Clean Air Southampton: Questions and comments in relation to Southampton City Council's (SCC) Clean Air Zone (CAZ) consultation 2018[1]

The following is our submission to the SCC CAZ consultation 2018. It comprises a large number of comments and questions based on the background documentation provided by SCC and guidance documents from the DfT/Defra Joint Air Quality Unit (JAQU) (only available via a request under the Environmental Information Regulations). In order to be able to formulate these (as yet unanswered) questions, it has taken a significant amount of time for 2 people to read all the documents; a 2 hour meeting with the Chief Scientific Officer & Senior Communications Officer at SCC; plus attendance at 2 Open Meetings on the CAZ consultation. We have worked on air quality issues for Clean Air Southampton for over 3 years and as such are not laypeople with respect to the topic of air quality.

In view of the large number of questions, we commissioned an expert review of the consultation documents. This is available here: https://cleanairsouthampton.files.wordpress.com/2018/09/1863-techncial-note_southampton-caz_31_aug_2018.pdf

We submit the comments, questions and expert report as evidence that the consultation process was
(a) **not transparent**;
(b) **not accessible to laypeople**; and
(c) **does not meet Justice Garnham's three tests of compliance**.

We would also like to highlight the following:

1. The **scope of the consultation** is almost entirely concerned with a discussion of the 'preferred option' (a city-wide Class B zone) and does not provide evidence or analysis for a more stringent class of Clean Air Zone (a Class C or D zone).
2. The **decision to remove a Class C or D CAZ from consideration**, at some point prior to the launch of the consultation, is not clearly explained in any way in the consultation documents. Also no documentation is provided which shows the *process* that was followed for this decision.
3. The removal of more stringent classes of CAZ as an option **prior to instructing Ricardo to carry out air quality modelling** (both of the current and projected situation) fails to provide a full assessment of the costs, benefits and efficacy of each of the potential options.
4. The Government's clean air policy, expressed through advice from the Joint Air Quality Unit, has forced Southampton City Council to work exclusively on meeting the EU 40ug/m3 target, **in one location in the city**, with no regard to the health of all citizens and the many other hot spots affecting health.
5. The preferred option appears to be based on optimistic modelling, out of date data and **a lack of agreement with major stakeholders** (Highways England, ABP) as to emissions reductions in areas under their responsibility. To adopt an air quality plan based on such assumptions and uncertainty is unlikely to lead to compliance.
6. The lack of ambition inherent in the preferred option is not only likely to lead to the EU limit value not being achieved for Southampton, but also **worsening of public health outcomes**[2] for a city which already has the highest rate of emergency admissions to hospital for asthma in the whole of the South.

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[1] http://www.southampton.gov.uk/council-democracy/have-your-say/clean-air-consultation.aspx

[2] Asthma UK has data showing that Southampton has a higher rate of emergency admission for asthma than anywhere else in the south of England: https://www.asthma.org.uk/get-involved/campaigns/data-visualisations#Hospitalisations (take the slider on the right of the page up to 140)

Questions and comments on the Clean Air Zone Draft Outline Business Case (CAZDOBC)[3]

Health

1. Given that the reason for reducing air pollution is to protect our health, you only refer to a study of the environmental, economic and social impact of introducing a charging Clean Air Zone (p4, CAZDOBC). Are you planning to monitor the health impacts of introducing such a zone and reporting on this? If so how?
2. On page 7 of CAZDOBC you quote the Public Health Outcomes Framework (PHOF) for mortality attributable to particulate air pollution in 2015. The latest data from this source shows Southampton now at 6% against the national average of 5.3% - an increase in attributable mortality which should be illustrated in your report, we feel.
3. The same PHOF data shows that "under 75 mortality rate from respiratory disease" in Southampton is 49.2 against a national average of 33.8 and is the worst in the South East region which averages 28.1. This information should be made available to the public as part of their assessment of what class of clean air zone they would prefer to have. See table below.
4. On page 24, para 1.11 Case for Change, one of your secondary objectives is "Ongoing improvements to public health". How will this improvement be measured and reported? Why was a public health report not commissioned alongside the air quality modelling report?
5. Again in para 1.11.3 Preferred Option, you say: "Of the shortlisted options, Option 1 delivers the greatest total NO2 concentration reductions and wider emission improvements. Therefore option 1 is likely to deliver the greatest benefit to public health." This leapfrogs consideration of a Class D zone, which would have greater impact on emissions in the short term, by discouraging non-compliant private cars and LGVs.
6. On page 39, para 2.9 Economic Assessment Conclusion says: "the focus has been on undertaking CBA of the options and monetisation of impacts." This does not, apparently, include health impacts. Why not?
7. On page 49, 3.1 Market Assessment – you omit to consider health impacts, surely a major element of such a process? Public Health is listed as an Internal Stakeholder on page 57. Surely they should be involved in such an assessment?
8. On page 58, 4.1.6 Managing Risk – when the project manager produces the risk strategy for inclusion in the Full Business Case we suggest that risk to health, including monitoring and reporting, should be included as a risk factor.
9. On page 61, 4.1.10 Current Stakeholder Consultation, Highways England – because the City Council is not required to act regarding the exceedances recorded on the M271 and M271 Redbridge roundabout (sources of considerable air pollution – always above legal limit), the role of Highways England becomes crucial to the health of residents in the West of the city, who live adjacent to the main access point to the port and the city from the west and the north. Traffic counts for 2017 show that over 58,000 vehicles pass the counter at Redbridge roundabout (junction of the M271 and A35), of which over 42,000 are private cars. The City Council has organised an MOU with New Forest District Council to manage shared aspects of air quality management. We suggest that, at a minimum, there should be an MOU between SCC and

[3] https://www.southampton.gov.uk/images/draft-outline-business-case-21062018_tcm63-400482.pdf

Highways England to adopt the same measures on their land as on SCC land. If this is not done there is no likelihood that NO2 emissions will be reduced and residents of Redbridge and Millbrook will continue to suffer ill health and premature death as a result. However, we would prefer that this silo mentality is challenged and the contract between Highways England and the Department for Transport reflect the seriousness of this omission. There is, at present, no apparent mechanism of accountability for this most important issue. The problem was highlighted in a 2010 report of the City Council, see page 12 of Air Quality Action Plan, Progress Report, June 2010.

10. "Highways England roads should be modelled but will not be included in the local authority's targets." JAQU Evidence Package, p22
11. On page 61, 4.2.1 Monitoring Plan – refers to Table 20 (example monitoring plan) which is not included. Please supply this. On page 62, you state: "* Public health – LAQM exceedances". We suggest that locally available health data also be monitored and reported by Public Health.
12. On page 62, 4.2.3 Benefits Realisation – we would hope that health benefits (if measureable) be included in the Outline Business Case. Why else are you doing this activity? At the Open Meeting on 24th July Debbie Chase (Public Health Southampton) said that the Class B Clean Air Zone would only make a "small dent" in health impacts.

<u>The local model</u>

1. The CAZDOBC states that the 2017 National Plan identified an area of exceedance of the EU AAQD in Southampton and the New Forest. This is based on the national Pollution Climate Mapping Model (PCM). However, SCC & NFDC were instructed to undertake a more localised study.
   - Where is the documentation for this local study?
   - Ref Para 1.8, Draft Outline Business Case, Local Model Baseline and Business as Usual Air Quality: are the results for 2015 derived from the Ricardo study carried out in 2015 for the SCC Air Quality Scrutiny Panel, or is this a newly-commissioned report?
   - It is difficult to decipher from the description of the process of choosing and evaluating options on pages 26 and 30 which air quality modelling reports are being referred to. There is one report which influences the decision to abandon a Class D zone, received before Stage 3. There is the commissioning of a report from Ricardo which does not refer to the evaluation of a Class D zone at all. So we are assuming there are two reports. Could we have sight of the first report, which evaluates a Class D zone?

2. The local model has found that instead of an *area* of exceedance, (Figure 3, page 6, CAZDOBC) there is one specific location that shows an exceedance, on a road that is the responsibility of SCC. (Figure 5, page 13, CAZDOBC). (The other exceedances are on roads under the authority of Highways England). In addition, the local model predicts that there will be no monitoring sites under Local Air Quality Management that will exceed the UK air quality objective in 2020 under the business as usual scenario (s 1.8.2, p15, CAZDOBC).
   - Does this mean that compliance with the air quality objective at this location in 2020, is the only success criterion for the Clean Air Zone? It appears that compliance is based upon modelling assumptions, rather than monitoring data, and only one location rather than points across the city)

- How will compliance be assessed at this location?

3. The annual status report on air quality for 2017 clearly shows that there are a number of persistent exceedances at monitoring sites across Southampton, some dating back to 2012. (Annual Status Report 2017, Table A3, pages 66-73: http://southampton.my-air.uk/reports/).
   - Has the local model referred to above been calibrated against this diffusion tube monitoring data, and if so, has it been calibrated against the most recent annual data (i.e. 2017)? (JAQU guidance states "The most recent historical assessment should include the national compliance data for 2015 and *can be supplemented with local data on exceedances*" (JAQU Evidence Package, p11)
   - Which automatic monitoring station(s) has/have provided data for the local model to be calibrated against? Which year of monitoring data? The Pollution Climate Mapping (PCM) model shows elevated annual mean NO2 from the western approaches, across the docks and port and to the east of the city. Has **local data** from the Victoria Road, Woolston air quality monitoring station been used to support the modelling process?
   - What are the assumptions in the local model that lead to the prediction that no AQMAs will exceed the air quality objective in 2020?
   - Does the modelling take into account the impact of the various classes of exempted vehicles?

4. The Annual Status Report for air quality 2017 p13 states: "SCC [...] will undertake the following: Re-designate the 10 AQMAs into one Clean Air Zone (CAZ) covering all main, radial roads and key pollution hotspots in the City."
   The Chief Scientific Officer has stated that this is not correct and that monitoring of the AQMAs will continue. However, the above document is still unchanged and available to download from the SCC website (as of 25th July 2018): http://southampton.my-air.uk/reports/
   He also stated that if the CAZ regime doesn't address the exceedance, SCC will go back to the LAQM regime. **At what point can SCC make the decision to re-focus on the LAQM regime instead of the CAZ regime?** We are unclear as to the difference between the 2 regimes as to modelling and monitoring exceedances.

5. The modelling work for the CAZ preferred option has a base year of 2015. "The base year is taken as 2015 as this covers the latest air quality and transport data, and is the base year of the transport model being used." (Draft air quality modelling methodology report, page 9). JAQU guidance states "The air quality model should use a base year of 2015 or later. **A base year of 2017 is preferred.**" (Evidence Package, page 13). The latest air quality and transport data that is available is actually 2017 data (http://southampton.my-air.uk/graphs/ and https://www.dft.gov.uk/traffic-counts/area.php?region=South+East&la=Southampton).
   - Why is 2017 not the base year for the modelling work?
   - Figure 8 Breakdown of NOx concentrations by source type – 2015 baseline (ug/m3) on page 17 of the CAZDOBC and the 2020 projection for the same source types on page 19, Figure 10 show a projected drop in ug/m3 in each location between -10 and -14. This seems a very **optimistic assumption**. What are the assumptions underlying these projections? We think these tables should be combined to show the difference between the two more clearly to a lay audience.

- On page 45, 2.11 Preferred Option – Summary of Alternative Options Considered – you say: "There is greater risk in delivery of Option 1a due to the high uncertainty associated with the non-charging measures and the assumptions made within the air quality and economic model." What are these assumptions? Where are they reported?
- Table 6 on page 15 of CAZDOBC show seven roads with annual mean NO2 concentration 35-39ug/m3 BAU. Which roads are these?

6. "For air quality modelling purposes, **observed traffic counts are preferred over modelled counts**. It is therefore particularly important that this variable is well validated. Modelled counts are acceptable, provided the model is well validated against other variables in the study area." (JAQU Evidence Package, p7-8)
   - Para 1.8.2 Local Model Air Quality Management Areas, page 15, CAZDOBC refers to "local monitoring sites". Are these diffusion tube sites or air quality monitoring stations? How was the contribution from each vehicle type arrived at in each location? Are diffusion tubes capable of showing this amount of detail? What other monitoring activities did you carry out? If you used DfT traffic count data we note that in 2015 it was estimated and in 2017 it was an actual count and could, perhaps, be more reliable to use?

<u>Port</u>

1. Has the modelling of traffic volumes and emissions taken account of the expansion plans of the Port?
2. On page 16, para 1.9.1 Baseline 2015 Source Apportionment: The statement – "The contribution from ships at dock and accessing the port is somewhat larger at between 2 to 6%." This differs considerably from the estimate in the LAQM progress report 2014 (which estimated 6.9% near the M271, 23.6% at the Millbrook Road automatic monitoring station and 33.8% at 539 Millbrook Road. How can this difference be explained?

<u>Buses</u>

1. Page 19 of CAZDOBC refers to the "more significant" emissions from buses in the city centre, as opposed to the Western Approach roads. The measurements at Canute Road could probably be said to equate with Above Bar and Shirley High Street and yet these locations have not been considered in this report. Although we know, from other sources (such as the Smogmobile and diffusion tube readings) that these two other locations are regularly in exceedance, this is not taken into account in this report.
2. On page 46, 2.12.2 Bus Mitigation Plan – b) Buses not included within the Clean Bus Technology Fund. The age of school buses used within the city suggests that they will not be suitable for retrofitting technology. In addition, there is currently no retrofitting technology for coaches e.g. those taking cruise ship passengers to and from the port. Is there a plan to remove these most polluting vehicles from the city?

<u>Not accessible</u>

1. Also in para 1.11.3 Preferred Option, you say: "Option 1 is a scheme that has an opportunity to accommodate mitigation measures to address negative impacts identified in the distributional analysis." What does this mean?

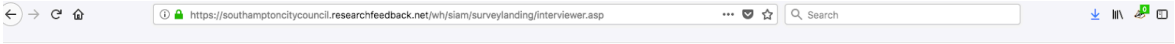
2. s2.9 Economic Assessment Conclusion – the meaning of the second paragraph on page 39 is not clear. In particular: "This air pollution impact is likely to fall to a greater extent on poorer households as emissions reductions are likely to be greatest in and around the city centre, which tend to score lower." What does this mean? As you have not included consideration of the city centre emissions or concentrations in this report, how do you know this? At the bottom of the page: "Assuming that the changes in traffic follow the same pattern as changes in concentration, these changes in noise, accidents and accessibility could also predominantly favour poorer households…" What does this mean?

Process

1. On page 43, 2.10 Qualitative Distributional Analysis – "A public consultation on the ESIA (Equality, Safety and Impact Assessment) will provide further input prior to submission of the Full Business Case." What is the timescale for a second consultation, given that you have to report to the Minister in the Autumn?
2. Appendix 1 – Stage 2 Long List Sifting Exercise – is impenetrable to anyone not directly involved in this process.

Questionnaire

In the consultation questionnaire there is a lack of transparency over the options appraisal process:



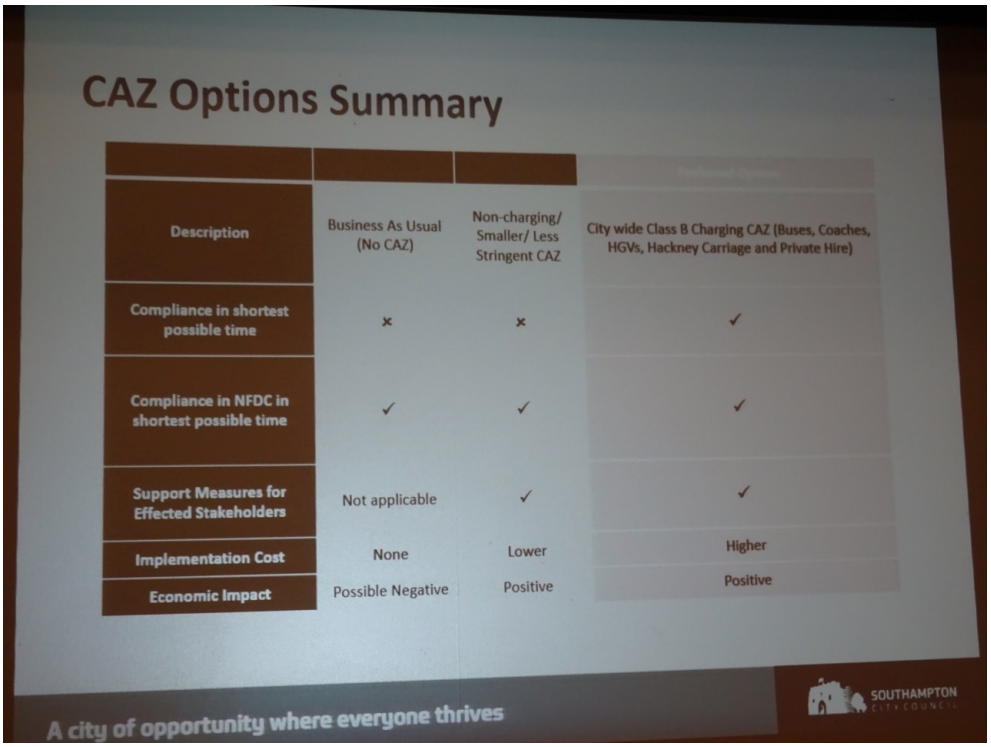
Clean Air Zone Consultation

The options considered

When considering what sort of Clean Air Zone to implement in Southampton, there were a number of options that were considered. The following tables summarises these options.

	Option 1	Option 2	Option 3 (The preferred option at this stage)	Option 4
Charging Clean Air Zone	×	✓	✓	✓
Vehicle groups charged in the Clean Air Zone	Non charging measures	Heavy Goods Vehicles	Heavy Goods Vehicles, Buses, Coaches, Taxis and Private Hire Vehicles	Heavy Goods Vehicles, Buses, Coaches, Taxis and Private Hire Vehicles, Minibuses, Light Goods Vehicles, Private Cars
Department for Food, Environment and Rural Affairs (Defra) Charging Clean Air Zone Class	Not applicable	Not applicable	Class B	Class D
Compliant Nitrogen Dioxide delivered in Southampton in shortest possible time	×	×	✓	✓
Compliant Nitrogen Dioxide delivered in the New Forest in shortest possible time	✓	✓	✓	✓
Clean Air Zone Boundary (see Figure 1)	None	City wide	City wide	City wide
Help and support available for affected stakeholders	Not applicable	✓	✓	✓
Implementation Cost	Lowest	Low	High	Highest

The above table is in the CAZ consultation questionnaire. It implies that Option 4 (Class D zone) has had the same consideration as Options 1, 2 and 3. Option 4 was actually *removed* from the SCC presentation during the Open Meeting on 24th July. Please see the image on the following page:



In addition, the draft air quality options report (https://www.southampton.gov.uk/Images/DRAFT-Air-Quality-Options-Report_tcm63-400487.pdf) is not consistent in numbering the options:

	Draft AQ options report	Consultation questionnaire
Option 1	Class B city-wide charging zone	Non-charging Clean Air Zone
Option 1A	City-wide HGV charging zone	-
Option 2	Class A city centre zone plus additional HGV measures	City-wide HGV charging zone
Option 3	Non-charging Clean Air Zone	Class B city-wide charging zone
Option 4	-	Class D city-wide charging zone

1. **Why is there a difference between the information presented in the consultation questionnaire, the Open Meeting and the draft options report?**
2. Will there be a qualitative analysis of the open text section of the questionnaire?
3. What kind of 'evidence' will be acceptable in the consultation responses?
4. "Once the consultation closes, the responses and suggestions will be considered and integrated into the Full Business Case **where appropriate** …" (CAZ FAQs)
   What is the process for determining which responses and suggestions will be integrated into the Full Business Case?

Economics

1. Where is the data which supports the statement that "…the adverse economic impact of introducing LGVs and private cars is **unlikely to be supported locally**…"? (*Briefing note*)
2. Where is the data which supports the view that the associated economic impacts for a more stringent CAZ class (C or D) are considered excessive and unjustified? (*Briefing note*)
3. According to the Chief Scientific Officer for SCC, achieving the EU compliance level with a Class B is a proportionate response.
4. [Question: how far does Mr Justice Garnham's statement on achieving compliance, without regard to cost, apply to local authorities? If local authorities have the threat of EU fines being passed down to them, it appears they therefore must have regard to cost, but is that it only in relation to setting up clean air initiatives, rather than wider economic impacts?]
5. Who are the 'most vulnerable people in our community' within the following statement? "It is recognised that by including private vehicles there is a danger that some of the most vulnerable people in our community would be badly affected." (CAZ FAQs)
6. Has an option been assessed for these 'vulnerable people' to also have exemptions or discounts?
7. Does the economic analysis take into account the health and social care costs of air pollution, as per the PHE tool (https://www.gov.uk/government/news/new-tool-calculates-nhs-and-social-care-costs-of-air-pollution)?
8. Has the options appraisal/economic analysis taken into account the potential fine for non-compliance which could be passed down from central government under Part 2 of the Localism Act 2011?

Defra/DfT Joint Air Quality Unit (JAQU) – Guidance to local authorities

Liz Batten submitted a request under the Environmental Information Regulations 2004 (EIRs) to JAQU. This was for guidance that this Government department issued to Southampton City Council, since July 2017, regarding the business case that was to be developed for the Clean Air Zone. She received the following documents on 7th March 2018:

- Options Appraisal Package
- Inception Package
- Implementation Package
- Evidence Package

These documents are **not publicly available**.

Key aim

"The broad aim of the options appraisal process is to demonstrate that the preferred option of a scheme delivers compliance within the shortest possible time **and represents value for money whilst minimising any distributional impacts**." (Options Appraisal Package, p5)

- Why is there is zero mention of health in the key aim of the options appraisal process?

Developing a long list (s2.2, Options Appraisal Package, p8)

"To assess the effectiveness of the preferred option it is essential to explore the way forward. This involves generating and looking at a broad range of options to ensure that **all realistic alternatives have been adequately considered**."

Critical Success Factors (s2.3, Options Appraisal Package, p9 onwards)

The primary (pass/fail) Critical Success Factor is "The overall spending objective of the local plan is to deliver a scheme that leads to compliance with NO2 concentration limits in the shortest possible time."

"Other CSFs should be used to determine which option would be best relative to other considerations. […] It is **required** that they cover the following themes: value for money; distributional impacts; strategic and wider air quality fit; supply side capacity and capability; affordability; achievability."

The 'Case for Change' in the Draft Outline Business Case (s.1.11, p24) states the primary objective of the Clean Air Zone proposal and this matches with the primary Critical Success Factor set out in the JAQU guidance. However, the *secondary objectives* in the Draft Outline Business Case (s1.11.2, p24) *do not match* with the secondary Critical Success Factors which are required by JAQU.

- Why is there no clear match between the secondary objectives in the Draft Outline Business Case and the secondary Critical Success Factors as required by JAQU?
- How have the secondary objectives been scored for all the longlist options?
- Value for money - "The assessment should consider the full range of costs and benefits to society (such as the **health benefits** of improved air quality …) rather than just looking at the financial impacts." (JAQU Options Appraisal Package, p10-11). Are the health benefits of improved air quality, plus the costs to society of not taking significant action, included in the assessment of value for money.
- Distributional impacts - "Consideration should be given to the impacts on key groups […] Does the option significantly affect one or a number of particular groups of stakeholders?" Is this CSF just concerned with economic impact?

- As poor air quality disproportionately affects a number of key groups in Southampton - the elderly, children, those with existing health problems and residents of more deprived neighbourhoods – how has this been weighted within the CSF for distributional impacts?

Developing a shortlist

"It is essential that decisions to reject options must be supported by **a structured scoring system and clear rationale**. Each of the options in each category will need to be assessed against the CSFs leading to **a documented final decision** on whether to reject a given choice." (JAQU Options Appraisal Package, p12). The only reference to the long list of CAZ options in the consultation documents appears to be the Draft Air Quality Modelling Methodology Report (Table 1, page 6). It is stated that "The sifting of the long list was based on simplified transport model runs …" (page 6 of the report).

- Where is the documentation which shows the scoring system and clear rationale for each of the longlist options?

JAQU has *stipulated* which class of charging Clean Air Zone should be taken forward for modelling: "...local authorities **are required to shortlist, and take forward for full modelling, the lowest class of charging Clean Air Zone** that will deliver compliance in the year after implementation, as the **benchmark** option." "The class of charging clean air zone defines the types of vehicles to which the clean air zone applied. With class A covering the least number of vehicles types and a class D the most." (Options Appraisal Package, page 13)

This seems to indicate that SCC should do only the **minimum amount of work** that is required to achieve compliance with the national air quality objective, even if more stringent zones could achieve the objective **more quickly and with greater certainty and have greater impacts on health**.

The JAQU guidance states: "A further three or four options should also be taken forward as part of the shortlist."
The preferred option is a city-wide Class B zone. This was taken forward for modelling together with 3 other options (a city-wide HGV charging scheme plus additional measures; a city centre Class A zone; a non-charging zone).

- Why was a more stringent class of zone than the preferred option (e.g. some form of Class C or D zone) not also taken forward for modelling? Option 4 in the consultation questionnaire is actually a city-wide Class D zone, which implies that it was taken forward for modelling along with the other options. There is also nothing in the JAQU guidance which prohibits more stringent classes of zone being taken forward for modelling.
- What margin of error has been reported for the Class B option?
- Has the proposed expansion of the port has been taken into account?

It is also stated that "This framework is the process JAQU will use to assess the local plan and **release funds** for implementation of the scheme" (Options Appraisal Package, page 4)

- Has JAQU told SCC that funds will **not** be released for implementation if a more stringent class of zone is taken forward as the preferred option?

JAQU guidance also states: "The purpose of target determination is to refine the primary objective of the scheme being designed, which seeks to move a zone into compliance with the annual mean NO2 concentration limit as quickly as possible. […] There may be secondary spending objectives that are locally relevant, such as tackling locally identified air quality issues, but **they should not diminish or**

impact the primary spending objective" (JAQU Evidence Package, p21)

- **Why is there no transparency over the Clean Air Zone proposal process and the constraints placed by central government on local government in terms of local air quality management?**

- **Does the Ministerial Direction take precedence over Southampton City Council's duties with respect to the LAQM system?** There is the principle of the 'primacy' of EU law over national law, and the UK must meet its obligations under the EU Ambient Air Quality Directive (2008/50/EC). This was made law in England through the Air Quality Standards Regulations 2010. However, the Ministerial Direction was made in relation to the Environment Act 1995, which also provides local authorities with the framework for Local Air Quality Management (LAQM). The Ministerial Direction simply "directs Southampton City Council to prepare and submit to the Secretary of State a full business case by 15th September 2018 in connection with its duties in respect of air quality under Part 4 of the Environment Act 1995 and as part of the UK plan for tackling roadside nitrogen dioxide concentrations 2017." The LAQM system "does not place an absolute obligation on local authorities to achieve the Government's National Air Quality Strategy, but they are required to act "in pursuit of the achievement" of the standards. (House of Commons Library Briefing Paper Number CBP8195, 13 June 2018, p15 researchbriefings.files.parliament.uk/documents/CBP-8195/CBP-8195.pdf)

- **Does the Clean Air Zone proposal for Southampton therefore breach the Air Quality Standards Regulations 2010?** The High Court judgement of 2 November 2016 (ClientEarth v Secretary of State for the Environment, Food and rural Affairs) states "In my judgement, the AQP did not identify measures which would ensure that the exceedance period would be kept as short as possible; instead it identified measures which, *if very optimistic forecasts happened to be proved right and emerging data happened to be wrong, might achieve compliance*. To adopt a plan based on such assumptions was to breach both the Directive and the Regulations." The Clean Air Zone proposal for Southampton has as its preferred option a Class B zone. This is supported by modelling which *has a model error of 5.3 ug/m3* (according to statements made by SCC staff at the Open Meeting on the CAZ on 24th July) *and does not appear to be validated against the latest air quality and traffic data*. In the public meeting (24th July) Mitch Sanders (Service Director, SCC, leading on AQ) demonstrated overconfidence in the model by twice stating "By 2022 there won't be a problem anyway" in reference to the Business As Usual Scenario.

<u>Additional modelling questions</u>

JAQU guidance states in relation to projections modelling that "additional years should also be modelled if infrastructure changes are expected to have a significant impact on air quality when measures are in place (e.g. currently planned road layout changes or housing development projects)." (JAQU Evidence Package, p18)

- Has the projections modelling therefore taken into account the impact of the 2 Highways England road improvement schemes planned for Southampton?
    - M271/A35 Redbridge Roundabout (start date May 2019, end date Spring 2020)

- M27 Southampton Junctions (start date May 2020, end date TBC)

SCC has to provide an 'Analytical Assurance Statement' to JAQU which outlines the limitations of the analysis e.g. "Has the analysis been constrained by time or cost, meaning further proportionate analysis has not been undertaken? Could this further analysis lead to a substantive change in the conclusions? Is the level of uncertainty proportionate to the decision being made?" (JAQU Evidence Package, p31).

- Has the analysis been constrained by time or cost?
- What is the level of uncertainty?