SUBJECT:Air Quality in Southampton – Background informationDATE: $31^{st}$  July 2014RECIPIENT:Scrutiny Panel

### 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 <u>Part IV of the Environment Act 1995</u>. 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 NOx 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 <u>Air Quality Action Plan</u> 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 CO2 emissions. Diesel vehicles are responsible for significantly higher levels of NO2 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 (NO2) 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/m3 to 51 ug/m3 annual average. Levels have been steady with some evidence of a decline in recent years (see Appendix 3). Date collated by <u>European Environment Agency (EEA) from Member States</u> 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 <u>Ambient Air</u> <u>Pollution in Cities Database</u>. From this it was reported in the press that Southampton ranked amongst the most polluted cities in the UK and PM10 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/m3. 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 maybe 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 <u>Committee on the Medical Effects of Air Pollutants</u> (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 <u>Estimating Local Mortality</u> <u>Burdens associated with Particulate Air Pollution</u>. 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.

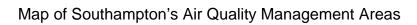
#### 8. Looking Forward

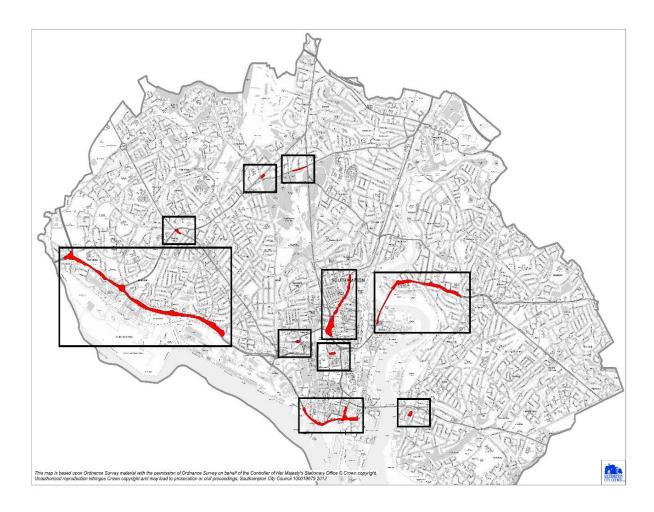
- 8.1. DEFRA is currently reviewing the future delivery of LAQM duties and it is widely anticipated that this will reduce the burden on local authorities to report review and assessment activities. The options being considered include proposals that could significantly reduce the expectation for council's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

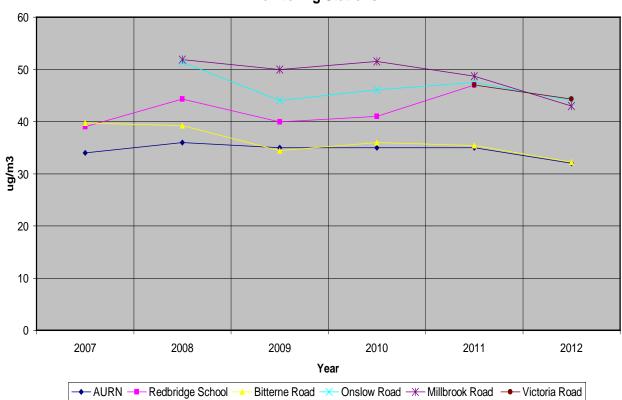
| Further Information Available From: | Name:   | Stephen Guppy                 |
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|                                     | Tel:    | 023 8091 7525                 |
|                                     | E-mail: | steve.guppy@southmpton.gov.uk |

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

| Pollutant   | Air Quality O  | bjective               | Date to be achieved by |
|---|--|------------------------|------------------------|
| Foliulant   | Concentration  | Measured as            | Date to be active by   |
| Benzene   | 16.25 µg/m³  | Running annual<br>mean | 31.12.2003             |
|   | 5.00 μg/m³   | Annual mean            | 31.12.2010             |
| 1,3-Butadiene   | 2.25 µg/m³   | Running annual<br>mean | 31.12.2003             |
| Carbon monoxide   | 10 mg/m <sup>3</sup>   | Running 8-hour<br>mean | 31.12.2003             |
| Lead  | 0.50 µg/m³   | Annual mean            | 31.12.2004             |
| Leau  | 0.25 μg/m³   | Annual mean            | 31.12.2008             |
| Nitrogen dioxide  | 200 μg/m³ not to be<br>exceeded more than 18<br>times a year               | 1-hour mean            | 31.12.2005             |
|   | 40 µg/m³   | Annual mean            | 31.12.2005             |
| Particulate Matter<br>(PM <sub>10</sub> ) (gravimetric) | 50 μg/m³, not to be<br>exceeded more than 35<br>times a year               | 24-hour mean           | 31.12.2004             |
|   | 40 µg/m³   | Annual mean            | 31.12.2004             |
|   | 350 μg/m <sup>3</sup> , not to be<br>exceeded more than 24<br>times a year | 1-hour mean            | 31.12.2004             |
| Sulphur dioxide   | 125 μg/m <sup>3</sup> , not to be<br>exceeded more than 3<br>times a year  | 24-hour mean           | 31.12.2004             |
|   | 266 μg/m³, not to be<br>exceeded more than 35<br>times a year              | 15-minute mean         | 31.12.2005             |







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



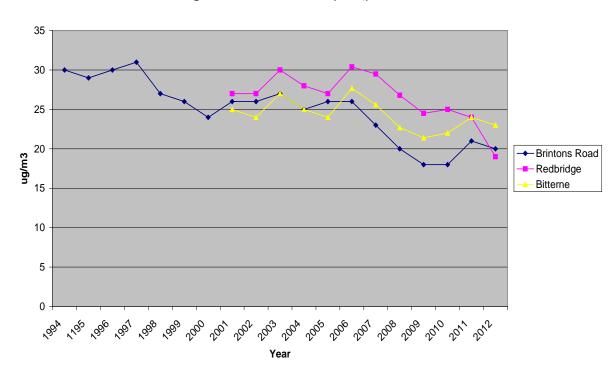


Figure Particulate Dust (PM<sub>10</sub>) 1994-2012

## Air Quality Action Plan – 2013 Progress Report.

### Progress update

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

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

| SOUT | HAMPTON SUSTAIN                            | ABLE TRAVEL CITY  |                 |                      |   |
|------|--|---|-----------------|----------------------|---|
| Ref  | Action                                     | Additional Information  | Status<br>(RAG) | Responsible<br>Owner | Progress  |
|      |  | (including creating a new<br>website). This will involve<br>the commissioning of a<br>new social marketing<br>campaign to be used as<br>the main branding and<br>advertising. A range of<br>strategic, low-cost<br>advertising sites such as<br>on school railings will be<br>used to promote<br>sustainable travel.  |                 |                      | has since been commended for a<br>national award. 25 MyJourney<br>roadshow events were staged, a<br>website has been launched offering<br>a multi-modal journey planning tool<br>and live bus and train travel<br>information. A Skyride was run in<br>the city in July 2013 with over<br>10,000 cyclists in attendance.  |
| 2.2  | Business Travel<br>Planning                | Retail Travel Plans for<br>Major Shopping<br>Destinations including<br>West Quay to encourage<br>more shoppers to travel by<br>public transport and<br>reduce reliance on the car.<br>Items such as cycle<br>parking, shower facilities,<br>electric vehicle charging<br>points at workplaces, PT<br>information points and<br>establishing a framework<br>for collective delivery and<br>evaluation of the travel<br>plan will be taken forward. | Green           | Adrian Webb          | <ul> <li>SCC has been, and is continuing to, work with major retailers and businesses in the city including:</li> <li>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:</li> <li>A car share scheme has been launched at the General Hospital and 60 additional cycle parking bays installed.</li> <li>An annual travel and transport conference has also been staged.</li> <li>The Royal South Hants Hospital now has a travel plan in place and several walking and cycling events have been held.</li> <li>Solent University has implemented a parking management scheme and updated its cycle facilities.</li> <li>The University of Southampton has installed additional cycle parking provide road safety training and a regular bike doctor for cyclists.</li> <li>Bike week was held in June 2013 for the city.</li> <li>A travel planner's forum has been set up with at least 20 businesses in attendance at each meeting.</li> <li>A travel planning newsletter is also sent out on a monthly basis.</li> </ul> |
| 2.3  | Freight<br>consolidation and<br>efficiency | The project will<br>investigate, evidence and<br>implement a series of<br>measures to introduce<br>'Green fleet' management.<br>This will eventually  | Green           | Simon Fry            | The viability study for the<br>development of a Sustainable<br>Freight Consolidation Centre has<br>been produced. An OJEU process<br>has been undertaken identifying a<br>private distribution company who  |

| SOUT | SOUTHAMPTON SUSTAINABLE TRAVEL CITY |  |                 |                      |  |  |  |
|------|-------------------------------------|--|-----------------|----------------------|--|--|--|
| Ref  | Action                              | Additional Information   | Status<br>(RAG) | Responsible<br>Owner | Progress   |  |  |
|      |                                     | encompass a driver<br>behaviour change<br>programme aimed at<br>encouraging more<br>economic driving<br>techniques, emissions<br>modelling tools to identify<br>particular locations where<br>freight is delayed, reducing<br>householder wasted<br>mileage through picking up<br>failed home deliveries,<br>shared service activities in<br>urban centres and smart<br>bins to reduce<br>unnecessary waste<br>collection, managed<br>loading bay booking in<br>urban centres. A trial of<br>the smart-freight concept,<br>the use of smart tagging<br>to enhance customer<br>visibility of freight transport<br>and a fleet vehicle<br>partnership looking at<br>joint procurement and<br>specification, sharing<br>vehicles and depots to<br>deliver efficiencies for<br>members and lower<br>emissions from vehicles<br>purchased by members.<br>These elements will be<br>delivered through the<br>development of a<br>Sustainable Freight<br>Distribution Centre. |                 |                      | have since been appointed to<br>develop and operate the centre.<br>The site has also been identified in<br>Nursling and will be commissioned<br>in December 2013. A number of<br>major organisations have signed up<br>to make use of the centre including:<br>1. Southampton City Council<br>2. University Hospital<br>3. University of Southampton<br>4. Solent University<br>5. New Forest District Council<br>6. Hampshire County Council<br>7. Eastleigh Borough Council<br>8. Hampshire Constabulary<br>9. West Quay<br>A number of other private<br>businesses have expressed an<br>interest in utilising the facility. |  |  |
| 2.4  | Public Transport<br>Travel Planning | Preparation of new rail<br>station travel plans. Work<br>with local rail users,<br>transition towns, rail<br>operators and ATOC to<br>develop station travel<br>plans at the following key<br>locations including<br>Southampton Central,<br>Eastleigh and other local<br>stations.  | Green           | Adrian Webb          | A consultant has been appointed to<br>develop a travel plan for the<br>Southampton Central Station. The<br>travel plan is scheduled to be<br>completed in January 2014 with up<br>to £180k of funding identified to be<br>invested in measures to promote<br>more sustainable modes of<br>transport in the area. An<br>overarching plan for all stations in<br>the city is also in progress. Real<br>time information is now available at<br>the station providing travellers with<br>up-to-date info on buses and trains.   |  |  |
| 2.5  | Smart ticketing<br>and media        | Delivery of a sub-regional<br>multi-modal interoperable<br>transport smartcard. The<br>ticket will provide the link<br>between operators and<br>modes to give the best<br>possible products to<br>transport users making<br>public transport seamless,<br>easier to use and cheaper<br>as well as promoting the<br>growth of the sector.   | Green           | Thomas King          | A Hampshire-wide Smartcard will<br>be launched in July 2014. The back<br>office system has been procured<br>and the equipment is in the process<br>of being fitted to buses and ferries.   |  |  |
| 2.6  | Brompton Bike<br>Hire scheme        | Expansion of the<br>Brompton bike hire<br>scheme i.e. PlusBike<br>establishing a series of<br>hire points in conjunction<br>with South West Trains in<br>addition to a Leeds-style   | Green           | Adrian Webb          | Installed in March 2013 and<br>launched in April 2013. The scheme<br>has 60 members signed up to use<br>the bikes with 10% of bikes used<br>every day of the year. Corporate<br>members include the University<br>Hospital, the University of<br>Southampton, Solent University,   |  |  |

| SOU | SOUTHAMPTON SUSTAINABLE TRAVEL CITY |   |                 |                      |   |  |
|-----|-------------------------------------|---|-----------------|----------------------|---|--|
| Ref | Action                              | Additional Information  | Status<br>(RAG) | Responsible<br>Owner | Progress  |  |
|     |                                     | cycle hub at Southampton<br>Central Station.  |                 | Cwild                | Skandia, CooperVision, Ordance<br>Survey and the Mayflower Theatre.   |  |
| 2.7 | Legible Bus<br>Network              | Legible bus networks.<br>Improving road-side<br>publicity for services along<br>key networks. The city has<br>high levels of bus use and<br>is seeking to double bus<br>use over the next 20<br>years.              | Green           | Richard<br>Cooke     | A new format for bus timetables has<br>been rolled out on bus stops along<br>Above Bar Street as a pilot. Two<br>additional phases of the project will<br>see the new timetables installed at<br>181 bus stops in December 2013<br>and another 180 bus stops between<br>February and March 2014.  |  |
| 2.8 | School Travel<br>Planning           | Support for the<br>implementation of<br>measures in existing<br>School Travel Plans and<br>ModeShift  | Green           | David Deane          | 27 schools have signed up to the<br>STARS school travel plan<br>programme (a national<br>accreditation scheme). Through this<br>programme over 1000 bikes have<br>been fixed, 192 Bike-it events have<br>been staged, and 25,000 positive<br>cycling and scooting experiences<br>have been delivered. By July 2013<br>14 schools had achieved bronze<br>status under the scheme which is<br>the highest rate of any local<br>authority area in the UK. The<br>scheme has seen 18,000 pupils<br>walk to school at least once a week<br>and an 8% increase in cycling to<br>school rates for those schools<br>participating in 'Bike-it'. A pilot<br>project was staged in Sholing<br>where a road was closed off to<br>simulate what it would be like<br>without traffic. A bus pass for 16 to<br>19 year olds has also been<br>launched which has trebled<br>participation in bus use.<br>An additional travel training<br>programme was developed with a<br>number of schools for children with<br>special educational needs and is<br>running until March 2014. The<br>scheme has so far seen 40 children<br>shift from local authority supported<br>journeys to other modes of travel<br>resulting in a £31k saving within 9<br>months. The scheme is referenced<br>as best practice by the DfT in their<br>annual school travel review. |  |
| 2.9 | Active Travel<br>programme          | Active travel programme to<br>encourage more active life<br>styles through walking and<br>cycling. A community and<br>workplace engagement<br>programme led by<br>Sustrans in partnership<br>with the city council. | Green           | Sustrans             | <ul> <li>Sustrans staff now sit with the council's transport planning team.</li> <li>In 2012/2013 the active travel programme achieved the following:</li> <li>Engagement with 12 community groups (target of 6)</li> <li>Engagement with 5 SureStart Centres (target of 5)</li> <li>3 Health Walk Groups maintained</li> <li>1 Health Walk Group established</li> <li>63 Cycle training and Bike Doctor events held</li> <li>214 participants engaged in walking activities (target of 80)</li> <li>845 participants provided info on walking and cycling (target of 80)</li> </ul>  |  |

| SOUT | SOUTHAMPTON SUSTAINABLE TRAVEL CITY   |   |                 |                      |  |  |  |
|------|---|---|-----------------|----------------------|--|--|--|
| Ref  | Action  | Additional Information  | Status<br>(RAG) | Responsible<br>Owner | Progress   |  |  |
|      |   |   |                 |                      | <ol> <li>22 Active Travel Champions<br/>recruited and trained (target of<br/>10)</li> </ol>  |  |  |
| 2.10 | Traffic Control<br>Predictions<br>Development to<br>improve air<br>quality. | Working with Southampton<br>University Transport<br>Design Group to predict<br>flows of traffic emanating<br>from signals data to<br>predict patterns ad<br>influence travel advice.<br>This will include<br>disseminating the<br>information via mobile<br>media and amending<br>signal plans to improve air<br>quality  | Amber           | Adrian Webb          | The city council is sponsoring an<br>EngD student to take the project<br>forward.  |  |  |
| 2.11 | Promotion of<br>home deliveries<br>campaign                                 | A campaign to be run in<br>conjunction with retailers<br>to encourage higher take-<br>up of home deliveries<br>allowing more people to<br>travel to shops without the<br>car.   | Amber           | Adrian Webb          | To be progressed in 2014.  |  |  |
| 2.12 | Development and<br>promotion of a<br>bus times<br>smartphone app            | SCC is working with<br>academic partners to<br>develop bespoke mobile<br>phone apps to provide a<br>step-change in public<br>transport smart ticketing<br>and information.  | Amber           | Adrian Webb          | An online journey planner has been<br>developed and implemented as part<br>of the MyJourney website and<br>marketing campaign. Access to this<br>tool and information on bus times<br>will be developed into a smartphone<br>app in 2014.  |  |  |
| 2.13 | Cycle Training  | Joint Commissioning and<br>contract management of<br>bikeability cycle training<br>across the South<br>Hampshire sub-region to<br>establish a standard offer<br>for cycle training to help<br>ensure the self funded<br>centre of excellence for<br>sustainable travel.   | Green           | Adrian Webb          | <ol> <li>Up to March 2013 the following was delivered:</li> <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<br>club scheme. The operator<br>will supply vehicles to be<br>used for marketing and<br>installation of up to 200<br>bays. Clear options for<br>extensive supply of electric<br>vehicles within the fleet will<br>be included.   | Amber           | Adrian Webb          | A campaign will be run in February<br>2014 to drive up membership of the<br>existing City Car Club. As part of<br>this promotion Eco-driver training<br>will be made available to residents<br>and businesses.   |  |  |
| 2.15 | Real time<br>information<br>provision                                       | SCC will deliver public<br>transport with real time<br>information through<br>display screens at our key<br>transport hubs, core bus<br>corridors and highly visible<br>locations and through<br>mobile phones by utilising<br>current and future proof<br>media. RTPI screens to be<br>installed at 13 x locations<br>including Hedge<br>Superstores, Gosport<br>Ferry terminal,<br>Southampton cruise ship<br>terminals, Bus Corridor | Green           | Paul Walker          | Real time information systems have<br>been fitted along all core bus routes<br>in the city.  |  |  |

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

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

| LTP3 | LTP3 ACTIONS                   |  |                 |                      |   |  |  |
|------|--------------------------------|--|-----------------|----------------------|---|--|--|
| Ref  | Action                         | Additional Information   | Status<br>(RAG) | Responsible<br>Owner | Progress  |  |  |
|      |                                | redevelopment and to<br>create a high quality public<br>realm and public transport<br>interchange.                         |                 |                      |   |  |  |
| 4.9  | Legible cities                 | Delivery of the on street<br>way finding maps and<br>signing in the city centre.   | Green           | Richard<br>Alderson  | Phase 4 due to be completed in<br>March 2014 which will see the city<br>centre network completed. |  |  |
| 4.10 | District Centres -<br>Bitterne | Bitterne District Centre is a<br>high priority for investment<br>to improve accessibility and<br>enhance the public realm. | Amber           | Richard<br>Alderson  | To be progressed.   |  |  |

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

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

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