

Improving Public Health: Introducing A Clean Air Plan for Bristol

**Growth and Regeneration
Scrutiny Commission:
21 February 2019**



Timeline of work carried out to date

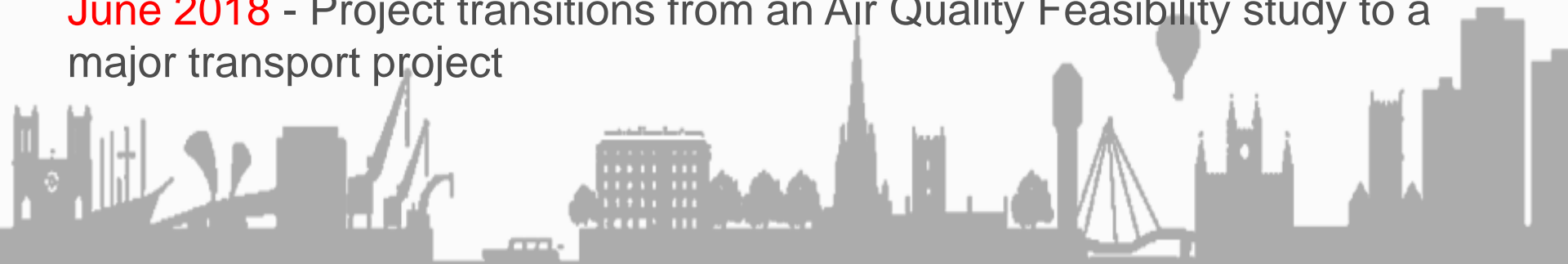
Early 2017 - Feasibility study approved for a CAZ, project team set up, Jacobs awarded the work

July 2017 - BCC received a Government Direction to deliver compliant air quality in the shortest possible time

Late 2017- Project scope moves from a Feasibility Study to a Clean Air Plan with the main part being a Clean Air Zone

March 2018 - Strategic Outline Case (**SOC**) submitted and approved at Cabinet

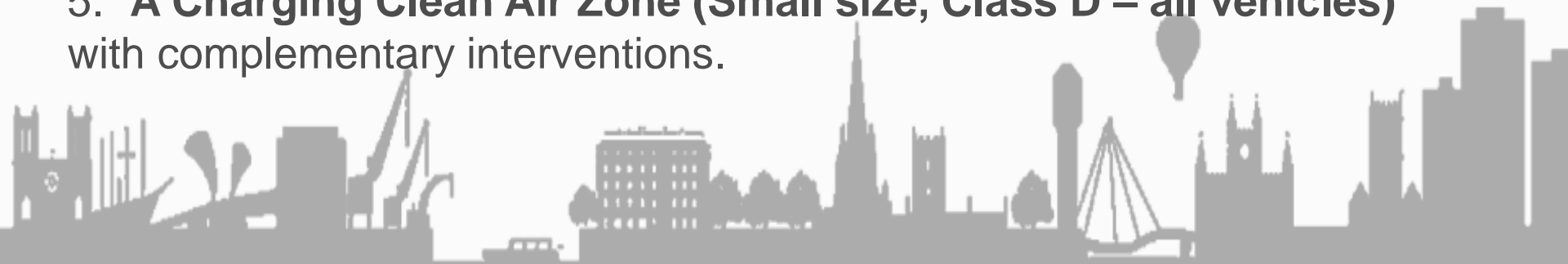
June 2018 - Project transitions from an Air Quality Feasibility study to a major transport project



SOC; 5 options

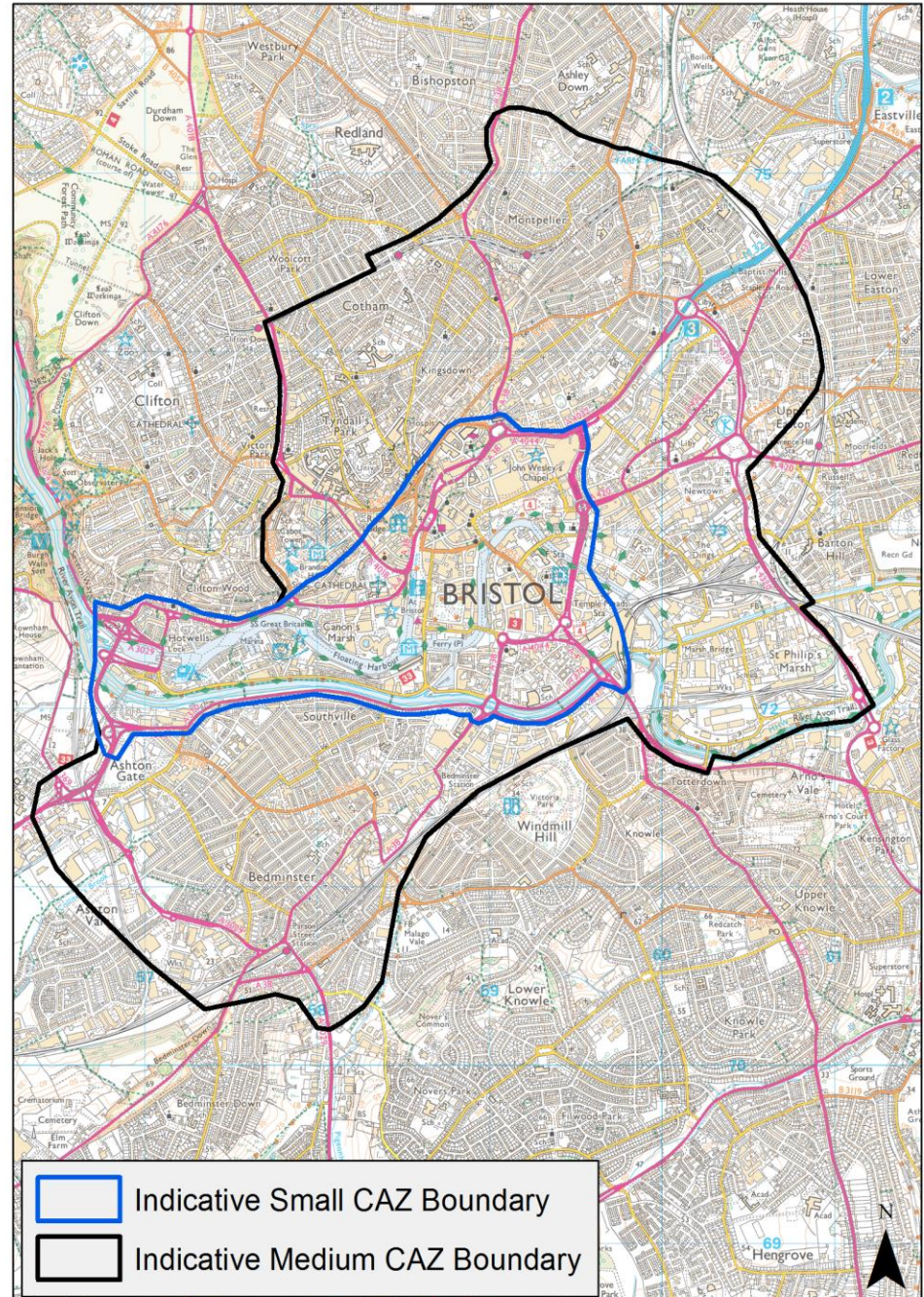
4 x charging and 1 x non-charging options (plus a benchmark option; CAZ D with no complementary interventions), approved to be modelled from an original list of 20 options and approved at Cabinet in March 2018;

1. **A Non-Charging Clean Air Zone** with complementary non-charging interventions, including a potential diesel car exclusion zone.
2. **A Charging Clean Air Zone (Medium size, Class C – all vehicles except cars)** with complementary interventions
3. **A Charging Clean Air Zone (Medium size, Class D – all vehicles)** with complementary interventions
4. **A Charging Clean Air Zone (Small size, Class C – all vehicles except cars)** with complementary interventions
5. **A Charging Clean Air Zone (Small size, Class D – all vehicles)** with complementary interventions.



SOC - Boundaries

2 boundary areas under consideration; medium and small.



SOC - Mitigation Measures

'Long list' of 70 mitigation measures (non charging) being developed.

Measures include;

- **Scrappage scheme** (not currently proposed to be funded by government)
- **Mobility Credits**
- **Targeted signals measures**; using traffic signals to ensure traffic flows quicker through busier transport corridors.
- **Subsidized bus services**
- **Clean vehicle 0% interest loans**
- **Expansion of “Smarter Choices” Programme**
- **Bus priority scheme**



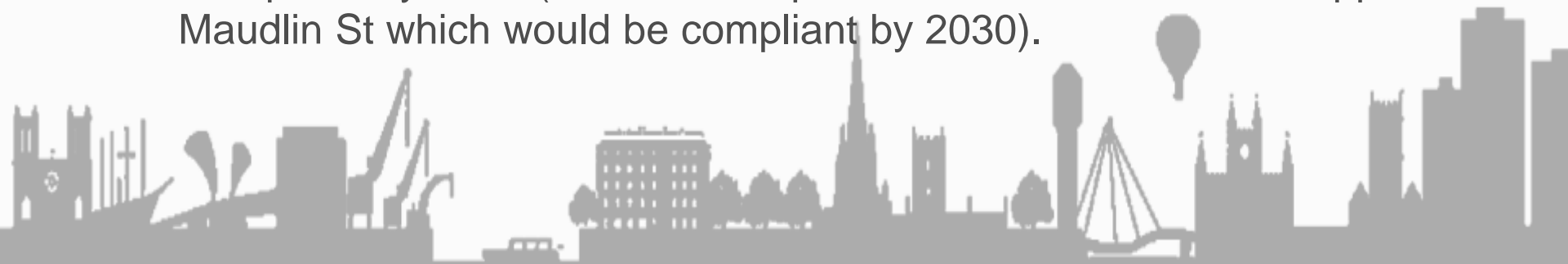
Modelling results; two initial options

- 1) **Small area diesel car ban** with bus/taxi fleet improvement to Euro6. **Exceedances in 2021** at Rupert Street ($42.84 \mu\text{g}/\text{m}^3$), Upper Maudlin Street ($45.4 \mu\text{g}/\text{m}^3$), Queens Road, ($43.0 \mu\text{g}/\text{m}^3$), Church Road ($45.2 \mu\text{g}/\text{m}^3$).

Results show displacement is an issue. Fully compliant by 2023 (with the exception of the north section of Upper Maudlin St which would be compliant by 2024).

- 2) **Medium CAZ D** with complementary measures. **Exceedances in 2021** at Rupert Street ($46.09 \mu\text{g}/\text{m}^3$), Upper Maudlin Street ($52.4 \mu\text{g}/\text{m}^3$), Park street ($40.5 \mu\text{g}/\text{m}^3$), Queens Road, ($47.9 \mu\text{g}/\text{m}^3$), Newfoundland Way ($41.4 \mu\text{g}/\text{m}^3$), Church Road ($45.6 \mu\text{g}/\text{m}^3$).

Compliant by 2027 (with the exception of the north section of Upper Maudlin St which would be compliant by 2030).



Negative impacts of initial options

- Disproportionate impact on low income households.
- Cannot reach compliance by 2021 without significant exceedances.
- Diesel ban would only be able to operate under restricted hours due to the limits on what can be achieved through a TRO, this reduces the effectiveness (modelling was for a 24hr ban) but also the impact.
- Diesel ban shows some increases in road traffic mainly outside of the Small CAZ boundary; namely the A369 and the iconic Clifton Suspension Bridge.
- Concerns of impact on local businesses and the socio-economic impacts.



Economic Case summary

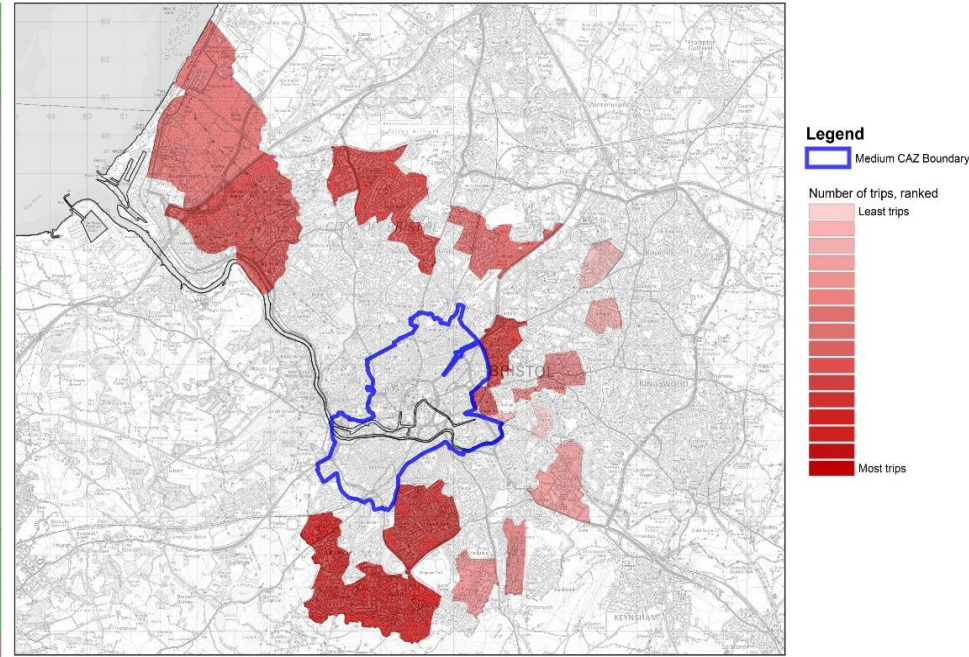
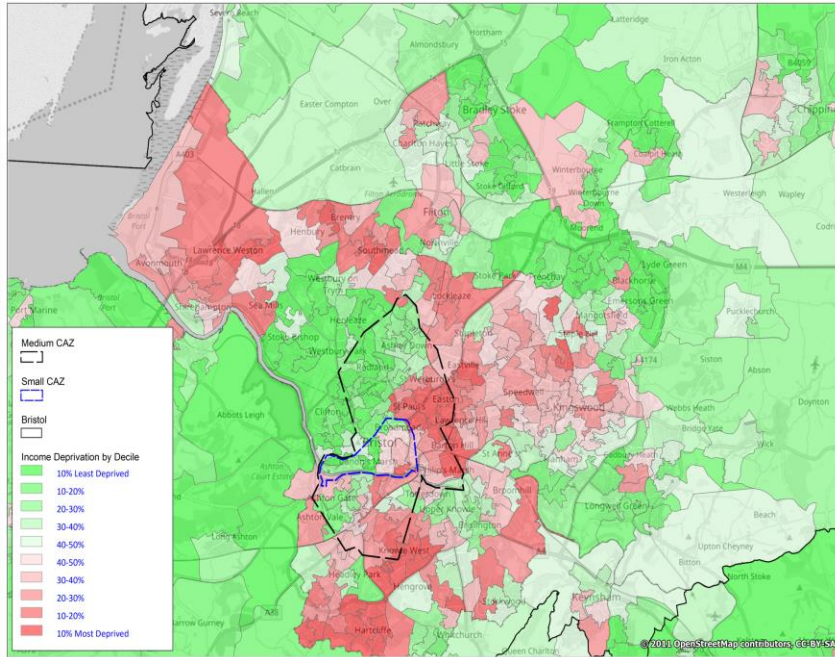
“Affordability impacts are adverse across the full range of relevant socio-economic and business groups for both options. Impacts are disproportionately felt by the most income deprived communities”.

(Extract from; BCC CAZ OBC Economic Case January 2019, p.44 Section 3.12)



Income Deprivation

Low income households non-compliant car trips into a medium zone.



Low Income Areas: number of trips (ranked) made by non-compliant cars to Medium CAZ in the AM Peak



Non-charging Option 1 variant

- Initial modelling reviewed to see what the impact would be, without a charging CAZ in place, of removing buses, taxis and HGVs emissions from a medium zone
- Early indications is that it could be possible to reach compliance by 2025
- Considering projects and interventions to reduce the impact of buses, taxis and HGVs i.e. electric taxis, bio gas buses
- Looking into other potential options to further bring forward the compliant year forward without having a negative socio-economic impact by revisiting the 'long list' of interventions



Next steps are to agree with Defra:

- Way forward
- Timescales
- OBC development
- Shared investment
- Collaborative working

