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**SUBJECT:** Air Quality in Southampton – Background information  
**DATE:** 31<sup>st</sup> July 2014  
**RECIPIENT:** Scrutiny Panel

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## 1. The Local Air Quality Management Regime (LAQM)

- 1.1. Local Authorities have a duty to fulfil the requirements of the Local Air Quality Management (LAQM) process as set out in [Part IV of the Environment Act 1995](#). The LAQM process requires all local authorities to regularly review and assess air quality in their areas, and to determine whether or not air quality objectives are likely to be achieved (see Appendix 1). Where exceedances are considered likely, the local authority must then declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives.
- 1.2. Local Authorities have to work towards achieving the air quality objectives in a cost effective way. They are not, under legislation, charged with meeting them. They have a vital role to play but ultimately compliance with the values lies with Government.
- 1.3. The LAQM process involves a three year cycle of screening, review and assessment. This includes a desk based exercise identifying emission sources and recognised issues. Where potential issues are identified, monitoring may be used to determine actual levels and can be combined with modelling to determine the extent of the problem.
- 1.4. Regulatory Services is responsible for delivering the LAQM regime on behalf of Southampton City Council. They are currently completing the fifth round of the review and assessment process. The assessment activities over the last 11 years have included maintaining a NO<sub>x</sub> diffusion tube network (at 60+ locations across the city at any one time) and real time monitoring (at eight separate locations) for nitrogen dioxide, particulates, sulphur dioxide and ozone.
- 1.5. Over 200 local authorities have declared AQMAs in the UK. Southampton currently has [ten AQMAs](#) declared, each one as a result of the annual mean for nitrogen dioxide (NO<sub>2</sub>) exceeding the limit value of 40 µg/m<sup>3</sup> (see Appendix 2). In all cases emissions from road transport are the main contributor of the exceedance and the AQMA's capture some of the city's busiest roads and junctions where residential dwellings are within close proximity.
- 1.6. An [Air Quality Action Plan](#) for Southampton was first introduced in 2007. The plan focuses on measures associated with road transport and has been integrated with the Local Transport Plan and the Local Sustainable Transport Fund. The AQAP has been successful in reducing NO<sub>2</sub> concentrations across the city (see Appendix 5) but levels still remain above the EU objective within the recognised AQMAs.
- 1.7. Over the past decade diesel vehicles have grown from 18% of new cars sold in 2001 to reach 50% of the market in 2012 as successive government schemes have

incentivised drivers to buy diesel cars, principally to tackle CO<sub>2</sub> emissions. Diesel vehicles are responsible for significantly higher levels of NO<sub>2</sub> emissions compared to petrol vehicles. It is generally recognised that if the proportion of petrol and diesel vehicles remained at 2001 levels the limit value for NO<sub>2</sub> would have been achieved in many of the current AQMA's.

### 2. EU Air Quality Directive 2008/50/EC

- 2.1. UK policy is driven by the European Air Quality Directive which requires Member states to meet limit values for key air pollutants which are known to cause human health effects. Air quality is reported to the European Commission in terms of 43 zones and urban agglomerations. This is handled by DEFRA on behalf of the government and LA reporting of air quality under LAQM feeds into this.
- 2.2. In February 2014 the European Commission started infraction proceedings against the UK for breaching nitrogen dioxide (NO<sub>2</sub>) limit values in 16 of its 43 zones. The Southampton agglomeration is one of these recognized zones and the council has received [written notification](#) from DEFRA informing them of the infraction process and the potential financial risks this presents. The letter reminds the responsible authorities of the discretionary power in Part 2 of the Localism Act under which the government could require them to pay all or part of an infraction fine if they have not taken reasonable actions to achieve the air quality objectives.
- 2.3. The letter indicates that the legal process could take several years to complete and that the Commission has stated that regardless of this it would like to "to achieve full compliance with existing air quality standards by 2020 at the latest.

### 3. Southampton Air Quality levels in Context

- 3.1. Nitrogen dioxide levels in Southampton are comparable to similar cities. Within the AQMA's levels range from 40 ug/m<sup>3</sup> to 51 ug/m<sup>3</sup> annual average. Levels have been steady with some evidence of a decline in recent years (see Appendix 3). Data collated by [European Environment Agency \(EEA\) from Member States](#) reports the highest UK levels at Marylebone Road in London at 98 ug/m<sup>3</sup> which was behind individual sites in Italy and Germany.
- 3.2. In March 2014 the World Health Organisation published an update of its [Ambient Air Pollution in Cities Database](#). From this it was reported in the press that Southampton ranked amongst the most polluted cities in the UK and PM<sub>10</sub> levels exceeded the WHO guideline of 20 µg/m<sup>3</sup> annual average. The WHO guideline level is aspirational. The EU limit value is set at 40 µg/m<sup>3</sup> annual average and Appendix 4 illustrates that levels in Southampton fall below this statutory level and well below the European average of 49 µg/m<sup>3</sup> and world average of 71 µg/m<sup>3</sup>. The WHO report used data from a limited number of monitoring sites in varied locations. The Brintons Road station (quoted for Southampton) is 8 metres from one the city's busiest road junctions and it is accepted that because of its location this station will experience particulate levels that are elevated above the typical urban background levels that most of the city experiences.

### 4. Air Quality Monitoring in the City

- 4.1. Regulatory Services have monitored air quality at key locations across the city in order to fulfil its LAQM duties. Monitoring has been subject to constant change in order to ensure resources are focused effectively. In recent years monitoring has consisted of:

- A network of approximately 60 diffusion tubes. These tend to be adjacent busy roads and are subject to regular adjustments in response to changing circumstances in the city.
- Two continuous monitoring stations measuring nitrogen dioxide and particulates at Redbridge and Bitterne. Ozone and sulphur dioxide had been measured at these locations until there was sufficient evidence to demonstrate that levels were not exceeding any thresholds.
- A continuous monitoring station at Onslow Road measuring nitrogen dioxide only.

4.2. A further continuous monitoring station measuring nitrogen dioxide is located at Victoria Road, Woolston to monitor the air quality impact of the Centenary Quay development. This is funded by the developer and operates as a condition of the Centenary Quay planning approval.

4.3. In addition, SCC has access to data from two other continuous air quality monitoring stations within the City. As a condition of the permit issued by the Environment Agency, Marchwood Power currently operates a station at Millbrook Road/Waterhouse Lane measuring nitrogen dioxide. Brintons Road, St Marys is the location of a station operated by the Department of Environment, Food and Rural Affairs (DEFRA) as part of their national network. Nitrogen dioxide, sulphur dioxide, particulates, benzene and ozone are all measured at this location.

4.4. SCC's monitoring network has been subject to continuous review and change since its introduction. Where monitoring has achieved its objective it is appropriate that resources are reprioritised, especially towards action planning. The monitoring station at Bitterne has recorded acceptable pollutant levels for 4 years and was closed in early 2014. The Redbridge station has been providing a consistent picture for several years. It has confirmed that the nitrogen dioxide average mean is the only pollutant of concern in this part of the city. In recent years the station has been unreliable and data capture has been poor. The nearby air quality management area on Redbridge/Millbrook Road is well catered for by a network of diffusion tubes. Therefore, the ongoing operation of this station was not considered to be necessary and it was closed in January 2014.

4.5. DEFRA is reviewing its national monitoring network and is looking for opportunities to expand this where there are opportunities to affiliate with stations operated by local authorities. Regulatory Services has had discussions with DEFRA's representatives and has promoted options that could enhance existing arrangements within the City without further burden on the council.

## 5. Air Quality Action Planning

5.1. To date the Action Plan has focused on transport related projects that will improve the efficiency of the road network and reduce congestion or reduce the burden on the existing road network by promoting a shift to more sustainable forms of transport. Details are included in Appendix 5.

5.2. In 2013 AEA Ricardo were commissioned by Regulatory Services to undertake a study of the city's Western approach, which includes the largest of the AQMA's declared. The study was financed by a grant from DEFRA and was to identify interventions which might be effective in achieving the limit value for NO<sub>2</sub>.

5.3. A draft report of the study findings has been published and the final version is due to be published in August 2014. The draft reports that modelling has demonstrated that

emissions from road transport are the most significant contributor but emissions from the port are far more significant than previously understood.

- 5.4. The introduction of newer, cleaner engine technology within the national fleet (i.e. the introduction of Euro 6 light vehicles and Euro VI heavy vehicles) in line with national expectations could reduce nitrogen dioxide levels below the statutory limit values by 2019. However, this is dependent upon the technology delivering its full potential and it is untested so far in real world conditions. The analysis suggests that if only a proportion of the benefit were achieved in practice, this would have to approach 75% of the theoretical maximum to deliver compliance.
- 5.5. Traditional LEZ models used to promote the introduction of low emission technology through penalties and enforcement cameras (as operating in Greater London) could bring compliance dates forward by a few years but would require significant capital investment. Over a ten year period costs would still outweigh benefits by approximately £2M and further economic impacts would be difficult to predict. Again, success will be dependent upon the technology delivering the benefits predicted.
- 5.6. The draft report promotes a city wide Low Emission Strategy (LES) as an effective means of promoting low emission technologies and improving air quality. A series of meetings and workshops with internal and external stakeholders were conducted as part of the study and the output has been used to outline a City-wide LES. Further funding has been obtained from DEFRA to develop the proposal.
- 5.7. It is proposed to deliver the project through a cross-departmental Project Team sponsored by Regulatory Services over a 24 month period. A Project Plan and some key policies are to be presented for adoption within the next 3-6 months.
- 5.8. The LES would sit within the AQAP and deliver the following objectives:
  - Develop a City-wide emission reduction strategies for passenger cars, freight (including sustainable delivery & port activities), buses and taxis. Projects and policies will be identified that will look to promote and incentivise the uptake of cleaner, low emission technologies. Examples include:
    - identifying opportunities to support and incentivise the uptake of electric vehicles with a charging infrastructure and subsidised (cost neutral) parking for visitors and residents.
    - developing mechanisms to use the ports freight booking system to incentivise the use of lower emission vehicles in the city.
    - exploring alternative fuel infrastructures for commercial vehicles including liquid natural gas
  - Develop and further introduce innovative retrofit technologies to our bus fleet. Like the flywheel technology being piloted through the Clean Bus Technology Fund.
  - Look at opportunities to make cleaner vehicles more attractive to taxi operators. For example by exploring a voluntary “low emission” badge scheme.
  - Develop a mitigation approach to air quality and land-use planning policies to support the uptake of low emission vehicles and infrastructure. This would look to develop a method for assigning a community damage cost (in terms of emissions) associated with new developments and use this to promote good practice and fund mitigation.
  - Develop & implement policies capable of using public sector procurement to reduce transport emissions. This would look to develop a method for calculating and acknowledging the damage costs associated with traditional combustion engines.

- Establish effective messaging on air quality and health promotion by establishing partnerships between Public Health and Regulatory Services.
- Build on existing private sector partnerships to achieve shared emission reduction goals. For examples, the port is open to reducing emissions from its harbour side operations by replacing diesel with cleaner fuels. SCC may be able to provide some influence if it is considered in conjunction with a wider strategy to bring a clean fuel infrastructure to the city.
- Provide a platform for inward investment for air quality mitigation

### 6. Air Quality and Planning

6.1. Regulatory Services works closely with its colleagues in Planning and due consideration is given to the air quality impacts of every planning application. Developers are expected to demonstrate that their proposals will not have a detrimental impact on local air quality. If the development is considered likely to increase emissions significantly permissions may be refused or conditions applied to mitigate the effects on public health. For example, residential developments placed within existing AQMA's may need to ventilate the occupied areas using clean air sourced from an unaffected facade. National guidance on planning and air quality is weak with regard to promoting improvements. To address this, local policies and guidance is to be considered as part of the LES project plan.

### 7. Air Quality and Public Health

- 7.1. Moderate air pollution levels are unlikely to have any serious short term effects on individuals in good health. However, elevated levels and/or long term exposure to air pollution can present symptoms and conditions affecting human health. This mainly affects the respiratory and inflammatory systems. People with lung or heart conditions are likely to be more susceptible to the effects of air pollution. Particulates and nitrogen dioxide are regarded as the pollutants responsible for the most significant impact on public health in the UK.
- 7.2. The [Committee on the Medical Effects of Air Pollutants](#) (COMEAP) estimated that long term exposure to air pollution had an effect equivalent to 29,000 deaths a year in the UK in 2008.
- 7.3. In April 2014 Public Health England published the report [Estimating Local Mortality Burdens associated with Particulate Air Pollution](#). Modelling suggests that 6.3% of mortality in the Southampton area is attributable to long-term exposure particulate air pollution.
- 7.4. SCC Regulatory Services and Public Health suspect that these figures are not a direct reflection of poor air quality in the city. Standards of respiratory health within the city (as a consequence of occupational exposure and smoking) are likely to have left a significant proportions of the population more vulnerable to the effects of reduced air quality.
- 7.5. SCC Public Health acknowledges the importance of the health issues presented by air quality in the city.
- 7.6. The Air Alert service has been delivered as part of the AQAP. Although it does not deliver improvements to actual air quality it assists vulnerable groups manage any detrimental health effects. A 2011 survey indicated that 90% of users would

recommend the service. Southampton is only one of a handful of authorities to provide this free service which is funded until 2016 by DEFRA.

**8. Looking Forward**

8.1. DEFRA is currently reviewing the future delivery of LAQM duties and it is widely anticipated that this will reduce the burden on local authorities to report review and assessment activities. The options being considered include proposals that could significantly reduce the expectation for council's to maintain air quality monitoring networks and focus their resources on action planning to ensure improvements are achieved.

8.2. The government has [recently announced](#) it will be investing £500M from 2015-2020 in to ultra low emission technologies. £50 million will be available for local areas to invest in cleaner taxis and buses. Cities will be encouraged to bid for Ultra Low Emission Status and the 2-4 successful cities will have access to a further £35M to showcase best practice.

8.3. Grants of up to £500k have recently been made available through the Clean Vehicle Technology Fund. Transport Policy, working with local bus operators and Regulatory Services have already submitted a bid for the maximum amount. A similar bid was submitted to last year's Clean Bus Technology Fund and was successful in securing funds to support a £1M project to improve emissions from the cities commercial bus fleet.

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Appendix 1

**Air Quality Objectives included in Regulations for the purpose of LAQM in England**

Pollutant	Air Quality Objective		Date to be achieved by
	Concentration	Measured as	
Benzene	16.25 µg/m <sup>3</sup>	Running annual mean	31.12.2003
	5.00 µg/m <sup>3</sup>	Annual mean	31.12.2010
1,3-Butadiene	2.25 µg/m <sup>3</sup>	Running annual mean	31.12.2003
Carbon monoxide	10 mg/m <sup>3</sup>	Running 8-hour mean	31.12.2003
Lead	0.50 µg/m <sup>3</sup>	Annual mean	31.12.2004
	0.25 µg/m <sup>3</sup>	Annual mean	31.12.2008
Nitrogen dioxide	200 µg/m <sup>3</sup> not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
	40 µg/m <sup>3</sup>	Annual mean	31.12.2005
Particulate Matter (PM <sub>10</sub> ) (gravimetric)	50 µg/m <sup>3</sup> , not to be exceeded more than 35 times a year	24-hour mean	31.12.2004
	40 µg/m <sup>3</sup>	Annual mean	31.12.2004
Sulphur dioxide	350 µg/m <sup>3</sup> , not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
	125 µg/m <sup>3</sup> , not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
	266 µg/m <sup>3</sup> , not to be exceeded more than 35 times a year	15-minute mean	31.12.2005

## Appendix 2

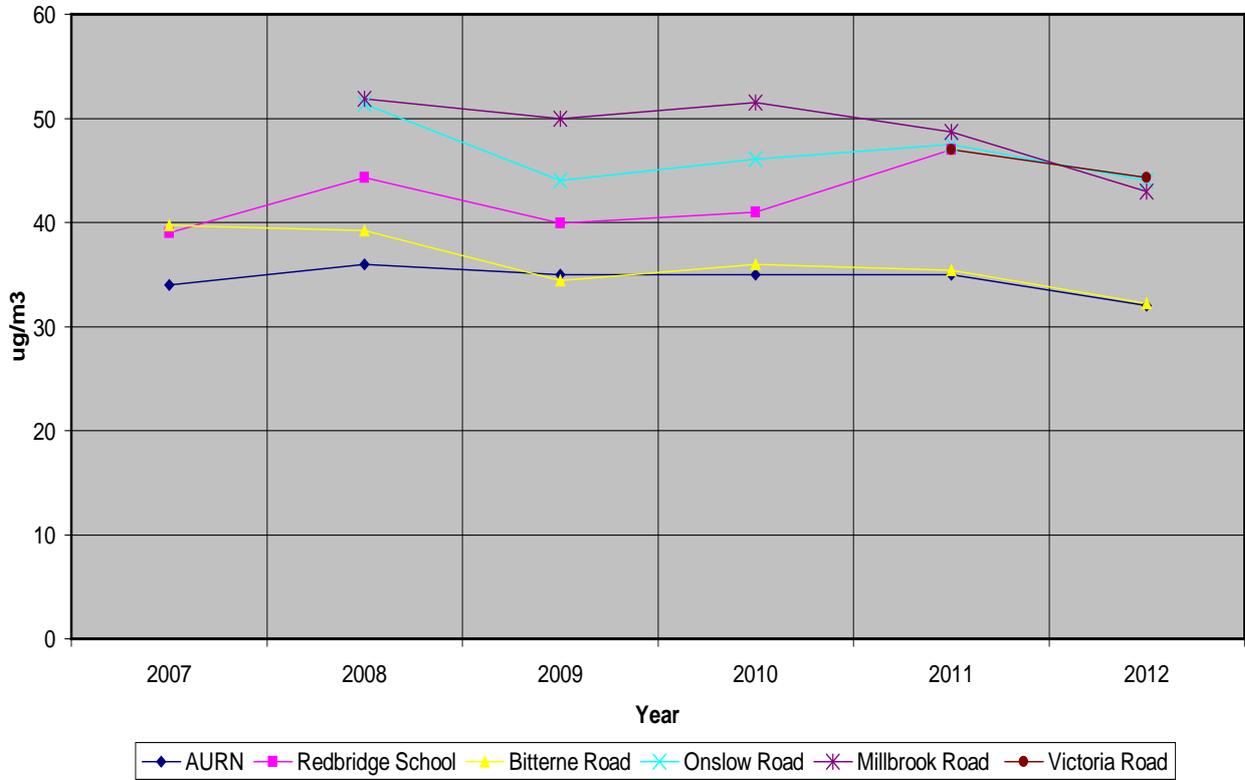
### Map of Southampton's Air Quality Management Areas





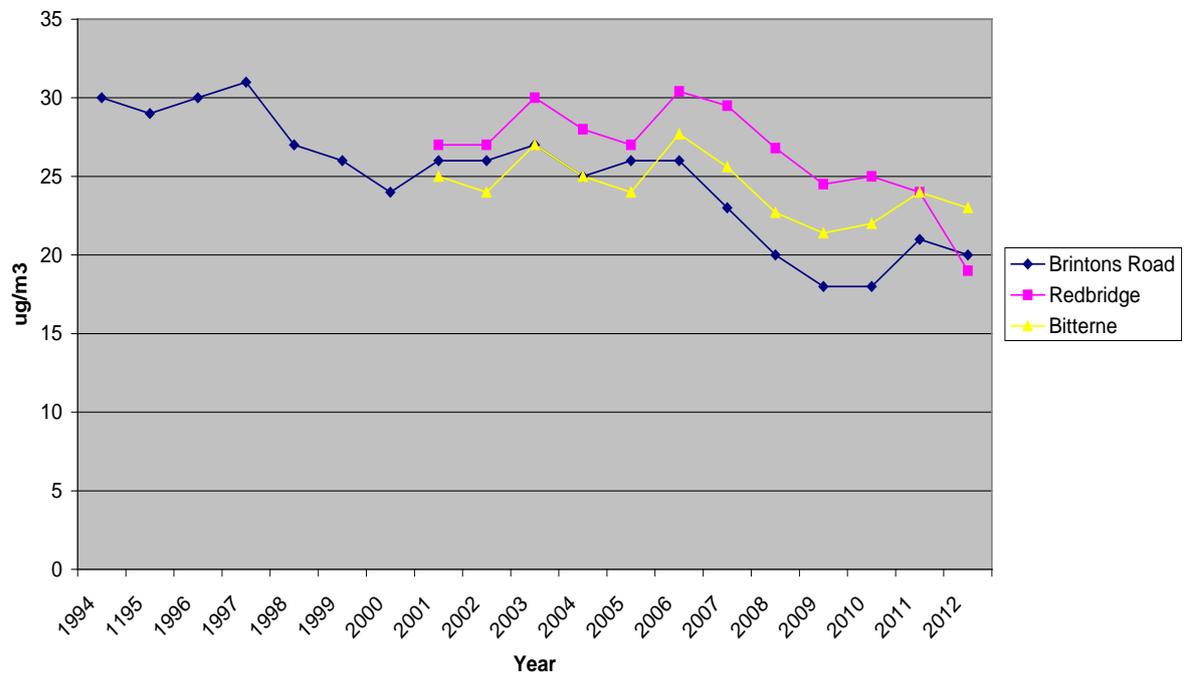
Appendix 3

**Trends in Annual Mean Nitrogen Dioxide Concentrations at Automatic Monitoring Stations**



# Appendix 4

## Figure Particulate Dust (PM<sub>10</sub>) 1994-2012



## Appendix 5

### Air Quality Action Plan – 2013 Progress Report.

#### Progress update

COUNCIL'S OWN ACTIONS					
Ref	Action	Additional Information	Status (RAG)	Responsible Owner	Progress
1.1	School travel plans	Survey of travel needs; encouraging alternatives to car travel; route improvements (walking/cycling); cycle storage provision; walking buses	Green	David Deane	100% of all schools in Southampton have travel plans in place
1.2	Assist staff in cycling to work in between meetings	A number of measures including: road safety assessments, expanding on number of secure cycle storage locations, a salary sacrifice scheme for bike lease to staff and providing pool bikes.	Green	Dale Bostock	Road safety assessments are now undertaken, the number of secure cycle storage locations have been expanded throughout the city, a salary sacrifice scheme for bike lease to staff has been put in place and pool bikes are now provided to staff
1.3	Journey Planning Service	Enables staff to have their journeys to/from work or business travel planned to increase financial efficiency and promote sustainable travel.	Amber	David Deane	30.9% of the working population are now covered by a Travel Plan.
1.4	Corporate Courier Transport Service	A council wide review of the movement of goods vehicles to re-engineer routes to create efficiencies.	Green	Annemarie Hooper	This has been completed and has resulted in 2 x WTE reducing from full time to term-time only and enabled a reduction in one fleet vehicle.
1.5	Continuous Improvement Objectives	A series of projects arising from a review of efficiency savings in fleet vehicle use conducted by Peopletoo consultancy	Green	Annemarie Hooper	Fleet Management Services have made a number of efficiency savings over the last few years, including reviewing the fleet vehicles they lease / purchase.
1.6	Improve emissions from the Council's vehicle fleet	A review of existing fleet to investigate the use of bio-fuel and the retro fitting of abatement technology.	Amber	Annemarie Hooper	This has been investigated but at the moment, new technologies for a greener fleet are expensive to maintain.
1.7	Public awareness and information provision	General awareness initiatives to encourage behavioural changes that could lead to reduced car use, more efficient car use, and greater acceptance of alternatives and air quality management measures.	Green	Dale Bostock and Simon Hartill	SCC runs the 'Southampton Cycle Challenge' communications campaign to encourage a greater take-up of cycling across the city as an alternative to private car use. Additionally the council runs the air alert project. Air Alert provides Southampton residents who have an existing respiratory condition with advance warning of poor air quality to enable them to adjust their behaviour to minimise the risk of exposure to elevated levels of pollution.

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Ref	Action	Additional Information	Status (RAG)	Responsible Owner	Progress
2.1	City-wide travel marketing and communications	Travel awareness, branding, marketing campaigns, advertising, events and publicity in various locations	Green	Adrian Webb	A city-wide campaign was run between January and March 2013. It achieved a 37% awareness of the MyJourney brand based upon 2700 survey responses. The campaign

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Ref	Action	Additional Information	Status (RAG)	Responsible Owner	Progress
		(including creating a new website). This will involve the commissioning of a new social marketing campaign to be used as the main branding and advertising. A range of strategic, low-cost advertising sites such as on school railings will be used to promote sustainable travel.			has since been commended for a national award. 25 MyJourney roadshow events were staged, a website has been launched offering a multi-modal journey planning tool and live bus and train travel information. A Skyride was run in the city in July 2013 with over 10,000 cyclists in attendance.
2.2	Business Travel Planning	Retail Travel Plans for Major Shopping Destinations including West Quay to encourage more shoppers to travel by public transport and reduce reliance on the car. Items such as cycle parking, shower facilities, electric vehicle charging points at workplaces, PT information points and establishing a framework for collective delivery and evaluation of the travel plan will be taken forward.	Green	Adrian Webb	<p>SCC has been, and is continuing to, work with major retailers and businesses in the city including: Skandia, Mayflower Theatre, the National Oceanography Centre, Town Quay, IKEA, Lloyds Register, Station Quarter, Solent University, the University of Southampton and the General and Royal South Hants Hospitals. Organisations in the Station Quarter including the Maritime and Coastguard Agency have also been engaged. A travel plan for West Quay is in progress. A customer travel survey and a staff travel survey were conducted in August and October 2013 respectively with results of the studies to determine the measures included in the travel action plan being finalised in December 2013. Additional achievements include:</p> <ol style="list-style-type: none"> <li>1. A car share scheme has been launched at the General Hospital and 60 additional cycle parking bays installed.</li> <li>2. An annual travel and transport conference has also been staged.</li> <li>3. The Royal South Hants Hospital now has a travel plan in place and several walking and cycling events have been held.</li> <li>4. Solent University has implemented a parking management scheme and updated its cycle facilities.</li> <li>5. The University of Southampton has installed additional cycle parking provide road safety training and a regular bike doctor for cyclists.</li> <li>6. Bike week was held in June 2013 for the city.</li> <li>7. A travel planner's forum has been set up with at least 20 businesses in attendance at each meeting.</li> <li>8. A travel planning newsletter is also sent out on a monthly basis.</li> </ol>
2.3	Freight consolidation and efficiency	The project will investigate, evidence and implement a series of measures to introduce 'Green fleet' management. This will eventually	Green	Simon Fry	The viability study for the development of a Sustainable Freight Consolidation Centre has been produced. An OJEU process has been undertaken identifying a private distribution company who

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Ref	Action	Additional Information	Status (RAG)	Responsible Owner	Progress
		encompass a <b>driver behaviour change programme</b> aimed at encouraging more economic driving techniques, emissions modelling tools to identify particular locations where freight is delayed, reducing householder wasted mileage through picking up failed home deliveries, shared service activities in urban centres and smart bins to reduce unnecessary waste collection, <b>managed loading bay booking</b> in urban centres. A trial of the smart-freight concept, the use of <b>smart tagging</b> to enhance customer visibility of freight transport and a <b>fleet vehicle partnership</b> looking at joint procurement and specification, sharing vehicles and depots to deliver efficiencies for members and lower emissions from vehicles purchased by members. These elements will be delivered through the development of a Sustainable Freight Distribution Centre.			have since been appointed to develop and operate the centre. The site has also been identified in Nursling and will be commissioned in December 2013. A number of major organisations have signed up to make use of the centre including: <ol style="list-style-type: none"> <li>1. Southampton City Council</li> <li>2. University Hospital</li> <li>3. University of Southampton</li> <li>4. Solent University</li> <li>5. New Forest District Council</li> <li>6. Hampshire County Council</li> <li>7. Eastleigh Borough Council</li> <li>8. Hampshire Constabulary</li> <li>9. West Quay</li> </ol> <p>A number of other private businesses have expressed an interest in utilising the facility.</p>
2.4	Public Transport Travel Planning	Preparation of new rail station travel plans. Work with local rail users, transition towns, rail operators and ATOC to develop station travel plans at the following key locations including Southampton Central, Eastleigh and other local stations.	Green	Adrian Webb	A consultant has been appointed to develop a travel plan for the Southampton Central Station. The travel plan is scheduled to be completed in January 2014 with up to £180k of funding identified to be invested in measures to promote more sustainable modes of transport in the area. An overarching plan for all stations in the city is also in progress. Real time information is now available at the station providing travellers with up-to-date info on buses and trains.
2.5	Smart ticketing and media	Delivery of a sub-regional multi-modal interoperable transport smartcard. The ticket will provide the link between operators and modes to give the best possible products to transport users making public transport seamless, easier to use and cheaper as well as promoting the growth of the sector.	Green	Thomas King	A Hampshire-wide Smartcard will be launched in July 2014. The back office system has been procured and the equipment is in the process of being fitted to buses and ferries.
2.6	Brompton Bike Hire scheme	Expansion of the Brompton bike hire scheme i.e. PlusBike establishing a series of hire points in conjunction with South West Trains in addition to a Leeds-style	Green	Adrian Webb	Installed in March 2013 and launched in April 2013. The scheme has 60 members signed up to use the bikes with 10% of bikes used every day of the year. Corporate members include the University Hospital, the University of Southampton, Solent University,

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Ref	Action	Additional Information	Status (RAG)	Responsible Owner	Progress
		cycle hub at Southampton Central Station.			Skandia, CooperVision, Ordnance Survey and the Mayflower Theatre.
2.7	Legible Bus Network	Legible bus networks. Improving road-side publicity for services along key networks. The city has high levels of bus use and is seeking to double bus use over the next 20 years.	Green	Richard Cooke	A new format for bus timetables has been rolled out on bus stops along Above Bar Street as a pilot. Two additional phases of the project will see the new timetables installed at 181 bus stops in December 2013 and another 180 bus stops between February and March 2014.
2.8	School Travel Planning	Support for the implementation of measures in existing School Travel Plans and ModeShift	Green	David Deane	<p>27 schools have signed up to the STARS school travel plan programme (a national accreditation scheme). Through this programme over 1000 bikes have been fixed, 192 Bike-it events have been staged, and 25,000 positive cycling and scooting experiences have been delivered. By July 2013 14 schools had achieved bronze status under the scheme which is the highest rate of any local authority area in the UK. The scheme has seen 18,000 pupils walk to school at least once a week and an 8% increase in cycling to school rates for those schools participating in 'Bike-it'. A pilot project was staged in Sholing where a road was closed off to simulate what it would be like without traffic. A bus pass for 16 to 19 year olds has also been launched which has trebled participation in bus use.</p> <p>An additional travel training programme was developed with a number of schools for children with special educational needs and is running until March 2014. The scheme has so far seen 40 children shift from local authority supported journeys to other modes of travel resulting in a £31k saving within 9 months. The scheme is referenced as best practice by the DfT in their annual school travel review.</p>
2.9	Active Travel programme	Active travel programme to encourage more active life styles through walking and cycling. A community and workplace engagement programme led by Sustrans in partnership with the city council.	Green	Sustrans	<p>Sustrans staff now sit with the council's transport planning team. In 2012/2013 the active travel programme achieved the following:</p> <ol style="list-style-type: none"> <li>1. Engagement with 12 community groups (target of 6)</li> <li>2. Engagement with 5 SureStart Centres (target of 5)</li> <li>3. 3 Health Walk Groups maintained</li> <li>4. 1 Health Walk Group established</li> <li>5. 34 Roadshow events staged</li> <li>6. 63 Cycle training and Bike Doctor events held</li> <li>7. 214 participants engaged in walking activities (target of 80)</li> <li>8. 1000+ participants engaged in cycling activities (target of 80)</li> <li>9. 845 participants provided info on walking and cycling (target of 800)</li> </ol>

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Ref	Action	Additional Information	Status (RAG)	Responsible Owner	Progress
					10. 22 Active Travel Champions recruited and trained (target of 10)
2.10	Traffic Control Predictions Development to improve air quality.	Working with Southampton University Transport Design Group to predict flows of traffic emanating from signals data to predict patterns and influence travel advice. This will include disseminating the information via mobile media and amending signal plans to improve air quality	Amber	Adrian Webb	The city council is sponsoring an EngD student to take the project forward.
2.11	Promotion of home deliveries campaign	A campaign to be run in conjunction with retailers to encourage higher take-up of home deliveries allowing more people to travel to shops without the car.	Amber	Adrian Webb	To be progressed in 2014.
2.12	Development and promotion of a bus times smartphone app	SCC is working with academic partners to develop bespoke mobile phone apps to provide a step-change in public transport smart ticketing and information.	Amber	Adrian Webb	An online journey planner has been developed and implemented as part of the MyJourney website and marketing campaign. Access to this tool and information on bus times will be developed into a smartphone app in 2014.
2.13	Cycle Training	Joint Commissioning and contract management of bikeability cycle training across the South Hampshire sub-region to establish a standard offer for cycle training to help ensure the self funded centre of excellence for sustainable travel.	Green	Adrian Webb	Up to March 2013 the following was delivered: <ol style="list-style-type: none"> <li>Over 166 individuals have received bike maintenance training</li> <li>Over 133 adults have received cycle training</li> <li>Another 130 adults are on the waiting list to receive training</li> <li>667 children have undertaken 'bikeability' training</li> <li>The target of 2000 children will be exceeded by March 2014</li> </ol>
2.14	City Car Club	Develop a sub-regional car club scheme. The operator will supply vehicles to be used for marketing and installation of up to 200 bays. Clear options for extensive supply of electric vehicles within the fleet will be included.	Amber	Adrian Webb	A campaign will be run in February 2014 to drive up membership of the existing City Car Club. As part of this promotion Eco-driver training will be made available to residents and businesses.
2.15	Real time information provision	SCC will deliver public transport with real time information through display screens at our key transport hubs, core bus corridors and highly visible locations and through mobile phones by utilising current and future proof media. RTPI screens to be installed at 13 x locations including Hedge Superstores, Gosport Ferry terminal, Southampton cruise ship terminals, Bus Corridor	Green	Paul Walker	Real time information systems have been fitted along all core bus routes in the city.

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Ref	Action	Additional Information	Status (RAG)	Responsible Owner	Progress
		RTPI on key routes and multi-modal real time information at interchanges.			
2.16	Access to work scheme	Free travel advice and bus passes to be provided to unemployed individuals in the city in order to aid their route back into employment.	Green	Adrian Webb	A scheme has been delivered in partnership with the Jobcentre plus to remove the transport barriers that may prevent unemployed people from accessing work. The scheme was targeted at 18 to 24 year olds with free Solent Travelcards provided to participants in the scheme along with free travel planning advice. 811 individuals were assisted throughout the scheme. Results suggest that of those participating in the scheme 44% were subsequently able to find a job compared to 10% of those who didn't participate.
2.17	Bus priority measures	Investment in measures on high frequency city corridors that reduce journey times for buses and design out delays including bus lanes, bus gates, changes to traffic signals and "virtual" priority measures.	Green	Simon Bell	Bus priority programme in progress with 42 junction improvements identified to be delivered.
2.18	Improving Journey Time Reliability	Targeted interventions to deliver journey time savings of 9.5 seconds per bus per junction. This will deliver an economic benefit, improve punctuality and journey times, whilst reducing emissions. The savings in peak vehicle requirement bought about by these improvements will be reinvested by operators within the bus network. This includes bus priority measures at 15 x locations.	Amber	Paul Walker	To be progressed



LTP3 ACTIONS					
Ref	Action	Additional Information	Status (RAG)	Responsible Owner	Progress
4.1	Cycle Lane/Routes Provision.	Work with Sustrans, Organisations & Stakeholders to contribute to the design and delivery of a city wide strategic cycle route.	Green	Dale Bostock	Phase 1 of the eastern cycle route to be completed by March 2014. University cycle corridor targeted for development with funding bids submitted. A 10 year cycle strategy has been produced.
4.2	Bus stop improvements	The installation of new bus shelters across the city to improve the waiting environment for passengers. This will be followed by the implementation of a legible bus network which will make it easier for passengers to find the correct bus stop and interpret timetable information.	Green	Simon Bell	Installation of new bus shelters has now commenced with phase completed in 2012/13. The legible bus network is currently in the design phase and will be implemented over the course of next the two years with completion in March 2015.
4.3	Platform road and Dock Gate 4 removal of gyratory	Major alterations to the highway network in order to enable two lanes of traffic in each direction between Town Quay and Dock Gate four, and the removal of the existing gyratory system arrangement.	Green	Phil Marshall	Scheme underway. Further information to be provided in next update.
4.4	Parking measures	Car Park Guidance System (CPGS) technology has recently been augmented by the arrival of reliable parking bay management systems. A red or green light above each bay indicates if the bay is free or not, and display boards at the top of each ramp indicate the number of free spaces on each floor.	Amber	Frank Baxter	To be progressed.
4.5	Civic Centre Place design and implementation	The Civic Centre Place scheme aims to remove through traffic from Civic Centre Road / New Road and divert this onto the Inner Ring Road via Havelock Road, Cumberland Place, Brunswick Place and Charlotte Place.	Amber	Phil Marshall	Further information to be provided in next update.
4.6	Oxford Street	Create a shared surface scheme, creating more space for the bars and restaurants to spill out into and activating the street.	Green	Phil Marshall	Scheme underway. Further information to be provided in next update.
4.7	Old Town public realm	Low cost improvements to the public realm will be implemented in the short term. These include works outside the recently renovated Tudor Merchant's House and the extension of the existing 20mph zone through the recently completed QE2 Mile enhancements in Holyrood to link with the existing scheme in French Street.	Amber	Phil Marshall	Scheme underway. Further information to be provided in next update.
4.8	North of central station improvements	Consolidation of surface level car parking into a new multi-storey car park to create land for	Amber	Phil Marshall	To be progressed.

LTP3 ACTIONS

Ref	Action	Additional Information	Status (RAG)	Responsible Owner	Progress
		redevelopment and to create a high quality public realm and public transport interchange.			
4.9	Legible cities	Delivery of the on street way finding maps and signing in the city centre.	Green	Richard Alderson	Phase 4 due to be completed in March 2014 which will see the city centre network completed.
4.10	District Centres - Bitterne	Bitterne District Centre is a high priority for investment to improve accessibility and enhance the public realm.	Amber	Richard Alderson	To be progressed.

## PLANNING POLICY ACTIONS

Ref	Action	Additional Information	Status (RAG)	Responsible Owner	Progress
4.1	Local planning policies (citywide)	Implementation of existing Local Plan policy and work towards strengthening policy in new Local Development Framework. This should include ensuring that the cumulative adverse effect of smaller developments on local air quality is avoided.	Green	Graham Tuck	There is a requirement in the Core Strategy transport policy (CS18) to 'Require new developments to consider impact on air quality, particularly in Air Quality Management Areas (AQMAs) through the promotion of access by sustainable modes of travel'. The Core Strategy sets out the general principles and the CCAP and Southampton Development Plan will show how this affects individual sites.
4.2	Targeted planning guidance to address air quality impacts of development	Ongoing involvement with Planning Policy and Development Control to avoid the canyon effect (created by tall buildings on both sides of a road) and cumulative air quality effects of development through the planning process.	Green	Graham Tuck	There is regular and ongoing close working between Planning Policy and Development Control. Both the Masterplan and CCAP set out a strategic approach to tall buildings.

## OTHER ACTIONS

Ref	Action	Additional Information	Status (RAG)	Responsible Owner	Progress
5.1	Low Emission Zone (LEZ)	Potential for reducing emissions from HGVs by working with freight partnerships to establish minimum emissions standards for HGVs operating in Southampton.	Green	Simon Hartill	Low Emissions Strategy to be developed and adopted outlining appropriate measures to be implemented along the Western Approach to the city.
5.2	Bus Quality Partnership	Emissions from buses can be reduced by modernising the bus fleet.	Green	Paul Walker	Partnership established. Further information to be included in next update.
5.3	Taxi Quality Partnership	Steps to modernise the taxi fleet and reduce taxi emissions.	Amber	Paul Walker	To be progressed.
5.4	Introduce fixed penalty for idling vehicles (including buses and taxis)	Use legal powers to enforce fines for idling vehicles and prevent unnecessary emissions.	Red	Paul Walker	This has not been invoked.
5.5	Changes to traffic light phasing	Use the road traffic management system to change traffic light phasing to hold back traffic queues in areas without residential receptors.	Amber	Martin Wylie	Further information to be provided in next update.
5.6	Port Masterplan actions	Working with ABP to address port related transport issues and emissions from shipping could involve a range of measures, including; creating new access routes, providing alternative fuel supplies, introducing freight quality partnerships, and developing lorry staging areas.	Amber	Sue Simmonite	Further information to be provided in next update.
5.7	Legible city signage	Legible city methodology to be adopted to improve signage within the city to encourage cycling and walking at key points in the city.	Green	Richard Pemberton	Signage has been fully installed throughout the city centre.

OTHER ACTIONS					
Ref	Action	Additional Information	Status (RAG)	Responsible Owner	Progress
5.8	Integrate Air Quality Impact Assessment into all major transport projects	Include costs for air quality modelling and impact assessment in the design stage of major transportation projects to ensure that their impacts are understood.	Green	Frank Baxter	This is part of the planning and transport assessment and is done on a site by site basis
5.9	Research the health impacts of air pollution	Work closely with the Health Authority and University of Southampton to research the health impact of air pollution on vulnerable groups.	Green	Simon Hartill	The monitoring and evaluation procedures as part of the Air Alert project are specifically designed to research the health affects of air pollution. This project has now commenced
5.10	Use of adaptive traffic control systems	The study is intended to investigate the feasibility of reducing or relocating traffic queues in AQMA areas. It is a 3- year-long project. Whilst they won't necessarily reduce air pollution they will relocate the source to an area without receptors, therefore reducing the health impact.	Green	Martin Wylie	The first phase of project, which involves data collection and analysis, is approaching its conclusion
5.11	Air Alert	The Air Alert project aims to provide Southampton residents who have an existing respiratory condition with advance warning of poor air quality and enable them to adjust their behaviour to minimise the risk of exposure to elevated levels of pollution. The project will initially identify community clusters in 3 of Southampton's Air Quality Management Areas (AQMA) – Redbridge Road, Bitterne Road and Bevois Valley. The project has now commenced and the process of registering users is taking place.	Green	Simon Hartill	201 air alert subscribers enrolled, 96 air alerts issued since June 2010.  Very high customer satisfaction results from survey of subscribers undertaken in 2011. "90% of subscribers would recommend the service."
5.12	Keep the City Moving Group	A project board for congestion issues that will coordinate, communicate and plan in relation to keeping the city moving.	Green	Frank Baxter	The group provide a focus for and coordination of anti-congestion actions achieving financial savings from significant reduction in fuel consumption. The group has met several times and has developed an action plan
5.13	Flywheel technology	Buses in Southampton to be upgraded with pollution-reducing flywheel technology on transport routes with poor air quality.	Green	Paul Walker	Southampton was one of eleven local authorities to have been awarded funds from the Department for Transport's Clean Bus Technology Fund to enable the flywheel technology to be fitted to buses in the city. The funding will be made available for bus operators in the 2013-2014 financial year with installation by bus operators to be completed by 31st March 2014. It is possible that UK and EU companies could also adopt this technology and there is potential for a 'Centre of Excellence' to be created within the Southampton area for installation of flywheel technology on buses.