University of Westminster
MODAL SHIFT TO RAIL
Workshop 12th November 2009

John Holwell – Rail Development Manager

Modal Shift, Optimisation through Co-Operation
practical solutions, successful partnerships
Malcolm Logistics Resources

22 Locations Nationwide
> 4,500,000 sq ft Warehousing
500 + Tractors
1,200 Trailers
Modern Fleet

practical solutions, successful partnerships
Warehousing

practical solutions, successful partnerships
Who

- F.M.C.G. Sector
- Customers – Retailers & 3PL’s
- Operators – Rail/Road/Network Rail
- Terminal Providers
- Government Agencies

Rail Market Share (vehicle miles) less than 1%
Optimisation Objectives

• What we are trying to achieve

• Reduce CO₂ & other emissions

• Reduce “real” & financial costs

• Maintain and improve service levels
How

• Co-operation

• Connect the players in order to increase rail movements

• BUT – Competitive and confidentiality will always impact
Present Framework

- Retailers - Interested in rail

- Carbon Tax - Future hard financial
  - Implications - £12.00 per tonne of carbon

- Rail Operators - move & focus

- Terminals - more

- Government - united political agenda
Optimise Resources

1. **Customer**

   Evaluate Depot network - which D.C. supplies - which area
# Example 1

## D.C. in N. West - to Scotland R.D.C.

<table>
<thead>
<tr>
<th></th>
<th>MODE</th>
<th>MILES</th>
<th>CO₂ KG</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>225 miles to RDC in Scotland</td>
<td>Road</td>
<td>225</td>
</tr>
<tr>
<td></td>
<td><strong>Total Miles</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii</td>
<td>60 miles to Rail Terminal</td>
<td>Road</td>
<td>290</td>
</tr>
<tr>
<td></td>
<td>210 miles Rail to Rail Terminal</td>
<td>Rail</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20 miles to D.C.</td>
<td>Road</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Miles</strong></td>
<td></td>
<td>290</td>
</tr>
<tr>
<td>iii</td>
<td>Use Midlands D.C.</td>
<td>Road</td>
<td>340</td>
</tr>
<tr>
<td></td>
<td>20 miles to Rail Terminal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>300 miles to Rail to Rail</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20 miles to D.C.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Miles</strong></td>
<td></td>
<td>340</td>
</tr>
</tbody>
</table>

**NOTE:** Assume rail CO₂ 20% of road - **but** - financial cost
Example 1

Scottish R.D.C
NTH West
Midlands D.C
Rail Terminal
Rail Terminal

Key
- Direct Road
- Road/Rail
- NTH West
- Changed
  D.C

practical solutions, successful partnerships
Example 2

2 x vehicles from A to C ]
2 x vehicles from B to C ] —— Scottish D.C.

But is C (not rail connected) is it in the right place??

Option of rail from A to rail terminal then D & B to rail terminal then D.

D is a different (rail connected) terminal with all facilities

D is more centrally located for Scottish destination and will shorten road miles from to shops.

1. CO₂ reduction by transfer to rail from A & B to D
2. Cost reductions in deliveries from D to shops
3. Possible cost reduction in X Docking at D over C
Example 3

- Seven day service from D.C. to R.D.C.

- Rail lack of access Saturday nights

- Customer re-adjusted pick times to suit earlier “7th” rail departure

- In many cases rail can get away with 6-1/2 days instead of 7 days x 24 hrs
Optimise Resources

2. Suppliers – (Operators, Terminals N.R.)
   - Could – share space on trains – e.g. DIRFT – Scotland ...... but competitive pressure
   - Stop blocking paths – O.R.R. Section J procedure
   - N.R. support – Larger – Faster Trains
     1 km ????? (54 instead of 40 containers).
     90 mph????
   - Trade Unions – bespoke labour
   - Agreements to customer requirements/schedules
Optimise Resources

3. Government

M.S.R.S. – Structured target support
e.g. South West green initiative

- bespoke grant to fit traffic. What does the customer need – rather than a bidding game.

- Underwriting of services via retail customers (fairness).

- “Green Lanes” – Limited relaxation of Highway Legislation to access “nearest” railhead.
e.g. Magna Park via A5 to DIRFT – (red diesel/ weight & length dispensation).
Optimise Resources

4. Longer Term

4.1 Government

- Planning Guidelines – Implementation
  D.C.’s / R.D.C.’s near/at Railheads.
- 15.4 (15.65m) long intermodal trailers
- Strategic rail terminals
- Port Centric - Teesport
Optimise Resources

4. **Longer Term Cont...**

4.2 Operators
- Rail capacity – HS2 implications
- L.Gauge – Height (Mega Van)
- Rolling stock design
- Development of network

4.3 Customers
- Pallet sizes / Warehouse Racking
- 9’6” – Int ht 2.6m?
Optimise Resources

5. **Conclusion**

- Speed up culture change

- Dialogue between all parties: I.G.D / F.T.A / CILT

- Attitude ‘it can be done’/qualified co-operation
One of the shortest routes in Europe
## Intermodal Environmental Benefits

Table 1: Comparison figures for The Malcolm Group’s rail service and its road equivalent

<table>
<thead>
<tr>
<th></th>
<th>HGVs</th>
<th>Trains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journeys per year</td>
<td>6,312</td>
<td>263</td>
</tr>
<tr>
<td>Typical journey distance</td>
<td>86 miles</td>
<td>86 miles</td>
</tr>
<tr>
<td>Total annual distance</td>
<td>542,832 miles</td>
<td>22,618 miles</td>
</tr>
<tr>
<td>Fuel efficiency</td>
<td>7 miles per gallon / (~0.65 litres per mile)</td>
<td>(~0.7 miles per gallon) / 7 litres per mile</td>
</tr>
<tr>
<td>Annual fuel use</td>
<td>77,547 gallons / 352,538 litres</td>
<td>34,827 gallons / 158,326 litres</td>
</tr>
<tr>
<td>CO₂ burden</td>
<td>927 tonnes</td>
<td>416 tonnes</td>
</tr>
</tbody>
</table>

practical solutions, successful partnerships
Bespoke Intermodal Options
Rail Division

practical solutions, successful partnerships