

Regulatory Incentives

Vehicle Age and Emissions Policies

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Introduction to Cenex

- Independent, not-for-profit, research and consultancy organisation (est. 2005)
- Specialise in delivery of low emission vehicle and infrastructure projects



Reducing Emissions From Transport



Helping clients to assess, evaluate, implement and deliver low emission vehicle and associated infrastructure strategies

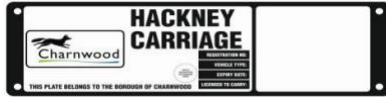
Taxi Expertise

- ULEV Hackney Carriage Business Case Assessment
 - Trade engagement
 - Trial management
 - Total cost of ownership and emissions modelling
- Licensing Policy Best Practice Research
- ULEV Availability and Suitability Assessment
- Fleet Emissions Modelling
 - Fleet baselining – number and type of vehicle, mileage, age and emissions
 - Impact of revised policies on vehicle replacement and emissions
- Plug-In Vehicle and Infrastructure Uptake Scenarios



Introduction - Licensing

Hackney Carriage Vehicle Licence (Taxi)



- Can be hailed in the street ('plying for hire) or be pre-booked
- Can operate from taxi ranks

Private Hire Vehicle Licence



- Must be pre-booked through a licensed operator
- Cannot operate from taxi ranks

Vehicle standards set by licensing authority such as:



Turning circle, driver partition, passenger door WAV



National spec hackney carriage or minibus



Rear access WAV



Number of doors, size, luggage capacity etc.

Introduction – Range of Typical Taxi Operations

Low Mileage Vehicles

- <60 miles per day (<15,000 miles per year)
- Single driver per vehicle
- Owner driven vehicles
- Dense urban based operation (outside of London)
- 25% of drivers work part time¹



High Mileage Vehicles

- >150 miles per day (>40,000 miles per year)
- Multiple drivers per vehicle
- Operator owned vehicles
- Rural and/or high mileage journeys such as airport transfers
- Full time drivers



¹ <https://www.gov.uk/government/statistics/taxi-and-private-hire-vehicle-statistics-england-2018>

Vehicle Age and Emissions Policy – Current Status

- According to DfT transport statistics 213/315 licensing authorities specify age limits
- ‘Exceptional condition criteria’ extends age further
- Very few examples of minimum emissions standards

Advantages

- Maximises use of vehicle as an asset
- Extended age limits can be used as an incentive when decoupled from emissions standards

Disadvantages

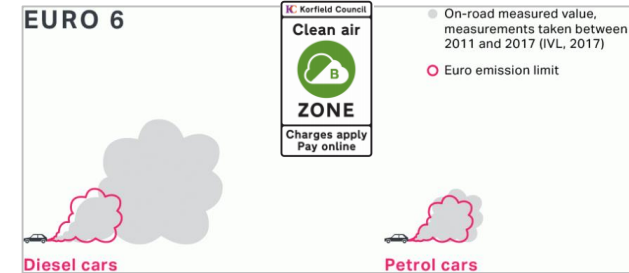
- No direct control over emissions standard
- Potential safety concerns
- Lack of modern fleets, customer expectations



Regulatory Incentives

Euro Emissions Standards based Policies (~2020)

- Minimum standard of Euro 6 (diesel) and Euro 4 (petrol)
- Licensing  Birmingham City Council  Nottingham City Council
- Charging Clean Air Zone



Source: London.gov.uk

- Proposed minimum standard of ULEV from ~2025/26 onwards

Advantages

- Large and immediate improvement in air quality
- Compliance with any CAZ via licensing option
- Good vehicle availability

Disadvantages

- Large short term replacement of vehicles
- Minimal impact on CO₂ emissions (whole generation of non ULEVs)
- Enforcement

Regulatory Support Measures

- Acceptance of retrofits that meet minimum standards (e.g. LPG)
- Temporary extensions beyond age limit
- Removal of exceptional condition test

ULEV Standard based Policies (~2020)

- Minimum standard of Ultra-Low Emission Vehicle for new vehicles (including replacement vehicles once age limit is reached)



- All licensed vehicles must be ULEV from ~2026-2030



Advantages

- Immediate improvement in fleet CO₂
- Lowest air quality emissions over licensing period
- Earliest transition to ULEV fleet
- Increased demand for ULEVs

Disadvantages

- Partial compliance with CAZ
- Availability of suitable ULEVs
- Trade acceptance
- Significant financial support required
- Enforcement

Regulatory Support Measures

- Removal of minimum engine capacity requirement
- Extended age limit (ULEVs)
- Access restrictions (non ULEVs)
- ULEV only taxi ranks

Summary of Vehicle Age and Emissions Policy Options

Increasing improvement to fleet emissions, increasing cost/effort to implement

Current Best Practice

Revise Age Limit

- Enforce existing max age limit
 - Reduce existing max age limit
 - Introduce max age limit

Minimum EU standard for ICE

- EU6 (diesel) and EU4 (petrol)
 - New licences only
 - All licensed vehicles

Aspirational

ULEV as minimum standard

- <75g CO₂/km (NEDC)
- New licences only

Aspirational

ULEV as minimum standard

- <75g CO₂/km (NEDC)
- All licensed vehicles

Long Term Aims

Revised ULEV definition as minimum standard

- <50g CO₂/km, min zero emission requirement (~2021, WLTP?)
 - New licences only
 - All licensed vehicles

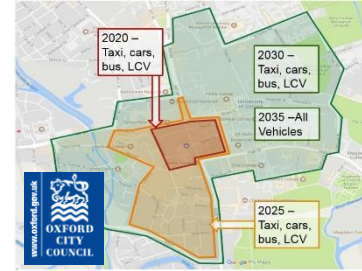
Introduce ZEV as minimum standard

- Zero tailpipe emissions
 - Minimum energy consumption requirement
 - Well to wheel impact

Regulatory Incentives

Future Outlook and Enablers

- Increasingly stringent emissions based access restrictions to cities via permits, clean air zones or zero emission zones - licensing policy consistent with CAZ framework
- Increased policy coordination between neighbouring local authorities
- National minimum standards?



West Midlands
Combined Authority



Identification of taxis and private hire vehicles entering charging Clean Air Zones
A consultation
October 2018

October 2018



Taxi and Private Hire Vehicle Licensing
Steps towards a safer and more robust system

Transport for London
London Taxi and Private Hire

Cross Border Hiring - Proposals for Legislative Change

MAYOR OF LONDON



Thank you for listening

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