Appendix 1
Air Quality Local Plan- Progress Update

1.0   Introduction

The [Strategic Outline Case](#) (SOC) (submitted January 2019) set out the process for identifying a long list of options (structured around the spending objectives / critical success factors), in order to identify a shortlist of better performing packages of options to take forward to Outline Business Case.

2.0   Identification of long list for SOC

In line with the Green Book recommended approach to developing policy options, a long list of options was identified based around the following framework (and evidence available at the time):

- Scope options – Potential interventions should meet the following criteria:
  - City-wide focus, but with targeted focus on exceedance areas (reflecting the island geography of the city with only three roads linking to the mainland, a significant potential for displacement of emissions);
  - Targeting all vehicles (especially the most polluting vehicles); and
  - Targeting all day / all-purpose trips (but with a particular focus on peak period trips, where appropriate).

- Service solution options – A long list of 64 options was generated comprising individual policies and interventions which could potentially address the problems, issues, and scope identified; structured around the following themes:
  - Charging Clean Air Zone (CAZ);
  - Measures to reduce private vehicle use (including reducing the need to travel);
  - Road network changes and traffic management measures to reduce traffic flow / congestion;
  - Measures to re-time vehicle trips;
  - Measures to encourage use of cleaner vehicles and more sustainable driving (to reduce tailpipe emissions);
  - Measures to encourage mode shift to sustainable modes (including reducing the need to travel);
  - Communications and marketing; and Other.

The list was based on:
  - suggestions put forward by local authority officers and members at a workshop for the Targeted Feasibility Study in August 2018;
  - a review of options considered by other local authorities developing Air Quality Local Plans, and other examples of best practice;

- a review of the problems and issues and scope identified, and recent policy developments in Portsmouth, to identify any gaps.

An initial sift was undertaken in order to sift out options which:
- are unlikely to improve air quality;
- are unlikely to be deliverable in the required timescale;
- are not considered technically feasible, deliverable under current legislation, or would be seen as wholly unacceptable by stakeholders.

As a result, 10 schemes were rejected, leaving a long list of 55 for further consideration. (See Table E1 in the [Strategic Outline Case](#), for more information.)

- Service delivery options – Options relating to who will deliver the local plan:
  - Fully delivered in house by local authority;
  - Fully delivered by external consultant; and
  - Some elements delivered by each.

- Funding options – Options around who will provide the funding required to deliver the plan:
  - Public funding only;
  - Public funding with substantial private funding support for non-charging measures; and
  - Public funding with private partners sought where possible.

2.1 Assessment of sifted long list for SOC

The options in the sifted long list were assessed in two stages:

- Firstly considering the potential of each option to achieve or contribute (as part of a package) to compliance in the shortest possible time (Primary Critical Success Factor); and
- Secondly considering how each option performs in terms of strategic fit, value for money, distributional impacts, commercial delivery, affordability, and achievement issues (Secondary Success Factors).

2.2 Compliance (and local objective) assessment

In order to determine the relative performance of options in achieving compliance in the shortest possible time, each option was assessed against the following sub-criteria:

- delivery timescales, where the Charging CAZ benchmark is assumed to be 12-18 months;
- potential scale of NO_2 reduction, based on emissions modelling undertaken as part of the 2018 Targeted Feasibility Studies or proxy estimates based on the potential change in vehicle flow, speeds and/or delay;
- certainty of delivering the estimated change identified above, e.g. high certainty for options which ban traffic or reduce per vehicle emissions and

low certainty for options which rely on individuals choosing to change their behaviour (e.g. travel planning initiatives); and

- risk of displacement of traffic or air quality limit exceedance to other AQMAs (reflecting the local objective).

Options which will take more than 24 months were assumed to have failed in the context of the Primary Critical Success Factor, and were not taken forward for further assessment against the Secondary Critical Success Factors. Schemes assessed as taking 18-24 months to deliver were retained, as further investigation may conclude that the intervention can be delivered within a similar or shorter time to a Charging CAZ.

It was acknowledged that many of the options would have a low impact if implemented on their own but are likely to be effective if implemented as part of a package of measures. Options which scored less favourably than a Charging CAZ in terms of 'potential scale of NO2 reduction' were therefore retained and taken forward for assessment against the Secondary Critical Success Factors and subsequent packaging as part of the short listing process.

(See Table E2 in the Strategic Outline Case, for assessment evidence.)

2.3 Secondary critical success factor assessment

In order to determine the relative performance of options in achieving compliance in the shortest possible time, each option was assessed against the following sub-criteria:

- Strategic case
- Supply side capacity and capability
- Affordability
- Achievability

At this stage (SOC) there was felt to be insufficient evidence or information to make a meaningful assessment of value for money.

(See Table E3 in the Strategic Outline Case, for assessment evidence.)

2.4 Shortlisted options and packages for SOC

The SOC submitted in January 2019 identified a Benchmark Charging Clean Air Zone (CAZ) option and three non-charging air quality improvement package options.

CAZ Benchmark - A Class B CAZ (focused on Portsea Island) was selected as the benchmark option at this stage. The emissions source apportionment data available suggested that buses, coaches and HGVs combined make a

significant contribution to emissions on the exceedance links, particularly the A2047 where the exceedances are greatest. Although the specific emissions impact of taxis was not available at the time, their volumes were known to be high on the A3 and A2047. Therefore, on the basis of evidence available at the time, the view was taken that a Class B CAZ has the potential to bring forward compliance to the earliest possible date.

Non-charging options – Evidence available at the time suggested that the most effective non-charging interventions were focused around traffic management measures on the A2047 (London Road), junction improvements on A3, and use of cleaner buses. However, they would only be successful with modal shift and cleaner vehicle uptake and so these relevant supporting measures were also brought forward as part of the package approach.

3.0   Review of options and packages for OBC

The SOC shortlist has been re-assessed following the submission of the SOC, to take into account the current understanding of exceedances across the city (following confirmation of the baseline and additional evidence gathering), their underlying causes, and emerging evidence on the likely effectiveness of different solutions.

Since the submission of the SOC the long list of measures has been refined, and continues to be refined based on the following:

- different options relating to the geographical extent of a CAZ and potential exemptions for specific groups (e.g. residents);
- a mobility credit scheme - provision of 'mobility credit' in return for giving up car use i.e. credit for use on other modes of transport or low emission car club cars – as an alternative to a scrappage scheme;
- early delivery of Portsmouth infrastructure elements of the proposed rapid transit scheme (TCF Tranche 2 bid), subject to emerging business case and operator response;
- Eastern Road junction improvement (to address specific exceedance at junction with A27).

It also updates the high level assessment evidence, in terms of the potential of each option to achieve or contribute (as part of a package) to compliance in the shortest possible time (Primary Critical Success Factor).

The results in the following revised shortlist of options are to be assessed further using detailed transport and air quality modelling prior to submission of the OBC.

ID	Description	OBC status
Charging Clean Air Zone		

CAZ B	Charging Clean Air Zone to levy a daily charge to non-compliant buses, coaches, taxis, private hire vehicles and heavy goods vehicles.	Modelling undertaken to date shows a CAZ B in isolation is not sufficient to achieve compliance, so would need supporting non-charging measures. Recommend CAZ B + supporting measures as the preferred approach.
CAZ C	Charging Clean Air Zone to levy a daily charge to non-compliant buses, coaches, taxis, private hire vehicles, heavy goods vehicles and light goods vehicles.	Modelling shows that a CAZ C would be likely to achieve compliance in all exceedance locations by 2022, so this should be used as the benchmark.
A. Measures to reduce private car use		
A1	Increase car-parking charges in city centre (or vary charges by vehicle emissions) to discourage car use	Potential complementary measure to encourage mode shift
A2	Reduce number of car parking spaces available in city centre to discourage car use	Potential complementary measure to encourage mode shift
A3	Increase on-street parking charges for residents (or vary charges based on vehicle emissions) to discourage car ownership or purchase of a cleaner vehicle	Potential complementary measure to discourage car ownership or use of a cleaner vehicle
A4	Advance and real time (social and conventional media, VMS) messaging to discourage driving on days of high pollution	Potential complementary measure to raise awareness and change behaviour
A5	Introduce car clubs and car hire schemes (using low emission vehicles) in exceedance areas, with subsidised hire rates. To discourage car ownership and use	Potential complementary measure to discourage car ownership or potential CAZ D mitigation measure
A6	Mobility credit scheme - Provision of 'mobility credit' in return for giving up car use i.e. credit for use on other modes of transport or low emission car club cars	Potential complementary measure to discourage car ownership or potential CAZ D mitigation measure
B. Road network Measures to reduce private car use		
B1	Rapid transit - TCF Tranche 1 bid	Potential to include as a sensitivity test due to interdependency with TCF funding stream and project delivery timescales.
B2	Rapid transit - Full TCF proposal for sub-region	
B3	Rapid transit – Early delivery of all Portsmouth infrastructure elements (subject to emerging business case).	
C. Measures to encourage use of cleaner vehicles and more sustainable driving (to reduce tailpipe emissions)		

C1	Anti-idling campaign	Potential complementary measure to raise awareness and change behaviour
C2	On-street charging points in residential areas to encourage residents to swap to cleaner vehicles	Potential complementary measure to encourage cleaner fuelled vehicles
C3	Public fast charging points in the city centre (and citywide) to encourage residents and visitors to swap to cleaner vehicles	Potential complementary measure to encourage cleaner fuelled vehicles
C4	Discounted charges for residents on-street parking permits for low emission vehicles (vary charges based on vehicle emissions)	Potential complementary measure to discourage car ownership or use of a cleaner vehicle
C5	Support to convert buses on A2047 routes to lower emission fuels (including hybrid buses, biofuel powered buses, and electric buses, as an alternative to petrol and diesel)	Potential complementary measure (based on operator commitment)
C6	Encourage use of lower emissions taxis through incentives / review and update existing licensing policies. Introduce charging points for taxis	Potential package component or potential CAZ mitigation measure
C7	Eco-driver training for businesses	Potential complementary measure
D. Mode shift to sustainable modes		
D1	Workplace Travel Planning	Potential complementary measure to raise awareness and change behaviour
D2	School Travel Planning	Potential complementary measure to raise awareness and change behaviour
D3	Personal Journey Planning for residents	Potential complementary measure to raise awareness and change behaviour
D4	Promote easitNETWORK and easitSHARE	Potential complementary measure to raise awareness and change behaviour
E. Communications and marketing		
E1	Targeted communications and marketing	Potential complementary measure (an important element of any package of measures).
F. Other		
F1	Port-specific measures	Being considered further