Overview of ‘Green Logistics’ modal shift research

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‘Green Logistics’ research project

• Funded by EPSRC
• 4 year duration (2006 – 2010)
• 6 UK universities:
  – Cardiff
  – Heriot-Watt
  – Lancaster
  – Leeds
  – Southampton
  – Westminster
• Series of inter-related project themes
Project themes

- Evaluating the impact of supply chain uncertainty on green-gold logistics performance
- Understanding and forecasting business-as-usual trends in road freight transport and its environmental impact
- Modelling of road and rail freight traffic in Britain
- Achieving greater sustainability in urban distribution operations
- Understanding ‘take-back’ mechanisms in a high street and dedicated shopping centre environment
- Potential for modal shift from road to rail and water
- Carbon footprints of conventional and online retailing
- Vehicle routing and scheduling
Objectives of modal shift research

• To identify means by which modal shift (primarily from road to rail transport) can be achieved
• To determine the barriers that currently prevent further modal shift
• To identify how these barriers can be overcome through a range of fiscal, regulatory and organisational changes
Key activities

• Demand-side:
  – questionnaire survey and in-depth interviews with manufacturers/retailers

• Supply-side:
  – annual inventory of rail freight service provision
  – container train capacity and load factors survey
  – survey and analysis of wagonload service provision
In-depth interview phase – main topics

- Supply chain structure and responsibilities
- Existing experiences of rail (and water)
- Rail (and water) freight potential

- Interviews were semi-structured:
  - Consistency where possible/appropriate
  - Specific focus on areas of relevance to interviewee company
## Survey coverage

<table>
<thead>
<tr>
<th></th>
<th>Questionnaires completed</th>
<th>Interviews attended</th>
</tr>
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<tbody>
<tr>
<td>Food and drink raw materials</td>
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<td>8</td>
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<tr>
<td>Packaged food and drink products</td>
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<td>3</td>
</tr>
<tr>
<td>Steel</td>
<td>4</td>
<td>3</td>
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<tr>
<td>Timber products</td>
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<td>3</td>
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<tr>
<td>Express parcels</td>
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<td>2</td>
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<tr>
<td>Textile</td>
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<td>1</td>
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<tr>
<td>Packaging</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>26</strong></td>
<td><strong>21</strong></td>
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‘Green Logistics’ project website:

www.greenlogistics.org