



# **Ricardo-AEA**

## **Air Quality in Southampton**

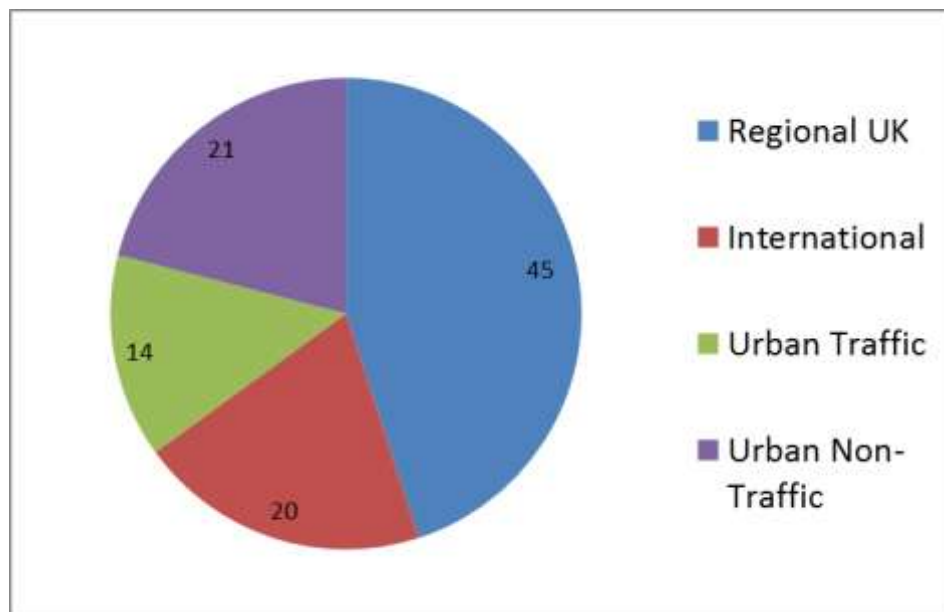
Dr Beth Conlan

31<sup>st</sup> July 2014

## Presentation will cover:

- The Council Paper
- Comparison of AQ in Southampton with elsewhere
- Exemplar Local Authorities
- Short term focus

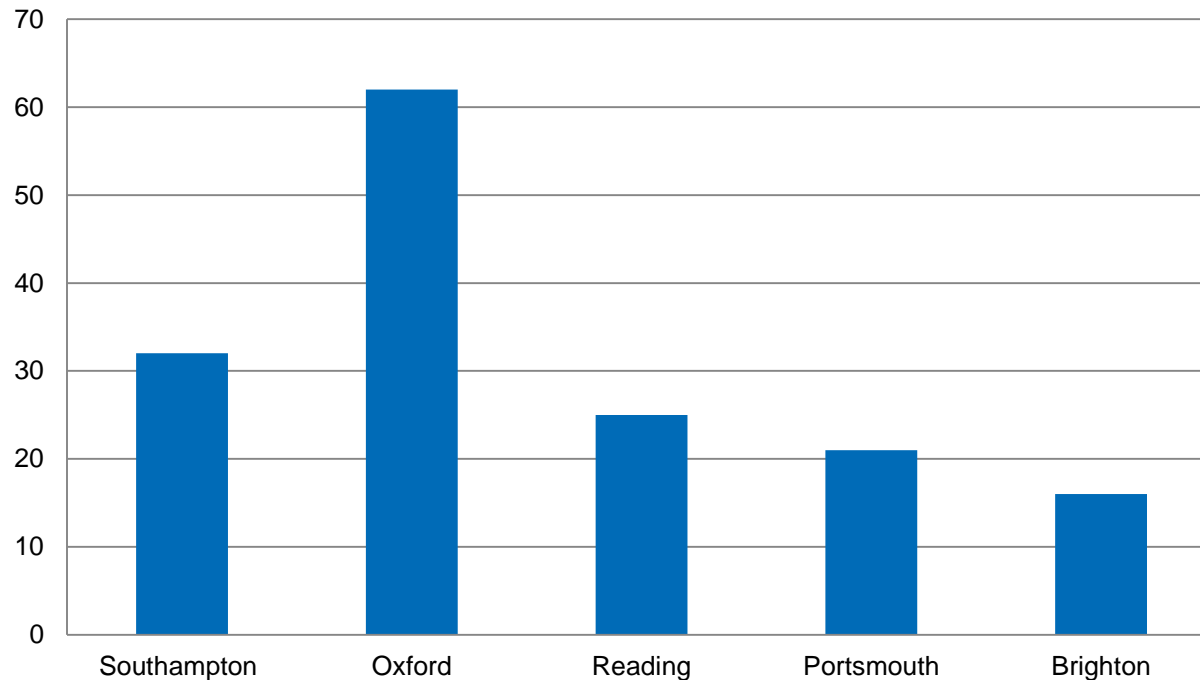
- Sets out the issues and challenges accurately
- Public health impact is clear and is not just related to  $\text{NO}_2$  but also is from fine particulates (soot)  $\text{PM}_{2.5}$
- In Southampton in 2010 6.2% is the attributable fraction of mortality due to  $\text{PM}_{2.5}$
- This is equivalent to 110 deaths in age 25+ and 1280 associated life years lost
- This is similar to Portsmouth, but higher than the South East average



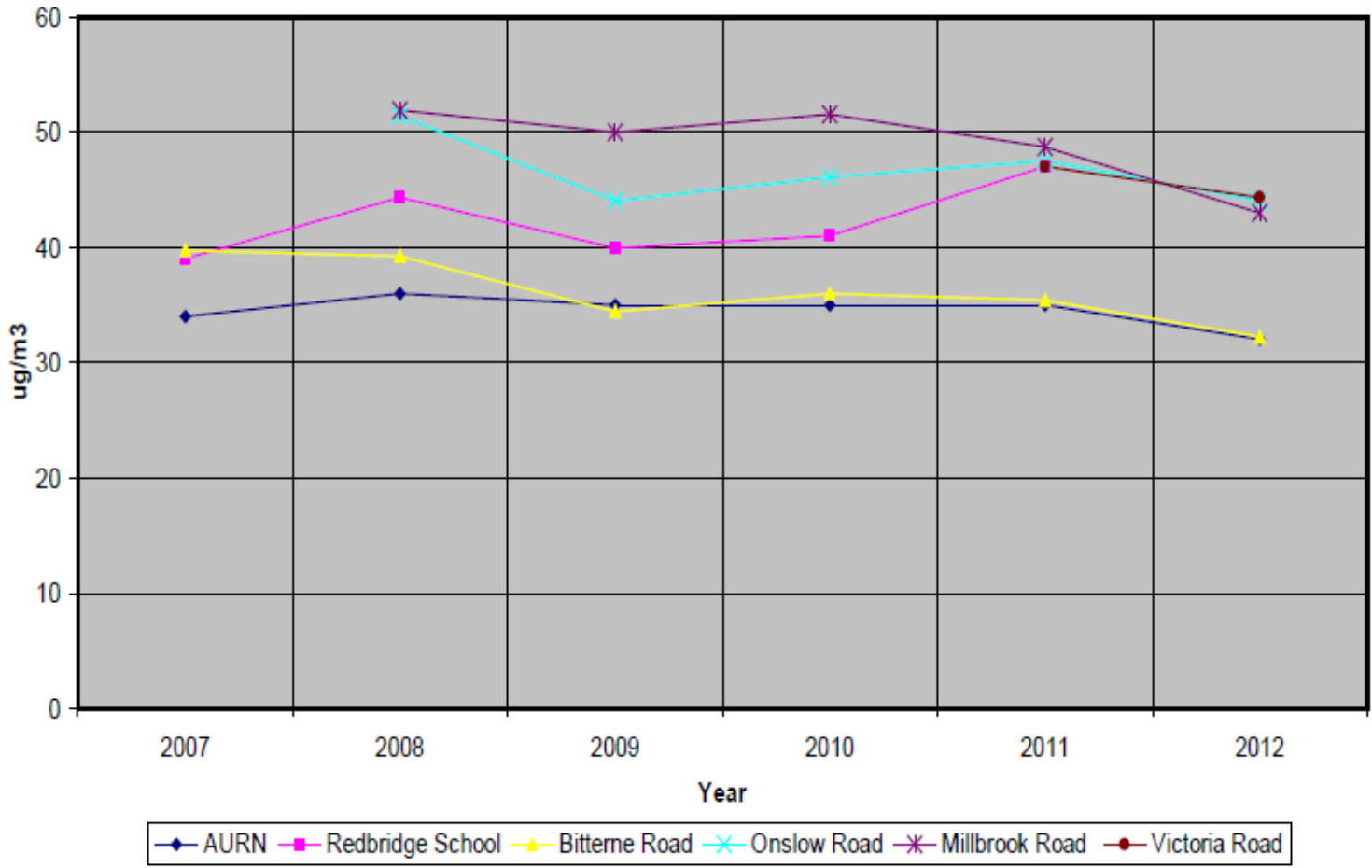
**Percentage contributions to modelled annual mean ambient  $\text{PM}_{2.5}$  concentrations at urban background air quality monitoring locations.** (Urban non-traffic emissions include: industrial, commercial and domestic emissions. “Regional UK” refers to national emissions in non-urban areas).

- Pollution levels vary significantly across a city
- Caution when comparing individual sites to represent a whole city
- Generally Southampton pollution levels are similar to other cities in the South

## Nitrogen dioxide levels in 2012 (ug/m<sup>3</sup>)



## Trends in Annual Mean Nitrogen Dioxide Concentrations at Automatic Monitoring Stations



## Air quality action plan measures

- mostly been implemented

## LEZ feasibility study

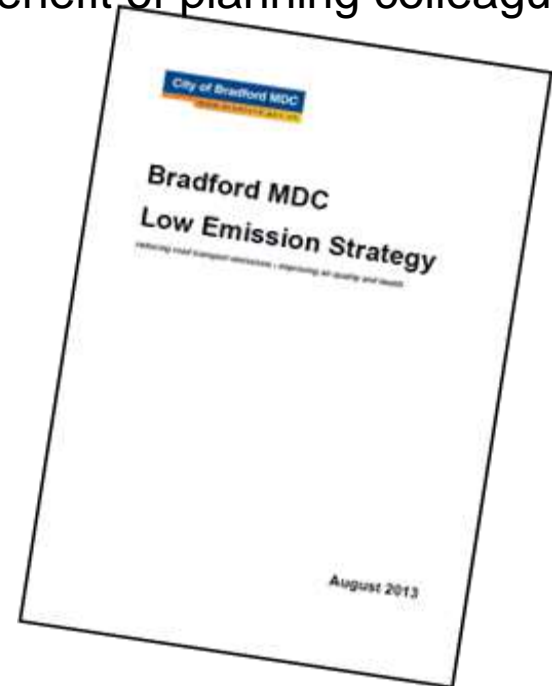
- Not economically attractive
- Achieve compliance by 2019 without



- The Oxford LEZ Traffic Regulation Condition consists of two elements:
- a requirement to switch off the bus engine if waiting for more than 1 minute from March 2013;
- a Euro V standard engine or retrofit equivalent for all emissions from January 2014.
- Southampton - Clean Bus Technology Fund but no emission standard within the Bus Quality Partnership



- Bradford Council introduce air quality into local planning policy to:
- design with a focus on providing cost effective low emission infrastructure and other measures such as travel planning.
- tackle the issue of cumulative impact
- give clarity and consistency to the process to the benefit of planning colleagues and developers





## Sources to be assessed in LAQM include....

- In Millbrook, about 50% of the total NO<sub>2</sub> comes from the port activities
- Ships hotelling is the largest source
- Priority is to engage on this issue with the Port Authority



## Next Steps

- Commence the development of a Low Emission Strategy
- Focus on Port Activities
- Consider other emission sources e.g. buses and diesel cars
- Timeframes



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