

The **Public Sector Equality Duty** (Section 149 of the Equality Act) requires public bodies to have due regard to the need to eliminate discrimination, advance equality of opportunity, and foster good relations between different people carrying out their activities.

The Equality Duty supports good decision making – it encourages public bodies to be more efficient and effective by understanding how different people will be affected by their activities, so that their policies and services are appropriate and accessible to all and meet different people’s needs. The Council’s Equality and Safety Impact Assessment (ESIA) includes an assessment of the community safety impact assessment to comply with Section 17 of the Crime and Disorder Act and will enable the Council to better understand the potential impact of proposals and consider mitigating action.

<b>Name or Brief Description of Proposal</b>	Southampton Local Plan for Compliance with NO <sub>2</sub> EU Ambient Air Quality Directive Within the Shortest Possible Time ( <b>Non Charging Option</b> )
<b>Brief Service Profile (including number of customers)</b>	
<p>Southampton City Council is assessing the need for a Clean Air Zone because levels of air pollution within the administrative boundary and on roads under the authority of Southampton City Council were identified in the government’s plans as being above required European Union legal standards. The limit value for nitrogen dioxide is an annual average of 40ug/m<sup>3</sup>. The specific pollutant that Southampton City Council is assessing is nitrogen dioxide (NO<sub>2</sub>). The primary objective of the Clean Air Zone is to achieve compliance with the legal standards within the shortest possible time. Clean Air Zones can be charging, where vehicles are discouraged from entering the zone if they do not meet a minimum emission standard, or non-charging which is an area of targeted air quality improvement without charging.</p> <p>A consultation was held from 21<sup>st</sup> June 2018 for 12 weeks. An online survey was used to collect responses supported by physical copies, events and social media. Face-to-face meetings with residents, business and trade organisations were also held. The consultation was advertised through postcards, billboards, VMS traffic signs and other media. The preferred option consulted on was to introduce a citywide Class B Clean Air Zone. This would mean buses, taxis (private hire and hackney carriage), coaches and heavy goods vehicles that do not meet minimum emission standards (Euro 6/VI diesel or Euro 4 petrol) would be charged to enter the zone.</p> <p>A key outcome of the consultation was the review and reassessment of transport and air quality modelling which has highlighted that the introduction of a charging clean air zone is not necessary to achieve the objective of</p>	

reducing levels of nitrogen dioxide down to below legal levels in the shortest possible time.

The technical assessment has predicted that Southampton will achieve legal compliance for NO<sub>2</sub> levels by 2020 under the business as usual scenario (i.e. no further intervention). The non-charging option will seek funding from the Secretary of State to introduce a package of measures that can be introduced sooner than 2020 that will improve likelihood of compliance, facilitate ongoing improvements in nitrogen dioxide concentrations, and ensure compliance with the legal standards within the shortest possible time.

These measures include:

- Traffic regulation condition for buses to meet a minimum Euro VI standard in the city centre.
- Changes to the taxi Southampton City Council licensing conditions:
  - All newly licensed taxi and private hire vehicles will meet at least Euro 6 diesel/Euro 4 petrol emission standards by 2020 (excluding wheelchair accessible vehicles WAVs).
  - All licensed taxi and private hire vehicles will meet at least Euro 6 diesel/Euro 4 petrol emission standards by 2023 (excluding wheelchair accessible vehicles WAVs).
- The existing low emission taxi incentive scheme will be expanded to accommodate upgrades for more vehicles.
- Facilitation of a ULEV Taxi Trial scheme for taxi and private hire drivers licensed by Southampton City Council.
- Non SCC licensed taxis restricted from bus lane access.
- Dedicated electric vehicle charge points for taxi and private hire vehicle.
- Additional funding for the MyJourney campaign to continue promoting sustainable and active travel in the city on the A3024 Northam/Bitterne area.
- Subsidised freight consolidation, delivery and service planning and fleet accreditation schemes for freight and logistics operators.

### **Summary of Impact and Issues**

Air quality is a national public health priority. Of all environmental factors, it has the largest impact on health in the UK. The latest estimates suggest that air pollution (particulate matter and nitrogen dioxide) is an effect equivalent to 28,000 to 36,000 deaths in 2013<sup>1</sup>. Air pollution has health effects across the course of a person's life; from the underdevelopment of the unborn baby through to dementia in the later years of life. The strongest evidence of health impact is worsening symptoms of respiratory diseases including asthma, COPD and cardio-vascular disease.

Currently, nitrogen dioxide and particulates are the pollutants causing the largest health impacts in the UK. These pollutants are mostly associated with road/transport. The public health outcome framework/indicator for air pollution is mortality attributable to particulate matter. For Southampton, this equates to

over 100 deaths per year caused by long term exposure to particulate air pollution.

Poor air quality is known to have more severe effects on vulnerable groups including the elderly, children and people already suffering from existing conditions such as respiratory and cardiovascular conditions<sup>2</sup>.

Southampton is typically an urban environment with concentrations above the ambient background concentration of NO<sub>2</sub>. Evidence is limited as to the specific health benefits conveyed by reducing NO<sub>2</sub> concentrations below 40µg/m<sup>3</sup> though it is generally accepted that reducing concentrations toward the ambient background level, and below 40µg/m<sup>3</sup> annually will benefit health. The EU limit value for nitrogen dioxide (40µg/m<sup>3</sup> annual mean) is consistent with the World Health Organisation's guideline value<sup>3</sup>. Ensuring Southampton meets air quality limits for nitrogen dioxide will help mitigate negative health impacts of poor air quality.

Measures to improve air quality in the city and ensure Southampton meets legal limits for the annual mean nitrogen dioxide level may introduce financial pressure on some businesses (i.e. taxi and private hire, bus operators). Mitigations to these financial pressures are proposed through financial incentives that facilitate adoption of cleaner vehicles.

### **Distributional Analysis**

A distributional analysis has been carried out to inform the proposals. The aim of the distributional analysis is to explore how the impacts of the policy options are distributed amongst the different socio-economic groups (such as children and different income groups). It also assesses whether any key amenities are adversely affected through changes in access or surrounding air quality (e.g. schools, hospitals). This is included in the document E3 Distributional Analysis.

### **Potential Positive Impacts**

- Ensuring compliance with the legal annual limit value of 40µg/m<sup>3</sup> of NO<sub>2</sub> will convey positive benefits for public and environmental health.

<b>Responsible Service Manager</b>	
<b>Date</b>	
<b>Approved by Senior Manager</b>	
<b>Date</b>	

Project', 2013 [http://www.euro.who.int/\\_data/assets/pdf\\_file/0004/193108/REVIHAAP-Final-technical-report-final-version.pdf?ua=1](http://www.euro.who.int/_data/assets/pdf_file/0004/193108/REVIHAAP-Final-technical-report-final-version.pdf?ua=1)

<sup>3</sup>World Health Organisation Ambient (Outdoor) Air Quality and Health (2 May 2018)

[https://www.who.int/news-room/fact-sheets/detail/ambient-\(outdoor\)-air-quality-and-health](https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health)

## Potential Impact

Impact Assessment	Details of Impact	Possible Solutions & Mitigating Actions
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Impact Assessment	Details of Impact	Possible Solutions & Mitigating Actions
Age	<p><b><u>Health Outcomes</u></b>            Poor air quality is known to affect sensitive groups including the young and elderly and those with existing conditions. Therefore improvements to air quality will benefit all residents but particularly these sensitive groups<sup>4</sup>.</p>	<p>N/A - positive impact</p>
	<p><b><u>Home to School Transport</u></b>            41 Taxis with 4 seats, 2 Taxis with 6 seats, 1 Taxi with 7 seats and 3 Wheel Chair Accessible Taxis are used for Home to School Transport in Southampton. Currently, there is limited availability of accessible vehicles and capital costs are often higher than a standard vehicle.</p> <p>Measures to improve emissions through licensing could increase costs to operators who run Home to School transport services, however the local authority has a statutory duty to provide home to school transport so the cost will be passed on. However, the Home to School drivers that undertake other work may still have a financial pressure relating to the cost of upgrading their vehicle where the cost cannot be passed on. This could result in a reduced pool of vehicles available for home to school services.</p>	<p><b><u>Home to School Transport</u></b>            Wheel Chair Accessible vehicles licensed by SCC may be exempted from 2020/23 Euro 6 diesel/4 petrol requirements.</p> <p>A financial incentive to upgrade taxi and private hire vehicles to meet the licensing standards is also proposed to mitigate this impact. The low emission taxi scheme will allow wheelchair accessible vehicles and vehicles that carry 5-8 passengers to upgrade to a euro 6 diesel vehicle, an amendment to the existing scheme based on feedback from the taxi and private hire trade, recognising the limited availability on the market for low emission alternatives.</p>

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<sup>4</sup> Royal College of Physicians Policy report. Every breath we take: the lifelong impact of air pollution. 2016: <https://www.rcplondon.ac.uk/projects/outputs/every-breath-we-take-lifelong-impact-air-pollution>

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	<p><b><u>Concessionary Bus Travel (Senior Citizen Pass)</u></b>  Total concessionary bus journeys in Southampton (including senior citizen and disability passes) across four bus operators Apr 2017-Mar 2018 totalled 4,385,932.</p> <p>There are currently 27,442 senior citizen bus passes issued in Southampton. The cost to operators will not be passed onto those eligible for concessionary bus travel as the pass allows for free travel. However, without mitigation, measures to improve emissions (traffic regulation condition and cost to meet requirements) could put pressure on the financial viability of some routes (no analysis has been done to determine which as retrofit grant will avert).</p>	<p><b><u>Concessionary Bus Travel (Senior Citizen Pass)</u></b>  Offering non-compliant buses the option to retrofit to an accredited standard through the Council's £2.7m Clean Bus Technology fund will ensure operators are not adversely economically impacted by measures to improve bus emissions. This fund is available now. Consultation with bus operators prior to the retrofit scheme launch and for the Clean Air Zone provides the council with the confidence that all buses will be compliant by 2020.</p>
<p><b>Disability</b></p>	<p><b><u>Taxi Use and Mobility</u></b>  In 2015, the latest data available on mobility, on average, adults (16+) with mobility difficulties use taxis or PHVs more than people who do not (16 trips per person vs. 10 trips per person). These figures have remained broadly stable since 2010. Taxi or PHV usage makes up 3% of all their trips, compared to just 1% for those without mobility difficulties. These figures have remained broadly stable since 2010. <b>Error! Bookmark not defined.</b> The consultation identified a concern within the taxi trade that measures targeting wheelchair accessible vehicles would be detrimental to facilitating mobility in the city for those with disabilities.</p>	<p><b><u>Taxi Use and Mobility</u></b>  Wheel Chair Accessible vehicles licensed by SCC may be exempted from 2020/23 Euro 6 diesel/4 petrol requirements.</p> <p>A financial incentive to upgrade taxi and private hire vehicles to meet the licensing standards is also proposed to mitigate this impact. The low emission taxi scheme will allow wheelchair accessible vehicles and vehicles that carry 5-8 passengers to upgrade to a euro 6 diesel vehicle, an amendment to the existing scheme based on feedback from the taxi</p>

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	<p><b>Home to School Transport</b> 41 Taxis with 4 seats, 2 Taxis with 6 seats, 1 Taxi with 7 seats and 3 Wheel Chair Accessible Taxis are currently used for Home to School Transport in Southampton. There is limited availability of accessible vehicles, and capital costs are often higher than a standard vehicle. A more stringent licensing requirement could impact the numbers of specialist vehicles operating in the city.</p> <p>Measures to improve emissions through licensing could increase costs to operators who run Home to School transport services, however the local authority has a statutory duty to provide home to school transport so the cost will be passed on. However, the Home to School drivers that undertake other work may still have a financial pressure relating to the cost of upgrading their vehicle where the cost cannot be passed on. This could result in a reduced pool of vehicles available for home to school services.</p>	<p>and private hire trade, recognising the limited availability on the market for low emission alternatives.</p> <p><b>Home to School Transport</b> Wheel Chair Accessible vehicles licensed by SCC may be exempted from 2020/23 Euro 6 diesel/4 petrol requirements.</p> <p>A financial incentive to upgrade taxi and private hire vehicles to meet the licensing standards is also proposed to mitigate this impact. The low emission taxi scheme will allow wheelchair accessible vehicles and vehicles that carry 5-8 passengers to upgrade to a euro 6 diesel vehicle, an amendment to the existing scheme based on feedback from the taxi and private hire trade, recognising the limited availability on the market for low emission alternatives.</p>

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	<p><b><u>Concessionary Bus Travel</u></b>            At the time of writing, there are currently 2,717 disability bus passes issued in Southampton. The cost to operators will not be passed onto those eligible for concessionary bus travel as the pass allows for free travel. However, measures to reduce emission improvements could potentially put pressure on the financial viability of some routes (no analysis has been done to determine which).</p>	<p><b><u>Concessionary Bus Travel</u></b>            Offering non-compliant buses the option to retrofit to an accredited standard through the Council's £2.7m Clean Bus Technology fund will ensure operators are not adversely economically impacted by the preferred option. This fund is available now. Consultation with bus operators prior to the retrofit scheme launch and for the Clean Air Zone provides the council with the confidence that all buses operating on routes in Southampton will be compliant by 2020.</p>
<b>Gender Reassignment</b>	No discernible impact	
<b>Marriage and Civil Partnership</b>	No discernible impact	If vehicles are used for marriage and civil partnership ceremonies and are licensed in SCC, they will either have access to the financial incentive scheme or if they are heritage or historic vehicles, they may be exempted from the licensing requirement.

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<b>Pregnancy and Maternity</b>	<p>Evidence suggests that exposure to outdoor air pollution affects premature birth, foetal growth and birth weight<sup>4</sup>. Achieving and maintaining limit values for nitrogen dioxide will benefit these health outcomes.</p> <p>Traffic related air pollution is estimated to contribute to one-fifth of low birth weight at term cases. Southampton's low birth weight value in 2015 was 6.7%, similar to the national average 7.4%<sup>5</sup>. Very low birth weight in Southampton in 2015 was 1.26%, similar to the national average 1.57%<sup>6</sup>. Therefore, there is limited evidence that air pollution is currently affecting birth weight in the city, but achieving legal levels of NO<sub>2</sub> will continue to reduce risks.</p>	N/A – positive impact
<b>Race</b>	<p>22.3% of the Southampton's population are non-White British, including 14% who are residents from Black or Minority Ethnic backgrounds.</p> <p>Citywide improvements in air quality will also mean all ethnic groups across the city will experience positive health benefits.</p>	N/A – positive impact
<b>Religion or Belief</b>	No discernible impact	
<b>Sex</b>	<p><b>Deaths from COPD by gender</b> COPD incidence and earlier onset is associated with</p>	N/A – positive impact

<sup>5</sup><https://fingertips.phe.org.uk/search/birthweight#page/3/gid/1/pat/6/par/E12000008/ati/102/are/E06000045/iid/92531/age/29/sex/4>

<sup>6</sup><https://fingertips.phe.org.uk/search/birthweight#page/3/gid/1/pat/6/par/E12000008/ati/102/are/E06000045/iid/92532/age/29/sex/4>

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	<p>exposure to air pollution<sup>Error! Bookmark not defined.</sup> In Southampton, COPD is attributed to the deaths of 103.47 males per 100,000 and 56.73 females per 100,000 in 2014-2016. Improving air quality as a result will benefit both males and females.</p>	
<b>Sexual Orientation</b>	No discernible impact	
<b>Community Safety</b>	No discernible impact	
<b>Poverty</b>	<p><b><u>Lower Income Households</u></b> Nationally, the health impacts associated with air pollution are likely to fall to a greater extent on poorer households for a range of reasons<sup>7</sup>. Citywide improvements in Southampton's air quality will be greatest in and around the city centre and in vicinity of main roads, which score lower on the Indices of Multiple Deprivation scale (IMD) (i.e. are more deprived). (See E3 Distributional Analysis report)</p>	<p><b><u>Low Income Household</u></b> Positive health benefits conveyed to the poorest in society as a result of reducing concentrations of NO<sub>2</sub>.</p>
	<p><b><u>SCC Licensed Taxi Drivers</u></b> The IMD gives an indication of the overall levels of deprivation in each LSOA and takes into consideration several factors including crime and employment deprivation. Lower IMD values correspond to areas with higher deprivation. This data is available from the Department for Communities and Local Government: English Indices of</p>	<p><b><u>SCC Licensed Taxi Drivers</u></b> Mitigation for 2020/2023 licensing requirement will provide operators with financial incentive to upgrade to low emission vehicles. It will also allow wheelchair accessible vehicles and vehicles that carry 5-8 passengers to upgrade to a euro 6 diesel vehicle recognising the limited availability on</p>

<sup>7</sup> <http://www.instituteofhealthequity.org/resources-reports/fair-society-healthy-lives-the-marmot-review>

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	<p>Deprivation 2015. Matching taxi licence data to LSOAs, and assessing demographic data associated with the LSOA, the distribution of taxi drivers across the IMD appears to be highly skewed towards more deprived LSOAs: 40% of the taxi operators are registered in the most deprived LSOAs (quintile 1) and 79% in the three lowest quintiles. Affordability concerns are also reflected in the Taxi Operators Survey conducted by the SCC where 78% of the respondents stated that the cost to buy a low emission vehicle is the key barrier. Though the licensing requirement will be Euro 6 diesel/4 petrol rather than low emission which is potentially more achievable. This was also a concern raised during the consultation.</p>	<p>the market for low emission alternatives. Recent changes to the licensing policy for private hire vehicles has increased the maximum age of hybrid vehicles from 9 years to 12 years, providing a more attractive business case for operating a hybrid private hire vehicle.</p> <p>Proposals to introduce further EV charging points in the city will also facilitate the use of EVs in the taxi fleet.</p>
<b>Health &amp; Wellbeing</b>	<p>Health impacts associated with age, disability and pregnancy and maternity are previously discussed.</p>	
<b>Other Significant Impacts</b>	<p>The document “E3 Distributional Analysis” reviews further distributional impacts of a charging Clean Air Zone including:</p> <ul style="list-style-type: none"> <li>• Population weight NO<sub>2</sub> concentrations according to LSOA.</li> <li>• Air quality impact on sensitive receptors.</li> <li>• Air quality and socio-economic characteristics.</li> <li>• Affordability for households and business</li> </ul>	

