DECISION-MAKER:		CABINET		
SUBJECT:		PROPOSED CLEAN AIR ZONE FOR SOUTHAMPTON		
DATE OF DECISION:		22 JANUARY 2019		
REPORT OF:		CABINET MEMBER FOR GREEN CITY		
CONTACT DETAILS				
AUTHOR:	**Name:**	**Steve Guppy, Service Manager, Scientific Services**	Tel:	**023 8091 7525**
	E-mail:	Steve.Guppy@southampton.gov.uk		
Director	**Name:**	**Mitch Sanders, Service Director, Transactions and Universal Services**	Tel:	**023 8083 3613**
	E-mail:	Mitch.Sanders@southampton.gov.uk		

STATEMENT OF CONFIDENTIALITY
None

BRIEF SUMMARY

Southampton City Council (SCC) was one of the first five local authorities in England outside of London required to assess the need for a Clean Air Zone and have been served a Ministerial Direction requiring a Plan to be submitted to the Secretary of State by the 31st January 2019 demonstrating how compliance with EU Ambient Air Quality Directive limit for nitrogen dioxide (annual mean 40 µg/m^3) will be achieved within the shortest possible time.

New Forest District Council (NFDC) were subsequently identified as also needing to undertake the same assessment and have worked in partnership with Southampton City Council to ensure legal compliance can be delivered in both areas. The options have been derived and assessed in accordance with the Government's Clean Air Zone Framework, the HM Treasury Green Book methodology and have been undertaken with technical support from consultants Ricardo and Systra in collaboration with government's Joint Air Quality Unit (JAQU). The work has been funded by JAQU.

The outcome of the feasibility study concluded that New Forest District Council will comply with legal levels by 2019 and additional measures will not deliver this any sooner.

Initial feasibility studies and modelling had indicated the need to consider a charging clean air zone under the Transport Act 2000 to achieve compliance in Southampton in the shortest possible time. A public consultation was carried out on that basis, the results of which informed further studies and modelling. As a result of that additional technical work it has now been established that levels of nitrogen dioxide in Southampton will be compliant in 2020. A charging scheme could not be introduced any earlier than January 2020 so will not deliver compliance any sooner.

The preferred option is to introduce a package of non-charging measures in 2019 to mitigate risk of exceedance, increase the likelihood that compliance is achieved before 2020 and to promote ongoing improvements in air quality.

The non-charging measures proposed are;

- Offering opportunities for businesses to assess and trial freight consolidation, thereby removing HGV trips in the city.
- An accreditation scheme for HGV operators so business can identify those who are the least polluting.
- Introduction of Traffic Regulation Condition that will ensure all operating buses meet the highest emission standard.
- Revising taxi licensing conditions to remove the most polluting vehicles.
- Expanding the existing low emission taxi scheme to support taxi operators deliver these upgrades.
- Offering a 'try before you buy scheme' for taxi operators to experience the benefits of an electric taxi for up to 3 months.
- An extension to the existing MyJourney programme to promote active and sustainable travel and reduce private vehicle use.
- Port measures including shore side power and preferential charging of the port HGV booking scheme.

An economic assessment has been able to demonstrate these measures offer value for money according to the net present value. The total cost for delivering these measures is £2.9M and the Plan seeks to secure these funds from the government's Clean Air Zone Implementation Fund and Clean Air Fund.

RECOMMENDATIONS:

	(i)	To approve the Plan attached as appendices for submission to the Secretary of State by the 31st January 2019 which proposes a package of non-charging measures that will mitigate risk of exceedance, increase the likelihood that compliance is achieved before 2020 and to promote ongoing improvements in air quality.
	(ii)	To delegate authority to the Service Director for Transactions & Universal Services to include port based measures, namely shore side power and the port HGV booking scheme, to the Plan subject to securing implementation and funding agreement with stakeholders.
	(iii)	To delegate authority to the Service Director for Transactions & Universal Services to take any action necessary to finalise the Plan, including making minor or consequential amendments following consultation with the Leader and Cabinet Member for Green City, so that all implementation, delivery and management requirements are sufficient enough to satisfy the requirements of HM Treasury Green Book methodology.

	(iv)	To delegate authority to the Service Director for Transactions & Universal Services to submit a revised Plan to the Secretary of State, following consultation with the Leader and Cabinet Member for Green City, in the event that the original Plan submitted on the 31st January 2019 is rejected.
	(v)	To approve the revision of the Clean Air Strategy for Southampton 2016-2025 to reflect the outcome of this Cabinet decision, the Plan and any other relevant progress made since the publication of the original strategy in 2016 and to delegate authority to the Service Director for Transactions & Universal Services to make any amendments to the Strategy necessary to give effect to this recommendation.
REASONS FOR REPORT RECOMMENDATIONS		
1.	Southampton City Council have been issued a Ministerial Direction that requires it to undertake a local assessment (feasibility study) of air quality in the city, and produce a business case for a Plan to demonstrate how compliance with the EU Ambient Air Quality Directive (AAQD) of 40 µg/m^3 for nitrogen dioxide (NO_2) can be achieved in the shortest possible time. This must be submitted to the Secretary of State for Environment for approval no later than the 31st January 2019.	
2.	SCC has concluded its feasibility study and can report the findings of its air quality technical assessment and economic appraisal. An Outline Business Case has been published in support of this paper (appended). This outlines a Plan to deliver compliance in the shortest possible time by delivering a Clean Air Zone in 2019 consisting of a package of non-charging measures to mitigate risk of exceedance, increase the likelihood that compliance is achieved before 2020 and to promote ongoing improvements in air quality.	
3.	In conjunction with NFDC, SCC has undertaken a twelve week consultation exercise with neighbouring authorities, local communities and businesses to: explain the objectives of the feasibility study, consider the potential health and economic impacts; understand any concerns; and assess the need for any mitigating actions or identify alternative options for consideration. 9309 responses were received and have been accounted for in developing the Business Case and identifying a preferred option for the Plan that will deliver compliance.	
4.	Significant support for shore side power has been expressed in the consultation exercise and has consistently featured in both internal and external engagement undertaken throughout the development of the Plan. The port operators (Associated British Ports) have expressed a willingness to facilitate its delivery within a short time frame if financial assistance was available. The CAZ feasibility assessment was able to determine that shore side power facilities to accommodate 20% of the cruise operations could be deliverable within the appropriate timeframes. Similarly, a port HGV booking scheme could be delivered promptly. However, it was concluded that;	

	• Both demonstrated no discernible benefit to nitrogen dioxide concentrations at EU relevant locations. • SCC does not hold the authority or any other mechanisms for implementing and ensuring a prompt and effective delivery. • No positive net present value of the two port measures was identified. Nonetheless, Cabinet have requested that, subject to securing suitable agreements with the port operators concerning delivery and finance, both shore side power and port HGV booking scheme be included in the non-charging package as it is considered that both can deliver significant benefits beyond achieving nitrogen dioxide compliance and the appetite and opportunity should be recognised.
5.	Delegated powers have been requested that would allow the Service Director for Transactions & Universal Services to submit a revised Plan without requesting formal approval from Cabinet. This will be subject to consultation with the Leader and Cabinet Member for Green City and is intended to accommodate the prompt resubmission of a Plan in the event that the Secretary of State rejects the original. This delegation is intended to only allow the Plan to be reduced in its scope and does not allow any change in the fundamental approach.
ALTERNATIVE OPTIONS CONSIDERED AND REJECTED	
6.	*Alternative Option A:* Do minimum (i.e. existing measures only) - The feasibility study indicates that compliance is likely to be achieved by 2020 at all compliance points. So compliance could be achieved without any further action and associated costs. However, the model output reports 40ug/m^3 at one location in Northam on the A3024 in 2019. This suggests that some prompt intervention in 2019 (i.e. non-charging measures) could assist in ensuring compliance is delivered sooner. The Analytical Assurance Statement (AAS), (appended) outlines the main limitations, risks, uncertainties associated with the assessment process. Sensitivity tests do not suggest unfavourable assumptions will push the model results into direct exceedance of the NO_2 limit value. The overall model uncertainty is reported at 4.7 µg/m^3 which indicates that anything over 35 µg/m^3 is at risk of exceedance in 2020. This suggests 5 locations in 2020 could be at risk of exceedance if no additional action is taken.
7.	*Alternative Option B:* Introduce a charging Clean Air Zone - A range of charging schemes have been appraised and a detailed assessment of a citywide Class B (busses, coaches, taxis and HGV) charging Clean Air Zone has been undertaken. While this initially was identified as the Council's preferred option based on early studies and modelling, the updated feasibility study has concluded that such a scheme could not be delivered any sooner than 2020, so is unlikely to deliver compliance any quicker now that the air quality in the city is improving more quickly than was first anticipated. Implementation, operation and mitigation costs over ten years are calculated at approximately £14M and the economic assessment has indicated it would deliver a positive net benefit for the same period.

	However, the government's Clean Air Framework (paragraph 38) expects any scheme to only operate until compliance is assured. On that basis a charging scheme introduced in accordance with this Framework is likely to operate for much less than ten years and would be unlikely to deliver a net benefit. For these reasons it is considered that the Secretary of State is very unlikely to approve and fund a charging scheme. SCC could chose to deliver a charging scheme outside of the government requirements placed upon it. Consequently, it would not be eligible for funding from either the Clean Air Zone Implementation Fund or Clean Air Fund and SCC would need to seek alternative funding. It is unclear what support a charging scheme might expect from government if it were pursued on a voluntary basis. It is anticipated that some of the backroom functions that might otherwise be delivered centrally may represent additional costs if a CAZ was being provided outside of a formal CAZ Plan. A full re-appraisal of costs, benefits and the project timeline would need to be undertaken if this were to be pursued. Additional improvements in air quality could be delivered initially by a charging Clean Air Zone, but ongoing benefits would be limited as the road fleet shifts over the next couple of years towards compliance with CAZ standards.
8.	*Alternative Option C:* Introduce a wider range of non-charging measures - The feasibility study has identified those measures considered as being effective in supporting the primary objective to bring about compliance with EU Ambient Air Quality Directive limits for nitrogen dioxide (NO_2) within the shortest possible time. A "long list" of non-charging measures was developed as part of the process and the short list of measures was selected on the basis of; • CAZ framework consistency – Is the option consistent with the governments CAZ Framework? • Distributional impacts – Are there adverse impacts on specific groups? • Value for money – Does the option represent good value for money? • Strategic fit – Does the option support the council's strategies? • Achievability – Southampton City Council's ability to deliver the proposed changes, both implementation of solution and ongoing management of solution. • Deliverability – The markets ability to deliver the proposed solution, in terms of product and services provision. • Affordability – Southampton City Council's ability to afford the proposed solution, both in terms of capital expenditure and revenue to maintain solution. • Eliminate, reduce or mitigate unintended adverse consequences – Does the option eliminate, reduce or mitigate unintended adverse consequences? For example worsening air quality in areas of the city due to traffic diversion or negative economic impacts. • Flexibility – The adaptability of the option to meet the potential changes requirements from the option as the CAZ develops. • Evidence Base - Availability of existing supporting evidence for this option that demonstrates its viability, or ability to assess it through transport and air quality modelling.

	Examples are provided in the Options Appraisal Report (appended).
DETAIL (Including consultation carried out)	
9.	In 2015, Defra published its Air Quality Plan for Nitrogen Dioxide (NO2) in the UK. Defra reported that the national **Pollution** Climate Mapping **(PCM) model indicated that an exceedance of the** EU Ambient Air Quality Directive level for nitrogen dioxide would **persist at locations in Southampton beyond 2023.** Consequently Southampton was identified as one of five cities needing to deliver compliance by introducing a Class B Clean Air Zone for buses, coaches, taxis and HGV, and legislation would be passed to this effect. In May 2016 the Joint Air Quality Unit (JAQU) was established to deliver the national nitrogen dioxide plan. Hosted by Defra, the team comprised of staff in Defra and DfT as well as the close involvement of a number of other government departments and delivery bodies. Direct links with officers in local authorities were established and JAQU were charged with the responsibility to provide guidance to assist in the delivery of local plans.
10.	A Clean Air Zone framework was subsequently published in May 2017 by Defra outlining the principles for the operation of Clean Air Zones in England. It provides the expected approach to be taken by local authorities when implementing and operating a Clean Air Zone.
11.	In July 2017, the national nitrogen dioxide plan was revised and Southampton City Council were instead of being mandated to introduce a charging CAZ were required to undertake an assessment to determine what measures would be required to ensure compliance with the legal limit value for nitrogen dioxide in its area in the shortest possible time.
12.	The UK Government has committed to funding the studies for plans to bring about compliance with legal NO_2 objectives in the shortest possible time. These feasibilities studies recommend a preferred option for implementation that achieves this objective. In Spring 2018, UK Government announced its commitment for funding the introduction of the plans through the Implementation Fund (£255m). An additional Clean Air Fund (£220m) was also introduced to support and mitigate the plans, totalling £475m.
13.	SCC have received a Ministerial Direction (appended) which required the Council to deliver a full business case to the Secretary of State by 15th September 2018. The business case was to set out detailed proposals for a scheme (the Plan) which is the authority's preferred measure to deliver compliance in the shortest possible time and was to be developed in accordance with HM Treasury's Green Book: Appraisal and Evaluation in Central Government.
14.	New Forest District Council (NFDC) was identified in the 2017 national plan as a "second tier" authority also required to undertake an assessment to establish how to bring about compliance. The exceedance identified in NFDC was confirmed as an extension to the same exceedance identified in Southampton, namely along the A35/A33 between Totton and Freemantle. To ensure consistency and effective delivery of their respective duties NFDC and SCC agreed to conduct their assessments collaboratively. This included joint technical assessments, stakeholder engagements and formal consultation. A Memorandum of Understanding* to this effect was established in March 2018. A copy is appended.

15.	Work on the Business Case began in late 2016. The primary objective being to identify a scheme that will deliver compliance with EU AAQD NO_2 limit in the shortest possible time. Initial stakeholder engagement and technical assessments were conducted between December 2016 and June 2018.
16.	The Clean Air Zone Framework requires Local Authorities to undertake extensive engagement and consultation with neighbouring authorities, local communities and businesses to: • explain the aims, including the potential health and economic benefits; • understand any concerns; and • assess the need for any mitigating actions or identify alternative options for consideration.
17.	SCC & NFDC conducted a joint public consultation exercise from the 21st June 2018 the 13th September 2018. The consideration of a charging CAZ was a significant issue for the city and the need to conduct a 12 week consultation was one reason why it was not possible to meet the deadline of the 15th September 2018 in the first Ministerial Direction. The additional technical assessment work that would also be required following consultation and the council's decision making process also meant that the September deadline which had been set without any agreement with SCC was unachievable. Representations were made to government but any extension of the deadline was refused.
18.	To assist in the technical assessments Systra and Ricardo were commissioned to deliver transport modelling and air quality modelling respectively. Ricardo were also commissioned to undertake the economic appraisal.
19.	<u>Transport Model Methodology</u> The full transport modelling methodology is included in the T3 Transport Modelling Methodology (appended). Systra have developed a Sub-Regional Transport Model (SRTM) on behalf of Solent Transport to support a wide ranging set of interventions across the region, such as forecasting changes in travel demand, public transport use, and testing impacts of transport policies and interventions.
20.	<u>Air Quality Model Methodology</u> The full air quality methodology report and, the results of the air quality modelling are appended. Ricardo have undertaken air quality modelling using the RapidAir model. The local model obtains a finer resolution of nitrogen dioxide concentrations in Southampton in comparison to the national Pollution Climate Mapping model (PCM). The RapidAir model enables a 1m resolution therefore modelled results can be extracted at receptor points anywhere on each of the 1m model output grid. The local model output provides NO_2 concentrations for the base year (2015) and projects the pollutant concentrations at the same locations in 2020. The local model therefore provides details of any non-compliant locations within Southampton in 2020. The local model is also able to take into account any additional measures to determine if the air quality compliance will be met or brought forward at particular locations through interventions (i.e. the Clean Air Zone). Local parameters (model inputs) were also used to establish the local model. These include;

	• Local fleet composition (i.e. bus, coach, heavy goods vehicle, light goods vehicle, private car, motorcycle taxi and private hire) informed by an ANPR survey of vehicles in Southampton and the associated emission standards of vehicles, vehicle numbers (as annual average daily traffic AADT), vehicle speeds, fuel use/type and euro standard classification of vehicles. • Other sources of emissions in Southampton including Southampton Port (vessels and port activity), industrial emissions including Marchwood Power Station and waste incineration plant in the New Forest. Local rail emissions were also included. • Local weather data. The local air quality model is validated with monitoring data collected by SCC from nitrogen dioxide diffusion tubes and automatic monitoring stations across the city. Assumptions for the transport and air quality model future projection (i.e. situation in 2020) were based on the principle that they would best reflect the most likely situation. The model provides results for the annual mean NO2 concentrations at EU AAQD relevant locations in Southampton. It extends to other roads that are the responsibility of Hampshire County Council in neighbouring authorities and the Strategic Road Network (SRN) managed by Highways England including the M271, M27 and M3. The assessment extended to these areas to determine the impact of the scheme more widely.
21.	The technical assessment supporting the consultation concluded that if no additional measures were taken the NFDC area was likely to achieve compliance by 2019 and no further action was warranted to ensure this. Southampton would likely experience exceedances of the legal limit value after 2019. Consequently some actions was required to accelerate the improvement of nitrogen dioxide concentrations in the city. For the purpose of the consultation exercise and based on early modelling of outcomes the preferred option for achieving this was identified as a city wide Class B Clean Air Zone imposing charges on buses, coaches, taxis, private hire and heavy goods vehicles entering the zone.
22.	The response to the Clean Air Zone consultation was unprecedented with 9,309 responses received. The consultation report setting out the detailed analysis of those responses was published on the 3rd December 2018. The Consultation report is appended and the full file of consultation responses is contained within the Background Papers to this report.
23.	In response to the information received from the consultation exercise and otherwise made available since the original feasibility study, the technical assessments were reviewed as follows: Transport Model • An updated version of the version of the SRTM has been used • Updated coding of the Redbridge roundabout to account for the current confirmed scheme design • Use of the latest 2018 National Road Traffic Forecast (NRTF) Updates to assumptions for the Port

	<u>Vessels travelling to or at berth</u> • Activity levels revised to represent latest growth forecasts for container vessels, Roll-on Roll-off vessels and bulk carriers. • Tighter fuel sulphur limit of 0.1% accounted for by assuming ships comply in 2015 by switching to marine distillate fuel. • LNG ships are assumed to represent 20% of cruise ships calling at the Port of Southampton with 85% lower NO_x emissions compared to distillate fuel. • Vessel fuel efficiency annual improvement of 1% in line with national atmospheric emissions inventory (NAEI) assumptions. • An annual 1% reduction in NO_x emission factor from ships to 2020 for Southampton compared to the NAEI assumption of 0.7%. <u>Port machinery</u> • Activity levels revised to represent latest growth forecasts for port machinery (e.g. straddle carriers relative to container ship forecasts). • Updated fleet plan for straddle carrier emission standards and model types as of 2018 to project 2020 fleets. <u>Port related traffic</u> • Port activity forecast revisions reflected in transport modelling. • Rail freight share updated to reflect diesel prices, rail freight subsidy provision and a rail lengthening project due for completion in 2020. <u>Funded Measures</u> • Confirmation of funding for the Clean Bus Technology Fund to retrofit 145 buses to Euro VI equivalent standard in Southampton. • Confirmation of funding for cycling routes in Southampton from the Clean Air Zone Early Measures Fund (Southampton Cycle Network 1, 5, 8 and 10) to be delivered by 2020. • Include recent success of the low emission taxi incentive scheme in Southampton.
24.	The economic appraisal was revised accounting for: • The outputs of the latest air quality modelling • Latest cost estimates • A specific appraisal of the port and its commercial operations. The methodology is detailed in the appendix.
25.	Full results for the air quality assessment are reported in the appendix, The Business Case for Achieving EU Nitrogen Dioxide Compliance in Southampton in the Shortest Possible Time, which identifies a preferred option and a plan for delivery (the Plan) is published alongside this paper (appended). The nitrogen dioxide annual mean results of the do minimum (i.e. no further intervention) are summarised in the table below for key locations. This compares the governments' national model, which predicted Southampton would exceed beyond 2020, and the local model that was undertaken to inform this plan. Bold and underlined values represent exceedances of the EU Ambient Air Quality Directive limit value. Values are reported to the nearest whole figure in accordance with EU Air Quality compliance guidelines.

Census ID	Location	PCM National Model NO_2 Annual Mean ($\mu g/m^3$)		Local Model NO_2 Annual Mean ($\mu g/m^3$)	
		2015	2020	2015	2020
46963	A3024 Northam Bridge	37	32	**50**	38
56347	A33 Millbrook Road West	**55**	**46**	**43**	36
6368	A33 Redbridge Road	**58**	**44**	**43**	36
6933	St Andrews Road	**35**	30	**46**	37
73615	Redbridge Causeway/ A35	**63**	**49**	**46**	36
75251	A3057 West Quay Road	**42**	37	39	32

The results for nitrogen dioxide annual mean in 2020 under non-charging and city wide CAZ B options are compared in the table below.

Census ID	Location	Do minimum baseline local model annual mean NO_2 ($\mu g/m^3$)	Non-charging local model annual mean NO_2 ($\mu g/m^3$)	City wide CAZ B local model annual mean NO_2 ($\mu g/m^3$)
		2020	2020	2020
46963	A3024 Northam Bridge	38	38	36
56347	A33 Millbrook Road West	36	36	32
6368	A33 Redbridge Road	36	35	32
6933	St Andrews Road	37	37	34
73615	Redbridge Causeway/ A35	36	36	33

26. The revised feasibility study suggests that those levels previously predicted for the NFDC area were likely to be an over estimate and compliance is more likely to be achieved by 2020 than previously reported. NFDC's Cabinet agreed on the 14th December 2018 to submit the New Forest District Council Air Quality Plan proposing to take no further action. The NFDC Plan was submitted to JAQU at the end of December and feedback is awaited.

27. The revised feasibility study predicted that nitrogen dioxide concentrations in Southampton would be much improved relative to those reported prior to the consultation exercise. The revised technical assessments for Southampton show levels at EU compliance points in 2020 all achieve the EU compliance level of 40 $\mu g/m^3$ (refer to relevant section of Business Case). Levels extrapolated from 2015 to 2020 indicate a concentration of 40ug/m^3 at one compliance point in 2019 (Ref 46963 A3024 Northam Bridge).

	The non-charging measures deliver improvements of less than 1 µg/m^3 at compliance points in 2020. Up to a 4 µg/m^3 improvement is observed on the motorway though these locations remain in exceedance according to our assessment Such exceedances fall within the control and responsibility of Highways England and lie outside the area for which the Council has been directed to produce a Plan. Additional measures beyond those which have been modelled within the air quality model have been included within the non-charging measures to increase confidence that compliance in the shortest possible time is achieved.
28.	The Class B charging scheme delivers improvements of between 0 µg/m^{3}and 4 µg/m^3 at compliance points relevant to SCC in 2020. Up to a 12 µg/m^3 improvement is observed on the motorway though these locations remain in exceedance according to our assessment. However, exceedances fall within the control and responsibility of Highways England and lie outside the area for which the Council has been directed to produce a Plan. The average reduction for SCC relevant locations is 2 µg/m^3.
29.	<u>Air Quality Model Sensitivity Tests</u> A range of model sensitivity tests were undertaken to understand how sensitive the air quality concentrations are to specific assumptions made. This is reported in full in the appendix. In summary: • Higher levels of port growth – this increases concentrations by a maximum of 0.5 µg/m^3 so did not have an impact on the final results; • Lower performance of Euro 6 – setting all light duty vehicles (e.g. private cars and vans) to base Euro 6 standard (Euro 6a rather than a split with the more modern Euro 6b and 6c) increased concentrations by up to 2 µg/m^3 which pushed one location up to 40 µg/m^3 and another to just over 35 µg/m^3 in the 'do minimum' so increases the risk of an exceedance arising in 2020. • Reduced primary nitrogen dioxide (fNO_2) emitted from vehicle exhausts by 40%. This significantly reduces modelled concentrations and indicates the model is sensitive to assumption made about engine types and performance. It suggests that modelled assumption are conservative. • Lower impact of the non-charging CAZ option to assess whether air quality would be affected if non charging options were not delivered as anticipated – the impact of this option was limited so there is no scope to reduce the benefit.
30.	Quality Assurance in the Technical Assessments - The Analytical Assurance Statement (AAS), (appended) outlines the main limitations, risks, uncertainties and suitability for use for supporting the preferred option with regards to the transport, air quality and economic assessments. The AAS concludes the following: <u>Limitations of Analysis</u> There are limitations and uncertainties in the assumptions made but what has been done is proportionate for the time and budget available to provide a robust evidence base for the final preferred option.

	Risk of Error/Robustness Ricardo have a range of quality assurance processes in place with checks carried out as part of this process. Sufficiently skilled and trained staff from both Systra and Ricardo are carrying out the analysis. Uncertainty The overall model uncertainty as measured in the baseline is 4.7 µg/m^3 which indicates that anything over 35 µg/m^3 is at risk of exceedance in 2020. This identifies 5 locations in 2020 at risk of exceedance in the do minimum scenario. The assumptions around the performance of Euro 6 vehicles and fNO_2 have the greatest impact on these results with lower performance of Euro 6 increasing the risk of exceedance and lower fNO_2 removing any risk of exceedance. None of the sensitivity tests pushed the model results into direct exceedance of the NO_2 limit value. Use of Analysis The AAS indicates that further measures beyond the do minimum scenario should be pursued to mitigate the residual risk of uncertainty in the modelling. Modelled non-charging measures did not significantly reduce this risk so a slightly wider package should be considered. The AAS concludes that the 'do minimum' scenario has the potential to achieve compliance with the air quality limits. SCC are pursuing additional non charging measures in light of this advice which have been included in the final preferred option. Government Assurance Process In addition to the AAS, the evidence used to support the preferred option will be assured by Government. A Department for Transport and Department for Environment, Food and Rural Affairs unit complete thorough reviews of the evidence as well as taking it through an independent review panel made up of external experts. The evidence goes through this scrutiny at several stages throughout the process. The evidence submitted to Government is reviewed by both internal and external experts to ensure it is a reasonable level of robustness and quality. This review and assurance process ensures Government and SCC have the confidence the right scheme has been identified to tackle roadside nitrogen dioxide concentrations in the shortest possible time.
31.	The Business Case concludes that compliance is likely to be achieved at EU compliance points in Southampton by 2020 without the need for any further measures introduced (do minimum scenario). The highest concentration in do minimum is 38 µg/m^3**.** The overall model uncertainty is 4.7 µg/m^3 , and assumptions relating to emissions of light duty vehicles are sensitive to the assumptions made and therefore increase the residual risk of exceedance, though no sensitivity test identifies an exceedance.

32.	The non-charging measures go beyond those modelled in the non-charging scenario to further improve the likelihood of compliance being achieved by 2020 or sooner, and to mitigate risk of exceedance. By increasing the chance of reaching compliance sooner, this is the model that best meets the requirements of the EU legislation and legal test. Economic Appraisal A cost benefit analysis (CBA) has been undertaken for the non-charging and CAZ B options to determine the net present value (NPV). CAZ B indicates a positive NPV on central assumptions: (i.e. the benefits of implementing these options would be greater than the costs), but the non-charging CAZ indicates a net cost. However, the greatest costs affecting the NPV of the non-charging option is Shore-side power which has a large upfront cost. Removing both port measures (including the port booking system, also a net cost) from the CBA, as is the case under the recommended option, the CBA for non-charging is positive. The citywide CAZ B option has the greatest impact on emissions, and therefore NO_2 concentrations within Southampton. Though the primary objective of the Plan is achieved under the do minimum scenario.
33.	The economic assessment determines the risk of delivering a CAZ B or non-charging scheme with regards to practicality of implementation and behavioural responses of transport users. The key delivery risks of a CAZ B are identified as: • Dependence on response to charge level set (i.e. assumptions made regarding upgrade of vehicles in response to a £12.50/£100 per day charge). • Occurrence of modelled assumptions immediately following implementation (i.e. 2020). In practice, it may take vehicle owners time to realise additional costs and upgrade vehicles to compliance, though some may react prior to implementation. Behaviours may also change over time, and multiple times. • Other JAQU uncertainties? E.g. taxi database, charging ANPR and back office given the timeframe SCC are under (must be in by 2020 as compliance anticipated in 2020). The key delivery risks for a non-charging option are identified as being primarily related to existing perceptions of businesses for sustainable distribution centres and the view that it is expensive alongside uncertainty on benefits and delivery mechanism. To mitigate this risk, the recommended option also includes a funding request for delivery and service planning and expert consultancy time to aid local business in identifying the benefits. With regards to shore power and the port booking system (encouraging HGVs to access the port at off-peak times), these are reliant on delivery by the Port.

34.	Additional Benefits The Economic Appraisal also reviews additional or secondary benefits of options. A CAZ B option could deliver significant secondary benefits (i.e. fuel and operating cost savings, GHG emission reductions and newer vehicles in fleets sooner). This is also possible under a non-charging scenario but at a smaller scale.
35.	The Business Case therefore identifies the package of non-charging measures as the preferred option to deliver compliance with the EU limit value in the shortest possible time.
36.	The primary objective of this Plan is to achieve compliance at EU relevant receptors, however, those receptors identified by the Local Air Quality Management Regime could benefit from any improvements delivered by the Plan.
37.	ESIA/Distributional Assessment Conclusions An Equalities Safety and Impact Assessment (ESIA) has been undertaken for both the non-charging and charging Clean Air Zones. Furthermore, a Distributional Assessment has been carried out by Ricardo. 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. Poor air quality is also known to have more sever effects on vulnerable groups including the elderly, children and people already suffering from existing conditions such as respiratory and cardiovascular conditions. Achieving and maintaining NO_2 concentrations below EU limit values (i.e. an annual mean NO_2 40µg/m^3) will benefit these health outcomes.
38.	CAZ B ESIA/Distributional Analysis There will be greater financial pressure on business under a charging clean air zone as a Class B will target commercial vehicles (buses, coaches, taxis and private hire vehicles and heavy goods vehicles) to upgrade. A CAZ B is unlikely to affect households directly as private vehicles would not be subjected to a charge, however indirect costs through the impacts on business will occur. Without mitigation, concessionary bus use, home to school transport and taxi and private hire operators that are primarily sole traders/self-employed would be most affected. Mitigations proposed for a CAZ B would however include financial incentives to upgrade vehicles. Buses are also currently supported by the Clean Bus Technology Fund to retrofit to compliant standard engines (Euro VI equivalent), therefore no assessment has been undertaken to establish which routes may face pressure as all buses operating in Southampton in 2020 are expected to be compliant. NO_2 reductions are greatest for the CAZ B, but the Distributional Assessment does not conclude a significant distributional impact for air quality.

39. Non Charging ESIA

The non-charging package of measures would also place financial pressure on taxi operators (through a change in licensing condition) and bus routes. However, the Clean Bus Technology Fund is secured and being delivered regardless of the CAZ local plan. The plan also includes measures to expand financial support for taxi operators in upgrading to low emission vehicles. The plan also requests that this financial support is extended to include Wheelchair Accessible Vehicles and those vehicles which carry 5-8 passengers to upgrade to euro 6 diesel, recognising the limited availability of low emission alternatives currently on the market.

NO_2 reductions are smaller than a CAZ B option, and the distributional assessment does not conclude a significant distributional impact for air quality under the non-charging option.

40. The distributional analysis is summarised in the table below:

Scenario	Air quality	Business Affordability	Household affordability	
City-wide CAZ B	-	×××	××	
Non-charging measures	-	×	×	

Notes: '-' means no significant or neutral effect, '×' denotes a small negative effect, '×××' denotes large negative distributional effect.

41. Monitoring and Evaluation

SCC will undertake monitoring and evaluation of the plan for compliance to ensure the objective is being achieved. This is detailed further in the Management case of the Outline Business Case appended. JAQU will also undertake a programme of national monitoring and evaluation. Where the monitoring and evaluation identifies a risk that the objective may not be achieved, SCC will work with JAQU to identify mitigations based on the nature of the issue to be addressed.

42. The public consultation clearly showed that expectations and ambitions for cleaner air in Southampton go beyond simply achieving legal compliance. To satisfy this expectation a proposal to introduce a Green City Charter is also being presented to Cabinet on the 22nd January 2018. This is intended to provide an opportunity to deliver long-term, far-reaching non-charging projects in partnership with stakeholders and will provide that opportunity to deliver improvements in air quality beyond the EU compliance levels and experience the public health benefits this will provide.

43. This will include continuing to work with stakeholders including the port community and Associated British Ports to support them with the delivery of their Clean Air Strategy commitments to deliver benefits outside the scope of this plan.

RESOURCE IMPLICATIONS

Capital/Revenue

44.	The Air Quality Plan recommended for approval includes significant capital expenditure for the implementation of the measures detailed in the Plan, for which the Council is requesting funding from government. A summary of the funding requested is provided below. The City Council is requesting the following funding in order to implement our package of measures to achieve compliance: • £ 243,250 to extend the Taxi Incentive scheme • £ 100,000 for taxi EV charging points • £ 8,000 for Bus Traffic Regulation Condition • £ 153,250 for Communications • £ 385,350 for officer support to mitigating measures. • £ 402,600 for monitoring and evaluation The following is requested for Freight measures: • £ 900,000 for a Sustainable Delivery Centre from the Clean Air Fund. • £ 450,000 for Delivery Support plans from the Clean Air Fund • £ 170,000 for a Fleet Accreditation scheme from the Clean Air Fund. • £ 80,000 for additional administrative business support Cost estimates have been derived through initial market consultation and engagement, and where this has not been possible, have been derived through estimation and examples of similar schemes. Further detail can be found in the financial case, section 4 in the Outline Business Case. Government funding for implementing Clean Air Zones (charging or non-charging schemes) is being made available through JAQU's Clean Air Implementation Fund. SCC's financial case has sought full Government funding to cover all costs that it would incur during its implementation. The total funding request is **£2,892,450.**
45.	Shore side power is estimated to cost £6.3M to deliver. If delivery costs were shared equally with the port operator an additional funding request of £3.15M will need to be requested. The project is dependent on receiving match funding from the port operator and will not go ahead without the proposed £3.15m contribution.
46.	There will be no statutory duty to deliver the Plan in the absence of funding from central government. SCC anticipate that confirmation of funding will be contained with the Ministerial Direction requiring the implementation of the Plan. If the Plan is submitted by the 31st January 2019 then it is anticipated that the Secretary of State will confirm funding in March 2019.
47.	In the event that the recommendation in this paper is not pursued, the implications of the alternatives are outlined below. In the event that no funding, or reduced funding, is awarded SCC can choose to implement the Plan at its own cost. This would require the Council to set aside capital funding for the implementation of the measures, and revenue budget for scheme monitoring in order to proceed. Currently there is no allowance in the Capital or Revenue budgets to fund the measures outlined in the Plan, and the Capital Programme would need to be

	reviewed accordingly and some schemes decommissioned, in addition to pressure on revenue budget.
48.	A number of alternative options were considered as follows: ***Alternative Option A****:* Do minimum. Under this option, funding would not be applied for and no capital or revenue expenditure would be incurred. However, there is potential for the Council to incur significant fines if nitrogen dioxide limits are exceeded. Any fines incurred would need to be met from the General Fund and could put a constraint on the delivery of core services. **Alternative Option B:** Introduce a charging scheme. An assessment of estimated costs and revenues has been undertaken for comparison purposes, based on a city wide charging zone, applying charging to Heavy Goods Vehicles (HGV), Buses & Coaches and Taxis (a CAZ B Scheme). Under this scheme the charge would be £100 per day for HGV, and £12.50 for taxis. The financial implications are split between implementation, operating revenues and operating costs. There are a number of uncertainties associated with a chargeable Clean Air Zone which could impact on these estimates. **Implementation costs:** The key implementation costs relate to the purchase and installation of ANPR twin-cameras and infrastructure, installation of signage, a suitable communications plan and project management costs. Further investment in the Penalty Charge Notice system may also be required. The combined capital and revenue cost of setting up a scheme is estimated at £3.3M, based on quotations received to date. The setup cost would form part of a business case submission in addition to the measures already outlined in the Plan. **Scheme Revenues:** The CAZ B scheme applies charging to Heavy Goods Vehicles, Buses, Coaches and Taxis. Revenues would be generated under the scheme through charging non-compliant vehicles, and through penalty charge notices (PCNs). Income from the scheme is expected to decrease year on year after the introduction of the scheme, as a result of both natural fleet turnover and behavioural change following the introduction of a charge. At this stage there is no allowance made for discounts or exemptions for local operators. **Operating Costs:** There would be significant operating costs associated with running the scheme. Costs relate largely to the operation and maintenance of the ANPR infrastructure, transactional costs associated with payments and the cost of enforcement and debt recovery. An annual contribution to a sinking fund has been included in the model to allow for risk and also to contribute to the eventual decommissioning of a charging scheme. Any net proceeds from the scheme would be available to the Council for reinvestment, and would be restricted to local transport schemes under Schedule 12 of the Transport Act 2000. The table below summarises the estimated cash flows on the basis that government funding is awarded to pay for the capital costs, that the mitigating

measures are implemented, and that charging scheme starts in January 2020. Costs are expected to exceed revenues after 2024/25.

(£'000s)	2019/20 (Qtr 4 only)	2020/21	2021/22	2022/23	2023/24	2024/25	Tot
Scheme Revenues							
CAZ income	1,349	4,978	4,152	3,092	2,418	1,783	
External Contributions							
Implementation Fund - Capital grant	2,912	-	-	-	-	-	
Implementation Fund - Revenue grant	366	30	-	-	-	-	
Grant Funding for Mitigating Measures	2,892	-	-	-	-	-	
Total Income	**7,519**	**5,008**	**4,152**	**3,092**	**2,418**	**1,783**	
Capital & Revenue Setup Costs							
Implementation Capital costs	2,912	-	-	-	-	-	
Implementation Revenue costs	366	30	-	-	-	-	
Mitigation costs	1,987	559	346	-	-	-	
Ongoing Revenue Expenditure							
CAZ Operation & Maintenance	684	1,539	1,552	1,321	1,330	1,339	
Total cost	**5,950**	**2,128**	**1,898**	**1,321**	**1,330**	**1,339**	
Net Cash contributed to Sinking Fund - Risk Mitigation	103	231	233	198			
Contribution to Sinking Fund - Decommissioning	167	167	167				
Net cash flow after Sinking Fund contributions	**1,300**	**2,483**	**1,854**	**1,573**	**1,088**	**444**	

There are a number of uncertainties in the assessment, where key assumptions have been made. Any change in these assumptions will impact on the financial model. The main assumptions concerns income estimates, contingency on capital costs and operating costs.

Capital costs:

A contingency of 15% has been allowed for on the capital costs for ANPR and signage. If this contingency is exceeded, the Council would incur capital costs of £0.06M for every additional 5% contingency. Cost overrun would not be covered by government funding and would therefore impact on the Capital Programme.

Income assumptions:

Income has been estimated on the basis of charging in line with the London Low Emissions Zone, combined with an estimated volume of non-compliant vehicles. If the assumed rate of compliance is accelerated, or the charge is reduced, income from the scheme will fall, and would cause cost to exceed revenue earlier than anticipated.

Cost assumptions:

The charging scheme estimates assume access to a centralised processing facility for matching ANPR data to DVLA records and handling payment of charges. In this scenario, SCC contributes a percentage of scheme revenue towards the operation of the facility, and DVLA charges apply to ANPR data passed to SCC in respect of PCNs only.

There is a risk that a centralised facility would not be available by 2020, and that SCC would have to undertake data processing in-house. The estimated charge for each vehicle enquiry is currently 11p, and would be a significant cost

	for high volumes of traffic. This could cause the scheme to generate a funding gap, which would be included in the business case to be subsidised by government only until air quality compliance is achieved. **Funding assumptions**: The estimates for option B have been built on the assumption that government funding will be secured to implement the scheme and that the mitigating measures in the Outline Business Case will proceed. **Charging scheme outside CAZ framework** The Council could create its own chargeable zone, under Part III of Schedule 12 to the *Transport Act 2000*, as amended by Part 6 of the *Local Transport Act 2008*. This provides for the introduction of road charging outside London. Charging schemes may only be made "if it appears desirable for the purpose of directly or indirectly facilitating the achievement of policies in the charging authority's local transport plan". If this were to be pursued, the Council would have to fund the capital setup costs, and the Capital Programme would need to be reviewed accordingly and some schemes decommissioned or delayed in order to fund the implementation. At this stage, while it is likely that setup costs and revenues would be similar outside of the CAZ framework, assurance cannot be given that, if a charging scheme were to be delivered outside of a CAZ framework, costs for ANPR data processing would be supported by the Department for Transport (as assumed in the existing CAZ framework). Therefore an assumption would need to be made that data processing costs would need to be recovered from any scheme other than a formal CAZ agreed by the Secretary of State. There may be other potential uses for the ANPR infrastructure if SCC were to pursue an independent charging zone. However, at this stage the cost implications of building in additional requirements have not been assessed and would require further feasibility work. **Alternative Option C:** Introduce a wider range of non-charging measures. At this stage, no further measures have been costed. Proposed measures would need to be identified, costed and included in the final business case submission, or alternative funding streams identified.
49.	Communications A communications plan has been developed in support of the plan and is included in the appendix. It aims to raise awareness of the plan and of the importance of clean air in Southampton. It will support the proposed measures by ensuring stakeholders are aware of the plan along with the impacts, mitigations and further opportunities it presents.

50.	Resourcing The business case includes a request for funding to provide staff resource to ensure effective delivery of the plan. This includes funding to cover existing staff time/resource and funding for an additional two posts.
Property/Other	
51.	None
LEGAL IMPLICATIONS	
Statutory power to undertake proposals in the report:	
52.	The UK Government , as the 'competent authority, for the purposes of the EU Air Quality Directive, is under a legal obligation in accordance with Article 13 of the Directive to ensure emissions of certain pollutants are below the prescribed limit values by relevant deadlines (January 2010). The UK has been in breach of these limit values since January 2010 and continues to breach the limit values at various locations across the Country. Southampton has been identified as being one of a number of Local Authority areas in which an exceedance of the limit value is modelled to have occurred and continues occurring. The UK Government is under a legal obligation within the Directive (Article 23) to establish air quality plans setting out appropriate measures to ensure the exceedance period is kept as short as possible.
53.	Following legal action (Client Earth v SSEFRA 2016) the UK Government has been ordered to secure compliance in the shortest possible time. As a result, areas which have an exceedance using national desktop modelling have been served with Ministerial Directions under s.85(5) Environment Act 1995 to secure compliance in those areas. Southampton is subject to such a Direction. A ministerial Direction was served on the Council on 19th December 2017 requiring submission of an outline business case followed by a full business case for securing compliance by 15th September 2018. A copy of that Direction is appended. Following initial modelling and feasibility work the Council modelling data indicated exceedances within the Southampton area were likely to require consideration of a Charging Clean Air Zone under Part III Transport Act 2000. This would constitute a significant strategic, policy, health and economic impact on the area and the Council, having taken detailed legal advice on the issues, determined that such a scheme could only be considered subject to proper public consultation while proposals were still at a formative stage. Accordingly the Council advised JAQU in April 2018 that a public consultation would be carried out between June and September 2018 alongside a further review of modelling data and technical analysis. The Council advised JAQU it would not be able to meet the deadline of 15th September 2018 and invited JAQU to re-issue a further Direction setting out a revised date that complied with the Council's legal obligations to consult and follow proper decision making processes set out in both statute and common law. JAQU declined to do so. The Council took further legal advice from leading Counsel, following which it concluded that to proceed with the submission of a business case absent proper consultation and consideration of the outcomes would be unlawful and contrary to the judgement in ClientEarth v SSEFRA which rejected the argument that delay justified not carrying out additional projection and technical work required to arrive at a properly constituted and deliverable Air Quality Plan for the UK. The government's own Consultation guidance issued by the Cabinet Office supports the requirement

	to carry out proper consultation at a formative stage of a project and to consider the outcomes in a timely and appropriate manner. The length, duration and content of consultations and the need to properly consider matters at a formative stage has also been considered by the UK courts in the cases of Mosely, Leicestershire, Haringey and Gunning. The Council has continued to work with JAQU throughout the consultation period and beyond and has kept JAQU informed of progress on a weekly basis throughout the conduct of this matter.
54.	Notwithstanding the above, a further Ministerial Direction was served on the Council on 17th December 2018 (appended). Under section 85(7) of the Environment Act it is the duty of a local authority to comply with a Direction given to it. The revised requirements of the new Direction are: (i) Provide the necessary final modelling outputs, prepare an outline business case and full business case for its area. (ii) Produce the necessary final air quality and transport modelling outputs for the baseline and scenario modelling that feed into the outline business case as soon as possible and by 18 December 2018 at the latest. (iii) The outline business case must be submitted to the Secretary of State as soon as possible and by 21 December 2018 at the latest. (iv) The full business case must be submitted to the Secretary of State as soon as possible and by 31st January 2019 at the latest. There are a number of additional technical requirements set out within the Direction itself and Members are advised to read the direction in full in order to understand the obligations to which they are subject in considering this matter. 'Full Business Case' means a document which sets out the detailed proposals for a scheme which has been identified through a feasibility study as the Authority's preferred scheme to deliver compliance with the legal limit value for nitrogen dioxide in the shortest possible time. 'Feasibility study' means a study conducted in accordance with HM Treasury's Green Book approach that will deliver compliance with legal limits for nitrogen dioxide in the shortest possible time.
55.	The Council is, accordingly, under a legal obligation imposed via the Directive to select an option for submission to the Secretary of State that secures compliance with the limit value in the shortest possible time. JAQU guidelines support funding only for those measures that best reflect this legal test set out in the EU Directive and Ministerial Direction. Any option that does not achieve compliance in the shortest possible time or which go beyond that which is required should, by law, be rejected unless adopted as measures 'in additional to' the option which secures compliance in the shortest possible time (i.e the Council can choose to take additional measures over and above the option securing compliance but these would be discretionary measures that fall to be funded by the Council in their entirety).
56.	The UK Government is currently in breach of the EU Directive. If it fails to secure compliance to the satisfaction of the European Court of Justice through the current JAQU engagement with local authorities and the non-compliance

	with limit value continues the Court is entitled to levy penalty measures on the UK under Article 260 of the TFEU. Penalties comprise a minimum sum to reflect non-compliance based on minimum lump sum multiplied by a factor representing the GDP and voting rights of the defaulting Member State (currently €10,328,000) supplemented by a discretional uplift of €4,163 for each day beyond the deadline for compliance that the UK remains in breach of the Directive. The UK Governments exposure to potential penalties is there for extremely significant and will survive any 'Brexit' implications. The significance of this risk for the Council arises under the Localism Act 2011, s.48 which allows the Secretary of State to apportion the liability of any financial sanctions imposed by the EU on the UK Government to any Local Authority found to have contributed to the default occurring. If the Council fails to approve a plan which meets the deadlines set out in the Ministerial Direction and fails to ensure compliance with the limit value by the specified date it will be possible for the Secretary of State to apportion a percentage of the penalty imposed on the UK by the Court for non-compliance. That percentage would be attributed according to the degree of default that has contributed to the overall UK default but the risk of significant financial penalty being imposed on Southampton remains high unless compliance is secured with NO2 limit values by 2020. If the Council fails to comply with any aspect of the second Ministerial Direction dated 17th December 2018 it would be open to any party having an interest in the matter, including the Secretary of State, to issue proceedings against the Council in order to seek a Mandatory order securing the Council's compliance with the Directive. The Council would likely be liable for the full costs of such proceedings in the event it was found to be in breach.
57.	In terms of the substantive proposals set out in the Officer recommendations and the proposed Full Business Case, the Council's statutory powers to implement the measures put forward derive from s.1 Localism Act 2011 (the General Power of Competence) together with a number of area specific discretionary powers associated with certain functions and services themselves. S.1 provides that a local authority has power to do anything that individuals generally may do. The generality of the power conferred is not limited by the existence of any other power of the authority which (to any extent) overlaps the general power but cannot override an express prohibition contained in any other statute (i.e The Council may do anything unless either another Statute or the Courts determine it cannot do that thing or can only do it in certain prescribed circumstances).
58.	Part IV of the Environment Act 1995 requires all local authorities to review and assess air quality in their areas. Where standards are being exceeded or are unlikely to be met, local authorities are required to take remedial action such as designation of Air Quality Managements Areas (AQMA's) and introduce action plans for achieving compliance or other action under the Local Air Quality Management Framework in accordance with the EU Directive. Where an AQMA is in effect fixed penalty notices can be issued to vehicles that exceed emission limits or which commit a stationary idling offence (subject to the Local Authority being designated by the Secretary of State for the issue of Fixed Penalties and covering only that part of the area covered by an AQMA). The Council is not currently designated to issue fines

	but could consider taking that forward in respect of the areas within the City covered by its existing (or amended) AQMA's.
59.	Additional powers to implement the non-charging measures contained within the proposed plan include, but are not limited to: **Applying a Traffic Regulation Condition** by application to the **Traffic** Commissioner under section 7 of the **Transport** Act 1985. This can be used to restrict any class of vehicle (including **buses**) from using any road; Taxi Licensing conditions may be imposed pursuant to Taxi and Private Hire Vehicle (PHV) legislation, primarily contained within the Town Police Clauses Act 1847 and the Local Government (Miscellaneous Provisions) Act 1976 together with ancillary legislation. Funding measures may be provided through Grant or Loan schemes introduced under s.1 Localism Act 2011 but will be subject to State Aid compliance and applications and measures will be assessed on a case by case basis to ensure funding remains within the legal framework for public funding.
60.	It should be noted that, cumulatively, the measures proposed within the recommended Business Case can be taken forward as part of a Clean Air Zone. A Clean Air Zone can comprise non-charging measures, or charging measures or both. One of the options considered as part of the Council's initial modelling and consultation, which has subsequently been recommended for rejection, is a local road charging scheme (Charging Clean Air Zone) under the Transport Act 2000. S.163 of the Transport Act permits a Council to introduce a 'scheme for imposing charges in respect of the use or keeping of motor vehicles on roads'. Those vehicles charged can be further divided into classes of vehicles that can / cannot be charged and exemptions from charges in certain circumstances. A charging clean air zone should only be considered where other non-charging measures cannot secure compliance in the shortest possible time (i.e. quicker than a charging scheme). Following the detailed public consultation carried out between June and September and in response to new and further information received from stakeholders that allowed modelling and technical studies to be undertaken with updated data, it has been determined that a local charging scheme could not achieve compliance faster than non-charging methods. A local charging scheme requires significant infrastructure to be procured and installed to ensure compliance and enforcement and the timeline for the introduction of the infrastructure and subsequent time to be allowed for impact of the scheme once in force results in the charging model achieving compliance after alternative non charging measures. As such, and in accordance with JAQU's published guidance on the approval of Business Cases for Air Quality Plans to be submitted in accordance with the Ministerial Direction this option cannot be included in the submission to JAQU for central government funding. It remains open to the Council, however, to consider a discretionary local charging scheme under the Transport Act 2000 if, at any point, the non-charging measures do not deliver the expected compliance rates or the Council wishes to plan ahead for further improvements in Air Quality over and above the statutory exceedance levels. Any such local scheme would

	however need to be funded locally by the Council and / or partners and as such would require a decision of full Council to implement (as the costs of implementation exceed £2,000,000 and therefor require an amendment to Council budgets). Further, more detailed legal implications must be considered in the event a local charging scheme were subsequently considered at these should be set out in full in any report to Council accordingly.
Other Legal Implications:	
61.	S.108(1) Transport Act 2000 imposes a duty on local transport authorities, including the Council, to develop policies for the promotion and encouragement of safe, integrated, efficient and economic transport to, from and within their area and to carry out their functions so as to implement those policies. The duty requires the Council to also take into account and have due regard to any policies announced by the Government and to any guidance issued in respect of the mitigation of or adaption to climate change or otherwise with respect to the protection or improvement of the environment. The measures proposed have been put forward having due regard to this duty and all relevant government guidance, including the Clean Air framework issued by JAQU, and are wholly in accordance with the Council's adopted Local Transport Plan which is further discussed below.
62.	S.149 of the Equality Act 2010 (the 'Public Sector Equality Duty') requires the Council to exercise its functions having due regard to the need to: (a) eliminate discrimination, harassment, victimisation and any other conduct prohibited by the Act, (b) advance equality of opportunity between persons who share relevant protected characteristics and those who do not, and (c) foster good relations between persons who share protected characteristics and those who do not.
63.	Protected characteristics comprise age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex and sexual orientation.
64.	The Council has carried out a full Equality Impact Assessment of the proposals recommended in this report, together with the content of the proposed Business Case for submission to JAQU and the details are set out in the appendices.
65.	Members are required to have due regard to the attached Impact Assessment in reaching their decision and to properly and fully consider the potential impacts of the proposals (both negative and positive) identified in the Assessment in reaching their decision having regard to the three statutory tests set out above.
66.	S.6 of the Human Rights Act 1998 makes it unlawful for the Council to act in a manner that is incompatible with a right protected under the European Convention on Human Rights. Relevant convention rights to be consider in accordance with these proposals include Article 2 (right to life – health impacts of the proposals that may negatively impact on mortality rates within a non-compliant area), Article 6 (right to a fair trial – in this case right to have a say in the determination of any civil rights and obligations through the conduct of public consultation on issues affecting individuals), Article 8 (right to respect for private and family life – no interference with how an individual may live their life subject to that which is necessary in a democratic society to preserve law,

	public safety, economic wellbeing, protection of health and protection of the rights and freedoms of others), Article 10 (freedom of expression, through participation in consultation and decision making processes), Article 14 (prohibition of discrimination), Article 1 of the First Protocol (protection of property and right to peaceful enjoyment of possessions (such as vehicle use) subject to the right of the state to control this right in accordance with the general interest. Other rights may also be engaged in limited circumstances but the above sets out the key considerations for Members when considering both the responses to the public consultation, the proposals and any measures for mitigation of the impacts of the proposals where relevant.
67.	S.17 Crime & Disorder Act requires the Council to exercise its various functions with due regard to the likely effect of the exercise of those functions on, and the need to do all that it reasonably can to prevent crime and disorder in its area. This includes ensuring that adequate enforcement and remedies for redress are in place to secure compliance with any measures introduced to secure compliance with air quality limits imposed through relevant measures put forward by the Council in its Air Quality Plans.
68.	Data Protection Impact Assessment Statements have been undertaken and are included in the appendices to this report. These may be subject to alterations under officer delegated powers when the finalising the Business Case in preparation for submission to the Secretary of State
RISK MANAGEMENT IMPLICATIONS	
69.	A plan submitted to the Secretary of State that fails to deliver the objectives set by government is likely to be rejected. This could include a plan that does not provide sufficient evidence to demonstrate that compliance will be achieved in the shortest possible time. It could also include a Plan that is overly ambitious and proposes measures that exceed the scope of the Plan as it is intended. The non-charging package identified in the Plan represents those measures that achieve the secondary objectives and can assist in ensuring likelihood of the primary objective being achieved. They deliver a net benefit but there is a risk that the Secretary of State could consider the expenditure unnecessary in terms of the Ministerial Direction. The measures have been presented and costed in a manner that would allow delivery to be scaled back in the event that the Plan is approved in part. The addition of shore side power and the port HGV booking system adds considerable cost to the non-charging package (approximately 100% increase) with no net benefit identified. As such the risk of this being rejected increases.
70.	SCC's Strategic Risk Register includes "Failure to improve air quality to legal levels" and is subject to regular Service Director oversight. Failure to achieve legal compliance and/or deliver a Plan that can ensure it, will elevate the level of corporate risk in terms of formal legal action by government to the highest level and present further risks to reputation and delivery of strategic goals i.e. improving health and economic growth.
POLICY FRAMEWORK IMPLICATIONS	

71.	The recommendations are consistent with SCC's Clean Air Strategy 2016-2025 (published 2016) which identifies the need to improve air quality in the city as a priority. However, delivery priorities include *the introduction of penalty charges in 2019/20 for the most polluting vehicles*. At the time of publication the governments Air Quality Plan for Nitrogen Dioxide (NO_2) in the UK suggested SCC would be mandated to introduce a charging scheme of this type. Subsequent iteration of the national plan and a Ministerial Direction have not required this. The feasibility study undertaken by SCC indicates that a charging scheme is not required to deliver compliance. A charging scheme could deliver additional benefits but would need to funded by SCC. The business plan also suggests that a charging scheme could have localised but significant economic impacts on business. The proposed non-charging measures in the Plan are an alternative to a penalty charges that can deliver sustainable improvement. It is recommended that the Clean Air Strategy 2016-2025 delivery priorities are revised to reflect this in the event a Plan is approved and supported by the Secretary of State and prior to implementation of Plan measures. The Strategy is not a Policy Framework document and can therefore be amended under delegated power from Cabinet. None of the proposals set out in this report are contrary to any existing Policy Framework Plan such as the Local Transport Plan or Local Development Framework and can be accommodated without further alteration of those Plans and Strategies.
72.	The recommendations are consistent with the Health and Wellbeing Strategy 2017-2025 within which an outcome is to ensure Southampton is a healthy place to live and work with strong active communities. This is to be achieved by delivering a cleaner environment through a Clean Air Zone with vehicle access restrictions to the city.
73.	The recommendation supports the South Hampshire Joint Local Transport Plan 3 policies A ('optimise capacity of the highway network and improve journey time reliability') and E ('deliver improvements in air quality').
74.	The recommendation is consistent with the priority within the Southampton City Council strategy 2016-2020 to "improve air quality".

KEY DECISION?	**No**
WARDS/COMMUNITIES AFFECTED:	
SUPPORTING DOCUMENTATION	
Appendices	
• Outline Business Case v0.2 • Non Charging ESIA • AQ2 Air Quality Modelling Methodology Edit o • AQ3 Air Quality Results Report • AQ1 Air Quality Modelling Tracker (JAQU Deliverable)	

- T1 Transport Modelling Tracker (JAQU Deliverable)
- T2 Transport Calibration/Validation Report
- T3 Transport Modelling Methodology Report
- T4 Transport Model Forecasting Report
- SCC Options Appraisal
- Analytical Assurance Statement
- SCC and NFDC Consultation Report
- OBC Communications Plan v0.1
- Freight Consolidation, Delivery Service Plan, Fleet Accreditation Support
- OBC Implementation Timeline v0.1
- Highlight Report (TEMPLATE ONLY)
- Change Request Form (TEMPLATE ONLY)
- Change Request Log (TEMPLATE ONLY)
- CAZ Project Board Terms of Reference
- RAID Log (TEMPLATE ONLY)
- Stakeholder Engagement Matrix
- CFO OBC Sign Off
- E1 Economic Appraisal Methodology
- SCC and NFDC MoU
- CAZ B ESIA
- E3 Distributional Analysis
- Ministerial Direction December 2018
- Ministerial Direction December 2017
- Taxi Incentive Scheme DPIA
- EV Charge Point DPIA
- Non SCC Licensed Taxi/PHV Bus Lane Restriction DPIA
- HGV Freight Consolidation, DSP, Fleet Accred DPIA
- Bus Traffic Regulation Condition DPIA
- A3024 MyJourney Support DPIA

Documents In Members' Rooms

1.	None

Equality Impact Assessment	
Do the implications/subject of the report require an Equality and Safety Impact Assessment (ESIA) to be carried out.	**Yes**
Data Protection Impact Assessment	
Do the implications/subject of the report require a Data Protection Impact Assessment (DPIA) to be carried out?	**Yes**
Other Background Documents; None **Other Background documents available for inspection at: N/A**	

Title of Background Paper(s)		**Relevant Paragraph of the Access to Information Procedure Rules / Schedule 12A allowing document to be Exempt/Confidential (if applicable)**