



Portsmouth

CITY COUNCIL

TRAFFIC, ENVIRONMENT & COMMUNITY SAFETY
SCRUTINY PANEL

A REVIEW OF AIR QUALITY IN PORTSMOUTH

Date published: 14 May 2013

Under the terms of the Council's Constitution, reports prepared by a Scrutiny Panel should be considered formally by the Cabinet or the relevant Cabinet Member within a period of eight weeks, as required by Rule 11(a) of the Policy & Review Procedure Rules.

PREFACE

The aim of this review was to understand the detrimental impact that poor air quality has on health and the economy and to assess how well the council carries out its responsibilities to improve it.

During the review which was carried out between September 2012 and May 2013, the panel received evidence from a number of sources, which it used to draw up a series of recommendations to submit to the Cabinet.

I would like to convey, on behalf of the panel my sincere thanks to all the officers who contributed to making this review a success.

.....
Councillor Caroline Scott
Chair, Traffic, Environment & Community Safety Scrutiny Panel.

Date: 14 May 2013

CONTENTS

	Page
Executive Summary.	3
Conclusions.	8
Recommendations.	9
Purpose.	10
Background.	10
To understand how air quality impacts on the population and to consider the purpose of local air quality management.	11
To understand the current air quality of Portsmouth in relation to national air quality regulations.	15
To understand how local air quality is monitored and the council's strategies to improve it.	19
To identify areas in the city that require improvements and how this can be achieved.	37
To consider the approach of other local authorities to see if the council could adopt measures which work elsewhere or learn lessons from their experience.	39
Equalities Impact Assessment.	39
Legal Comments.	40
Finance Comments.	40
Budget and Policy Implications of the Recommendations.	41
Appendix 1 – A list of meetings held by the panel and details of the written evidence received.	44
Appendix 2 - A glossary of terms used.	45
Appendix 3 - The Local Air Quality Management Objectives which set out the targets for maximum concentrations of each pollutant.	46
Appendix 4 - A map showing the Air Quality Management Areas in the city.	48

EXECUTIVE SUMMARY

1. To understand how air quality impacts on the population and to consider the purpose of local air quality management.

Research shows that poor air quality can have a detrimental impact on health, either by itself or in conjunction with other environmental factors or social habits. Reducing air pollution would therefore help improve life expectancy.

Air pollution exacerbates existing health problems. The evidence linking poor outdoor air quality on health conditions such as asthma and chronic obstructive pulmonary disease is well established. Portsmouth has high levels for both conditions. High levels of nitrogen dioxide have been linked with respiratory inflammation and infection. The two Air Quality Management Areas in Portsmouth that have high levels of nitrogen dioxide also fall within some of the most disadvantaged areas in the city and have some of the highest levels of smoking and other risk factors associated with lung and respiratory related ill health.

Epidemiological studies show that smaller particles in the ultrafine range tend to penetrate further into the gas exchange area of the lungs. However the toxicity of the particles depends on the nature of their components. These particles are arguably the most important component of ambient air quality with regards to health.

Many Volatile Organic Compounds e.g. benzene and 1,3 butadiene take part in photochemical reactions with other pollutants such as oxides of nitrogen in the atmosphere to form ozone.

The health impacts of air quality in the UK are estimated to be £10.7 billion per annum.

The Local Air Quality Review and Assessment process requires local authorities to review local air quality and assess whether health-based air quality objectives (set out in appendix 3) will be achieved. If it is predicted that these will not be achieved, an Air Quality Management Area must be designated and an Air Quality Action Plan put in place. This process is explained in section 4 on page 15.

2. To understand the current air quality of Portsmouth in relation to national air quality regulations.

European Union legislation is the main driver for national policy on air quality and requires local authorities to control emissions of the following pollutants:

- Benzene
- 1,3 Butadiene
- Carbon Monoxide
- Lead
- Nitrogen Dioxide
- Particles
- Sulphur Dioxide.

In 2005, Portsmouth City Council (henceforth known as the council) assessed the city's air quality and designated 13 Air Quality Management Areas.

A draft Air Quality Action Plan was published in 2007 and although not formally adopted, many of the proposed actions were implemented as part of the Local Transport Plan.

The UK was granted an extension until 2015 for compliance with the nitrogen dioxide limits in nine agglomerations where the targets were not going to be met including Portsmouth. However, it is not known whether the European Union will impose any penalties for this breach.

In 2009 the quality of ambient air in Portsmouth had improved sufficiently to enable 8 of the 13 Air Quality Management Areas declared in 2005 to be revoked.

The 2010 Air Quality Action Plan was formally adopted and annexed to the Local Transport Plan 3.

3. To understand how local air quality is monitored and the council's strategies to improve it.

The council employs an Environment Protection Officer who has sole responsibility for Local Air Quality Management. The Environmental Health Manager oversees this work.

Air pollution is monitored continuously at four locations in the city. Nitrogen dioxide levels are monitored at a further 36 locations. The council also carries out a co-location study where diffusion tubes are placed at each of the four continuous air quality monitoring stations to generate a bias correction factor. In 2011 the council entered into a three-year maintenance contract for the air quality monitoring equipment at a cost of £56,000. Air quality has not been mentioned in the budget proposals at the time of this report being published.

Road traffic was identified as the main source of nitrogen dioxide. As Portsmouth is an island, traffic does not flow through the city easily and therefore there is a significant congestion problem.

Despite a reduction in the number of cars on the roads, miles travelled by car and by ship, air quality nationally has deteriorated since 2010. Engine efficiency due to advances in technology improved significantly but has now levelled off.

Future air quality is predicted using dispersion modelling technique which forms the basis for the alternative statutory annual report that is sent to the Department for the Environment, Farming & Rural Affairs.

When required, an environmental impact assessment is submitted by developers as a part of the planning application process.

The panel reviewed the progress reports on the 29 measures set out in the Air Quality Action Plan.

1. Review and Assessment of Air Quality.

The update can be read on page 23.

2. Regulation of Industrial Processes.

The update can be read on page 23.

3. Domestic Heating Emissions.

The update can be read on page 23.

4. Energy-Saving Measures.

The update can be read on page 24.

5. Workplace Travel Plans.

The update can be read on page 24.

6. Promote Walking.

The update can be read on page 25.

7. Promote Cycling.

The update can be read on page 26.

8. Air Quality Information.

The update can be read on page 27.

9. School Travel Plans.

The update can be read on page 27.

10. Creation of Portsmouth City Council Transport Manager.

The update can be read on page 27.

11. High Occupancy Vehicle Lanes.

The update can be read on page 28.

12. Park and Ride.

The update can be read on page 28.

13. Traffic Control Southbound M275 Slip.

The update can be read on page 29.

14. Traffic Control Mile End

The update can be read on page 29.

15. Junction Improvements

The update can be read on page 29.

16. Variable Message Signs

The update can be read on page 31.

17. Freight Quality Partnership

The update can be read on page 31.

18. Regeneration of North End Shopping Area Traffic Initiatives.

The update can be read on page 32.

19. Hampshire Terrace Junction with St Michael's Gyratory.

The update can be read on page 32.

20. Queen Street Junction with Anglesea Road.

The update can be read on page 32.

21. Public Transport Initiative I.

The update can be read on page 33.

22. Public transport initiative II

The update can be read on page 33.

23. Idling Engines.

The update can be read on page 34.

24. Vehicle and Operator Services Agency Emission Testing.

The update can be read on page 35.

25. Bus Transport and Patronage.

The update can be read on page 35.

26. Implementation / Incorporation of the Air Quality Action Plan.

The update can be read on page 36.

27. Planning Service Liaison Initiative Beyond the Supplementary Planning Document.

The update can be read on page 36.

28. Variable Parking Charges/ Controlled Parking Zones.

The update can be read on page 36.

29. Explore New Technology.

The update can be read on page 37.

5. To identify areas in the city that require improvements and how this can be achieved.

The areas that require improvements in air quality in order to comply with the National Air Quality Objectives are the five Air Quality Management Areas (shown in appendix 4).

Portsmouth is ranked the highest of 14 local authorities within Hampshire and the Isle of Wight for its average deprivation score and concentration of deprivation. Air Quality Management Areas 6 and 11 fall within some of the most disadvantaged areas within the city which have some of the highest levels of smoking and other risk factors associated with lung and respiratory related ill health. The amount of council housing stock in these areas can vary significantly e.g. in number 9 there are 175 dwellings whilst in number 7 there is a complete absence.

Residents' support is essential when introducing measures to tackle air quality pollution, for example behavioural change such as turning off their car engines

when stationary or switching from the use of cars to public transport can contribute to the improvement of air quality.

The Highways Agency is responsible for the M275 and other motorways. There are no longer any Air Quality Management Areas in these areas.

The Air Quality Action Plan sets out the roles of the council's partners. Many of the actions remain the responsibility of the traffic department, including school travel plans, the promotion of cycling and walking and public transport.

The Environmental Protection Officer appraises the air quality impact assessments submitted by developers and can suggest measures to minimise the impact of the proposed new housing on residents' health. These measures can include setting the development back from the kerbside of the road by a few metres, or having non-opening front windows coupled with mechanical ventilation that draws air from areas with cleaner air.

As there are many variables involved in air pollution dispersion, it is very difficult to single out and assess the impact of any given measure. However, the predicted air quality improvement of projects such as Park & Ride can be estimated based on the number of parking spaces allocated and their frequency of occupancy. From these parameters the council can determine the emissions reduction.

6. To consider the approach of other local authorities to see if the council could adopt measures which work elsewhere or learn lessons from their experience.

In preparing the Air Quality Action Plan, the council referred to and adopted some of the best practice examples from elsewhere.

The council is continually looking for innovative ways to improve air quality locally and has been working hard to raise awareness of air quality and forge new synergies between transport, planning and climate change partners to address the possible negative impact on the health of local residents.

The introduction of Low Emission Zones, areas which seek to restrict or deter access by certain polluting vehicles or only allow low emission vehicles, with the aim of improving the air quality was considered. However, this was not adopted because of the implementation costs and the potential negative impacts upon the local economy.

The council is currently reviewing the existing traffic management systems in order to ensure that road traffic is maintained at maximum fluidity and that transport-related pollution is minimal. This measure was adopted in the council's Air Quality Action Plan and research was carried out into other authorities that have carried out similar measures to assess whether these could be adopted here.

A combination of members of the Green Party and Winchester branch of Friends of the Earth headed by the MEP Keith Taylor filled a complaint to the European Commission against Winchester City Council for allegedly failing to address air quality improvement issues within the declared air quality

management areas in January 2013. The outcome is due sometime in April this year.

Conclusions

Based on the evidence and views it has received during the review process the panel has come to the following conclusions:

1. The panel recognises the significant detrimental impact of air pollution on health and the significant economic costs of failing to deliver the council's responsibilities. (paragraphs: 3.1-3.16)
2. The panel was pleased with the current delivery of the council's statutory responsibilities to review and assess the quality of air in Portsmouth. (Paragraphs 5.6-5.16).
3. The panel was pleased to note that air quality had improved sufficiently for 8 of the 13 Air Quality Management Areas in 2009 to be revoked. (paragraph 4.12).
4. The panel recognises the need for further development of the council's strategies to improve the quality of air we breathe, working towards compliance with the National Air Quality Objective and beyond. (paragraphs 4.7 and 4.8).
5. The panel notes that Portsmouth is the main area within the 'Portsmouth Conglomerate' which has been provided with an extension from the government to achieve compliance with the National Air Quality Objectives and is concerned about the possible financial penalties of failing to comply. (paragraphs 4.14)
6. The panel considers that there is a need to strengthen the existing joint working partnerships to deliver cleaner air. However, the council has no current strategy to ensure that this can be carried out. (AQAP measures 17, 22 and 25).
7. In line with the council's aspirations to be the Great Waterfront City which delivers a high quality of life in a beautiful, flourishing, safe and clean environment, the panel considers that there is a need for robust and sustained actions not only to measure pollutant concentrations but also to improve the quality of the city's air.
8. The panel agrees with the actions set out in the Air Quality Action Plan but notes that it requires updating and regular monitoring to ensure that the momentum/ progress is maintained. (Paragraph 5.19)
9. The panel was informed that lorries alone cause around 45% of the pollution, but are crucial for the city's economy (paragraph 5.4).
10. The panel recognises that reliable and accessible public transport can encourage more people to use it and therefore reduce the number of cars on the roads and help reduce air pollution (AQAP measures no.21, 22 and 25).

11. The panel noted that a well-signposted Park and Ride system at Tipner with frequent, reliable and cheap buses will play a key role in encouraging visitors to the city and reducing traffic in the city and therefore reducing future increases in air pollution. (AQAP measures no.12).
12. The panel was pleased to note that Park and Ride buses will be given priority at the M275 slip road on to the roundabout. (AQAP measure no. 13).
13. The panel considers that as traffic contributes to 70% of air pollution, more must be done to reduce traffic and improve circulation. (Paragraph 5.16).
14. The panel was pleased to note that the introduction of a measure to maximise the use of and possibly expand existing traffic management systems locally is being considered. This aims to maintain road traffic at maximum fluidity and to keep transport related pollution to a minimum (AQAP measure no. 15 and paragraph 7.4).

Recommendations

1. The Cabinet Member for Environment & Community Safety monitor the progress made on measures set out in the National Air Quality Strategy.
2. As high levels of nitrogen dioxide are an indicator of poor air quality and consequent ill health, consideration should be given to transferring the financial responsibilities for monitoring and assessing local air quality to the public health team that has recently moved to the council (paragraph 3.18). The coordination and overseeing of the implementation of measures to improve air quality within the council should remain predominately with The Environment and Transport Service and the monitoring and assessment of air quality levels with the Environmental Health Team.
3. Carry out research on the introduction of staggered arrival and leaving times for naval base staff
4. A new local Air Quality Strategy be produced to:
 - a. Co-ordinate the actions set out in the 2010 Air Quality Action Plan in order to redefine how the council could further improve Portsmouth's air quality and maintain long-term air quality improvements.
 - b. Strive to form new initiatives and renew commitments to reduce levels of nitrogen dioxide and other pollutants of concern.
 - c. Recognise the importance of breathing clean air in terms of the enormous economic costs of failing to deliver the council's responsibilities.
 - d. Refocus the council and the public on the shared challenge of meeting the nitrogen dioxide objective level in Portsmouth by 2015.

- e. Make every effort to comply with the directives to improve air quality and also to avoid potential fines.
- f. Strengthen existing joint working partnerships and forge others to deliver cleaner air.

The budgetary and policy implications of these recommendations are set out in section 9 on pages 41-43.

1. Purpose.

The purpose of this report is to present the Cabinet with the recommendations of the Traffic, Environment & Community Safety Scrutiny Panel following its review of air quality in Portsmouth.

2. Background.

- 2.1 The review of air quality in Portsmouth was undertaken by the Traffic, Environment & Community Safety Scrutiny Panel, which comprised:

Councillor Caroline Scott (Chair)
Phil Smith
Les Stevens
Sandra Stockdale
Luke Stubbs
Neill Young

Standing Deputies were: Councillors Michael Andrewes, Ken Ellcome, Margaret Foster, Jacqui Hancock and April Windebank.

- 2.2 At its meeting on 25 September 2012, the Traffic, Environment & Community Safety Scrutiny Panel (henceforth referred to in this report as the panel) agreed the following objectives for a scrutiny review of air quality in Portsmouth:

2.2.1 To understand how air quality impacts on the population and to consider the purpose of local air quality management.

2.2.2 To understand the current air quality of Portsmouth in relation to national air quality regulations.

2.2.3 To understand how local air quality is monitored and the council's strategies to improve it.

2.2.4 To identify areas in the city that require improvements and how this can be achieved.

2.2.5 To consider the approach of other local authorities to see if the council could adopt measures which work elsewhere or learn lessons from their experience.

- 2.3 The panel met formally to discuss the review of air quality in Portsmouth on 6 occasions between 25 September 2012 and 14 May 2013.

2.4 A list of meetings held by the panel and details of the written evidence received can be found in *appendix one*. A glossary of terms used in this report can be found in *appendix two*. The minutes of the panel's meetings and the documentation reviewed by the panel are published on the council's website and paper copies are available from Democratic Services upon request to scrutiny@portsmouthcc.gov.uk.

3. To understand how air quality impacts on the population and to consider the purpose of local air quality management.

3.1 At the request of the panel, the Environmental Health Manager and the Environment Protection Officer explained the impact of poor air quality on the population and the purpose of local air quality management.

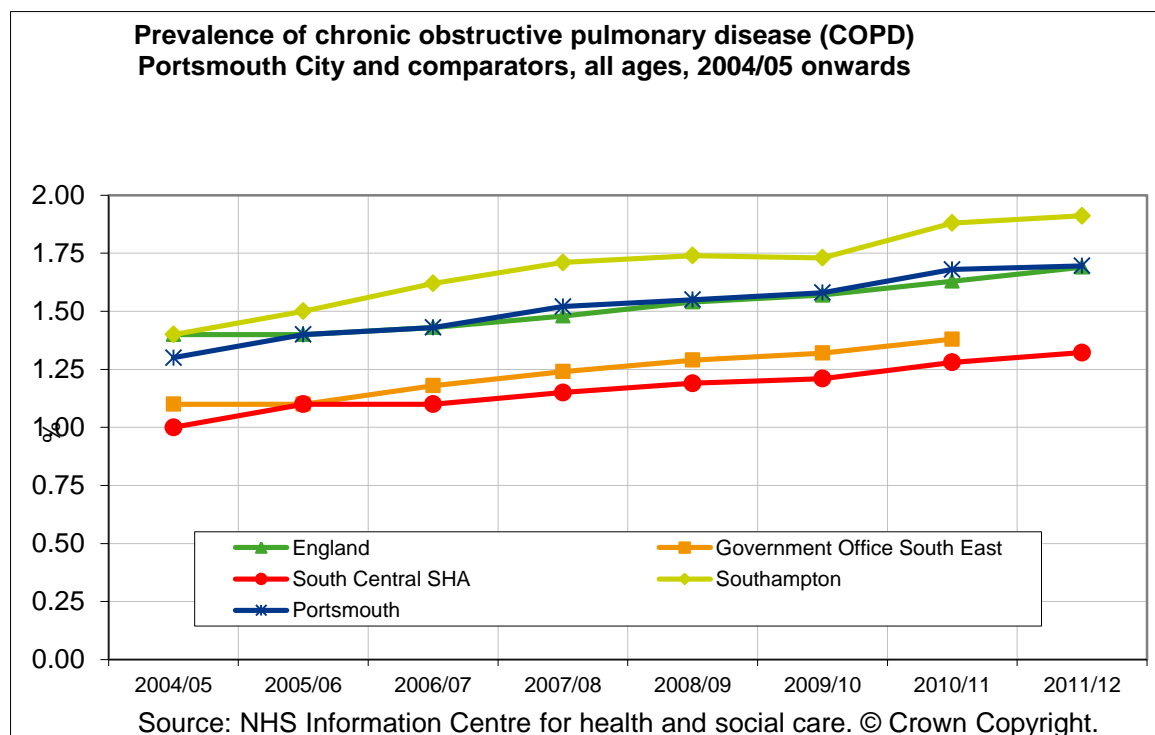
3.2 Poor air quality can have a detrimental impact on health, either by itself or in conjunction with other environmental factors or social habits: poor health; smoking; a sedentary lifestyle; poor nutrition; alcohol consumption and poverty. Reducing air pollution would therefore help improve life expectancy.

3.3 Air pollution exacerbates existing health problems. The evidence linking poor outdoor air quality and health conditions such as asthma and chronic obstructive pulmonary disease is well established (see section 3.4). Portsmouth has high levels for both conditions.

3.4 The Joint Strategic Needs Assessment¹ reported that: *In 2011/12, there were 13,626 registered patients of all ages (6.4% of all registered patients) on GP Practices' asthma registers. (NB National comparator data not yet available). In 2010/11, local prevalence was 6.3% of GP registered patients of all ages – significantly higher than national prevalence of 5.9%.*

¹ http://portsmouth.gov.uk/media/API_STR_JSNA_BURD_RESP14.pdf

Prevalence of chronic obstructive pulmonary disease 2004 - 2012²



Note: The Government Office South East consists of Berkshire, Buckinghamshire, East Sussex, Hampshire, Isle of Wight, Kent, Oxfordshire, Surrey and West Sussex.

- 3.5 Relatively high concentrations of nitrogen dioxide are an irritant causing respiratory inflammation which can increase susceptibility to respiratory infection. Evidence suggests that ambient (outdoor) concentrations of nitrogen dioxide can increase the likelihood of asthma attacks and longer term exposure can increase the likelihood of respiratory illnesses in children.
- 3.6 Two areas in Portsmouth (Air Quality Management Areas 6 and 11 - see sections 4.7, 6.3 and appendix 4 for further details) that have high levels of nitrogen dioxide fall within some of the most disadvantaged areas in the city and have some of the highest levels of smoking and other risk factors associated with lung and respiratory related ill health. The council's Air Quality Action Plan (AQAP) concluded that the city's most disadvantaged communities experience a higher risk of poor health due to localised environmental factors and as a result of lifestyle choice.
- 3.7 The Committee on the Medical Effects of Air Pollutants (COMEAP)'s report published in 2006 entitled Cardiovascular Disease and Air Pollution concluded that *'there is increasing and persuasive evidence that air pollution is associated with CHD [coronary heart disease], even at the generally low concentrations found today in the UK.'*³
- 3.8 The Committee's 2009 report on Long Term Exposure to Air Pollution: Effect on Mortality concluded that *'we are left with little doubt that long-term*

² http://portsmouth.gov.uk/media/API_STR_JSNA_BURD_RESP_COPDPprev6.xls

³ http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/ab/COMEAP/DH_108448

*exposure to air pollutants has an effect on mortality and thus decreases life expectancy*⁴

- 3.9 Its 2011 report entitled *The Mortality Effects of Long Term Exposure to Particulate Air Pollution in the United Kingdom* reported that particulates cost an "associated loss of total population life of 340,000 life-years"⁵
- 3.10 The Environmental Health Manager and Environment Protection Officer explained that epidemiological studies show that smaller particles in the ultrafine range tend to penetrate further into the gas exchange area of the lungs. However the toxicity of the particles depends on the nature of their components. These particles are arguably the most important component of ambient air quality with regards to health and are the focus of much of the current work on air quality pollution nationally.
- 3.11 Many Volatile Organic Compounds e.g. benzene and 1.3 butadiene take part in photochemical reactions with other pollutants such as oxides of nitrogen in the atmosphere to form ozone.
- 3.12 Benzene average levels in outdoor air are much lower than the national air quality objective and do not pose a measurable risk to health.
- 3.13 The council's web page on air quality⁶ states that: *The West of England University Air Quality Management Resource Centre reports that the health impacts of air quality in the UK are almost twice those of physical inactivity, [and are] estimated to be £10.7 billion per annum.*
- 3.14 On 16 March 2010, a cross-party Environmental Audit Committee (EAC) appointed by the House of Commons published the "Air Quality" document in two volumes⁷ that reported:
- *"Air pollution on UK streets is contributing to tens of thousands of early deaths each year and the government is not doing enough to tackle the problem. MPs warn that Britain could face millions of pounds in fines if our cities continue to breach EU air quality targets supposed to protect public health.*
 - *The £8-20 billion total cost of poor air quality is likely to be an underestimate. The Air Quality Strategy ignores the impact on morbidity, costing only mortality. There are additional costs to the NHS from respiratory hospital admissions triggered by air pollution. For example, in 2007/08, there were over 74,000 emergency admissions to hospital because of asthma and the NHS's non-elective spell tariff was £612 million for 2007/08. There are clear links between asthma and air quality; Asthma UK estimate the annual cost of asthma to society at £2.3 billion.*
- 3.15 Tim Yeo MP, Chair of the EAC said: *"Air pollution probably causes more deaths than passive smoking, traffic accidents or obesity, yet it receives very*

⁴ http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1317137020526

⁵ http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1317137012567

⁶ <http://www.portsmouth.gov.uk/living/22814.html>

⁷ <http://www.publications.parliament.uk/pa/cm200910/cmselect/cmenvaud/229/22902.htm>

*little attention from government or the media. In the worst affected areas this invisible killer could be taking years off the lives of people most at risk, such as those with asthma... The large EU fines we face if we don't get to grips with this problem should now focus Ministers' minds. Much more needs to be done to save lives and reduce the enormous burden air pollution is placing on the NHS.*⁸

- 3.16 The panel was advised that on 30 March 2010 Asthma UK welcomed the EAC report and the Chief Executive explained that air quality is of prime concern to people with asthma with 66% reporting that traffic fumes trigger their symptoms. He said that "*quantifying the impact of pollution on health and quality of life, as well as the costs to the NHS and the economy, would open people's eyes to the importance of improving air quality.*"⁹
- 3.17 Real time air quality information is published on Portsmouth City Council's website¹⁰ to enable residents who have asthma or other health issues to plan their routes around the city and avoid high levels of air pollution. It had been hoped that this could be developed further to allow residents to sign up to receive four texts a day informing them about the air quality in the city however this was not developed because of the costs involved.
- 3.18 At the request of the panel, the Cabinet Member for Environment & Community Safety gave evidence to the panel and she expressed the following views:
- There is no agreement regarding the causes and effects of air pollution.
 - As high levels of nitrogen dioxide are an indicator of poor air quality and consequently impact upon health, the financial responsibility for monitoring and assessing local air quality could be in part transferred to the public health team that recently moved to the council. The delivery of actions within the AQAP should remain with the Environment and Transport Team and the review and assessment of the quality of air remain with Environmental Health.
 - The Cabinet Member felt that it would be counterproductive for the government to pass on fines to local authorities for not meeting the air quality objectives when it needs to encourage industry and safeguard employment.
- 3.19 As defined by the Department for the Environment & Rural Affairs (DEFRA), the Local Air Quality Review and Assessment process is prescribed under Part IV of the Environment Act 1995 (see section 4.5-7 for details). This process requires local authorities to review local air quality and assess whether health-based air quality objectives set out in appendix 3 will be achieved. If it is predicted that these will not be achieved an Air Quality Management Area (AQMA) must be designated and an Air Quality Action

⁸ <http://www.parliament.uk/business/news/2010/03/early-deaths-from-air-pollution-shame-uk-says-report/>

⁹ <http://www.portsmouth.gov.uk/media/cab20100628r2appB.pdf>

¹⁰ <http://80.175.62.119/TodaysAirQuality.aspx>

Plan (AQAP) put in place to improve air quality to acceptable levels. This process is explained in section 4.

3.20 The council is required to carry out regular reviews and assessments of air quality in accordance with standards and objectives prescribed in regulations for the purpose of Local Air Quality Management (LAQM) before undertaking Action Planning if air quality is found to breach the regulations. In England the following regulations apply: the Air Quality (England) Regulations 2000 (SI 928)¹¹ and the Air Quality (England) (Amendment) Regulations 2002 (SI 3043)¹²,

4 To understand the current air quality of Portsmouth in relation to national air quality regulations.

4.1 The Environmental Health Manager and the Environment Protection Officer were invited to provide information to the panel about the city's current air quality in relation to national air quality regulations.

4.2 The panel heard that the national policy on air quality is currently largely driven by EU legislation. The 2008 ambient air quality directive (2008/50/EC)¹³ sets legally binding limits for concentrations of major air pollutants in outdoor air that impact public health such as particulate matter (PM₁₀ and PM_{2.5}) and nitrogen dioxide (NO₂).

4.3 This 2008 directive replaced nearly all the previous EU air quality legislation and was made law in England through the Air Quality Standards Regulations 2010, (which also incorporates the fourth air quality daughter directive (2004/107/EC¹⁴)) that sets targets for levels in outdoor air of certain toxic heavy metals and Polycyclic Aromatic Hydrocarbons (PAC). These are shown in *appendix three*.

4.4 The regulations that require local authorities to control emissions are as follows:

- The Environment Act 1995¹⁵.
- Pollution Prevention & Control Regulations 2000¹⁶ (now known as the Environmental Permitting Regulations 2007) which cover industrial pollution control.
- Section 80 of the Statutory Nuisance Environmental Protection Act 1990¹⁷ which covers neighbourhood issues.
- The Clean Air Act 1993¹⁸ which allows local authorities to control emissions from stationary combustion sources.

4.5 The LAQM statutory drivers are as follows:

- Part IV of the Environment Act 1995¹⁹ which sets out the framework for LAQM in the UK Duties.

¹¹ <http://www.legislation.gov.uk/ukxi/2000/928/contents/made>

¹² <http://www.legislation.gov.uk/ukxi/2002/3043/contents/made>

¹³ http://ec.europa.eu/environment/air/quality/legislation/existing_leg.htm

¹⁴ <http://ec.europa.eu/environment/air/legis.htm>

¹⁵ <http://www.legislation.gov.uk/ukpga/1995/25/contents>

¹⁶ <http://www.legislation.gov.uk/ukxi/2000/1973/contents/made>

¹⁷ <http://www.legislation.gov.uk/ukpga/1990/43/section/80>

¹⁸ <http://www.legislation.gov.uk/ukpga/1993/11/contents>

¹⁹ <http://www.legislation.gov.uk/ukpga/1995/25/part/IV>

- The Air Quality Regulations 2000²⁰ which cover the designation of an AQMA by means of an order under section 83(1) of the 1995 Act²¹.
- Section 84(1)²² of the 1995 Act requires local authorities to carry out a further assessment of air quality within 12 months of the designation order
- Section 84(2)²³ requires the preparation of an AQAP to be submitted between 12-18 months following the designation order.
- Air Quality (Amendment) Regulations 2002²⁴ which prescribes air quality objectives and the dates for achieving them.

4.6 As stipulated in part IV of the 1995 Environment Act, the government published a national Air Quality Strategy (AQS)²⁵ and established the system of LAQM which covers the following pollutants:

- Benzene
- 1.3 Butadiene
- Carbon Monoxide
- Lead
- Nitrogen Dioxide
- Particles
- Sulphur Dioxide.

4.7 Consequently, in 2005, Portsmouth City Council reviewed and assessed the city's air quality and declared 13 AQMAs where levels of nitrogen dioxide were above the National Air Quality Objectives (NAQO) set to protect health. These are attached as *appendix three*. It was required to publish an AQAP in order to work towards meeting the objectives. The first draft was produced in 2007 and, although not formally adopted, many of the proposed actions were implemented as part of the Local Transport Plan (LTP). Given that the 2007 draft version of air quality action plan was not adopted, the document cannot be considered as the council policy document. However the 2010 air quality action plan was formally adopted in its entirety and annexed to the LTP3.

4.8 In July 2007 the government updated its AQS to deliver long-term improvements in air quality. If levels of nitrogen dioxide continue to increase, the local authority will not meet the objectives set by the government by the extended deadline of 2015. It is not known whether the EU will take any action when this is reported.

4.9 There is however some concern amongst critics that the government's plans are still not stringent enough, that thousands of lives are being put at risk and the health of many more people damaged by the UK government's failure to adhere to strict EU regulations on air pollution. In the recent past Government Ministers have been accused by the EAC "actively trying to dilute safety standards²⁶", in order to avoid fines from the EU for breaches of the rules.

²⁰ <http://www.legislation.gov.uk/uksi/2000/928/contents/made>

²¹ <http://www.legislation.gov.uk/ukpga/1995/25/section/83>

²² <http://www.legislation.gov.uk/ukpga/1995/25/section/84>

²³ *ibid*

²⁴ <http://www.legislation.gov.uk/uksi/2002/3043/contents/made>

²⁵ <http://archive.defra.gov.uk/environment/quality/air/airquality/strategy/documents/air-qualitystrategy-vol1.pdf>

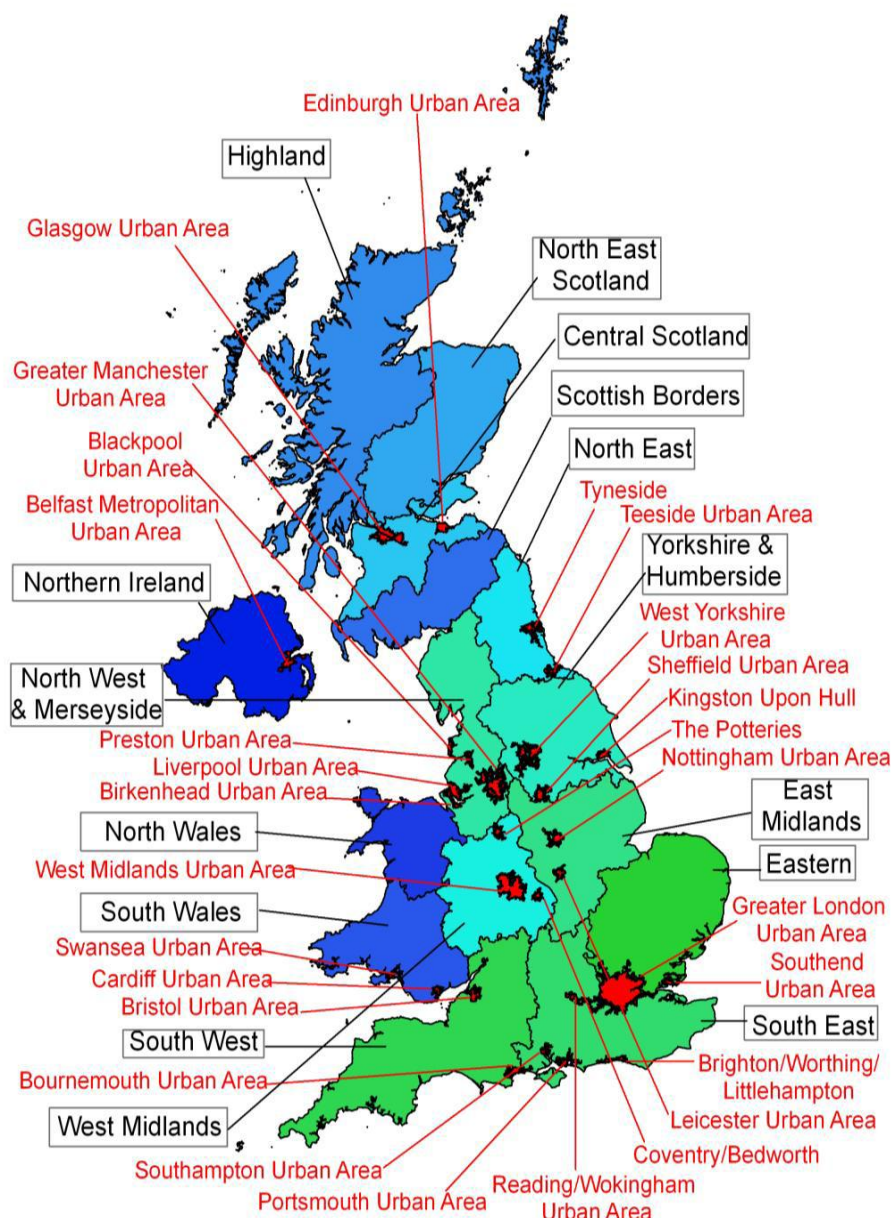
²⁶ <http://www.parliament.uk/business/committees/committees-a-z/commons-select/environmental-audit-committee/news/air-quality-a-follow-up-report/>

- 4.10 EU annual mean legal limits for nitrogen dioxide are set at 40 micrograms per cubic metre. For every year that the limits are breached, the UK can face fines of £300 million. Spain has incurred fines for this in the past. However, UK infringement fines are likely to be a long way away off as only 2% of EU infringement cases end in fines being levied and matters are generally resolved before they get to court.
- 4.11 The UK could however also face fines over any failure to meet or put in place new measures for EU nitrogen dioxide targets for 2015. A campaign group ClientEarth²⁷ has taken the UK government to the Supreme Court over the issue. ClientEarth is hoping for a judgement on the case to be made very shortly, which could eventually force the government to introduce more stringent measures for UK nitrogen dioxide levels or face infringement fines from the EU.
- 4.12 Following the 2009 Further Assessment carried out by the council it was evident that the quality of ambient air in Portsmouth had improved sufficiently to enable 8 of the 13 AQMAs declared in 2005 to be revoked. In 2010 the council reviewed the 2007 AQAP and published a new one²⁸ which set out to:
- Identify and assess measures implemented since 2007
 - Identify the causes of pollution
 - Identify specific target 'hotspot' areas for improvement
 - Devise actions to deliver improvements in the target 'hotspot' areas
 - Devise actions to deliver city wide and continuous improvements in air quality
 - Improve cross-service working
 - Improve public awareness
 - Make significant progress towards reducing exposure to poor air quality by 2014 and improve the air which we all breathe.

²⁷ www.clientearth.org/

²⁸ <http://www.portsmouth.gov.uk/media/tecs20120925r4AQAP.pdf>

Air Pollution in the UK 2011 - Compliance Assessment Summary²⁹.
UK zones and agglomerations for ambient air quality reporting 2011



© Crown copyright. All rights reserved Defra, Licence number 100022861 [2012]

Agglomeration zones are shown in red and non-agglomeration zones in blue/green.

4.13 The UK is divided into 43 zones for air quality assessment. There are 28 agglomeration zones (large urban areas) and 15 non-agglomeration zones. The majority of zones and agglomerations in the UK had locations with measured or modelled annual mean nitrogen dioxide concentrations higher than the annual mean limit value (40 µg m⁻³). This was the case in 40 out of the 43 zones. The following three zones met the annual mean limit value in 2011:

²⁹ http://uk-air.defra.gov.uk/library/annualreport/air_pollution_UK_2011_Compliance_Assessment_Summary.pdf

- Blackpool Urban Area (UK0022)
- Highland (UK0039)
- Scottish Borders (UK0040)

4.14 The UK has been granted a time extension until 2015 for compliance with the nitrogen dioxide annual limit value in the following zones and agglomerations:

- Nottingham Urban Area,
- Leicester Urban Area,
- Portsmouth Urban Area,
- Reading/Wokingham Urban Area,
- Southend Urban Area,
- Edinburgh Urban Area,
- Cardiff Urban Area,
- Central Scotland zone, and
- North Wales zone.

5 To understand how local air quality is monitored and the council's strategies to improve it.

5.1 The panel received evidence from the Environmental Health Manager and the Environment Protection Officer on how local air quality is monitored and the council's strategies to improve it.

5.2 The council employs one Environment Protection Officer who has sole responsibility for the LAQM process which covers:

- Air quality monitoring;
- Air quality review and assessment;
- Reporting statutory returns to DEFRA;
- Appraising air quality assessment reports submitted as part of the planning application process for developments that are likely to have an impact on local air quality.

5.3 Nationally the number of cars on the road, the number of miles travelled by car and emissions produced by cars and shipping have reduced. Engine efficiency due to advances in technology improved significantly but has now levelled off. Despite this, air quality has deteriorated since 2010.

5.4 In Portsmouth, HGVs alone cause around 45% of nitrogen dioxide emissions, but are crucial for the city's economy. As Portsmouth is an island, traffic does not flow through the city easily and therefore there is a significant congestion problem. The council needs to develop new ways to reduce the number of vehicles on the road. Although the council also wants to encourage more visitors to the city, it is aware that an increase in traffic would increase air pollution.

5.5 All likely sources of pollution were subjected to a series of assessments prescribed by DEFRA: Updating & Screening Assessment; Detailed Assessment and Dispersal Modelling. Numerous input data was used such as road traffic average speed, annual average daily traffic volume, percentage of HGVs and a meteorological file. The results identified road traffic as the main source of nitrogen dioxide.

- 5.6 Air pollution, particularly nitrogen dioxide and PM₁₀ are monitored continuously at the following four locations:
- Gatcombe Park,
 - London Road,
 - Burfields Road,
 - Mile End Road.
- 5.7 Nitrogen dioxide monitoring is expanded locally to an additional 36 locations using diffusion tubes. A small tube containing a mesh to absorb nitrogen dioxide is placed at key sites and the levels absorbed are analysed every month.
- 5.8 The council also carries out a co-location study where diffusion tubes are placed at each of the four continuous air quality monitoring stations set out in section 5.6 to generate a bias correction factor. Diffusion tube precision can be described as the ability of a measurement to be consistently reproduced, i.e. how similar the results of duplicate or triplicate tubes are to each other. Accuracy represents the ability of the measurement to represent the 'true' value, which is defined as the result from the automatic analyser. When averaged over a number of sets of results bias can be evident. This represents the overall tendency of the diffusion tubes to depart from the 'true' value, i.e. to systematically over-or under-read when compared against the reference method. Once identified, bias can be adjusted for to improve the accuracy of diffusion tube results. This is done using bias adjustment factors, which are specific to a laboratory and tube preparation method.
- 5.9 Detailed dispersion modelling is carried out using software to predict future air quality. The results for future years are normally lower than the baseline year because the modelling software takes into account all emission factors, including the introduction of more efficient new cars and the removal of the older cars with worse emissions. These factors are reviewed by DEFRA as and when necessary.
- 5.10 The outcome of this modelling is compiled into an annual report in accordance with DEFRA's guidance. This report is a statutory requirement and is subjected to an appraisal by a qualified independent air quality consultant on behalf of DEFRA. Once finalised, the report is filed in the public register.
- 5.11 When required, developers submit environmental impact assessments of proposed development with their planning applications. It is essential that the design and abatement technology is the best it can be to reduce the impacts upon local air quality and climate change. Such impacts are carefully considered through the planning processes and during the submission of environmental impact assessments by the Environmental Protection Officer who can suggest measures to minimise the impact on health for residents of the proposed new development. These measures can include setting the development back from the kerbside of the road by a few metres, or having non-opening front windows with mechanical ventilation drawing air from a clean location.

5.12 The Environmental Health Manager and the Environment Protection Officer explained that any measures taken to tackle air quality could have an impact on the city's economy in general and on tourism in particular, and care must be taken that air pollution is not displaced to another part of the city. These measures could cover the following areas:

- City wide non-traffic related measures (background emissions).
- Transport schemes.
- Public information/ enforcement.
- Policy.
- Parking.
- Technology.

5.13 In order to reduce air pollution, improve safety, encourage footfall and to improve the economy, HGVs were diverted from the north of London Road and to seek an alternative route along the M275 to reach the Continental Ferry Port. Further measures are required to reduce pollution levels and in particular nitrogen dioxide across the city.

5.14 The Environmental Health Manager monitors research into air quality technology

5.15 The Labour Party's Shadow Spokesperson for Environment & Community Safety explained that although work was recently carried out at the entrance of Trafalgar Gate to alleviate traffic congestion, he felt that more could be done for example the introduction of staggered arrival and leaving times for naval base staff.

5.16 The Cabinet Member for Environment & Community Safety explained the following points to the panel:

- Some schemes, including the Combined Heat and Power systems help improve air quality nationally (paragraph 5.19 - action 3), but in the areas where they are located the air quality is actually worsened. The Cabinet Member assured the panel that she would only support measures that produced local benefits.
- Under the City Deal (a regeneration package for the Solent area) parts of the motorway may be adopted by the council and its partners. This could have significant implications for air quality management as it would enable initiatives to be combined into regional approaches to air quality management rather than local initiatives. Such initiatives could also aid Gosport, Fareham and Southampton.
- As part of the contract with Veolia, all power generated by the incinerator in Quartermaine Road³⁰ is sold to the National Grid. In future, any heat generated from new or retrofit schemes will be used in the city where possible.
- The main causes of air pollution are traffic which accounts for 70%, particularly Heavy Goods Vehicles (HGVs) and shipping. A review in 2006

³⁰ <http://www.portsmouth.gov.uk/media/Incinerator.pdf>

showed that shipping only contributes approximately 5% of air pollutants. Traffic management is not within her portfolio's remit.

- This work is overseen by the Environmental Health Manager who is also responsible for many other council duties. The Cabinet Member feels that the Environmental Health Manager and the Environment Protection Officer carry out their duties extremely well.
- In 2010/2011 the council's application for a grant of £20,000 to maintain its Air Quality Monitoring Stations was declined. Subsequent grants have been unavailable for this purpose. The withdrawal of this grant had a significant effect on the small air quality team. The administration was informed of this growth pressure but no funding was available due to the austerity measures. Therefore, the Cabinet Member used part of an under spend to cover the air quality deficit and a three year maintenance contract was introduced for the air quality monitoring equipment. Air quality has not been mentioned in the budget proposals at the time of this report being published.
- Although responsibility for monitoring air quality lies with the environment portfolio; all Cabinet Members are responsible for delivering solutions.
- Political leadership is essential in order to improve air quality.

5.17 The Labour Party's Shadow Spokesperson for Environment & Community Safety explained that his understanding was that there had been an improvement in air quality nationally despite an increase in traffic.

5.18 The Cabinet Member for Traffic & Transportation explained that:

- His aim is to reduce traffic volume because the city has finite space. Mid-term predictions estimate that there will be 16% more traffic on the roads by 2020; the more traffic there is on the roads, the more air pollution is emitted. The council cannot impose limits on the number of cars owned; it can only use its resources as effectively as possible and investment is the key to easing congestion.
- A significant amount of work has been carried out to reduce carbon levels.
- Air pollution has been an issue for many years and is the joint responsibility of many departments.
- Introducing a congestion charge is not a viable option.

5.19 The 2007 draft AQAP set out 29 measures to improve air quality in Portsmouth. Updates on these were reported in the 2010 AQAP which was agreed by the full council and annexed to the Local transport Plan 3³¹. The panel was given the following further updates on the progress made so far:

1. Review and Assess Air Quality.

- **Review and assess the air quality in the city using four continuous monitoring stations and numerous diffusion tubes.**
- **Produce annual action plan progress reports to assess implementation against the indicators.**

This monitoring and assessment is carried out by the council and is explained in sections 5.6- 5.10.

2. Regulation of Industrial Processes.

- **Regulation of industrial emissions is achieved through the integration of air quality considerations into the local authority's regulation of pollution, prevention and control regulations.**
- **Reduction of organic solvent emissions is carried out in accordance with the solvent emission regulations.**

The council issues four-yearly environmental permits for industries in order to monitor compliance with the permitting conditions set to control emissions into the atmosphere. There are 75 industries that are regulated under this scheme, typically those that coat or create dust.

3. Domestic Heating Emissions.

- **Control of replacement gas fired boilers and central heating systems through building control and private sector housing teams.**
- **Providing advice to consumers and landlords on investment in condensing gas fired boilers where possible.**
- **Implement sustainable development strategies – careful consideration of combined heat and power.**

Assistance to replace inefficient heating systems with A rated boilers or heating systems is offered to households whose properties are judged to be the least economical to heat and would produce the highest fuel bills. This is calculated using Standard Assessment Protocols (the Department for Energy and Climate Change's methodology for assessing and comparing the energy and environmental performance of dwellings). Assistance is also given to households suffering from fuel poverty or where inadequate heating exists.

Complaints of inadequate heating from tenants are investigated by Housing Standards Officers using the Housing Health Safety Rating System. This is a risk-based evaluation tool to help local authorities identify and protect against potential risks and hazards to health and safety from any deficiencies identified in dwellings. It was introduced under the Housing Act 2004 and applies to residential properties in England and Wales. Twenty nine categories of housing hazard are assessed, including excess cold, damp and

³¹ <http://www.portsmouth.gov.uk/media/cab20110110r5app1and2.pdf>

mould, and electrical hazards. Each hazard is given a score according to how likely is that someone could come to harm, as well as how serious this harm could be. For instance, how likely someone could come to harm from excessive cold in the home, and if they did would they suffer mild illness, or be hospitalized etc. This score is then divided into one of two groups, category 1 hazards are those that have a high score and are considered serious hazards. Category 2 hazards have a lower risk score, but still represent a risk to occupants of the property, although this risk of harm is lower than a category 1 hazard. The council aims to address all hazards found in a property, but has a mandatory duty to address Category 1 hazards. All households are also offered energy efficiency advice from the Energy Efficiency Officer.

The Community Housing Team works to improve the efficiency of boilers in council housing stock.

Combined heat and power systems integrate the production of usable heat and power (electricity) in one single, highly efficient process. Page 24 of the 2010 AQAP³² shows that although this could have a positive impact nationally, it could also have a negative one locally. One example is the introduction of larger plants which means fewer emissions nationally but an increase in the areas where these are located.

4. Energy - Saving Measures.

- **The promotion of energy saving measures leading to reductions in combustion emissions across the city. To be conducted through Portsmouth Sustainability Action Group (PSAG).**
- **Continued implementation of Portsmouth climate change strategy to reduce energy use for both organisations and housing across the city.**

The Principal Climate Change & Sustainability Co-ordinator meets regularly with all partners to discuss the Climate Change Strategy Action Plan. The results of how the group is reducing its carbon footprint by reducing energy consumption and staff travel are published on the council's website³³.

5. Workplace Travel Plans.

Work continues as these are required as part of the planning process.

The council's travel plan

The council's travel plan is currently being developed and includes measures such as using Common Wheels cars as pool cars, offering staff 10% off annual rail travel, bus taster tickets and using the Hampshire car share database.

Focus groups are being held in Environment & Transport and Children & Adult Social Services departments to look at how staff travel to and from work and what transport they use for business travel during the day. This will be opened up to the whole council and the results will feed into the travel plan.

³² <http://www.portsmouth.gov.uk/living/22804.html>

³³ www.portsmouth.gov.uk/living/28058.html

Additionally, a travel to work staff survey is conducted every two years and has a high response rate. The results of these and other surveys will feed into the plan to set agreed objectives and targets for the whole council to enable council staff to work smarter and more energy efficiently.

During 2013/14 the council will trial six pool bus passes for selected services to use. If successful this will be rolled out to the wider council and may offer a solution to other businesses in reducing the grey fleet mileage.

Work-place travel solutions

The Local Sustainable Transport Fund (LSTF) has enabled the creation of an Influencing Travel Officer to encourage people to use sustainable methods of transport. The main focus of the post is the development of business travel plans.

Business or work-place travel plans come under two guises, firstly as part of the planning process whereby new developments are required to have one in place and the optional travel plan whereby businesses choose to develop one.

Companies can bid for financial support from the LSTF to put in place measures which will encourage sustainable travel e.g. cycle parking, showers, pool, bikes/cars, membership of a carshare database, equipment that enables home-working etc. These projects will target workplaces, visitors and residents.

Other supporting services to aid the development of travel plans is the SignPOST Travel Forum which comprises local organisations committed to supporting sustainable transport in the Portsmouth area. Members include representatives from the local authority, the Chamber of Commerce & Industry and large and small organisations.

In addition, the Go Green newsletter is published on the council website³⁴ to provide the latest sustainable travel news.

A workplace commuter challenge (formerly known as the BIG Green Commuter Challenge) is planned for 2013. This is part of an Active Travel programme run by Sustrans on behalf of Transport For South Hampshire.

6. Promote Walking.

- **Work continues – audit of walking routes commenced – development of ‘walking map’ linking places of interest.**
- **Work continues to improve safety in regional shopping areas with traffic engineers to identify and improve pedestrian crossing facilities.**
- **Raise public awareness of issues relating to air quality.**

An active travel map was produced in 2012 which details walking and cycling routes. This is published on the council website³⁵ and a hard copy is available upon request to travel@portsmouth.gov.uk.

³⁴ <http://www.portsmouth.gov.uk/living/22043.html>

³⁵ <http://www.portsmouth.gov.uk/living/593.html>

A wayfinding post will be installed in the city centre in late July/ early August and will show how long it would take to walk to key attractions. Information boards will be placed at key locations across the South East of the city. These will show concentric circles to indicate distances and identify key routes passing shops and visitor attractions, restaurants etc. These will also link in to the bus network.

A marketing campaign will precede the launch of the on-street travel advisors at key locations.

The on-street advisors will focus on transport hubs (rail stations and bus interchanges) where the intention is to mainly help visitors but will also include local residents or employees) who may need advice about how to get about.

The pavement in London Road was widened to enhance the shopping experience of the area by ensuring that pedestrians felt safer and enjoyed the experience more. It was envisaged that enhancing the pedestrian experience would bring about gains to increased activity and growth whilst serving to improve pedestrian safety in the area.

Pedestrian crossings signalisation was introduced at:

1. Albert Road/ Waverley Road; Albert Road/ Elm Grove.
2. Elm Grove/ Victoria Road North.
3. London Road / Kingston Rd and Crescent.
4. Velder Avenue.

7. Promote Cycling.

- **Work continues to reduce speed on side roads to 20mph.**
- **Cycling strategy being implemented as part of LTP programme. Implementation of schemes to promote the advantages of cycling as well as ensuring routes and secure storage provisions are enhanced.**
- **Raise public awareness of issues relating to air quality.**

Secure bicycle parking and local route enhancements have been introduced as part of the Development Control process. Cycle route improvements are to be carried out as part of LSTF at various locations including the seafront and the Western Active Travel Corridor.

South Western Trains will operate a cycle hire system and provide lockers for foldable Brompton bicycles. An additional cycle hire scheme funded by the LSTF will operate at hubs across the city including the university.

Secure cycle parking in the main shopping areas will be upgraded and additional storage will be provided by local businesses through the travel plan project in the LSTF. On-street cycle parking will be improved in the town centre, The Hard and Palmerston Road.

The council has applied to DEFRA for funding to implement a Workplace Cycle Challenge for local businesses to increase cycle use. This project will involve close monitoring of the carbon saving accrued.

Between 200 and 250 ten year olds took part in cycle training last year. This year, through the new Bikeability Programme it is expected that more than 1,000 will be trained. The aim is to create more confident adult cyclists and has been welcomed by schools.

8. Air Quality Information.

Provision of information regarding air quality, including real time monitoring data and information regarding assessments of air quality to enable public awareness of issues and success of actions implemented.

This real-time information is published on the council's website³⁶.

9. School Travel Plans.

Work continues to reduce single pupil journeys and encourage alternatives to car travel such as route improvements, walking buses, cycle storage and to raise air quality awareness in schools.

A School Travel Advisor, funded by the LSTF, works with schools on their travel plans and minor remedials (bollards, signs and lines) to make the area around them safer. In addition the postholder works with the Road Safety Officers in the delivery of education, training and publicity around walking and cycling initiatives.

The following cycle training has been introduced:

- Bikeability level 3 (year 7) at Priory and Milton Cross schools which covers riding on busy roads and junctions.
- Bikeability levels 1 & 2 for year 5 and 6 pupils. Approximately 1,100 children were trained by end of the financial year 2012/13.
- 700 year 1 pupils will have received pedestrian training by the end of the 2013/14 academic school year

10. Creation of Portsmouth City Council Transport Manager.

In place January 2010 – ensuring all council vehicles are pooled to maximise sharing opportunities; all vehicle purchasing (including improving emissions) and leasing arrangements to be subject to a financial appraisal and involve consultation with the transport manager, rationalisation of the vehicle fleet with the elimination of spare capacity, evaluate the feasibility of social care utilising bus lanes.

The initial focus of the Transport Manager (who was appointed in 2010) was to consolidate the council's existing fleet into fewer vehicles (a reduction from 107 vehicles to 100 vehicles has been achieved) and to ensure that a council-wide procedure was established when services wished to replace existing or procure additional vehicles. Potential environmental impact is now a consideration of all new vehicle procurement. In addition, the terms and conditions of all vehicle leases have been standardised across the council and vehicles with expired leases replaced. The result of this activity has been a large vehicle renewal programme. Newer vehicles meet stricter emission standards and manufacturers are engaged in a permanent quest to make vehicles more economical. Large vans are now Euro 4 or Euro 5³⁷ compliant

³⁶ <http://80.175.62.119/TodaysAirQuality.aspx>

³⁷ http://transportpolicy.net/index.php?title=EU:_Heavy-duty:_Emissions

and the average Carbon Dioxide (CO₂) emissions across the entire fleet is 149g/km as opposed to 250g/km in 2010.

A fleet or transport function has its CO₂ emissions measured annually using a formula of grams of CO₂ per kilometre times the total number of kms travelled. The council has base line data for 2010/11 which shows its own fleet activities accounted for 316,000 tonnes of CO₂ produced. In 2011/12 that figure had reduced to 301,000 tonnes and it is expected that 2012/13 will produce further reductions.

The vast majority of the council's fleet has diesel engines; these are more thermally efficient than petrol engines. Diesel engines size for size also produce fewer CO₂ emissions than petrol engines. However in terms of local air quality diesels produce far more nitrogen dioxide and particulate matter than petrol. Therefore the vehicle fleet operator is faced with a choice: choose diesel and use less of a diminishing resource and contribute less to the 'greenhouse' gases or choose petrol which is more beneficial to local air quality but contributes more to the greenhouse effect. To confuse the matter further, petrol is currently significantly cheaper to buy than diesel. Petrol engines are making more inroads in to Light Commercial Vehicle engines but diesel remains the fuel of choice for most Fleet Managers.

A further project is being proposed to consolidate and rationalise other transport functions throughout the council. If adopted, this proposal aims to reduce the duplication of resources and further eradicate inefficiencies in transport planning and procurement.

11. High Occupancy Vehicle Lanes.

- **Assess specific routes and consider feasibility of locations.**
- **Develop and undertake feasibility study. Implementation linked to Transport for South Hampshire's traffic management strategy.**

These are very difficult to enforce and there is not sufficient room for a high occupancy vehicle lane in the city.

12. Park and Ride.

- **Through redevelopment/ regeneration of Tipner and Horsea Island, secure a P&R facility offering 663 spaces together with a fast bus service running regularly to city centre and the Hard.**
- **The council has undertaken soft marketing with bus operators via the PIN [Prior Information Notice] procurement process. We are currently running an interim solution in operation on Saturdays and bank holidays and Portsmouth Football Club home match days.**

Park and Ride is due to open in April 2014 for 663 spaces and will have the potential for more. The operating strategy is currently being developed and work is continuing with bus operators regarding the sort of service to be provided. An environmental consultant is examining the cost and frequency of the services required. The buses are envisaged to provide an attractive, reliable service from Tipner to The Hard via the city centre.

The Cabinet Member for Environment & Community Safety Portfolio suggested that Park and Ride should be free if possible to ensure usage and in order for this to happen, local councillors will need to support it.

The Labour Party's Shadow Spokesperson for Environment & Community Safety Portfolio explained that the council should provide an incentive to encourage use of the Park and Ride facility.

13. Traffic Control Southbound M275 Slip.

Consider feasibility and introduction of priority signalling at M275 slip on to roundabout to prevent/ control peak hour queuing, preventing 'queue jumping' and additional associated impacts upon Kingston Crescent and AQMA 6.

Improvements to the junction and roundabout will be linked to development of Tipner Park and Ride and buses will be given priority.

14. Traffic control Mile End

Introduction of measures to improve southbound traffic by introducing signals at Church Street, preventing traffic accessing Church Street from Hope Street, elimination of 'queue jumping' by making All Saints Street one way (west).

Updated plans are to be included in the final City Centre Masterplan and are linked to the Northern Quarter development. All in/out traffic will be routed to the west (Hope Street); local traffic and bus priority route to the east via a roundabout and then around the edge of the development. Two way accesses will be introduced into Wingham Street and access to Church Street.

15. Junction Improvements

Possible improvements of all traffic controlled junctions throughout AQMA 6 (all three sections). Co-ordination of signal operation through Microprocessor Optimised Vehicle Actuation (MOVA) (or similar) with particular attention paid to:

- a) London Road/ Stubbington Road through roundabout.
- b) London Road/ Kingston Crescent.
- c) Kingston Road/ New Road
- d) Fratton Road/ Arundel Street
- e) Roundabout at Fratton Road – Victoria Road North – Goldsmith Avenue
- f) **Review all junctions city-wide, starting with AQMAs, to increase effectiveness and prevent unnecessary congestion.**

MOVA was designed by Transport Research Laboratory during the 1980s and is now a very well established strategy for the control of traffic light signals at isolated junctions i.e. junctions that are uncoordinated with any neighbouring signals. It can also be used at stand-alone pedestrian crossings, i.e. puffin and pelicans. Currently the UK is thought to have at least 700 sites equipped with MOVA with each year seeing at least another 100 installations. Although designed for isolated junctions, a number of linked schemes have also been installed.

It is designed to cater for the full range of traffic conditions, from very low flows through to a junction that is overloaded. For most of the range before congestion occurs, MOVA operates in a delay minimising mode: if any approach becomes overloaded, the system switches to a capacity maximising procedure. MOVA is also able to operate at a wide range of junctions, from the very simple 'shuttle-working', to large, multi-phase multi-lane sites

DEFRA awarded the council an air quality grant of £60,000 for 2012 to 2013. This was to fund a feasibility study on the optimization of the existing road traffic management system to deliver air quality with a possible recommendation for junction improvement if and when necessary. This project is already underway and the open bid process is being prepared. It will take the form of a set of feasibility studies to focus on testing ways to regulate and improve road traffic flow management to achieve an improvement in local air quality without creating new air pollution hotspots. The following provisional project timetable has been submitted to DEFRA:

First Package	
<u>Extensive traffic survey</u>	
Start date	1st March 2013
Completion date	30 April 2013
Second Package	
Road traffic micro-simulation in conjunction with road emission determination	
Start date	1st May 2013
Completion date	31 December 2013
Third Package	
Air quality assessment	
Start date	1st January 2014
Completion date	21 April 2014
Project Profile	
31/11/2012	Start of the tendering process for the three packages individually.
31/12/2012	Decision on the tendering process and start of the project.
31/03/2013	The project is half way through the First Package.
30/04/2013	Completion of the first Package.
30/04/2013	Start of the first part of the third package (To

	produce the output model for both baseline and do minimum scenarios).
30/06/2013	The project is half way through the first part of the second Package.
30/09/2013	Completing of the first part of the Second Package.
31/12/2013	Completion of the second part of the Second Package.
01/01/2014	Start of the second part of the third Package (air quality modelling of the selected tested scenarios).
21/04/2014	Completion of Third Package.
31/05/2014	Submission of AQ Progress Report to DEFRA
31/05/2014	Submission of the project report to DEFRA and PCC Transport department.

The scope of the project study area will not be confined immediately to the road network within the five remaining AQMAs but will extend to both adjacent junctions and corridors linking to AQMAs (6,7, 9, 11 and 13). Road layout has been reconfigured and the work is to be carried out under the LSTF programme.

- a) No update
- b) Road layout has been reconfigured. There are further junction improvements planned as part of LSTF
- b) Work to be carried out under the LSTF programme.
- c) New pedestrian crossing and traffic lights in place
- d) There are currently no plans to undertake any improvements at this junction
- e) Improvements to this area may be considered for future funding.
- f) This review is likely to form part of the remit of the Traffic Management team once the newly appointed Senior Traffic Systems Engineer joins the council at the end of February 2013.

16. Variable Message Signs.

Several already in place – further to be rolled out at car parks and providing route guidance.

This action has been completed.

17. Freight Quality Partnership.

Working closely with freight supplies (particularly local) to ensure the most appropriate routes are undertaken through AQMAs and via PIGY [the Portsmouth Intermodal Goods Yard] and particularly AQMA 6 (Norway Road – Continental Ferry Port).

No resources are available to establish a partnership to ensure the most appropriate routes are undertaken through AQMAs and via the Portsmouth Intermodal Goods Yard and particularly AQMA 6 (Norway Road – Continental

Ferry Port). It is difficult to move freight between Fratton station and the port due to existing road/ rail infrastructure.

18. Regeneration of North End Shopping Area Traffic Initiatives.

Combination of the above and complex proposals designed to facilitate regeneration, improved road safety and to improve air quality. Scheme to include:

- **Implementation of traffic control systems.**
- **Restriction of HGV access/ movements [as above].**
- **Introduction of speed restrictions.**
- **Time related vehicular prohibitions.**
- **Parking/ delivery controls [consideration given to the removal of on-street parking to improve hourly flow rates] offset by increased patronage of local off-street parking potential [short term free parking.**
- **Some elements of the coloured surfacing are still outstanding.**

This was completed in 2012

19. Hampshire Terrace Junction with St Michael's Gyratory.

St Michael's gyratory effectively operates as a roundabout. Traffic travelling north on Hampshire Terrace must give way to traffic on the circulatory carriageway of the gyratory. Due to the high volumes of traffic exiting the city, predominantly during afternoon peak hours, large traffic queues form on Hampshire Terrace. The pedestrian crossing signals, a short distance to the north of the junction, exacerbates the problem, as circulatory traffic does not have the appropriate forward visibility. The introduction of traffic signal control at this point would improve traffic flow on Hampshire Terrace and reduce the existing queue. A feasibility study has been undertaken and the council will shortly evaluate the findings.

Modelling and surveys to inform design have been carried out and the findings are being reviewed. If approved, an application would be made to the LSTF Board to commence with the proposal.

Planning Policy drew up a plan for the City Centre Masterplan, whereby Lord Montgomery Way would be stopped up to provide an improved pedestrian and cycle friendly area with St Michaels Road and King Richard 1 Road becoming two way.

20. Queen Street Junction with Anglesea Road.

Traffic management improvement at lights – linked to above scheme to prevent desire to 'queue jump' navigate /queue causing congestion and traffic stacking in other areas.

As part of LSTF programme, consideration is being given to installing a toucan crossing in Queen Street.

21. Public Transport Initiative I.

Re-development of the Hard gateway and Portsmouth & Southsea (Commercial Road) interchange – Sub-regional Hubs. Providing improved links to rail and ferry services and improving pedestrian, cycle links to Gunwharf Quays and city centre principal shopping areas.

The recent pre-planning application of Brunel House has initiated discussions and development of the Hard Interchange. A report will be presented to Informal Cabinet in due course to understand how this project is moved forward.

The Portsmouth LSTF has a number of projects to improve links across all sustainable transport modes. These projects are currently being developed and delivered over the 3 year funding period 2012-2015. The projects specific to this initiative include:

- Real Time Passenger Information (RTPI) on buses
- Legible Bus Networks
- Wayfinding
- Station Travel Planning
- Smart ticketing on buses and ferries
- Tipner to Gunwharf ferry

22. Public transport initiative II

LTP to deliver improved and integrated network of public transport services that give priority to delivering better local bus services in partnership with operators by making more use of bus quality partnerships. Continue to improve transit systems (additional to express services), increase opportunities for interchange between the public transport network and all other modes of transport (further introduction of local hub at Portsmouth & Southsea rail station) and promote demand-responsive transport services to sectors and areas with low accessibility.

Demand-responsive transport services are provided through a Dial a Ride service financially supported by the council. This provides pre-booked journeys, picking passengers up from home and taking them to friends, relatives, education, leisure and key local destinations. It is a planned response to gaps within the current public transport network for people who find it difficult or impossible to use public transport. The service operates throughout the day Monday to Sunday throughout Portsmouth.

Taxis are vital to the functioning of the conurbation, providing:

- An alternative to the private car for those who do not own one;
- Support for the night-time economy (when people wish to leave their car at home);
- The final 'leg' of a public transport journey; or
- A backup mode when other arrangements fail.

In recognition of their role in supplementing the public transport network, hackney cabs are permitted to use bus lanes throughout Portsmouth.

Hampshire County Council, Portsmouth City Council and The South Hampshire Bus Operators' Association share the common objective of increasing the use of public transport in South East Hampshire. High quality public transport systems can play a significant role in addressing the issues of traffic congestion, air quality and carbon emissions and can help to promote economic growth and facilitate development in the sub-region. The signatories believe that high quality, reliable and frequent Bus Rapid Transit (BRT) services can best be delivered through a partnership approach of Local Highway Authorities and Operators. The partnership is working together to deliver BRT routes between Clanfield & Waterlooville, Havant and Fareham into Portsmouth.

Transport for South Hampshire (TfSH) will act as the over-arching bidding Authority for bids to secure Government funding. Operators will seek to secure approval from within their respective companies for investment in vehicles, staff, ticketing and marketing schemes that will deliver and support the BRT services. Each partner will provide mutual support during these bidding processes in order to maximise the opportunities for success.

During 2012 the council carried out a full EU Procurement Process for the provision of supported bus services in Portsmouth and for those services that cross-border the Hampshire County Council areas with a start date of 9 June 2013.

The procurement process has been complicated by changes to the commercial bus network in November 2012, subsequent commercial changes in March 2013 and the budget report of the 11 December 2012 when the members proposed a reduction of £221,000 per year in financial support for bus services. This proposal was confirmed in the budget report dated the 12 February 2013.

New bus service contracts have been issued so that there is continuation of bus services on 9 June 2013. The vast majority of bus services have been maintained other than the reduction to some single journeys and some evening services after 21:00.

23. Idling engines.

Introduction of signage at key locations where drivers should be encouraged to switch off engines when stationary for more than a minute or two.

The council identified the need to campaign against idling engines in the latest air quality action plan to reduce unnecessary traffic-related air pollution through adoption of a new policy to curb this poor practice. The aim is to convince motorists to change their driving habits and to be greener; given that engine idling is illegal, costs money and gets drivers nowhere.

By adopting and enforcing regulations provided under the Road Vehicles Construction and Use Act and the Road Traffic (Vehicle Emissions) (Fixed Penalty) (England) Regulations 2002 the council could help to improve local air quality. The principles of enforcement were debated as part of the 2010 AQAP and incorporated into that plan. The council has subsequently

attempted to raise awareness regarding the impact of idling engines through targeted campaigns in areas where vehicles are found idling unnecessarily, such as taxi ranks and school pick-up areas (i.e. where significant pollution might coincide with public exposure). Locations of particular interest are:

- Outside the Hard, Portsmouth & Southsea, Fratton and Cosham railway stations;
- At the railway crossing point Cosham
- Outside the city's four largest schools
- At the vehicle waiting areas at / within the Continental and Isle of Wight ferry terminals.

24. Vehicle and Operator Services Agency emission testing.

Undertake four emissions tests per year and publish the results on the portair website³⁸.

The Vehicle and Operator Services Agency and the council used to work together to pull over old cars and test their emissions. However, the agency no longer carries out this scheme and the council cannot do it alone.

25. Bus Transport and Patronage.

- **Continue to increase vehicle miles and bus patronage through improvements to services particularly feeder and express. Deliver increased punctuality.**
- **Continue to upgrade fleet and improve emission technologies.**
- **Delivery improvements in ticketing, implement public information systems and increase use of website.**
- **Continue to work towards improvements to zip routes – particularly through AQMA 6.**

Following the budget decisions in 2012 and the subsequent consultation, the council was granted permission to move forward with caps to bus subsidies which will affect some tendered bus services.

The Quarterly Punctuality Improvement Partnership reports to the Transport Liaison Group. Punctuality is being delivered by providing low cost short term measures.

Most buses meet the Euro III standards, as required for all tendered services. Newer buses and those on zip corridors (high specification buses) may meet EURO IV or V standard³⁹.

The tendering process for smart ticketing started in January 2013.

The Labour Party's Shadow Spokesperson for Environment & Community Safety explained that according to reports, more people would use public transport if it were cheaper, more accessible and more reliable. However, the bus companies are private companies and the council has limited influence on how they operate. It is important to ensure that bus travel is accessible for all ages particularly young people who may have limited incomes.

³⁸ <http://80.175.62.119/TodaysAirQuality.aspx>

³⁹ <http://ec.europa.eu/environment/air/transport/road.htm>

26. Implementation / Incorporation of AQAP.

- **Inclusion of AQAP into national and regional policies and strategies to deliver the NAQO – target 2014 (providing cleaner air to AQMA 6, two years quicker than otherwise expected).**
- **Improved service liaison – quarterly working party meetings.**

The AQAP has been included in the following documents:

The National Planning Policy Framework 2012 which is a key part of the government's reforms to make the planning system less complex and more accessible. It vastly simplifies the number of policy pages about planning. The framework acts as guidance for local planning authorities and decision-takers, both in drawing up plans and making decisions about planning applications.

The Portsmouth Plan - in particular policies PCS14 A Healthy City and PCS17 Transport:

- Air Quality & Air Pollution Supplementary Planning Document
- Transport for South Hampshire Local Transport Plan 3 and freight strategy 2009.

27. Planning Service Liaison Initiative Beyond the Supplementary Planning Document.

- **Development of stronger focused policy to deliver cleaner air / development of clearer links between climate change and AQ.**
- **A supplementary planning document was adopted in 2006 for air quality and air pollution. This is seen to be at the forefront of such guidance. This be reviewed taking account of impact and guidance within the Strategic Environmental Assessment, Low Emission Strategy and Air Quality Strategy.**
- **Consider the inclusion of guidance (Section 106 and the Community Infrastructure Levy) on financial contributions to address air quality issues.**

A full review of the 2006 supplementary planning document is planned in 2013/2014.

28. Variable Parking Charges/ Controlled Parking Zones.

- **Consider implementation of reduced cost parking for less polluting vehicles;**
- **Consider implementation of Control Parking Zones for all on street parking / or all parking within 500m of train stations / priority bus routes / regional retail centres.**

The council is developing a parking strategy for the city with particular focus on the city centre and includes car park closures, review of on-street parking tariffs and prime parking.

The council is reviewing the parking and enforcement of Residents Parking Zones.

Staff parking is being reviewed as part of the Travel Plan.

29. Explore New Technology.

Undertake research into new technologies to reduce levels of nitrogen dioxide and consider their potential use within future strategies.

The Environmental Health Manager monitors research into air quality technology.

6 To identify areas in the city that require improvements and how this can be achieved.

6.1 Within the procedure adopted by Portsmouth City Council, if the front of a sensitive receptor (residential dwellings, schools, nursing homes etc) exceeds the maximum nitrogen dioxide levels set out in the NAQO, the entire property is deemed to be part of the AQMA.

6.2 The panel requested information on the spatial distribution of the council housing stock across the city. The panel noted from the information supplied that in some AQMAs local authority housing stock was considerable whilst in AQMA 7 there was a complete absence. This issue was raised to explore the possibility of addressing the health issues of some of Portsmouth City Council tenants through housing allocations taking into account the health and wellbeing of individual residents in the process.

Area	Total Residences.	PCC Owned Properties Houses / Flats
AQMA 9	391	175
AQMA 6	977	115
AQMA 7	381	Nil
AQMA 12	764	62
AQMA 11	159	110

6.3 Portsmouth is ranked the highest of 14 local authorities for its average deprivation score and concentration of deprivation, within Hampshire and the Isle of Wight. AQMA 6 and AQMA 11 falls within some of the most disadvantaged areas within the city which have some of the highest levels of smoking and other risk factors associated with lung and respiratory related ill health.

6.4 The four most deprived wards in Portsmouth (Charles Dickens, Paulsgrove, Nelson and St Thomas) are also amongst the fifth most deprived in England⁴⁰.

6.5 Average male life expectancy across the city (77.5 years) is improving but remains significantly worse than the average for England. At ward level, there is a 7.7 year difference in life expectancy between males living in the least and worst deprived ward quintiles.

6.6 Female life expectancy (82.3 years) is now not significantly different from the England average. At ward level, there is a 4.4 year difference in life expectancy

⁴⁰ http://www.wessexdeanery.nhs.uk/public_health/specialist_training/portsmouth_pct.aspx

between females living in the least and most deprived ward quintiles.

- 6.7 In 2007/09, Portsmouth's mortality rate for males of all ages was 723 per 100,000 whereas for women of all ages it was 484 per 100,000. The male rate was statistically significantly higher than the England and regional rates⁴¹.
- 6.8 In 2008/10, ischaemic heart disease continues to be the leading cause of death for Portsmouth residents (658 deaths, 14% of all deaths). Cerebrovascular disease continues to be the second highest cause (475 deaths, 10% of deaths).
- 6.9 The manner in which AQMAs are determined is not prescribed by DEFRA. Portsmouth City Council decided to confine them to areas where air pollution failed to meet the NAQO; whereas some other local authorities declared the whole of their cities as AQMAs.
- 6.10 Following the 2009 Further Assessment, it was evident that the quality of air in Portsmouth had improved sufficiently to enable 8 of the 13 declared AQMAs to be revoked. A map showing the location of all 13 AQMAs in Portsmouth revoked and retained was circulated to the panel and is attached as *appendix four*. The revoked eight AQMAs are shown in blue.
- 6.11 Residents' support is essential when introducing measures to tackle air quality pollution, for example turning off car engines when stationary or by using public transport.
- 6.13 The AQAP sets out the roles of the council's partners. Many of the actions remain the responsibility of the traffic department, including school travel plans, the promotion of cycling and walking and public transport.
- 6.14 The environmental impact of planning applications is submitted as a part of the planning application process if required. This is considered by the Planning Officer and passed on to the Environmental Protection Officer according to a protocol between the two departments, to seek their expert advice.
- 6.15 The Environmental Protection Officer appraising the air quality impact assessment can suggest measures to minimise the impact on health for residents of the proposed new housing. These measures are explained in section 5.11
- 6.16 As there are many variables involved in air pollution dispersion, it is very difficult to single out and assess the impact of any given measure. However, the predicted air quality improvement of projects such as Park and Ride can be estimated based on the number of parking spaces allocated and their frequency of occupancy. From these parameters the council can determine the emissions reduction.

⁴¹ http://www.portsmouth.gov.uk/media/API_STR_JSNA_TECH_UpdatesAll51.pdf

7 To consider the approach of other local authorities to see if the council could adopt measures which work elsewhere or learn lessons from their experience.

7.1 The Environmental Health Manager outlined the approaches that are in use in other local authorities.

7.2 In preparing the AQAP, the council referred to and adopted some of the best-practice examples that had been effective elsewhere in the country. Some of the adopted measures are more subtle and less invasive than others but all have been designed to achieve compliance with Part VI of the Environmental Act 1995 and reduce emissions of greenhouse gases related to transport.

7.3 The council has always been looking for innovative ways to improve air quality locally and has been working hard to raise awareness of air quality and forge new synergies between transport, planning and climate change partners to address the possible negative impact on the health of local residents. One measure considered locally was the introduction of Low Emission Zones (a geographically defined area which seeks to restrict or deter access by specific polluting vehicles or only allow low emitting vehicles, such as regular or plug-in hybrids, or zero-emission vehicles, such as all-electric vehicles, with the aim of improving the air quality). However, after careful consideration of implementation costs and the potential negative impacts upon the local economy this was not adopted.

7.4 As explained in the update given to the AQAP measure number 15, one of the latest measures being assessed is how to maximise the use of and possibly expand existing traffic management systems locally. The aim of this is to maintain road traffic at maximum fluidity and to keep transport related pollution to a minimum. This measure was adopted in the council's AQAP and so research was carried out into other authorities that have carried out similar measures to assess whether these could be adopted here. It was learnt that Reigate and Banstead Borough Council has delivered a similar project albeit at a smaller scale and therefore Portsmouth City Council is looking at the possibilities of adopting a similar approach at 30 junctions.

7.5 The Cabinet Member for Environment & Community Safety informed the panel that some parts of the USA are currently looking at how to improve air quality whilst balancing the need to encourage economic growth.

7.6 A combination of members of the Green Party and Winchester branch of Friends of the Earth headed by the MEP Keith Taylor filed a complaint to the European Commission against Winchester Council for allegedly failing to address air quality improvement issues within the declared air quality management areas back in January 2013. The Council is still awaiting the outcome of the complaint that is due sometime in April this year.

8 Equalities Impact Assessment.

An equality impact assessment is not required as the recommendations do not have a negative impact on any of the protected characteristics as described in the Equality Act 2010.

9 Legal Comments.

Legal commentary is contained within the body of the report.

10 Finance Comments.

10.1 It is anticipated that the costs of approving the recommendations and meeting the objectives raised within this report, will be met from within existing budgets, as approved by Council on 12 February 2013.

10.2 Recommendation 2 requests that consideration should be given to transferring the financial responsibilities for monitoring and assessing local air quality to the Public Health team. It should be noted that if Public Health are able to fund this proposal from within their existing resources, then this could result in an ongoing saving to the General Fund.

9 BUDGETARY AND POLICY IMPLICATIONS.

The following table highlights the budgetary and policy implications of the recommendations being presented by the panel:

Recommendation	Action by	Policy Framework	Resource Implications
1. The Cabinet Member for Environment & Community Safety monitor the progress made on measures set out in the National Air Quality Strategy.	The Cabinet Member for Environment & Community Safety.	Local Transport Plan - Air Quality Action Plan	Officer time and effort
2. As high levels of nitrogen dioxide are an indicator of poor air quality and consequent ill health, consideration should be given to transferring the financial responsibilities for monitoring and assessing local air quality to the public health team that has recently moved to the council (paragraph 3.18). The coordination and overseeing of the implementation of measures to improve air quality within the council should remain predominately with The Environment and Transport Service and the monitoring and assessment of air quality levels with the Environmental Health Team.	Relevant finance teams, the Environmental Health Manager and officers of the Environment and Transport Service.	Local Transport Plan.	Officer time and effort plus the potential ongoing General Fund saving, should Public Health be able to contribute towards Air Quality monitoring and assessments from their existing resources.
3. Carry out research on the introduction of staggered arrival and leaving times for naval base staff.	Environment and Transport Service	Unclear.	Officer time and effort.

Recommendation	Action by	Policy Framework	Resource Implications
<p>4. A new Air Quality Strategy be produced to:</p> <p>a. Co-ordinate the actions set out in the 2010 Air Quality Action Plan in order to redefine how the council could further improve Portsmouth's air quality and maintain long-term air quality improvements.</p> <p>b. Strive to form new initiatives and renew commitments to reduce levels of nitrogen dioxide and other pollutants of concern.</p> <p>c. Recognise the importance of breathing clean air in terms of the enormous economic costs of failing to deliver the council's responsibilities.</p> <p>d. Refocus the council and the public on the shared challenge of meeting the nitrogen dioxide objective level in Portsmouth by 2015.</p> <p>e. Make every effort to comply with the directives to improve air quality and also to avoid potential fines.</p>	<p>The Environmental Health Manager, representatives of the Environment and Transport Service, Public Health and Corporate Communications Team.</p>	<p>Local Transport Plan - Air Quality Action Plan.</p>	<p>Officer time and effort.</p>

f. Strengthen existing joint working partnerships and forge others to deliver cleaner air.			
--	--	--	--

Meeting Date	Witnesses	Documents Received.
25 September 2012	Richard Lee, Environmental Health Manager. Redouan Sadak, Environmental Protection Officer.	Scoping document. Background information. Air Quality Action Plan.
23 October 2012	Richard Lee, Environmental Health Manager. Redouan Sadak, Environmental Protection Officer.	Presentation on air quality by the Environmental Health Manager.
27 November 2012	Amanda Morris, Development Control & Travel Plan Officer Richard Lee, Environmental Health Manager.	Portsmouth City Council's web page on air quality Update on the measures set out in the Air Quality Action Plan.
18 December 2012	Councillor Eleanor Scott, Cabinet Member for Environment & Community Safety. Councillor John Ferrett, Spokesperson for Environment & Community Safety Portfolio. Richard Lee, Environmental Health Manager.	BBC News article published on 1 December 2012 entitled: Residents urge action on Winchester pollution. BBC News article published on 5 December 2012 entitled: Great Smog 50 years on: new laws needed to clean London's air.
26 March 2013	Councillor Jason Fazackarley, Cabinet Member for Traffic & Transportation. Amber Kerens-Bathmaker, Acting Assistant Head of Service – Transport & Environment Simon Brownlie, Traffic & Network Manager.	Air Pollution in the UK 2011: Compliance Assessment Summary. Further updates on the measures set out in the Air Quality Action Plan.
14 May 2013	The report was signed off by the panel.	

GLOSSARY

AQAP	Air Quality Action Plan.
AQMA	Air Quality Management Area.
AQS	Air Quality Strategy.
BRT	Bus Rapid Transit.
CO₂	Carbon Dioxide.
COMEAP	Committee on the Medical Effects of Air Pollutants.
DEFRA	Department for the Environment, Farming and Rural Affairs.
EAC	Environmental Audit Committee.
HGV	Heavy Goods Vehicle.
LAQM	Local Area Quality Management (system). (Set by the Government).
LSTF	Local Sustainable Transport Fund.
LTP	Local Transport Plan.
NAQO	National Air Quality Objective.
PAH	Polycyclic Aromatic Hydrocarbons.
PSAG	Portsmouth Sustainability Action Group.
TfSH	Transport for South Hampshire.

The Local Air Quality Management Objectives - targets for maximum concentrations of each pollutant.

Pollutant	Air Quality Objective Measured as Concentration	To be achieved by	
Benzene			
All authorities	16.25 $\mu\text{g m}^{-3}$	Running annual mean	31 December 2003
England and Wales Only	5.00 $\mu\text{g m}^{-3}$	Annual mean	31 December 2010
Scotland and N. Ireland	3.25 $\mu\text{g m}^{-3}$	Running annual mean	31 December 2010
1,3-Butadiene	2.25 $\mu\text{g m}^{-3}$	Running annual mean	31 December 2003
Carbon Monoxide			
England, Wales and N. Ireland	10.0 mg m^{-3}	Maximum daily running 8-hour mean	31 December 2003
Scotland Only	10.0 mg m^{-3}	Running 8-hour mean	31 December 2003
Lead	0.5 $\mu\text{g m}^{-3}$	Annual mean	31 December 2004
	0.25 $\mu\text{g m}^{-3}$	Annual mean	31 December 2008
Nitrogen Dioxide	200 $\mu\text{g m}^{-3}$ not to be exceeded more than 18 times a year	1-hour mean	31 December 2005
	40 $\mu\text{g m}^{-3}$	Annual mean	31 December 2005
Sulphur dioxide	350 $\mu\text{g m}^{-3}$, not to be exceeded more than 24 times a year	1-hour mean	31 December 2004
	125 $\mu\text{g m}^{-3}$, not to be exceeded more than 3 times a year	24-hour mean	31 December 2004
	266 $\mu\text{g m}^{-3}$, not to be exceeded more than 35 times a year.	15-minute mean	31 December 2005

Pollutant	Air Quality Objective Concentration	Measured as	Pollutant
Particles (PM₁₀) (gravimetric)			
All authorities	50 µg m ⁻³ , not to be exceeded more than 35 times a year	Daily mean	31 December 2004
	40 µg m ⁻³	Annual mean	31 December 2004
Scotland Only	50 µg m ⁻³ , not to be exceeded more than 7 times a year	Daily mean	31 December 2010
	18 µg m ⁻³	Annual mean	31 December 2010
Particles (PM_{2.5}) (gravimetric) *	25 µg m ⁻³ (target)	Annual mean	2020
All authorities	20% cut in urban background exposure	Annual mean	2010 - 2020
Scotland Only	12 µg m ⁻³ (limit)	Annual mean	2020
PAH *	0.25 ng m ⁻³	Annual mean	31 December 2010
Ozone *	100 µg m ⁻³ not to be exceeded more than 10 times a year	8 hourly running or hourly mean*	31 December 2005

* Not included in regulations at present

England: The Air Quality (England) Regulations 2000 (SI 928), The Air Quality (England) (Amendment) Regulations 2002 (SI 3043),
Scotland: The Air Quality (Scotland) Regulations 2000 (Scottish SI 2000 No 97), The Air Quality (Scotland) (Amendment) Regulations 2002 (Scottish SI 2002 No 297),
Wales: Air Quality (Wales) Regulations 2000, No 1940 (Wales 138), Air Quality (Amendment) (Wales) Regulations 2002, No 3182 (Wales 298),
Northern Ireland: Air Quality Regulations (Northern Ireland) 2003, Statutory Rules of Northern Ireland 2003, no. 342.
<http://agma.defra.gov.uk/objectives.php>

Locations of all Air Quality Management Areas in Portsmouth

(Blue: Revoked, Red: Retained).

