Managing local traffic-related air pollution in England

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Outline of Presentation

1. Local Air Quality Management framework in the UK.
2. Integration of air quality management into the Local Transport Planning (LTP) process.
3. Research objectives and methodology.
4. Summary of key findings.
5. Conclusions: theoretical model.

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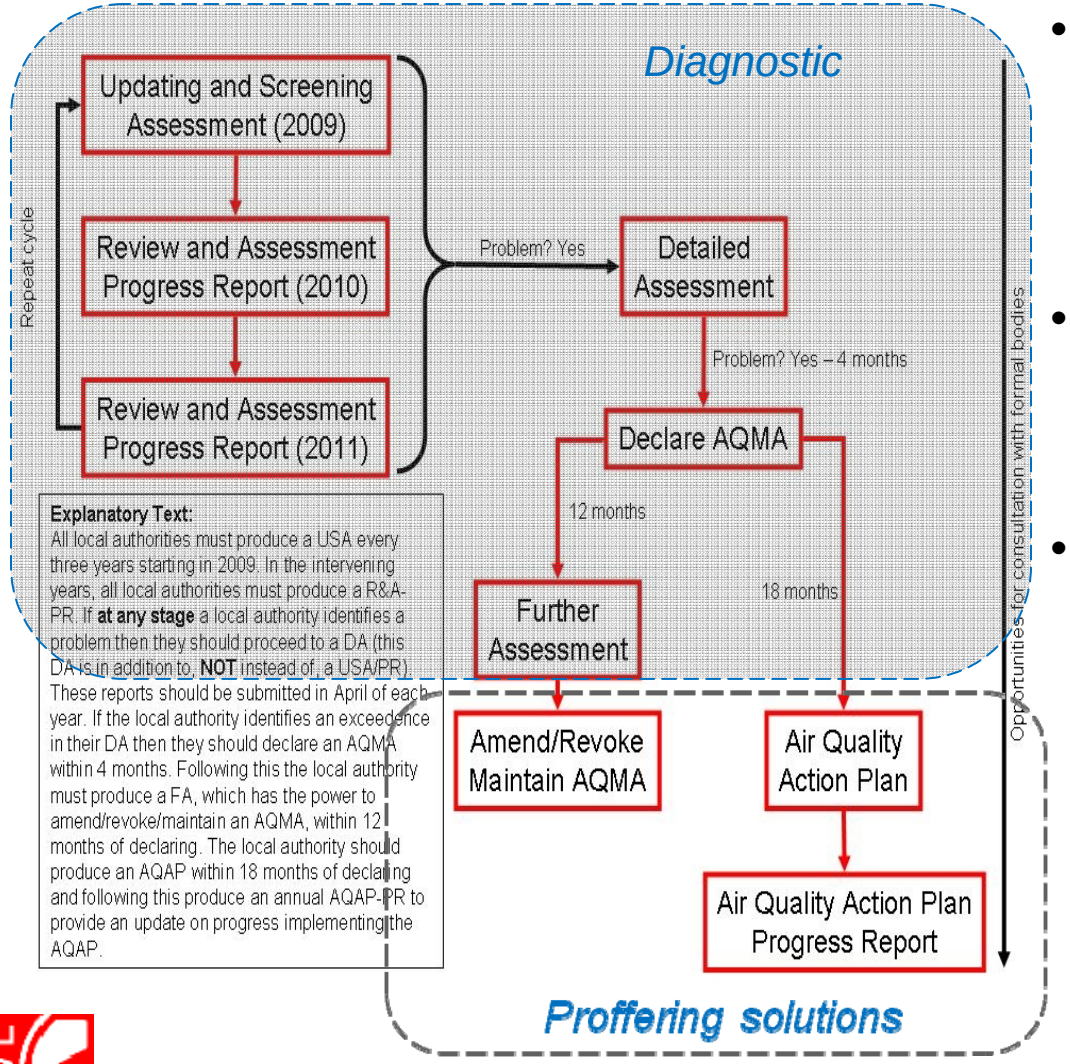
Local Air Quality Management (LAQM)



- Responsibility on local government to work towards achieving national air quality objectives for 7 key air pollutants
- Declare Air Quality Management Areas (AQMAs) as spatially designated zones.
- Prepare Air Quality Action Plan (AQAP) which outlines the mitigation and management measures for improving the situation.

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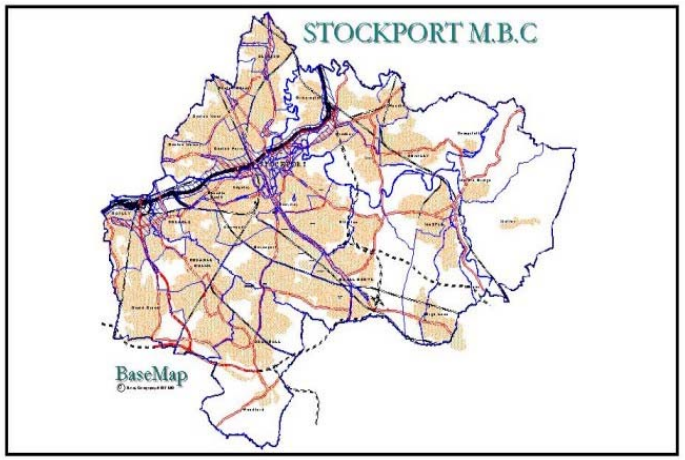
Contributions of traffic to local air pollution

Pollution sources	%
Road Transport	89%
Industrial	4.5%
Domestic	2.5%
Transport & Industrial	3.5%
Transport & Domestic	0.5%
Other	0.5%

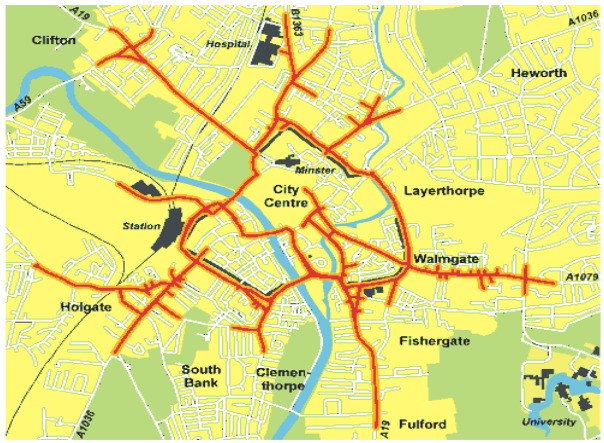
Source: AQMRC Review and Assessment database (2008)



The Air Quality Management Area in Stockport (Blue shading)

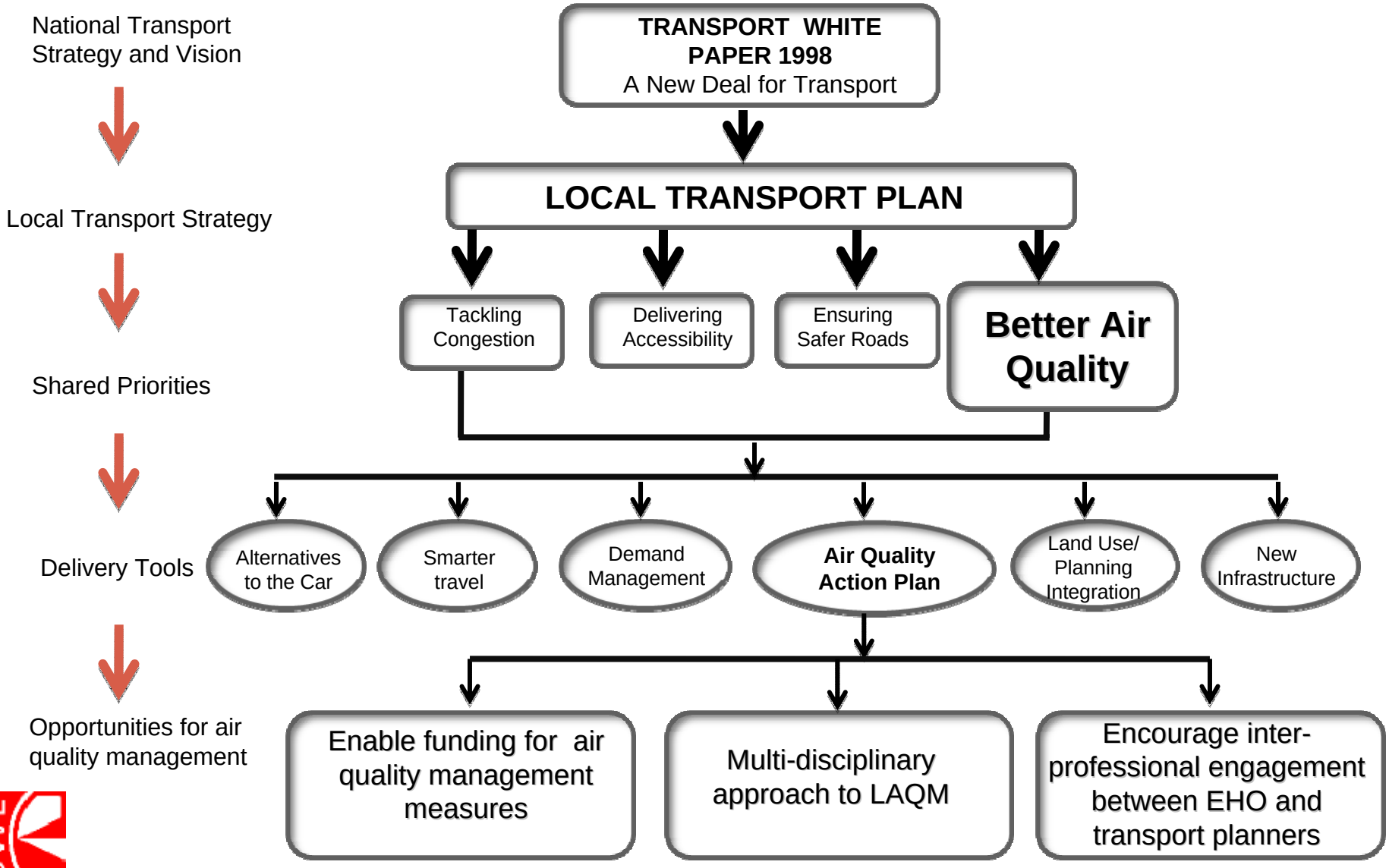
Source: *www.airquality.co.uk*

- Over 90% of AQMAs declared are due to traffic-related emissions.
- Policy disconnect between the diagnosis and the solutions proffered through air quality action planning.
- Necessity of addressing air quality through transport planning.



Source: City of York Council

Air Quality as a shared priority in LTP2



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Research objectives

- Air quality as a shared priority within the LTP2.
- Impact of integration on achieving air quality objectives.
- Implication of multi-tier local government arrangements.
- Capacity for inter-professional engagement between EHOs and transport planners.
- **OUTCOME:** evidenced-based recommendations for managing traffic-related air quality problems through transport planning.

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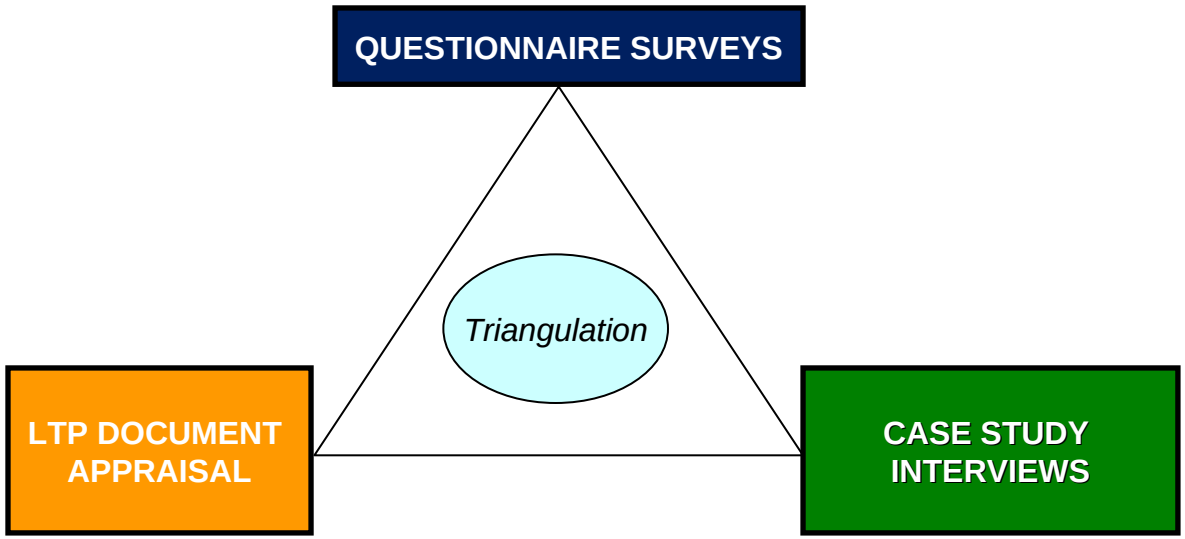
Methodology

Two rounds of questionnaire survey in 2007 and 2008 administered to over 200 EHOs and transport planners.



Appraisal of 23 LTP2 documents against air quality criteria.

In-depth case study interviews with officers from 8 local transport authorities.

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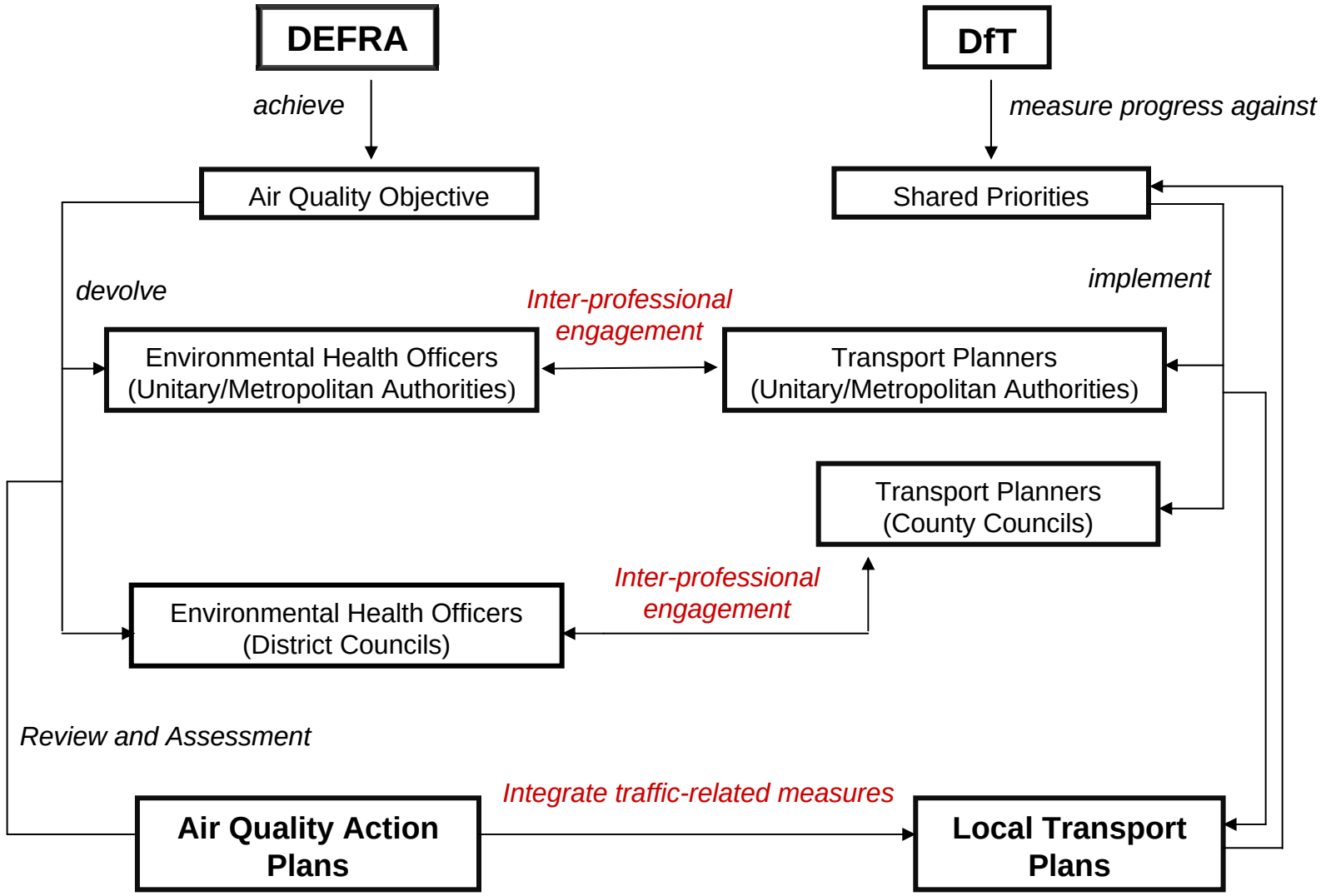
Institutional complexities



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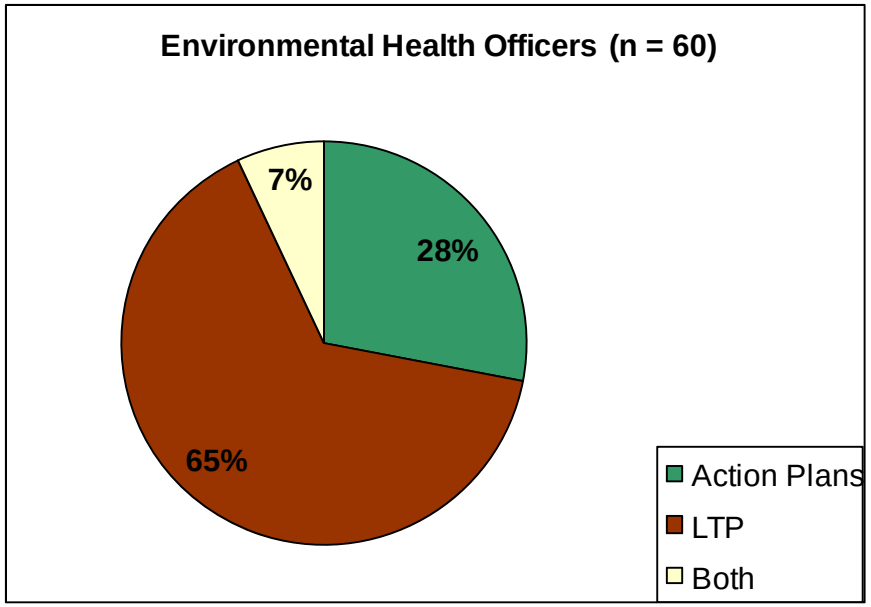
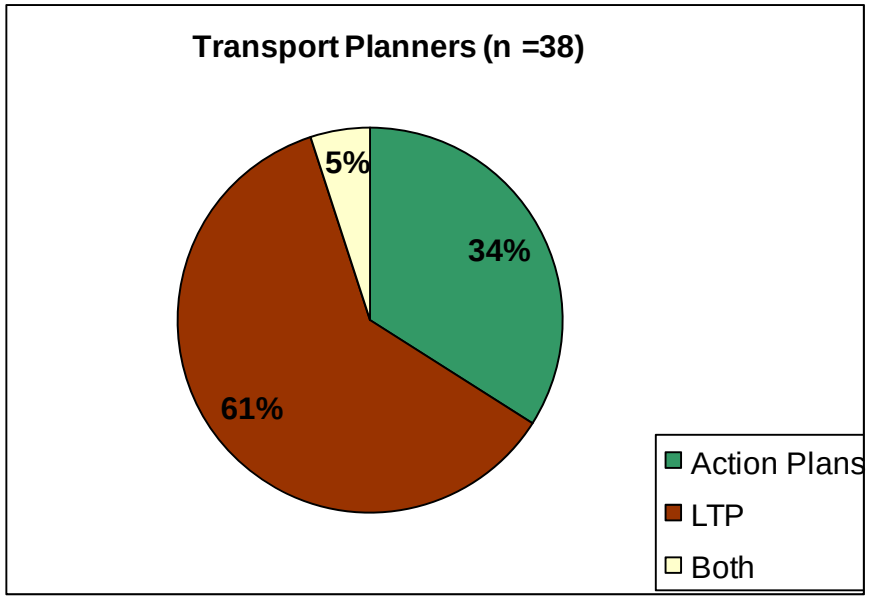
Stakeholder views on LTP as an appropriate policy for managing air quality

Question: *In addressing transport-related AQ problems in your LA, which approach do you think is more effective?*





- LTP is widely considered as an appropriate policy for managing traffic-related local air quality.

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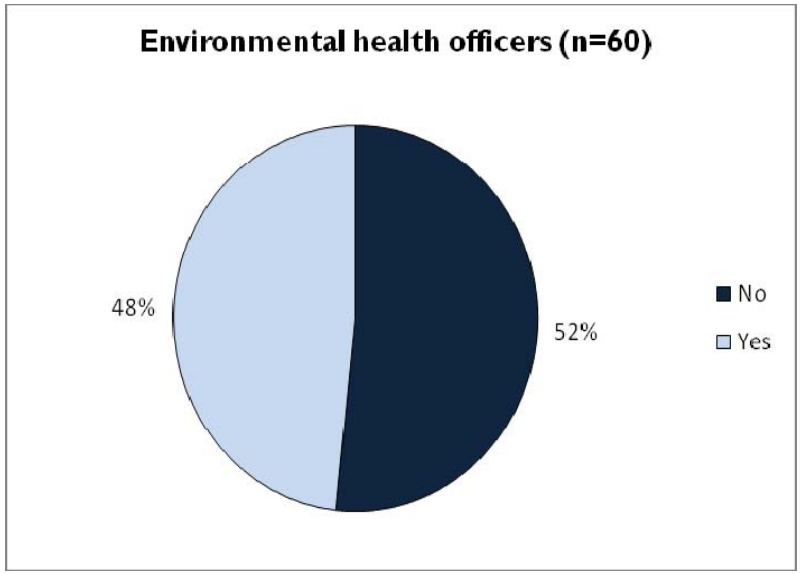
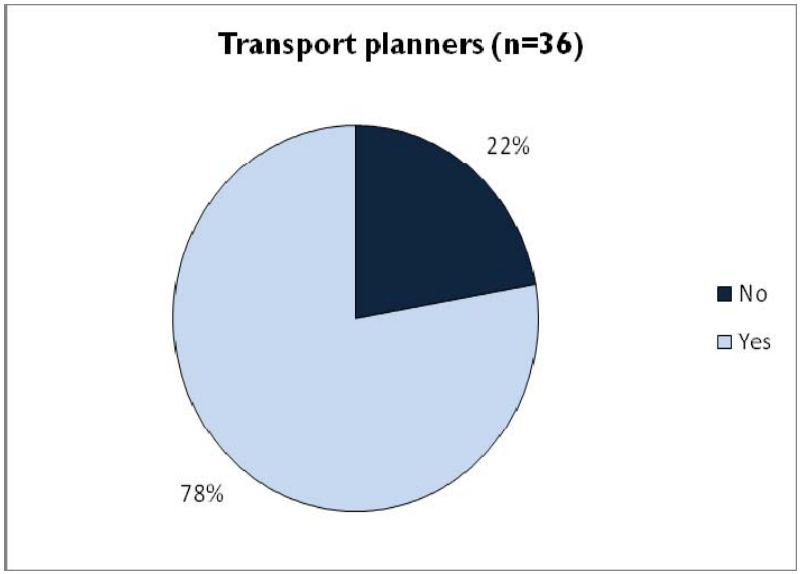
Asymmetrical understanding

Question: "*Do you think the transport planners paid enough attention to the Action Plan during the implementation of the LTP2?"*





- Contrasting views from both EHOs and transport planners is indicative of the challenges of integrating two separate policy packages with different priorities and objectives.
- Unequal expectation of the process.

Relative importance of air quality within LTP

- Shared not *'equal'* priorities.
- Funding allocation.
- Air quality and congestion management.
- Air quality vs. other priorities.

"improving air quality risks conflicting with improving accessibility in some cases. And we consider accessibility as vital to the economy." [Transport planner]

Shared priorities' importance based on time, resources and funding allocation, by the transport planners.

Priorities	n	Mean (1-6)
Safety	41	1.46
Congestion	41	2.02
Accessibility	41	2.05
Other Local Priorities	39	2.33
Air Quality	41	2.98

1= very high priority, 6= very low priority

- Political intangibility.

"From an officer point of view, I can understand the health impact of air quality but this is difficult to translate in reality to the public compared to the way traffic congestion and road safety issues can be communicated." [County transport planner during case study interview]

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Communication between air quality officers and transport planners

- Professional differences.

"As with many joint ventures, successful operation requires that a measure of trust is built up between all involved. Two sets of professionals with different backgrounds and priorities will have different takes on the same subject" (Transport planner)

Source: http://www.inkcinct.com.au

- Sense of engagement.

"Communication is often a little one-way generally. The transport planners …. don't always involve us sufficiently to discuss how to maximise [air quality] benefits from the measures in the LTP2." (Questionnaire survey response from Air quality officer)

*Some of the measures within the action plan "creates a danger that the LAQM process can be used or hijacked as a way of trying to deliver other things which are on this local authority **shopping list**, and you have to say no!" (Transport planner during case study interview)*

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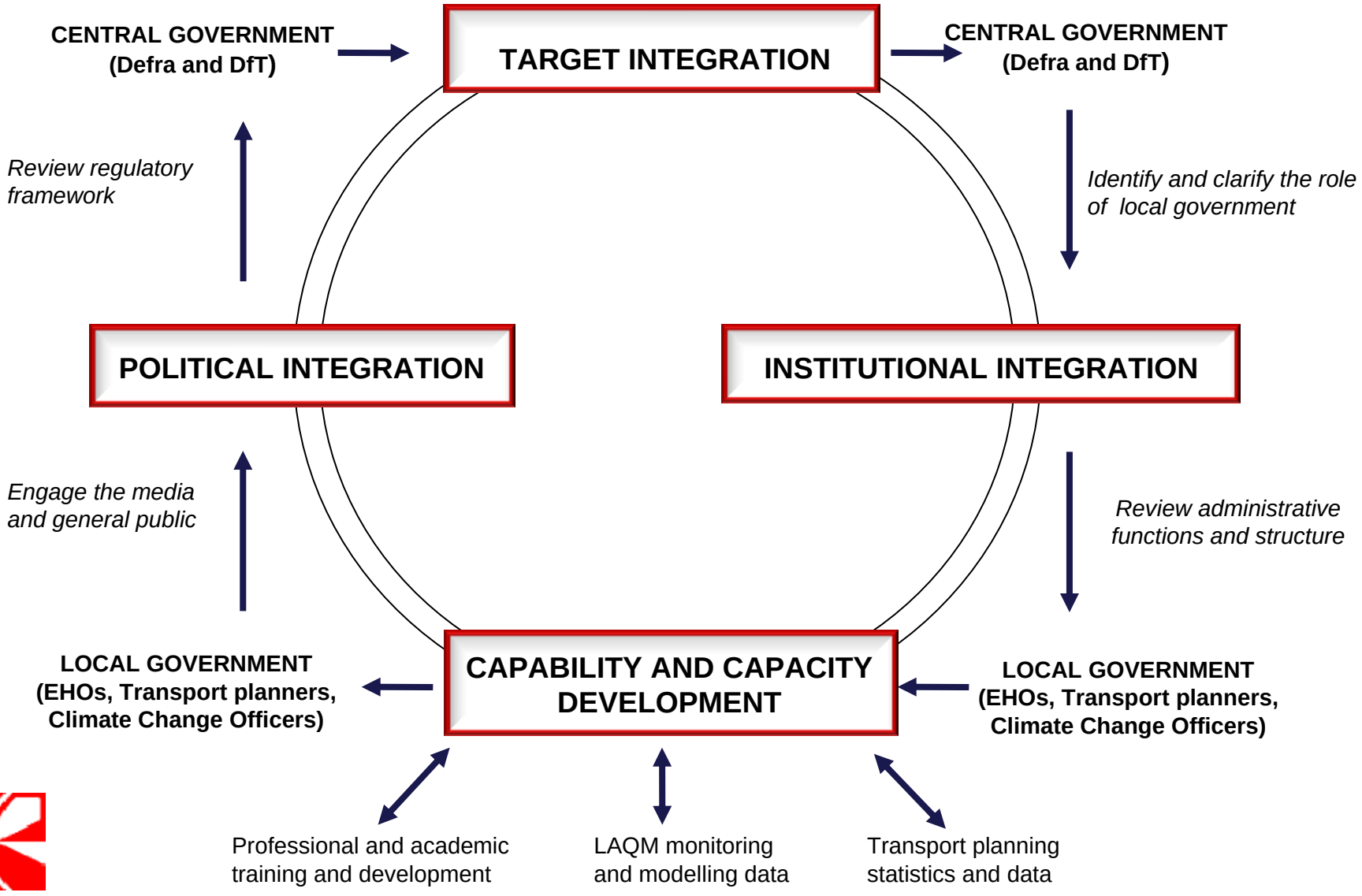
Theoretical model for managing traffic-related air pollution



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Questions……..

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http://www.uwe.ac.uk/aqm/dotun.html