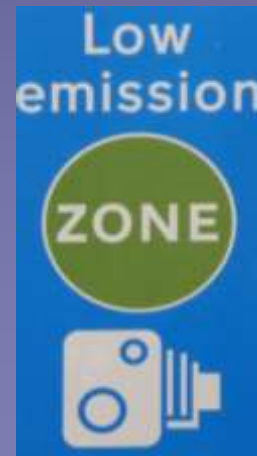


# APSE Scotland Fleet, Waste and Grounds Seminar 2017



## Scotland's National Low Emission Framework (NLEF)

Drew Hill  
Transport Scotland



Key paradox message today...

Transport is a principle cause of  
poor air quality

Transport can contribute  
significantly towards cleaner air  
quality

## Environment - where are we now

**c.3.7  
Million**

Air pollution contribution to worldwide deaths each year, primarily from cardiovascular disease

**9th**

Global ranking of air pollution in significant population risk factors for morbidity and mortality

**20-30%**

European population exposed to PM<sub>2.5</sub> levels above **EU reference values** and **World Health Organization Guidelines**

**91-96%**

**6% per  
10µg/m<sup>3</sup>**

Increase in chronic impact of PM exposure on cardiovascular mortality rates

**3.9%**

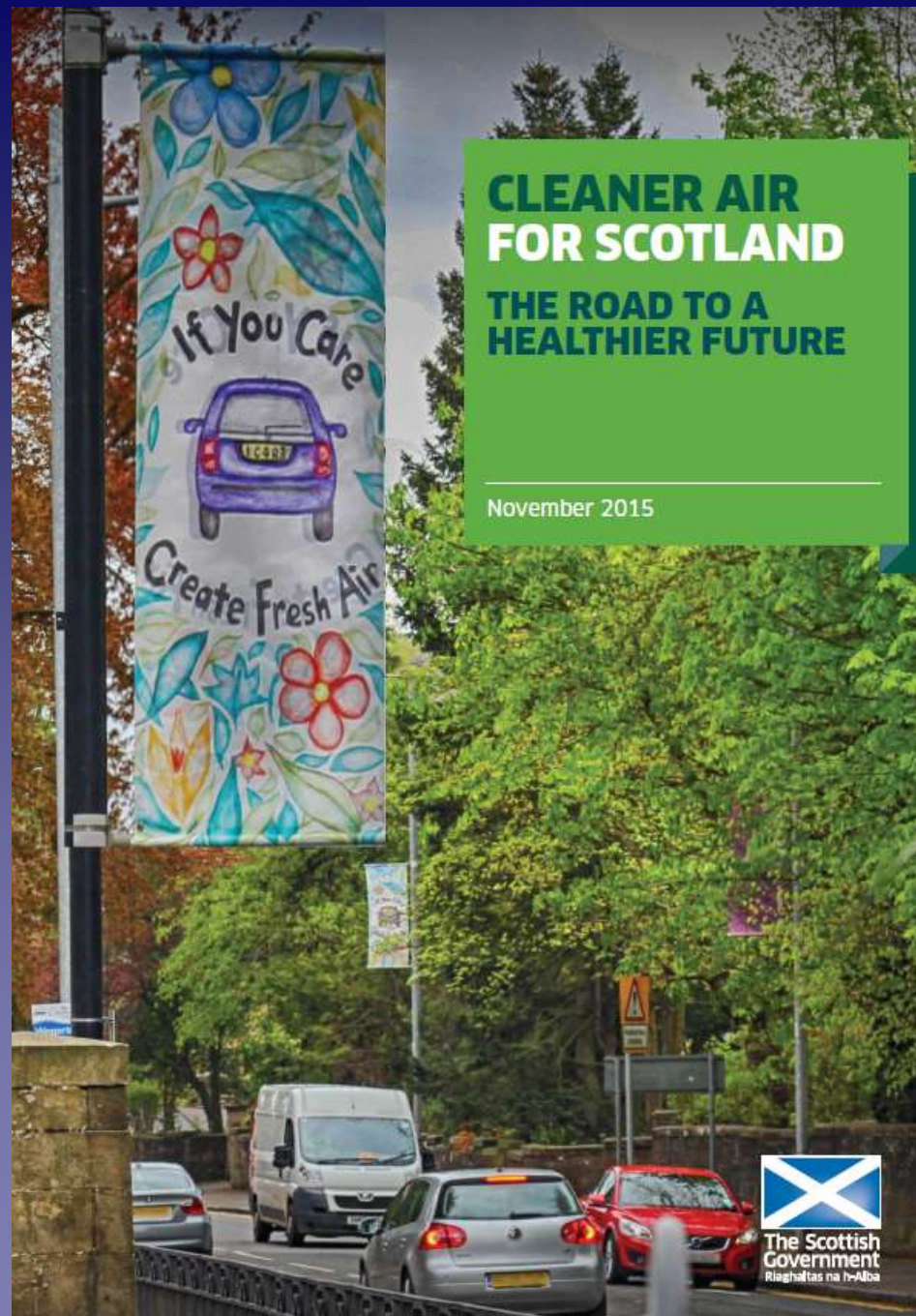
Proportion of all deaths attributable to long-term PM<sub>2.5</sub> exposure in **Scotland** and **UK**

**9.3%**

Congestion costs the UK economy €24.5Bn a year in lost production

Nearly 2,100 people every year, in Scotland, are estimated to have their lives shortened as a result of air pollution

A national strategy within which we can all work together towards the common aim of achieving the best possible air quality for Scotland.

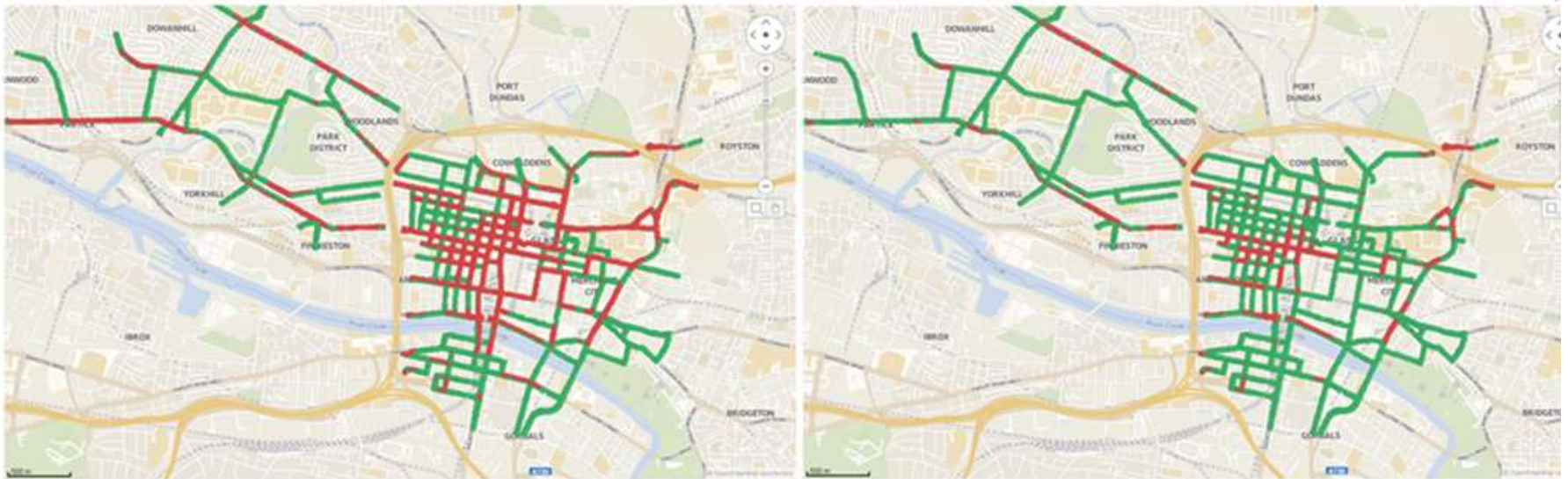


# CAFS Includes important new initiatives:



- National Modelling Framework
- National Low Emission Framework
- Adoption of WHO guideline values for particulate matter in Scottish legislation
- A National air quality awareness campaign

# National Modelling Framework



**Figure 5:** Provides comparison in the changes to modelled NO<sub>2</sub> for different traffic scenarios, visualised for all kerbside points through the online data analysis application. The 2 maps compare kerbside concentrations for the National Fleet, and for improvements if all buses were EURO 6 (or similar emission standard).



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## NATIONAL LOW EMISSION FRAMEWORK

NLEF is a transport-focused, science-led, evidence based appraisal process to enable local authorities to justify the business case for Vehicle Access Regulation Scheme (VARS) options.

### LOW EMISSION ZONE

Set minimum emission standards for access to a defined area.

**NLEF supported  
by NMF evidence**

### **DATA GATHERING**

Data gathering and modelling will be undertaken by the Scottish Government to provide an initial clear understanding of the air quality problem.

### **ANALYSE AND VISUALISE**

Data and modelling will be presented and analysed to refine the evidence in order to inform decision making.



### **TRANSFORM INTO EVIDENCE**

We will provide tools and access to shared data to allow the NMF to be used to inform decision making.

### **ADDRESS UNCERTAINTY**

We are aware modelling can be uncertain, with key sensitivities, and this will be quantified and managed to improve the quality of the evidence.

**Science driven**



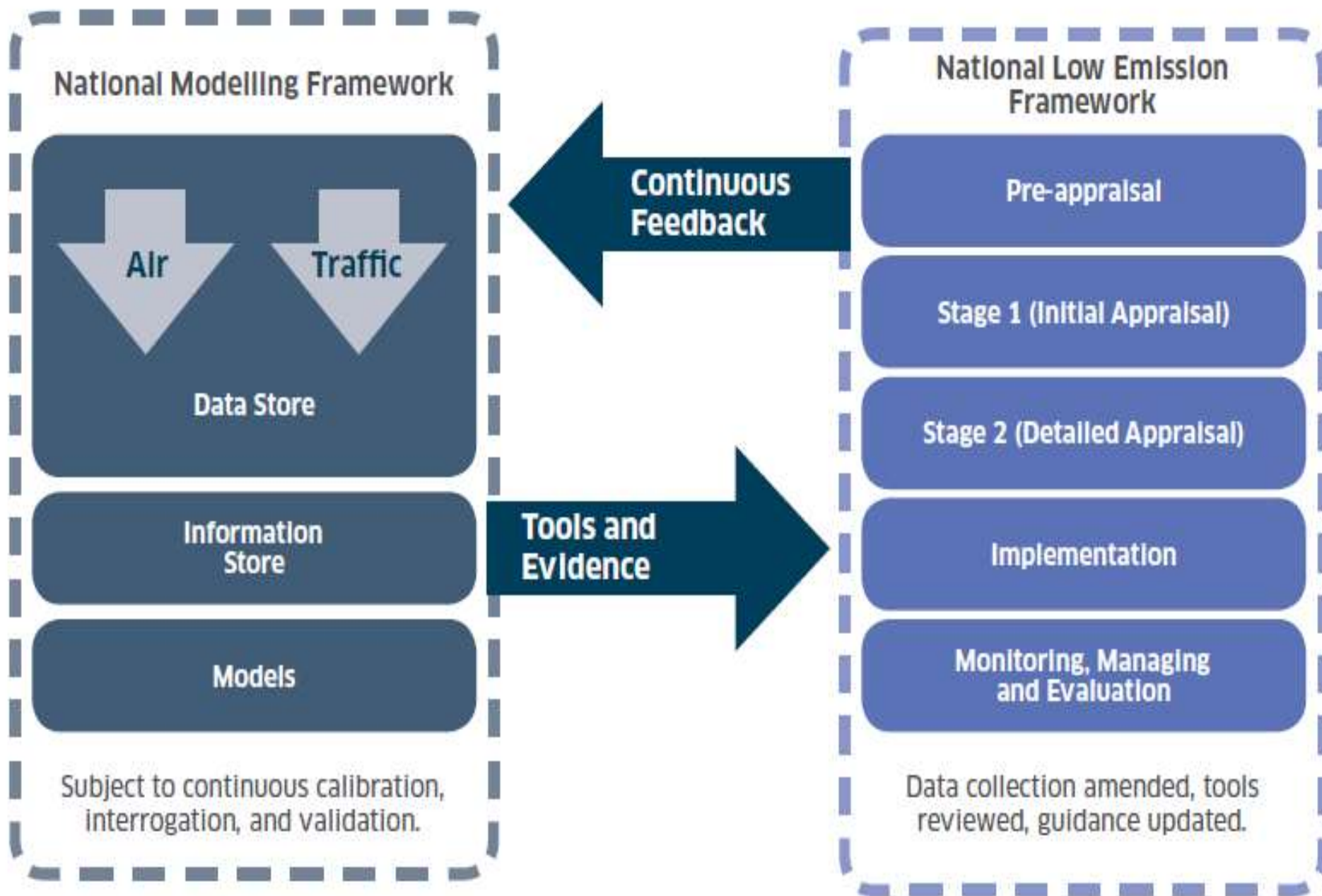


Figure 17. Interlinkages between NMF and NLEF

## NLEF Objectives



- Legislative basis from the 1995 Environment Act, related guidance, and Vehicle Access Regulation Scheme (VAR) enforcement legislation.
- Alignment with the Scottish Government, CAFS, STAG, and Vehicle Access Regulations Scheme Objectives.
- Provision of guidance on Vehicle Access Regulation Scheme design.
- Links to existing budget streams to support delivery.

## What are the NLEF Options

- **Vehicle Access**  
Restrictions for a defined area based vehicle emission standards for vehicle types.
- **Non-charging**  
(substantial fines for non-compliant vehicles to deter access as opposed to charge for access)

# Three groups of NLEF Options

## NLEF Options

Non Charging  
Zonal Entry  
Systems

Vehicle Access  
Regulation  
Schemes

Vehicle Licensing  
Regulation  
Schemes

## Implementation

Hard  
infrastructure  
such as gates

Traffic Regulation  
Orders

Licensing Powers

## Exclusion Groups

Buses and coaches  
Taxis and private hire  
vehicles

HGVs  
LGVs  
Cars

Buses and coaches  
Taxis and private hire  
vehicles

# Vehicle Access Regulation Schemes



## Roads: Traffic Regulation Orders (TROs)

Standard Note: SN6013  
Last updated: 17 November 2014  
Author: Louise Butcher  
Section: Business and Transport

This note explains what Traffic Regulation Orders are, how they are made and the various uses to which they can be put.

Highway authorities can place temporary, experimental or permanent restrictions on traffic within their areas by way of a Traffic Regulation Order (TRO). Some of the most popular uses for TROs are restricting the movements of HGVs in residential areas, implementing parking restrictions (on single streets, not more widely – separate legislation exists for this), and restricting traffic for the purposes of parades, street parties and other events.

Information on other roads-related issues can be found on the [Roads Topical Page](#) of the Parliament website.

### Contents

1	Legislation	2
2	Procedure for making a TRO	3
2.1	Permanent orders	3
2.2	Experimental orders	4
2.3	Temporary orders	4
2.4	Consultation on possible changes to advertising rules, 2012	4
3	What TROs can be used for	6
3.1	Banning lorries from residential areas	7
3.2	Parking restrictions	7
3.3	Temporary closures for parades and associated charges	7

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Low  
emission



NLEF supported  
by Programme  
for Government  
commitment.



With the help of local authorities, we will identify and put in place the first low emission zone by 2018, creating a legacy on which other areas can build.

**USING IT  
IS THE HARDEST PART.**



**BIG  
DATA**



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# Developing the National Low Emission Framework (NLEF): Lessons and challenges





# LEZs and finance

- NLEF appraisal
- NLEF design
- Civil engineering
- Back office/resource
- Retrofitting existing fleet
- New fleet
- Communications



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# NLEF engagement and consultation

Tools: CBA

Euro criteria

Penalty +  
exemptions

Legislation  
enforce

TRO/TRC

Stake-  
holders

Comms  
strategy

Governance

Funding



TRANSPORT  
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**Drew Hill**  
**Senior Environmental Engineer**  
**Transport Scotland**  
**[drew.hill@transport.gov.scot](mailto:drew.hill@transport.gov.scot)**  
**0141 272 7261**