



Department  
for Environment  
Food & Rural Affairs



Department  
for Transport

# Air Quality Plan for tackling roadside nitrogen dioxide concentrations in Reading/Wokingham Urban Area (UK0016)

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# 1 Introduction

## 1.1 This document

This document is the Reading/Wokingham Urban Area agglomeration zone (UK0016) updated air quality plan for tackling roadside nitrogen dioxide (NO<sub>2</sub>) 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 Reading/Wokingham Urban Area agglomeration zone
- Details of NO<sub>2</sub> exceedance situation within the Reading/Wokingham Urban Area 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 Reading/Wokingham Urban Area 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 NO<sub>2</sub> 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 NO<sub>2</sub> 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 NO<sub>2</sub> limit values will be achieved by 01/01/2010.

## 1.3 Zone status

The assessment undertaken for the Reading/Wokingham Urban Area agglomeration zone indicates that the annual limit value was exceeded in 2015 but is likely to be achieved by 2020 through the introduction of measures included in the baseline.

## 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 NO<sub>2</sub> 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: Reading/Wokingham Urban Area

Zone code: UK0016

Type of zone: agglomeration zone

Reference year: 2015

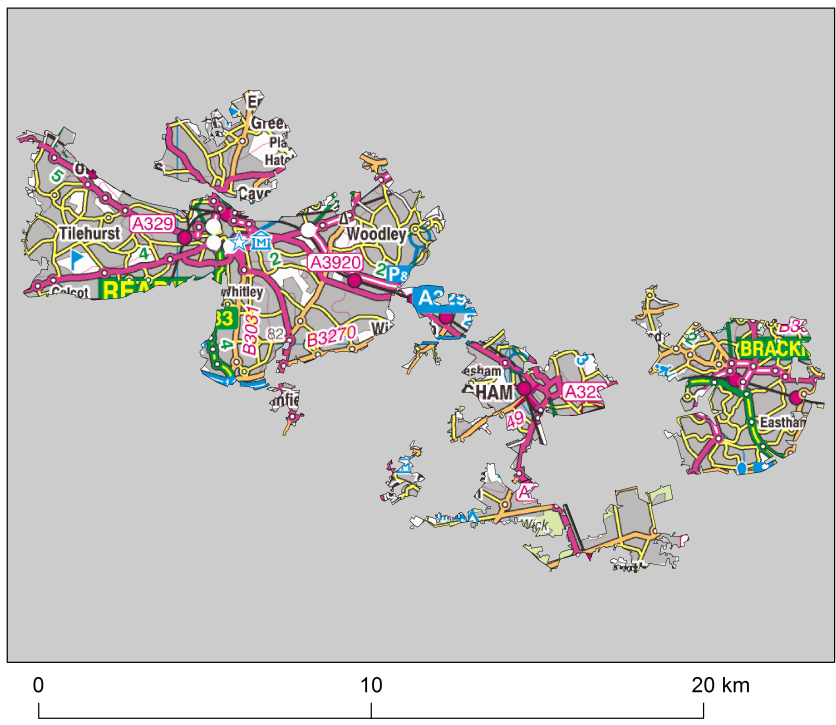
Extent of zone: Figure 1 shows the area covered by the Reading/Wokingham Urban Area agglomeration zone.

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. Bracknell Forest Borough Council
2. Reading Borough Council
3. West Berkshire Council
4. Wokingham District Council

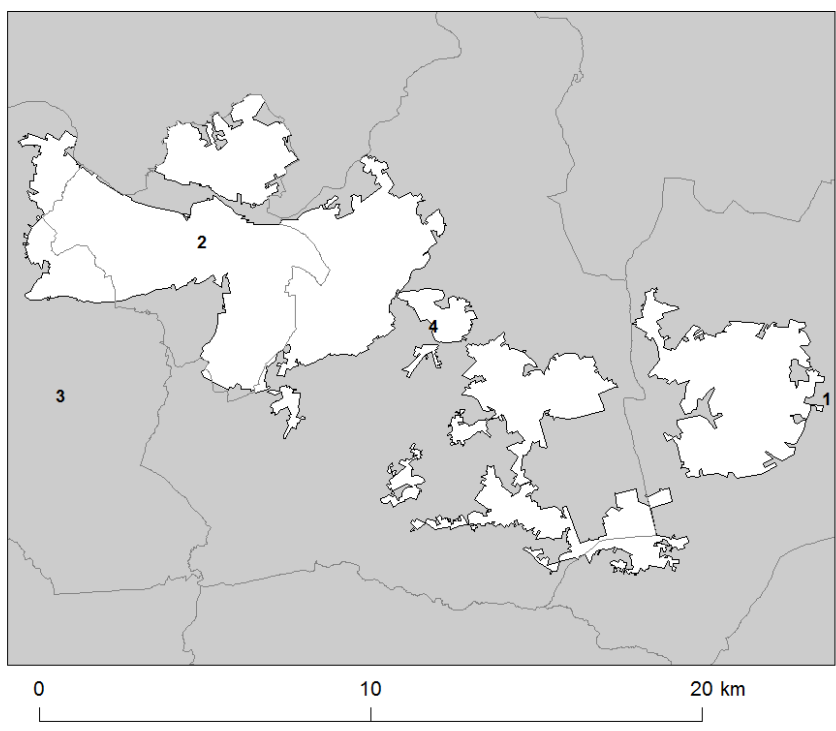
(Note: Local Authority boundaries do not necessarily coincide with zone boundaries. Hence Local Authorities may be listed within more than one zone plan.)

**Figure 1: Map showing the extent of the Reading/Wokingham Urban Area agglomeration zone (UK0016).**



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**Figure 2: Map showing Local Authorities within the Reading/Wokingham Urban Area agglomeration zone (UK0016).**



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## 2.2 Assessment details

### Measurements

NO<sub>2</sub> measurements in this zone were available in 2015 from the following national network monitoring stations (NO<sub>2</sub> data capture<sup>1</sup> for each station in 2015 shown in brackets):

1. Reading New Town GB0840A (97%)

Full details of monitoring stations within the Reading/Wokingham Urban Area agglomeration zone are available from <http://uk-air.defra.gov.uk/networks/network-info?view=aurm>.

### 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): 82 km<sup>2</sup>
- Total population within zone (approx): 300,142 people

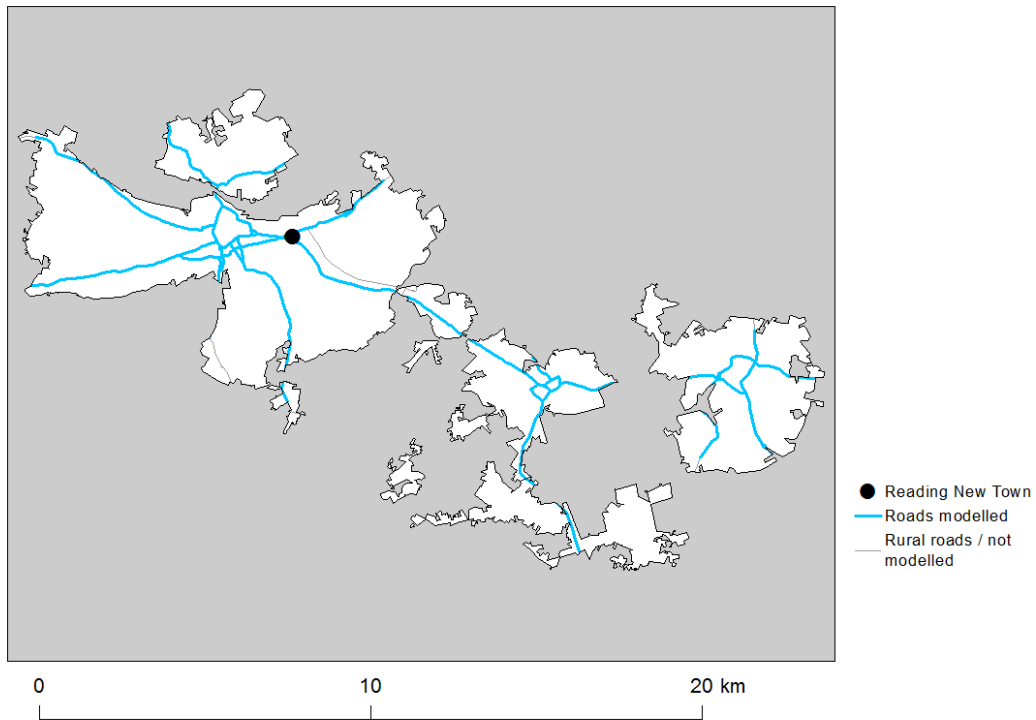
### Zone maps

Figure 3 presents the location of the NO<sub>2</sub> monitoring stations within this zone for 2015 and the roads for which NO<sub>2</sub> concentrations have been modelled. NO<sub>2</sub> concentrations at background locations have been modelled across the entire zone at a 1 km x 1 km resolution.

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<sup>1</sup>Annual 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 NO<sub>2</sub> monitoring stations with valid data in 2015 and roads where concentrations have been modelled within the Reading/Wokingham Urban Area (UK0016) 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 NO<sub>2</sub>. These are:

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

Within the Reading/Wokingham Urban Area agglomeration zone the annual limit value was exceeded in 2015. Hence, one exceedance situation for this zone has been defined, NO<sub>2</sub>\_UK0016\_Annual\_1, which covers exceedances of the annual limit value. This exceedance situation is described below.

## 3.2 Reference year: NO<sub>2</sub>\_UK0016\_Annual\_1

The NO<sub>2</sub>\_UK0016\_Annual\_1 exceedance situation covers all exceedances of the annual mean limit value in the Reading/Wokingham Urban Area 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 NO<sub>2</sub> concentrations in this exceedance situation for the same time period. This table shows that, in 2015, 4.8 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 NO<sub>2</sub> 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<sub>x</sub> source apportionment for all modelled locations. Emissions to air are regulated in terms of oxides of nitrogen

(NO<sub>x</sub>), which is the term used to describe the sum of nitrogen dioxide (NO<sub>2</sub>) and nitric oxide (NO). Ambient NO<sub>2</sub> concentrations include contributions from both directly emitted primary NO<sub>2</sub> and secondary NO<sub>2</sub> formed in the atmosphere by the oxidation of NO. As such, it is not possible to calculate an unambiguous source apportionment specifically for NO<sub>2</sub> concentrations; therefore the source apportionment in this plan is presented for NO<sub>x</sub>, rather than for NO<sub>2</sub> (for further details please see the UK Technical Report). Table 3 summarises the modelled NO<sub>x</sub> source apportionment for the section of road with the highest NO<sub>2</sub> 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<sub>x</sub> source apportionment for each section of road within the NO<sub>2</sub>\_UK0016\_Annual\_1 exceedance situation (i.e. the source apportionment for all exceeding roads only) in 2015.

**Table 1: Measured annual mean NO<sub>2</sub> concentrations at national network stations in NO<sub>2</sub>\_UK0016\_Annual\_1 for 2001 onwards,  $\mu\text{gm}^{-3}$  (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
Reading (GB0683A)	32 (97)	33 (95)	29 (9)												
Reading New Town (GB0840A)			31 (20)	25 (93)	23 (95)	21 (71)	23 (96)	22 (98)	22 (51)	25 (72)	26 (95)	25 (95)	27 (98)	27 (98)	22 (97)

(a) Annual Mean Limit Value = 40  $\mu\text{gm}^{-3}$

**Table 2: Annual mean NO<sub>2</sub> model results in NO<sub>2</sub>\_UK0016\_Annual\_1 for 2001 onwards.**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Road length exceeding (km)	43.3	14.6	54.9	22.2	22.2	20.9	19.3	9.0	4.7	10.3	7.5	7.2	6.9	6.0	4.8
Background exceeding (km <sup>2</sup> )	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maximum modelled concentration ( $\mu\text{gm}^{-3}$ ) (a)	56.0	48.4	60.5	55.3	56.8	56.2	56.3	54.2	50.4	56.3	53	53	49	49	47

(a) Annual Mean Limit Value = 40  $\mu\text{gm}^{-3}$

**Table 3: Modelled annual mean NO<sub>x</sub> source apportionment at the location with the highest NO<sub>2</sub> concentration in 2015 in NO2\_UK0016\_Annual\_1 (µgm<sup>-3</sup>) traffic count point 99740 on the A329; OS grid (m): 471180, 172980) .**

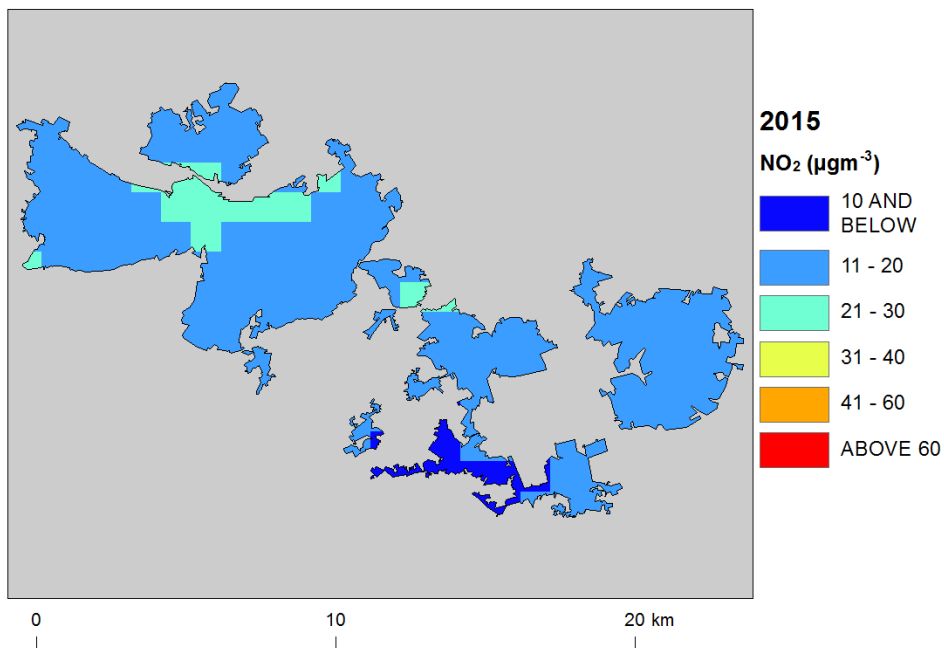
Spatial scale	Component	Concentration at highest road link (a)
Regional background sources NO <sub>x</sub> (i.e. contributions from distant sources of > 30 km from the receptor).	Total	5.9
	From within the UK	3.4
	From transboundary sources (includes shipping and other EU member states)	2.5
Urban background sources NO <sub>x</sub> (i.e. sources located within 0.3 - 30 km from the receptor).	Total	26.5
	From road traffic sources	11.8
	From industry (including heat and power generation)	1.4
	From agriculture	NA
	From commercial/residential sources	3.9
	From shipping	0.0
	From off road mobile machinery	2.4
	From natural sources	NA
	From transboundary sources	NA
From other urban background sources	7.0	
Local sources NO <sub>x</sub> (i.e. contributions from sources < 0.3 km from the receptor).	Total	80.8
	From petrol cars	8.2
	From diesel cars	34.7
	From HGV rigid (b)	13.7
	From HGV articulated (b)	2.7
	From buses	2.1
	From petrol LGVs (c)	0.1
	From diesel LGVs (c)	19.1
From motorcycles	0.2	
From London taxis	0.0	
Total NO <sub>x</sub> (i.e. regional background + urban background + local components)		113.3
Total NO <sub>2</sub> (i.e. regional background + urban background + local components)		47

(a) Components are listed with NO<sub>x</sub> concentration of NA when there is no source from this sector.

(b) HGV = heavy goods vehicle

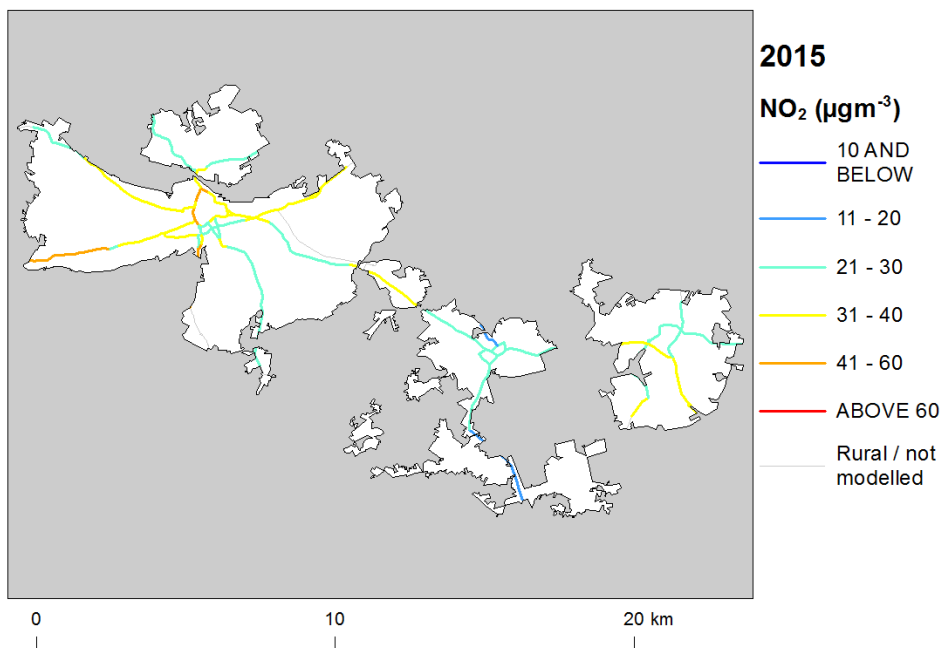
(c) LGV = light goods vehicle

**Figure 4: Map of modelled background annual mean NO<sub>2</sub> 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 NO<sub>2</sub> 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 NO<sub>2</sub> limit values within Reading/Wokingham Urban Area 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 NO<sub>2</sub> 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 34.7  $\mu\text{gm}^{-3}$  of NO<sub>x</sub> out of a total of 113.3  $\mu\text{gm}^{-3}$  of NO<sub>x</sub>. Diesel cars, diesel LGVs, rigid HGVs and on some roads rail transport emissions 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 NO<sub>2</sub> 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](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.

There are a significant number of measures undertaken in the zone to reduce poor air quality. Campaigns through media channels have been taking place to improve access to the public and detail of information. To build on this, there are initiatives to encourage modal shift of travel away from using private cars such as

implementation of cycling and walking strategies. Reading Borough Council carried out a low emission zone impact study, to assess if they should introduce a low emission zone to improve air quality, with £40,000 of funding from the Air Quality Grant.

There is ongoing work with local businesses and schools to assist them in reducing their environmental impact through developing travel plans, including school travel plans and other measures, such as car clubs and initiatives to encourage walking.

In terms of vehicle adjustments, retrofitting programmes have been implemented on taxis and private hire vehicles. Further measures have been undertaken on reducing emissions from HGVs, as well as buses. Reading Borough Council received £1.7m from the Office of Low Emission Vehicle's Low Emissions Bus Scheme to improve infrastructure and fund 16 biomethane buses.

Park and ride schemes are part of the wider drive to lower emissions as well as electric charging points that will improve uptake of electric vehicles by providing a wider network of charging points in the region. Traffic planning improvements have been implemented to improve traffic flow, for example optimising traffic signalling at junctions and variable message signing for car parks.

Network Rail is widening the rail bridges over Cow Lane in Reading to reduce congestion and allow double-decker buses to pass through. This will take some pressure off the inner distribution road, particularly in relation to HGVs.

## 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 NO<sub>2</sub> 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: NO<sub>2</sub>\_UK0016\_Annual\_1

Table 4 presents summary results for the baseline model projections for each year from 2017 to 2030 for the NO<sub>2</sub>\_UK0016\_Annual\_1 exceedance situation. This shows that the maximum modelled annual mean NO<sub>2</sub> concentration predicted for 2020 in this exceedance situation is 39  $\mu\text{g}\text{m}^{-3}$ . Hence, the model results suggest that compliance with the NO<sub>2</sub> annual limit value is likely to be achieved by 2020 under baseline conditions.

Figure 6 and 7 presents maps of projected annual mean NO<sub>2</sub> concentrations at background and roadside locations respectively in 2020, the year at which compliance is achieved. For reference Figures 8 and 9 show maps of projected annual mean NO<sub>2</sub> 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.



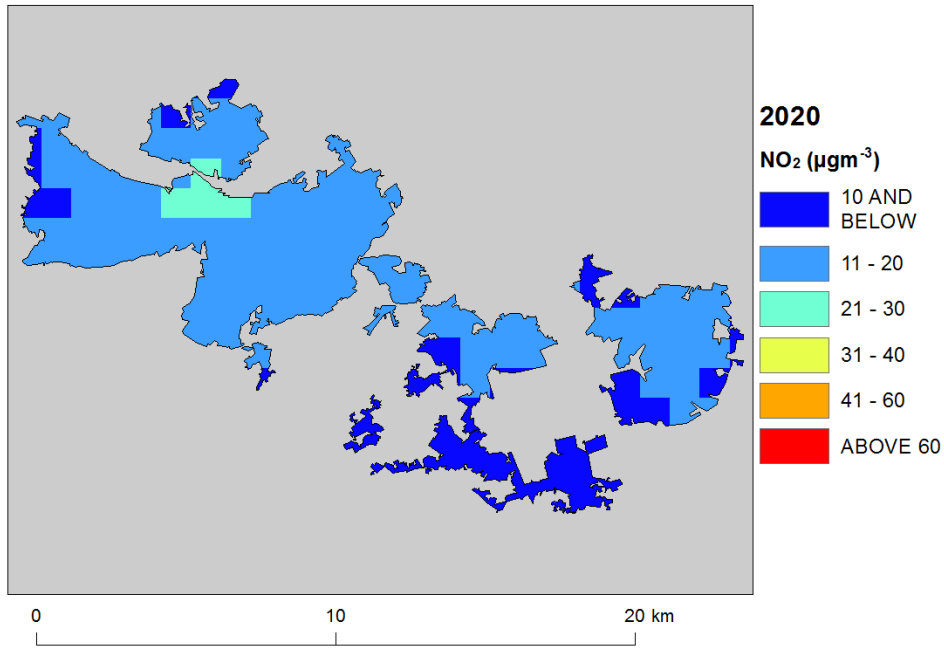
**Table 4: Annual mean NO<sub>2</sub> model results in NO<sub>2</sub>\_UK0016\_Annual\_1.**

	2015	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Road length exceeding (km)	4.8	3.4	1.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Background exceeding (km <sup>2</sup> )	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maximum modelled concentration NO <sub>2</sub> (μgm <sup>-3</sup> ) (a)	47	44	43	41	39	37	35	34	32	31	30	29	28	27	26
Corresponding modelled concentration NO <sub>x</sub> (μgm <sup>-3</sup> ) (b)	113	105	99	94	88	82	79	75	71	67	64	61	58	56	54

(a) Annual Mean Limit Value = 40 μgm<sup>-3</sup>

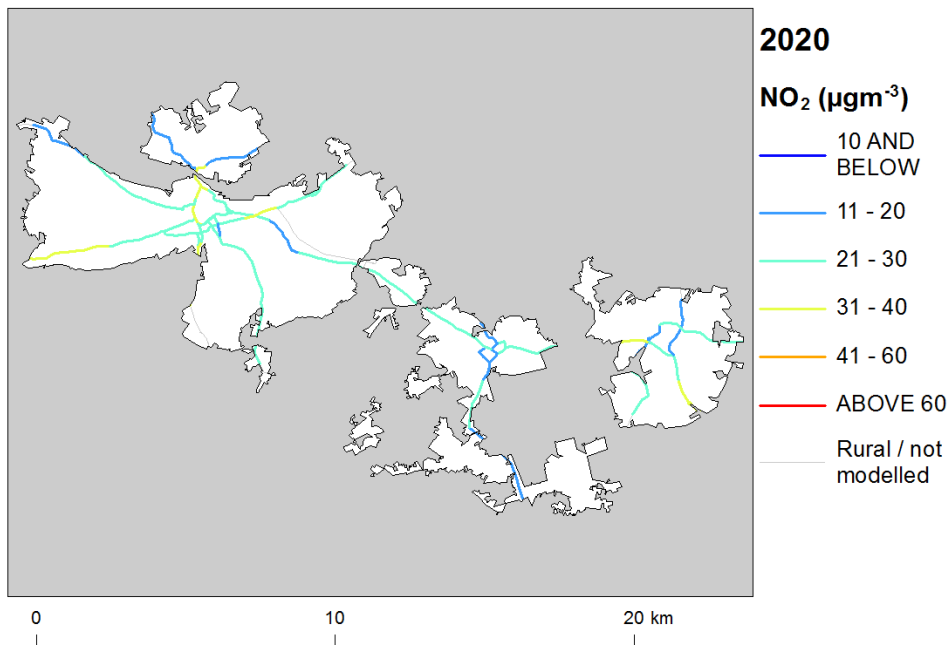
(b) NO<sub>x</sub> is recorded here for comparison with the NO<sub>x</sub> source apportionment graphs for 2015 presented in Annex B of this plan. Limit values for EU directive purposes are based on NO<sub>2</sub>.

**Figure 6: Background baseline projections of annual mean NO<sub>2</sub> concentrations in 2020, 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 NO<sub>2</sub> concentrations in 2020, 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 NO<sub>2</sub> 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.

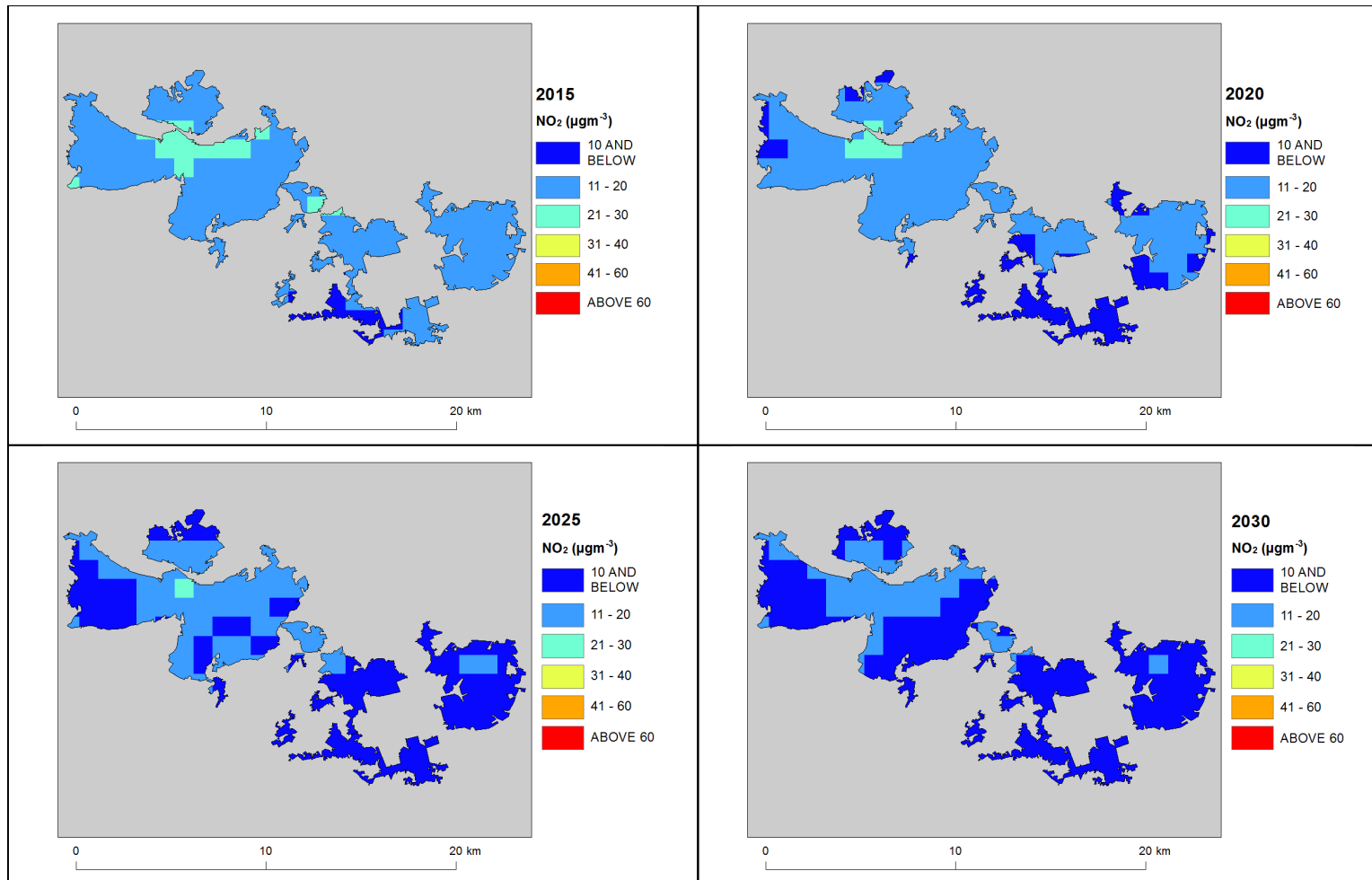
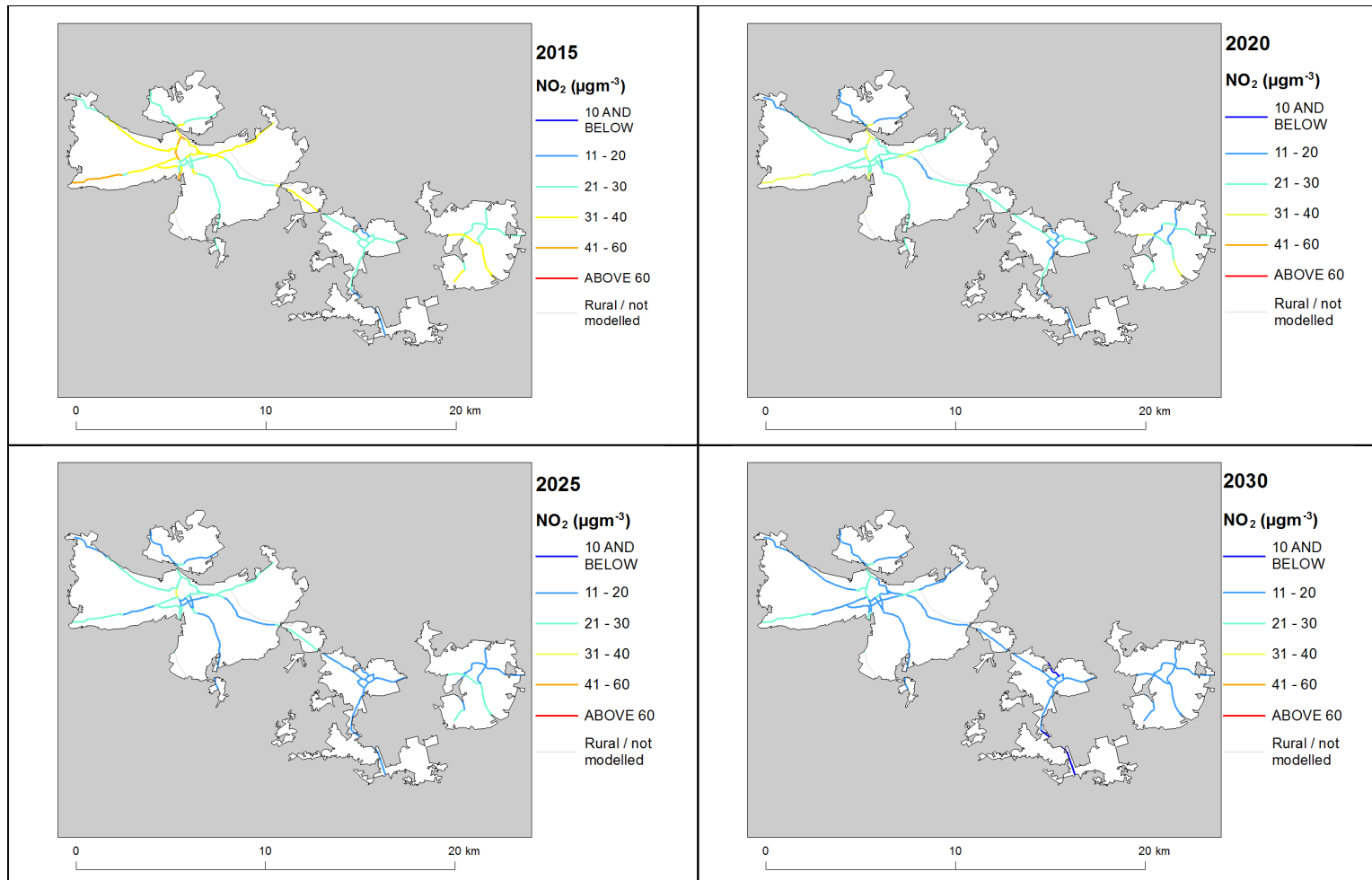


Figure 9: Roadside baseline projections of annual mean NO<sub>2</sub> concentrations in 2020, 2025 and 2030. 2015 is also included here for reference. Modelled exceedances of the annual limit value are shown in orange and red.



# 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.

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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

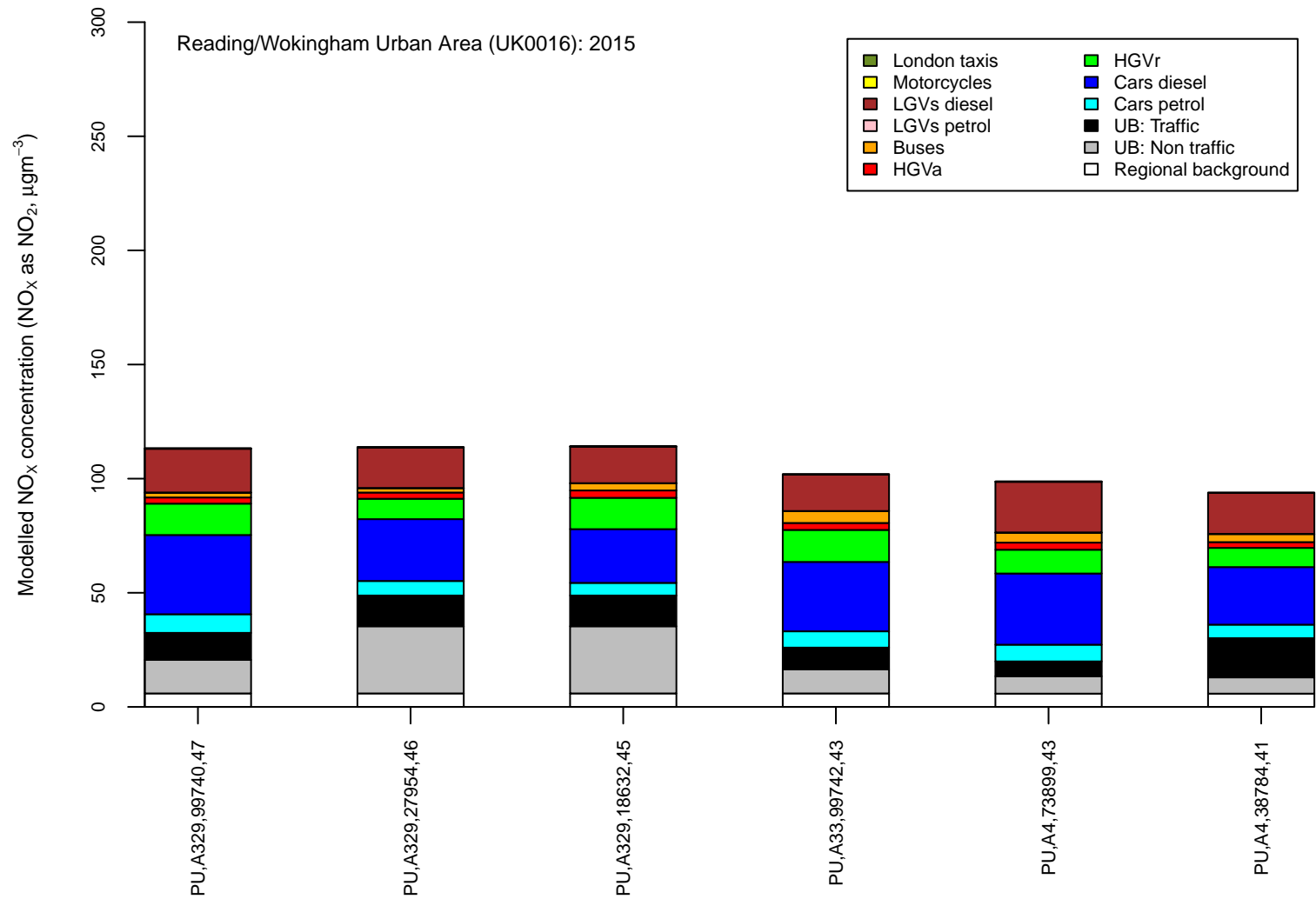
IPR 2013. Guidance on the Commission Implementing Decision laying down rules for Directives 2004/107/EC and 2008/50/EC of the European Parliament and of the Council as regards the reciprocal exchange of information and reporting on ambient air (Decision 2011/850/EU). [http://ec.europa.eu/environment/air/quality/legislation/pdf/IPR\\_guidance1.pdf](http://ec.europa.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<sub>x</sub> source apportionment plots for all roads exceeding the annual mean NO<sub>2</sub> limit value in 2015.



Road class (MU = motorway, PU = primary road, TU = trunk road), road number, census id 15 and modelled NO<sub>2</sub> concentration (μgm<sup>-3</sup>)

## C Tables of measures

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**Table C.1 Relevant Local Authority measures within Reading/Wokingham Urban Area (UK0016)**

Measure code	Description	Focus	Classification	Status	Other information
Bracknell Forest Borough Council_1	Improvements to roundabouts to widen carriageways around Bracknell town centre to improve traffic flows	Congestion management	Traffic planning and management: Other measure	Implementation	Start date: 2015 Expected end date: 2018 Spatial scale: Whole town or city Source affected: Transport Indicator: NO2 Target emissions reduction: Not available
Bracknell Forest Borough Council_2	Enforcement of traffic restrictions, e.g. along the High Street in Crowthorne	Traffic management	Traffic planning and management: Other measure	Planning	Start date: 2016 Expected end date: 2016 Spatial scale: Local Source affected: Transport Indicator: NO2 Target emissions reduction: Not available
Bracknell Forest Borough Council_3	Improvements to bus stops to reduce queuing	Bus route improvements	Traffic planning and management: Improvement of public transport	Evaluation	Start date: 2018 Expected end date: 2020 Spatial scale: Local Source affected: Transport Indicator: NO2 Target emissions reduction: Not available
Bracknell Forest Borough Council_4	Provision of real time information at road side displays, for example to encourage people to use the bus	Bus information improvements	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2015 Expected end date: 2020 Spatial scale: Whole town or city Source affected: Transport Indicator: NO2 Target emissions reduction: Not available
Bracknell Forest Borough Council_5	Improving signage along cycle routes, for example along Bagshot Road in the AQMA	Cycle network improvements	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Implementation	Start date: 2015 Expected end date: 2020 Spatial scale: Local Source affected: Transport Indicator: NO2 Target emissions reduction: Not available
Bracknell Forest Borough Council_6	Further investigations into smart ticketing	Promoting travel alternatives	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2015 Expected end date: 2020 Spatial scale: Whole town or city Source affected: Transport Indicator: NO2 Target emissions reduction: Not available

Measure code	Description	Focus	Classification	Status	Other information
Bracknell Forest Borough Council_7	Considering the use of electric cars as Council pool cars	Promoting low emission transport	Public procurement: Other measure	Evaluation	Start date: 2015 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: NO2 Target emissions reduction: Not available
Bracknell Forest Borough Council_8	Developing school travel plans and personal travel planning	Travel plans	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2015 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: NO2 Target emissions reduction: Not available
Reading Borough Council_APTM1	Continue to implement the core infrastructure projects detailed in and arising from the Local Transport Plan 2006-2011, subject to the findings of the independent transport commission	Reducing congestion across the wider urban area, and improving specific traffic hotspots	Traffic planning and management: Improvement of public transport	Other	Start date: 2009 Expected end date: 2011 Spatial scale: Whole town or city Source affected: Transport Indicator: Unknown Target emissions reduction: None set
Reading Borough Council_APTM2	Continue to implement the strategic themes of Quality Travel for Reading including new cycle strategy	Improvements to public transport, cycle and pedestrian facilities	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2009 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: Unknown Target emissions reduction: None set
Reading Borough Council_APTM3	Continue to use the planning process to ensure that whilst encouraging the economic development of Reading this remains sustainable and within a balanced transport strategy	Ensure new development does not lead to increase in emissions and worsening of Air Quality	Other measure: Other measure	Implementation	Start date: 2009 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: Number of applications considered and number of AQA's requested Target emissions reduction: None set
Reading Borough Council_APTM4	Continue to lead by example in reducing our own emissions of air pollutants and finding innovative ways to reduce our impact on the environment	Reducing NO2 and PM10 emissions from RBC buildings	Other measure: Other measure	Implementation	Start date: 2009 Expected end date: 2015 Spatial scale: Local Source affected: Commercial and residential sources Indicator: Improvement in energy efficiency within council buildings Target emissions reduction: None set

Measure code	Description	Focus	Classification	Status	Other information
Reading Borough Council_APTM5	Reduce greenhouse gas and air quality impacting emissions from RBC fleet use, setting targets for emissions reduction, and linking these to other strategic targets (e.g. Local Area Agreement) where appropriate	Reducing NO2 and PM10 emissions from RBC fleet	Other measure: Other measure	Implementation	Start date: 2009 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: Emissions improvement within RBC vehicle fleet Target emissions reduction: None set
Reading Borough Council_APTM6	Continue to work with local business and schools to assist them in reducing their environmental impact through travel plans/school travel plans and other measures	Reducing emissions from local schools and business across the borough	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2009 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: Uptake of travel plans amongst schools and business Target emissions reduction: None set
Reading Borough Council_APTM7	Continue to work with Reading Buses to reduce air quality impacting and greenhouse gas emissions per passenger kilometre from Reading buses fleet use, setting targets for emissions reductions	Reducing emissions from the local bus fleet	Public procurement: Cleaner vehicle transport services	Implementation	Start date: 2009 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: Increase in LEV's and reduction in average age of the fleet Target emissions reduction: None set
Reading Borough Council_APTM8	Continue to support in town without my car day and other environmental awareness / sustainable travel events to promote more sustainable travel and air quality information	Raising awareness of AQ issues and encouraging more sustainable travel	Public information and Education: Other mechanisms	Implementation	Start date: 2009 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: Attendance at events and dissemination of promotional information Target emissions reduction: None set
Reading Borough Council_APTM9	Encourage the choice of non-motorised transport options emphasising positive health benefits as well as climate change and air quality benefits	Raising awareness of AQ issues and encouraging more sustainable travel	Public procurement: Other measure	Implementation	Start date: 2009 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: Unknown Target emissions reduction: None set
Reading Borough Council_APTM10	Introduce new license conditions in 2009 to improve emissions and produce a cleaner fleet of licensed vehicles	Reducing emissions from Readings Taxi and private hire fleets	Retrofitting: Retrofitting emission control equipment to vehicles	Other	Start date: 2009 Expected end date: 2013 Spatial scale: Whole town or city Source affected: Transport Indicator: Improvement in average Euro standard of the fleet Target emissions reduction: None set

Measure code	Description	Focus	Classification	Status	Other information
Reading Borough Council_APTM11	Encourage local businesses to reduce their greenhouse gas and air quality emissions and prepare for climate change. Work with Reading UK CIC, connect Reading, key businesses and business organisations to develop practical local solutions	Linking AQ and CC issues & reduction of emissions from local business	Other measure: Other measure	Implementation	Start date: 2009 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: Number of businesses included in the green business network Target emissions reduction: None set
Reading Borough Council_APTM12	Investigate mechanisms to reduce the impact of HGVs on local air quality in Reading, producing a report with recommendations within 18 months of the production of this action plan	Reducing emissions from HGVs	Traffic planning and management: Low emission zones	Other	Start date: 2009 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: Reduction in HGV traffic and/or improvement in average Euro standard amongst Reading HGV fleet Target emissions reduction: None set
Reading Borough Council_APOS1	Continue to work with Festival Republic (Reading Festival) to reduce the impact and/or numbers of campfires during the Reading Festival on air quality in Reading	Reducing NO2 and PM emissions from the festival site	Traffic planning and management: Other measure	Implementation	Start date: 2009 Expected end date: 2015 Spatial scale: Local Source affected: Commercial and residential sources Indicator: Reduction in emissions during the construction, use and take down of the festival site Target emissions reduction: None set
Reading Borough Council_APOS2	Subject to available funding, carry out an awareness raising campaign related to Reading's smoke control areas including advice to stores selling non authorised fuels	Reducing emissions of solid fuels from houses	Public information and Education: Leaflets	Implementation	Start date: 2013 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: Advice given to stores and awareness campaign Target emissions reduction: None set
Reading Borough Council_APOS3	Work with partners to give Reading householders easy access to discounted or free home insulation and free energy advice	Reducing emissions from domestic heating systems	Public information and Education: Other mechanisms	Implementation	Start date: 2009 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: Increase in energy efficiency measures installed in domestic properties across Reading Target emissions reduction: None set

Measure code	Description	Focus	Classification	Status	Other information
Reading Borough Council_APOM1a	Carry out a feasibility study into introducing a scheme to alert vulnerable members of the Reading community when air pollution episodes are forecast and advising them on possible appropriate action to take. The study will consider the number of pollution events (moderate or higher for Particulates, Ozone and NO2) in Reading from previous years monitoring	Investigate feasibility of alert system	Public information and Education: Other mechanisms	Other	Start date: 2009 Expected end date: 2009 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: N/A Target emissions reduction: None set
Reading Borough Council_APOM1b	In partnership with the sustainability team we will consider the feasibility of cold snap and heatwave forecasting for people with conditions affected by extremes of weather within this study	Investigate feasibility of alert system	Public information and Education: Other mechanisms	Other	Start date: 2009 Expected end date: 2009 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: N/A Target emissions reduction: None set
Reading Borough Council_APOM3	Continue to expand and improve air quality data on the RBC website to improve the accessibility of information	Improve accessibility to aq information on RBC website to improve awareness	Public information and Education: Internet	Implementation	Start date: 2009 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: Information added to Website Target emissions reduction: None set
Reading Borough Council_APOM4	Add information relevant to the school curriculum on the website so that local information is available for school and college science activities	N/A	Public information and Education: Internet	Implementation	Start date: 2009 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: Information added to Website Target emissions reduction: None set
Reading Borough Council_APOM5	Make air quality information easier to find on the website and use opportunities such as "in town without my car" and "Forbury Fever" to raise awareness of the availability of air quality and climate change information on the council website	Make AQ information easier to find	Public information and Education: Other mechanisms	Implementation	Start date: 2009 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: Information added to Website Target emissions reduction: None set

Measure code	Description	Focus	Classification	Status	Other information
Reading Borough Council_APOM6	Ensure that measures to address local air quality do not conflict with climate change actions, by considering the interlinked causal factors, identifying conflicts and promoting mutually beneficial solutions	To maximise win win measures and minimise conflict between AQ and CC	Other measure: Other measure	Implementation	Start date: 2009 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Other, please specify Indicator: N/A Target emissions reduction: None set
Reading Borough Council_1	Convert taxis to use CNG diesel blend	Reducing emissions from taxis	Public procurement: Cleaner vehicle transport services	Planning	Start date: 2014 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: Emissions improvements indicated by emissions testing Target emissions reduction: None set
Reading Borough Council_RDAQ1	Railway upgrade	Public transport improvements-interchanges stations and services	Traffic planning and management: Improvement of public transport	Complete	Start date: 2010 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: None set Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ2	Green Park Station	Public transport improvements-interchanges stations and services	Traffic planning and management: Improvement of public transport	Planning	Start date: 2016 Expected end date: 2020 Spatial scale: Local Source affected: Transport Indicator: None set Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ3	Southern Mass Rapid Transit (MRT)	Public transport improvements-interchanges stations and services	Traffic planning and management: Improvement of public transport	Planning	Start date: 2016 Expected end date: 2018 Spatial scale: Local Source affected: Transport Indicator: - Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ4	Eastern MRT	Public transport improvements-interchanges stations and services	Traffic planning and management: Improvement of public transport	Planning	Start date: 2018 Expected end date: 2020 Spatial scale: Local Source affected: Transport Indicator: - Target emissions reduction: Unable to quantify

Measure code	Description	Focus	Classification	Status	Other information
Reading Borough Council_RDAQ5	Southern (MereOak) Park & Ride	Public transport improvements-interchanges stations and services	Traffic planning and management: Improvement of public transport	Complete	Start date: 2015 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: Monitoring of patronage Target emissions reduction: 600 parking spaces - potential 600+ less trips into AQMA
Reading Borough Council_RDAQ6	Winnersh Park & Ride	Public transport improvements-interchanges stations and services	Traffic planning and management: Improvement of public transport	Complete	Start date: 2016 Expected end date: 2016 Spatial scale: Local Source affected: Transport Indicator: Monitoring of patronage Target emissions reduction: 400 Parking spaces - potential 400+ less trips into AQMA
Reading Borough Council_RDAQ7	East (Thames Valley Park) Park & Ride	Public transport improvements-interchanges stations and services	Traffic planning and management: Improvement of public transport	Planning	Start date: 2016 Expected end date: 2020 Spatial scale: Local Source affected: Transport Indicator: - Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ8	Traffic signal upgrading	UTC, Congestion management, traffic reduction	Traffic planning and management: Other measure	Complete	Start date: 2016 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: - Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ9	A33 Congestion pinchpoint relief scheme	UTC, Congestion management, traffic reduction	Traffic planning and management: Other measure	Complete	Start date: 2015 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: - Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ10	A4 Congestion relief pinchpoint scheme	UTC, Congestion management, traffic reduction	Traffic planning and management: Other measure	Complete	Start date: 2015 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: - Target emissions reduction: Unable to quantify

Measure code	Description	Focus	Classification	Status	Other information
Reading Borough Council_RDAQ11	Work towards electrification of vehicle fleet	Promoting Low Emission Transport	Public procurement: Other measure	Implementation	Start date: 2015 Expected end date: Ongoing Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: Will replace diesel and petrol vehicles on RBC fleet with electric
Reading Borough Council_RDAQ12	Expansion of Ready Bike cycle scheme	Public transport improvements-interchanges stations and services	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Planning	Start date: 2017 Expected end date: 2017 Spatial scale: Whole town or city Source affected: Transport Indicator: Cycle scheme usage Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ13	Cross boundary cycle routes	Promoting Travel Alternatives	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Implementation	Start date: 2016 Expected end date: Ongoing Spatial scale: Whole town or city Source affected: Transport Indicator: Cycle usage numbers from cycle cordon counts Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ14	Cycle route infrastructure improvements	Promoting Travel Alternatives	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Implementation	Start date: 2016 Expected end date: Ongoing Spatial scale: Whole town or city Source affected: Transport Indicator: Cycle usage numbers from cycle cordon counts Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ15	Thames pedestrian/cycle bridge	Promoting Travel Alternatives	Traffic planning and management: Improvement of public transport	Completed	Start date: 2016 Expected end date: 2016 Spatial scale: Local Source affected: Transport Indicator: Opening of bridge Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ16	Minimising industrial emissions	Environmental Permits	Permit systems and economic instruments: Other measure	Implementation	Start date: 2016 Expected end date: Ongoing Spatial scale: Whole town or city Source affected: Transport Indicator: EP Annual subscriptions and applications. Annual search for unpermitted processes Target emissions reduction: Unable to quantify



Measure code	Description	Focus	Classification	Status	Other information
Reading Borough Council_RDAQ17	Through Reading Climate Change Partnership increase business participation in reducing emissions through measures such as cycle to work schemes, reducing building energy, low emission delivery vehicles.	Policy Guidance and Development Control	Other measure: Other measure	Implementation	Start date: 2016 Expected end date: 2020 Spatial scale: Whole town or city Source affected: Transport Indicator: Reading climate change partnership Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ18	Through planning process ensuring that future development does not result in further deterioration of air quality and where possible results in an improvement	Policy Guidance and Development Control	Other measure: Other measure	Implementation	Start date: 2016 Expected end date: Ongoing Spatial scale: Whole town or city Source affected: Transport Indicator: Air quality assessments produced for new developments. Monitoring results. Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ19	Ensure that measures to address air quality do not conflict with climate change actions, by considering the interlinked causal factors and promoting mutually beneficial solutions	Policy Guidance and Development Control	Other measure: Other measure	Implementation	Start date: 2016 Expected end date: Ongoing Spatial scale: Whole town or city Source affected: Transport Indicator: Number of conflicting measures installed within the AQMA. Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ20	Continue Reading Buses investment Programme to ensure the bus fleet has the lowest emissions it can.	Vehicle Fleet Efficiency	Retrofitting: Retrofitting emission control equipment to vehicles	Implementation	Start date: 2016 Expected end date: Ongoing Spatial scale: Whole town or city Source affected: Transport Indicator: Reporting to transport management sub-committee Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ21	Continue to explore and implement ways to improve emissions from Reading's taxi fleet.	Vehicle Fleet Efficiency	Retrofitting: Retrofitting emission control equipment to vehicles	Implementation	Start date: 2016 Expected end date: Ongoing Spatial scale: Whole town or city Source affected: Transport Indicator: Changes in makeup of taxi fleet. e.g. Retrofitted taxis, EURO standard. Target emissions reduction: Unable to quantify

Measure code	Description	Focus	Classification	Status	Other information
Reading Borough Council_RDAQ22	Reduce emissions from idling vehicles at hotspot locations within the AQMA.	Public Information	Public information and Education: Other mechanisms	Implementation	Start date: 2016 Expected end date: Ongoing Spatial scale: Whole town or city Source affected: Transport Indicator: Report to members, implementation of campaign Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ23	Continue to offer Bikeability cycle training to all schools across Reading	Promoting Travel Alternatives	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2016 Expected end date: 2018 Spatial scale: Whole town or city Source affected: Transport Indicator: Uptake of scheme Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ24	Continued funding for a Cycle development officer to help promote cycling and deliver the Cycling Strategy.	Promoting Travel Alternatives	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2016 Expected end date: 2017 Spatial scale: Whole town or city Source affected: Transport Indicator: Percentage of road users cycling according to cycle cordon readings. Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ25	Continue to inspire people to walk more via initiatives such as Beat the Street.	Promoting Travel Alternatives	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2016 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: Number of people signed up to scheme Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ26	Continue to monitor air pollution at existing monitoring locations and make results available to view on RBC website.	Public Information	Public information and Education: Internet	Implementation	Start date: 2016 Expected end date: Ongoing Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: Monitoring data available on RBC website. Achieve a good level of data capture. Target emissions reduction: Unable to quantify

Measure code	Description	Focus	Classification	Status	Other information
Reading Borough Council_RDAQ27	Investigate the feasibility of introducing locally based alert system to inform residents of forecasted pollution episodes.	Public Information	Public information and Education: Internet	Implementation	Start date: 2016 Expected end date: 2017 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: Complete an assessment of the feasibility of such a system. Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ28	Bonfires - Provide advice to residents and take enforcement action where appropriate to discourage the use of bonfires when disposing of waste material.	Public Information	Public information and Education: Internet	Implementation	Start date: 2016 Expected end date: Ongoing Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: Review of number of enquiries and advice given. Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ29	Solid Fuel Burning - The Smoke Control Survey 2014; Showed there was a relative lack of knowledge of smoke control areas, it is now proposed to inform people of the existence of smoke control areas, how to find out if you live in one and what you should or shouldn't do if you live in one. This will be done through an awareness raising campaign to promote best practice for people heating their homes using wood, coal and other solid fuels.	Public Information	Public information and Education: Internet	Implementation	Start date: 2015 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: Pamphlet to businesses selling appliances. Press release in run up to winter. Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ30	Provide advice, guidance and support to improve home energy efficiency through the private sector renewal scheme and winter watch.	Public Information	Public information and Education: Internet	Implementation	Start date: 2016 Expected end date: Ongoing Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: Home Energy Conservation Act report EPC rating of houses. Target emissions reduction: Unable to quantify
Reading Borough Council_RDAQ31	Generate a larger proportion of energy from renewable sources 8% by 2020	Promoting Low Emission Plant	Public procurement: Low emission fuels for stationary and mobile sources	Implementation	Start date: 2016 Expected end date: 2020 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: Government registration Target emissions reduction: Unable to quantify

Measure code	Description	Focus	Classification	Status	Other information
West Berkshire Council_1	Variable Message Signing (VMS) Linked to Newbury Car Park system	Reduce emissions within the town centre by identifying where car park spaces are.	Traffic planning and management: Other measure	Implementation	Start date: 2011 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: Car park usage Target emissions reduction: Negligible
West Berkshire Council_2	Study into signalling junction at Burger King Roundabout	Reduce emissions within the AQMA by reducing queuing times and congestion	Traffic planning and management: Other measure	Planning	Start date: 2012 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: Reduction in queuing time and congestion within AQMA and reduction in NO2 levels Target emissions reduction: 15 ug/m3(based on 2008 data)
West Berkshire Council_3	Amendments to Bear Lane (Sainsbury's) Junction of A339, as this junction can impact on A343 Greenham Road Junction	Reduce emissions at a location close to the AQMA	Traffic planning and management: Other measure	Implementation	Start date: 2012 Expected end date: 2012 Spatial scale: Local Source affected: Transport Indicator: Reduction in queuing time and congestion close to AQMA and reduction in NO2 levels Target emissions reduction: Links with 15 ug/m3 (based on 2008 data)
West Berkshire Council_4	Park and Ride	Reduce emissions within the town centre by reducing number of cars and congestion	Traffic planning and management: Improvement of public transport	Other	Start date: 2011 Expected end date: 2011 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A
West Berkshire Council_5	Improved local bus services to reduce short car journeys	Reduce emissions within the town centre by reducing number of cars and congestion	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: Increase in no. of passenger journeys Target emissions reduction: Negligible
West Berkshire Council_6	Smarter Choices (1) Investigate the feasibility of a district wide car share scheme (2) Investigate the feasibility of a car club for Newbury and Thatcham area (Racecourse)	Reduce emissions within the town centre by reducing number of cars	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: No. of car share cars and their usage Target emissions reduction: Negligible

Measure code	Description	Focus	Classification	Status	Other information
West Berkshire Council_7	Electrification of Newbury to Reading railway line	Improvements to service	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2011 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: Increased reliability of services and increase passenger usage Target emissions reduction: Negligible
West Berkshire Council_8	Cycle lane on A343 St Johns Road between Burger King Roundabout and St Johns roundabout	To reduce reliance on car in AQMA by promotion of cycling	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Evaluation	Start date: 2011 Expected end date: 2012 Spatial scale: Local Source affected: Transport Indicator: Reduction in car journeys along this section of road network and decrease in NO2 levels measured. Target emissions reduction: Negligible
West Berkshire Council_9	Travel Planning	To reduce reliance on car in AQMA and Newbury /Thatcham areas	Traffic planning and management: Encouragement of shift of transport modes	Evaluation	Start date: 2011 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: No. of businesses engaged in the Network, with focus on Newbury and Thatcham Target emissions reduction: Negligible
West Berkshire Council_10	Supplementary Planning Document for AQ	Avoid worsening air quality by adopting local planning policies	Other measure: Other measure	Planning	Start date: 2012 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Commercial and residential sources Indicator: Reduce reliance of car in new development. Use of s106 funds Target emissions reduction: Negligible
West Berkshire Council_11	Low Emission Zone	Reduce emissions within the town centre by limiting the type of vehicles permitted	Traffic planning and management: Low emission zones	Other	Start date: 2012 Expected end date: 2030 Spatial scale: Local Source affected: Transport Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
West Berkshire Council_12	Reduction HDV's using A339 through Newbury	Reduce emissions within the AQMA	Traffic planning and management: Freight transport measure	Planning	Start date: 2013 Expected end date: 2015 Spatial scale: Local Source affected: Transport Indicator: Reduction in HDV journeys along this section of road network and decrease in NO2 levels measured. Target emissions reduction: Links with 15 ug/m3 (based on 2008 data)
West Berkshire Council_13	Electric Charging points	Improve uptake of electric vehicles by providing a wider network of charging points in the region.	Public procurement: Other measure	Implementation	Start date: 2013 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: Usage of charging points Target emissions reduction: Negligible
West Berkshire Council_14	Health education	Increase awareness of health impact from poor air quality	Public information and Education: Other mechanisms	Planning	Start date: 2012 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: Decrease in hospital admissions from asthma. Increase in walking and cycling. Target emissions reduction: N/A
West Berkshire Council_15	3 EV recharging using OLEV grant	N/A	Public procurement: Other measure	Implementation	Start date: 2013 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
West Berkshire Council_16	Plugged in fleet review OLEV grant	N/A	Public procurement: Other measure	Implementation	Start date: 2014 Expected end date: 2017 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
West Berkshire Council_17	Biomass programme	N/A	Public procurement: Other measure	Implementation	Start date: 2013 Expected end date: 2030 Spatial scale: Local Source affected: Commercial and residential sources Indicator: N/A Target emissions reduction: N/A

Measure code	Description	Focus	Classification	Status	Other information
West Berkshire Council_18	Go ultra low city scheme with Reading BC	N/A	Public procurement: Other measure	Planning	Start date: 2015 Expected end date: 2030 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
West Berkshire Council_19	Freight strategy	N/A	Traffic planning and management: Freight transport measure	Implementation	Start date: 2013 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
West Berkshire Council_20	Passenger transport strategy	N/A	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2012 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
West Berkshire Council_21	Cycle working group	N/A	Traffic planning and management: Encouragement of shift of transport modes	Planning	Start date: 2014 Expected end date: 2016 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
West Berkshire Council_22	Freight route network review	N/A	Traffic planning and management: Freight transport measure	Planning	Start date: 2015 Expected end date: 2015 Spatial scale: Whole town or city Source affected: Transport Indicator: N/A Target emissions reduction: N/A
West Berkshire Council_23	Sustainable school travel project	N/A	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: N/A Target emissions reduction: N/A
Wokingham District Council_1	Reading Road, new pedestrian islands	Reading Road, new pedestrian islands	Traffic planning and management: Other measure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/A
Wokingham District Council_2	Miles Road Woodley New Cycle Route	Miles Road Woodley New Cycle Route	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/a Target emissions reduction: N/a

Measure code	Description	Focus	Classification	Status	Other information
Wokingham District Council_3	Cutbush Lane New Cycle Route	Cutbush Lane New Cycle Route	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_4	Black Boy RBT Cycleway improvements	Black Boy RBT Cycleway improvements	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_5	Barncroft Drive New Cycleway	Barncroft Drive New Cycleway	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_6	Paddick Drive New Cycleway	Paddick Drive New Cycleway	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_7	Rushy Way Ped signal upgrade	Rushy Way Ped signal upgrade	Traffic planning and management: Other measure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_8	Meldreth Way New Cycleway	Meldreth Way New Cycleway	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_9	Hurrican way Woodley New Cycleway	Hurrican way Woodley New Cycleway	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_10	Plough Lane New Footway	Plough Lane New Footway	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a



Measure code	Description	Focus	Classification	Status	Other information
Wokingham District Council_11	Barn Manor New footway	Barn Manor New footway	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_12	Nine Mile Ride - New bus stops	Nine Mile Ride - New bus stops	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_13	Showcase Cinema - Traffic signal Upgrades	Showcase Cinema - Traffic signal Upgrades	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_14	Business Travel Planning	Business Travel Planning	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_15	Wokingham Town PTP (4000 residents)	Wokingham Town PTP (4000 residents)	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_16	Wokingham Travel Smart Phone app	Wokingham Travel Smart Phone app	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_17	Job Seekers PTP	Job Seekers PTP	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_18	Community Challenge	Community Challenge	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a

Measure code	Description	Focus	Classification	Status	Other information
Wokingham District Council_19	Cycle Road shows	Cycle Road shows	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_20	Bike It Officer	Bike It Officer	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_21	Active Travel Officer	Active Travel Officer	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_22	Commuter Challenge	Commuter Challenge	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_23	Cycle promotion video	Cycle promotion video	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_24	New walking & Cycle mapping	New walking & Cycle mapping	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_25	Beat the Street (Walking 2000 residents)	Beat the Street (Walking 2000 residents)	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_26	Station Travel plans	Station Travel plans	Traffic planning and management: Encouragement of shift of transport modes	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a

Measure code	Description	Focus	Classification	Status	Other information
Wokingham District Council_27	Bus shelter replacement	Bus shelter replacement	Traffic planning and management: Other measure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Local Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_28	Traffic Signal improvement	Traffic Signal improvement	Traffic planning and management: Other measure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_29	A329 Cycleway Corridor Phases, 1, 2 &3	A329 Cycleway Corridor Phases, 1, 2 &3	Traffic planning and management: Expansion of bicycle and pedestrian infrastructure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_30	Micro Park and Rides	Micro Park and Rides	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_31	Winnersh Park and Ride	Winnersh Park and Ride	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_32	MereOak Park and Ride	MereOak Park and Ride	Traffic planning and management: Improvement of public transport	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_33	VMS on A329	VMS on A329	Traffic planning and management: Other measure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_34	Blue Tooth Monitoring	Blue Tooth Monitoring	Traffic planning and management: Other measure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/a Target emissions reduction: N/a

Measure code	Description	Focus	Classification	Status	Other information
Wokingham District Council_35	Website development	Website development	Public information and Education: Internet	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_36	Coms & PR	Coms & PR	Public information and Education: Internet	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/a Target emissions reduction: N/a
Wokingham District Council_37	Electric vehicle charging points	Electric vehicle charging points	Other measure: Other measure	Implementation	Start date: 2014 Expected end date: 2014 Spatial scale: Whole town or city Source affected: Transport Indicator: N/a Target emissions reduction: N/a