planning and management: Other measure	Evaluation	Start date: 2007 Expected end date: 2011 Spatial scale: Local Source affected: Transport Indicator: Implementation of the scheme in full Target emissions reduction: 0.12
Rugby Borough Council_2	Warwick Street Gyratory Improvements	Manage the impact of traffic accessing and passing through the town centre, along with planned housing and employment growth within the town.	Traffic planning and management: Other measure	Implementation	Start date: 2015 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: Implementation of the scheme in full Target emissions reduction: Not specified
Rugby Borough Council_3	Improvements to Church Street/North Street	Reduce the impact of traffic on the town centre, and allow better access for pedestrians and cyclists.	Traffic planning and management: Encouragement of shift of transport modes	Other	Start date: 2015 Expected end date: 2016 Spatial scale: Local Source affected: Transport Indicator: Implementation of the scheme in full Target emissions reduction: Not specified

Measure code	Description	Focus	Classification	Status	Other information
Rugby Borough Council_4	Decriminalisation of Parking Enforcement within Rugby Borough	Improve the management of traffic within the town centre and the impact of illegal parking.	Traffic planning and management: Management of parking places	Evaluation	Start date: 2006 Expected end date: 2006 Spatial scale: Whole town or city Source affected: Transport Indicator: Implementation of the scheme in full Target emissions reduction: Not specified
Rugby Borough Council_5	Rugby Town Centre 20:20 Vision	Improve public transport.	Traffic planning and management: Improvement of public transport	Planning	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: Not specified
Rugby Borough Council_6	Re-routing traffic - Lorry Route Maps and agreements	Reduce the impact of heavy goods vehicles on the transport network of the Borough.	Traffic planning and management: Freight transport measure	Implementation	Start date: 2009 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Reduction in complaints regarding inappropriate lorry movements Target emissions reduction: Not specified
Rugby Borough Council_7	Variable Message Signing	Reduce the impact of circulating traffic seeking access to the town centre car parks.	Traffic planning and management: Other measure	Implementation	Start date: 2009 Expected end date: 2009 Spatial scale: Local Source affected: Transport Indicator: Implementation of the scheme in full Target emissions reduction: Not specified
Rugby Borough Council_8	Enforcement of Idling Vehicle Legislation	Reduce number of idling vehicle improving local air quality by reducing emissions to air.	Traffic planning and management: Other measure	Other	Start date: 2014 Expected end date: 2030 Spatial scale: Local Source affected: Transport Indicator: Currently N/A Target emissions reduction: Currently N/A
Rugby Borough Council_9	Improve the Borough Council Fleet (interims of emissions)	As vehicles are replaced, they are replaced with lower emission vehicles.	Other measure: Other measure	Implementation	Start date: 2010 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Not specified Target emissions reduction: Not specified

Measure code	Description	Focus	Classification	Status	Other information
Rugby Borough Council_10	Improve Bus Emissions	The County Council is working with the principal bus operators within the town to reduce bus emissions through their fleet renewal process, and on individual routes when they are upgraded to QBC status.	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Not specified. Target emissions reduction: Not specified
Rugby Borough Council_11	Cycling	Reduce the impact of traffic on the transport network of the Borough (particularly within the urban area of Rugby) by encouraging a shift towards sustainable modes of transport.	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Increase in cycling as a result of individual scheme implementation Target emissions reduction: Not specified
Rugby Borough Council_12	Walking	Reduce the impact of traffic on the transport network of the Borough (particularly within the urban area of Rugby) by encouraging a shift towards sustainable modes of transport.	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Increase in walking (footfall) as a result of individual scheme implementation Target emissions reduction: Not specified
Rugby Borough Council_13	Workplace Travel Plans	Reduce the impact of traffic on the transport network of the Borough (particularly within the urban area of Rugby) by encouraging a shift towards sustainable modes of transport.	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Number of Travel Plans agreed with existing employers and as part of new development Target emissions reduction: Not specified
Rugby Borough Council_14	School Travel Plans and Safer Routes to School	Reduce the impact of traffic on the transport network of the Borough (particularly within the urban area of Rugby) by encouraging a shift towards sustainable modes of transport.	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Reduction in the number of car-based journeys to school Target emissions reduction: Not specified
Rugby Borough Council_15	Public Transport Strategy, including the Bus Strategy	Reduce the impact of traffic on the transport network of the Borough (particularly within the urban area of Rugby) by encouraging a shift towards sustainable modes of transport.	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Increase in bus patronage Target emissions reduction: Not specified

Measure code	Description	Focus	Classification	Status	Other information
Rugby Borough Council_16	Travel Awareness Campaigns	Reduce the impact of traffic on the transport network of the Borough (particularly within the urban area of Rugby) by encouraging a shift towards sustainable modes of transport.	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Reduction in the number of car-based journeys being made within the Borough Target emissions reduction: Not specified
Rugby Borough Council_17	Energy efficiency improvements to Rugby housing & the reduction of fuel poverty. Corporate Property	Reduction of carbon emissions from domestic dwellings, the reduction of residents' fuel bills & the alleviation of ill health due to cold, damp housing.	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2020 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: HECA report published March 13, and will be updated at two yearly intervals.. Target emissions reduction: We aim to reduce CO2 emissions in the housing sector to 165.8kt CO2 of 2009 (207.3kt CO2) levels by 2020. This will be equivalent to a 20% reduction.
Rugby Borough Council_18	Control Of Industrial Emissions	Reduce the environmental impact of industrial processes through pollution control regulation	Permit systems and economic instruments: IPPC permits	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Industry including heat and power production Indicator: 99.24% compliance improvements Target emissions reduction: Not specified
Rugby Borough Council_19	Emissions from Domestic and Commercial Sources	Prevent and/or reduce environmental impacts from domestic and commercial emissions.	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: Reduction in complaints. Target emissions reduction: Not specified
Rugby Borough Council_20	Control of Bonfires	Prevent and/or reduce environmental impacts from domestic and commercial emissions.	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: Reduction in complaints Target emissions reduction: Not specified

Measure code	Description	Focus	Classification	Status	Other information
Rugby Borough Council_21	Planning Development and Planning Applications	Air quality assessments have been requested for land use planning developments that meet AQMA thresholds in the Rugby Borough Local Plan (July 2006). The requirements for future assessments have now been embodied in a new Planning Obligations Supplementary Planning Document adopted in March 2012. This is to ensure that new development does not result in a significant increase in the production of air pollutants and that opportunities are taken to improve air quality, where possible. In some instances where an AQMA threshold has not been met, officer discretionary measures have been utilised where it is felt that a proposed land use development has potential to impact on air quality and should be a material consideration.	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Not specified Target emissions reduction: Not specified
Warwick District Council_1	Improvements to Junctions 13, 14, 1nd 15 of the M40	Reduce queuing at motorway junctions	Traffic planning and management: Other measure	Implementation	Start date: 2008 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: Changes in traffic levels at junctions Target emissions reduction: N/a
Warwick District Council_2	Completion of the Urban Cycle Network within Warwick and Leamington Spa	Reduce reliance on car and reduce queuing time in AQMA	Traffic planning and management: Encouragement of shift of transport modes	Planning	Start date: 2014 Expected end date: 2018 Spatial scale: Whole town or city Source affected: Transport Indicator: Changes in number of people cycling Target emissions reduction: No specific targets set
Warwick District Council_3	Provision of secure on and off street PTW parking facilities	Reduce reliance on car and reduce queuing time in AQMA	Other measure: Other measure	Other	Start date: 2030 Expected end date: 2030 Spatial scale: Local Source affected: Transport Indicator: Changes in parking levels at dedicated facilities Target emissions reduction: No specific targets set

Measure code	Description	Focus	Classification	Status	Other information
Warwick District Council_4	Development of Intelligent Transport Systems	Reduce reliance on car and reduce queuing time in AQMA	Public information and Education: Other mechanisms	Implementation	Start date: 2010 Expected end date: 2011 Spatial scale: Whole town or city Source affected: Transport Indicator: Changes in journey times Target emissions reduction: No specific targets set
Warwick District Council_5	Improving the attractiveness of public transport	Reduce reliance on car and reduce queuing time in AQMA	Other measure: Other measure	Implementation	Start date: 2006 Expected end date: 2008 Spatial scale: Local Source affected: Transport Indicator: Delivery of the SPARK major public transport scheme Target emissions reduction: No specific targets set
Warwick District Council_6	Implementation of the LTP Public Transport Interchange	Implementing the measures to reduce queuing in AQMA	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2006 Expected end date: 2009 Spatial scale: Local Source affected: Transport Indicator: Delivery of the schemes Target emissions reduction: No specific targets set
Warwick District Council_7	Improve and promote local bus services	Reduce unit emissions in AQMA using Bus Quality Partnership Agreements	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2006 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: Delivery of the schemes within the bus strategy and LTP Target emissions reduction: No specific targets set
Warwick District Council_8	Implementation of LTP Bus Information Strategy	Reduce reliance on car and reduce queuing time in AQMA	Traffic planning and management: Improvement of public transport	Preparation	Start date: 2010 Expected end date: 2016 Spatial scale: Local Source affected: Transport Indicator: Delivery of the schemes within the strategy Target emissions reduction: No specific targets set
Warwick District Council_9	Promotion of a passenger rail network including a new station in Kenilworth	Reduce reliance on car and reduce queuing time in AQMA	Traffic planning and management: Improvement of public transport	Planning	Start date: 2013 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: New railway station at Kenilworth Target emissions reduction: Unknown

Measure code	Description	Focus	Classification	Status	Other information
Warwick District Council_10	Implementation of LTP Parking Strategy	Implementing the measures to reduce queuing in AQMA	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2010 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Delivery of the schemes within the strategy Target emissions reduction: No specific targets set
Warwick District Council_11	Promoting and encouraging different forms of transport	Reduce reliance on car and reduce queuing time in AQMA	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2010 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Modal shift Target emissions reduction: No specific targets set
Warwick District Council_12	Improving the safety and quality of cycling routes	Reduce reliance on car and reduce queuing time in AQMA	Traffic planning and management: Encouragement of shift of transport modes	Planning	Start date: 2014 Expected end date: 2018 Spatial scale: Whole town or city Source affected: Transport Indicator: Changes in number of people cycling Target emissions reduction: No specific targets set
Warwick District Council_13	Encouragement for schools to write Travel Plans	Reduce reliance on car and reduce queuing time in AQMA	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2006 Expected end date: 2010 Spatial scale: Whole town or city Source affected: Transport Indicator: Number of schools submitting a plan Target emissions reduction: No specific targets set
Warwick District Council_14	Implementation of the LTP Land Use and Transportation Strategy	Implementing the measures to reduce queuing in AQMA	Other measure: Other measure	Implementation	Start date: 2011 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: Number of planning applications which include sustainable transport measure Target emissions reduction: No specific targets set
Warwick District Council_15	Implementation of the LTP Sustainable Freight Distribution Strategy	Implementing the measures to reduce queuing in AQMA	Traffic planning and management: Encouragement of shift of transport modes	Other	Start date: 2030 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Delivery of the schemes in the strategy Target emissions reduction: No specific targets set

Measure code	Description	Focus	Classification	Status	Other information
Warwick District Council_16	LEZ Feasibility Study for town centres	Analyse, decide on and implement best option to reduce queuing in AQMA	Other measure: Other measure	Implementation	Start date: 2012 Expected end date: 2013 Spatial scale: Whole town or city Source affected: Transport Indicator: Produce feasibility report Target emissions reduction: No specific targets set
Warwick District Council_17	LEZ Planning Guidance for new development	Avoid worsening air quality by adopting local planning policies	Other measure: Other measure	Implementation	Start date: 2013 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: Policy adopted by Council Target emissions reduction: No specific targets set
Warwick District Council_18	Produce new Sustainable Transport Strategy for Warwick and Leamington Spa	Reduce reliance on car and reduce queuing time in AQMA	Traffic planning and management: Encouragement of shift of transport modes	Preparation	Start date: 2014 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: Strategy adopted by Council Target emissions reduction: Work in progress
Warwick District Council_19	Review and update Air Quality Action Plan	Improve ability to manage air quality across services	Traffic planning and management: Other measure	Preparation	Start date: 2015 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: Action Plan approved by Council Target emissions reduction: Work in progress