

State of the art in data collection in the UK

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Main organisations collecting freight-related data on regular basis

- Department for Transport
- Office for National Statistics (employment)
- Urban authorities (most available data is traffic counts)
- Trade Associations (especially cost and activity data)
- HM Revenue & Customs

Department for Transport freight data

- Main source of freight data in UK - collects and publishes wide range of freight-related data
- Covers all transport modes
- Covers various aspects: vehicles licensed, vehicle activity, goods transported, safety issues
- Long time series for many transport surveys
- Many surveys are continuous and results published at least annually
- Added a survey of van activity in 2003
- But no survey work specifically about URBAN freight

Other organisations collecting urban freight data

- Transport for London – roadside interviews to determine origin/destination, load type and trip type every ten years
- Urban authorities in UK - manual and automatic traffic counts in many towns and cities plus specific one-off freight surveys

Types of freight data not collected in UK (1) – from list in 3.1

- Commodity flow surveys
- Shipper surveys
- Loading/unloading/parking infrastructure data for goods vehicles

Exploratory studies of urban freight data

- University of Westminster – research project in Birmingham, Norwich and Basingstoke to examine freight operating patterns
- University of Westminster – research project in Norwich and London to examine goods and vehicle activity flows to and from urban businesses
- University of Southampton – survey in Winchester of goods and vehicle activity flows to and from urban businesses
- Bexleyheath – high street survey of shops and businesses
- Bristol – survey of deliveries to shops
- Ealing – town centre business survey and parking/loading survey

Limited quantity of urban freight data

- No specific on-going urban freight activity surveys in UK
- Many national data sources contain urban freight data but:
 - Either urban data is difficult/time-consuming to disaggregate
 - Or sample size is small at urban scale causing data reliability issues
 - Surveys based on vehicle activity not geographical area, so urban and non-urban data collected with no easy method of separation

Reasons for freight data collection

- Government monitoring and performance measurement
- Commercial monitoring
- Locally-based study
- To meet requirements of EC Directive
- To produce national estimates
- For modelling and forecasting
- Legal requirement for licensing and safety controls
- Crime investigation

Issues in the availability of urban data

- Cost of data collection
- Confidentiality
- When using larger dataset:
 - Ease of disaggregation
 - Sample size at urban scale

Continuing Survey of Road Goods Transport in Britain (1)

- Records all activity carried out by vehicle in UK during survey week
- Includes urban trips and trips outside urban areas
- Some data about urban activity can be extracted
- But, due to small sample sizes, disaggregating data for specific urban area can lead to data reliability issues
- Also some trips take place both inside and outside urban areas, so cannot be readily allocated as urban or outside urban vehicle activity
- Also, respondents with multi-drop trips that include 5 or more stops do not record details about each stop. Many such multi-drop trips likely to take place in urban areas

Continuing Survey of Road Goods Transport in Britain (2)

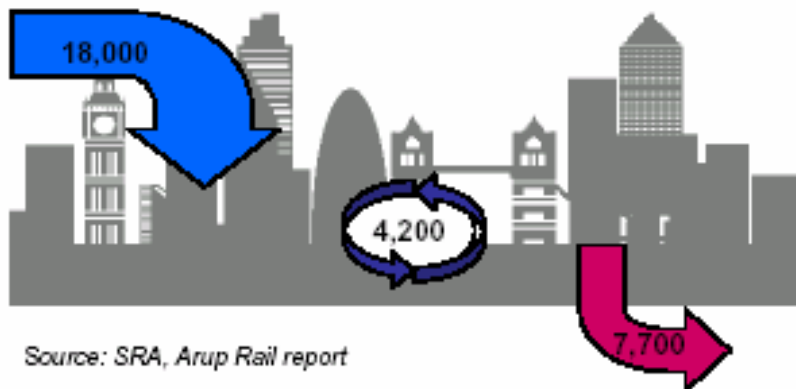
- 94% response rate to survey in 2004
- Telephone reminders used to chase non-respondents
- It takes, on average, 26 minutes to complete survey
- In 2003, it was calculated that annual cost of survey was £249,000
- Estimated that the total annual cost to respondents (based on 20,300 forms despatched) was £228,000
- Success of survey due to continuous nature which means it has consistent definitions which are well understood by respondents and survey staff
- Very successful survey that has proven itself over many years

Collating and disaggregating data at urban scale – Transport for London example

- University of Westminster carried out project for TfL to identify freight data collected that had London relevance
- London freight data collected if it was readily available
- Use of CSRGT for road freight data
- TfL has published this data at:
<http://www.tfl.gov.uk/tfl/downloads/pdf/Freight-Plan-sc-app-bc.pdf>
- Some examples of the freight data produced.....

Origin & Destination of rail freight in London

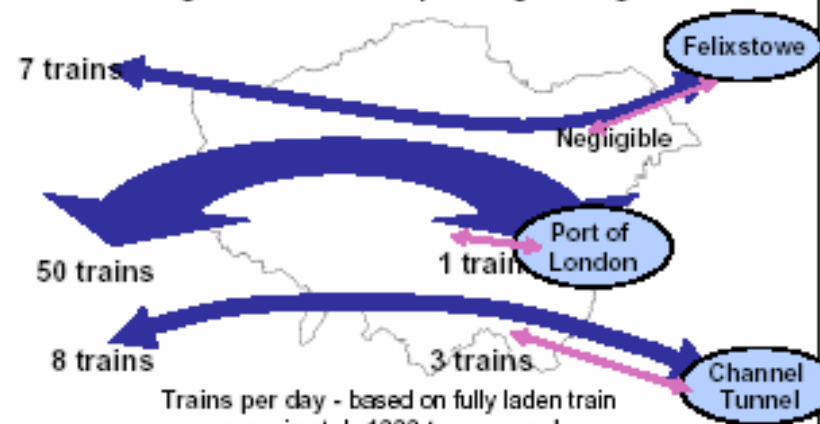
Rail Freight with an origin and/or destination in London
Daily tonnage



Source: SRA, Arup Rail report

30,000 tonnes per day
= 8 million tonnes per year
has an origin and/or destination in
London....

Rail Freight transit traffic passing through London



Source: SRA, Arup Rail report

69,000 tonnes per day
= 18 million tonnes per year
which passes through London

...compared to...

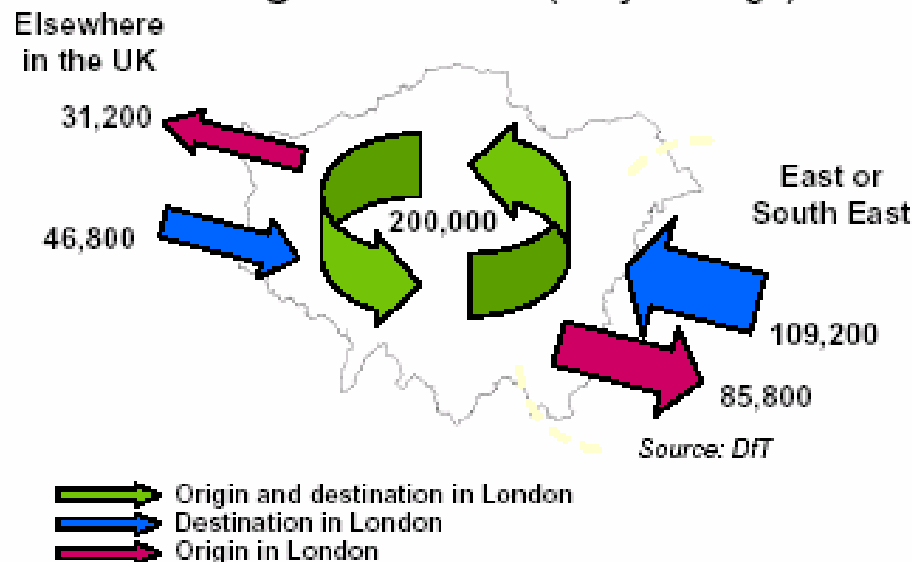
Freight moved by rail in London includes

Aggregates, coal, sand, paper, building blocks, waste, palletised freight, car components, cars, cement, scrap metal

Following privatisation in 1994 we do not know the quantities and proportions of individual cargos.

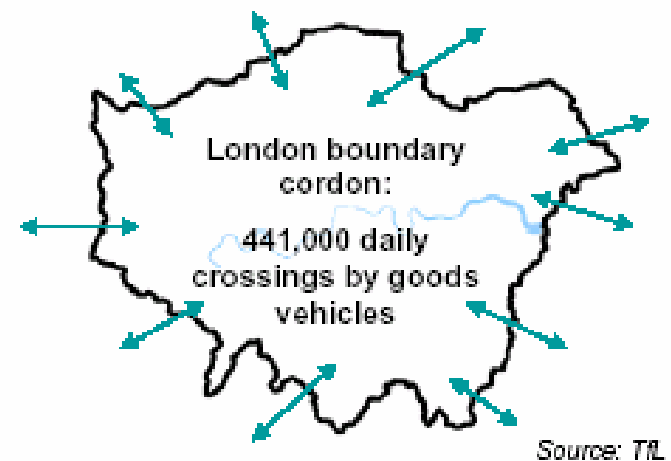
Origin and destination of road freight transportation in London

Where do HGVs transport freight to/from? (daily tonnage)



The tonnage transported to/from the East and South East of the UK accounts for 70% of all movements to/from London.

Boundary Crossings by MGVs and HGVs




Daily goods vehicle crossings of the GLA boundary are made up of

HGVs	13%	57,330 crossings
MGVs	19%	83,790 crossings
LGVs	68%	299,880 crossings

Distance travelled by goods vehicles in London

Daily Vkm for goods with both origin & destination in London

	Daily Vkm	Daily Trips	Average Trip
 HGV	2.2 million km	80,000	28 km
 LGV (privately owned only – not including company owned)	2.7 million km	225,000	12 km

By comparison cars travel 132 million kms daily, make 11 million trips, with average 12km trip

Data topics for urban evaluation and monitoring

- Trends in freight lifted (total commodities and mode)
- Commodity flow (commodity O & D, weight and value)
- Goods vehicle information (licensed and operating including age, type, weight/size, standards)
- Road goods vehicle trip information (flows by location, O & D of trips, time/day, reliability, distance, routes, utilisation, loading/unloading)
- Freight facilities & depots generating major freight flows (no., capacity, area served, trips generated)
- Safety and security (accidents, roadworthiness, overloading, hours, theft)
- Social/environmental impacts of freight transport operations (fuel consumption, emissions, noise)

Gaps in urban freight data in UK

- Vehicle routing/journey information
- Journey time/reliability of journeys (i.e. freight trip performance)
- Environmental impacts at supply chain/sectoral level
- Information/data on loading/unloading activity
- Lack of linkage about freight modal interactions - esp. road movements to other modes
- Available freight data does not provide detail about supply chain stages between which freight is transported - it provides snapshot of vehicles at unspecified point in chain
- Existing survey work tends to lack detail about land uses between which goods movements take place

Difficulties in urban freight data

- Many types of urban freight data often not currently collected
- Some data sources can only provide data at a national or regional level. While some data is only available at a London-wide level.
- When urban freight data does exist, small sample sizes can affect its reliability
- Urban freight surveys that have taken place tend to be one-offs
- Can be difficult to make links and comparisons between data from different sources/surveys
- Data is held by companies may be very useful to policymakers but often it is confidential