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# Trade Growth & the Case for Port Centric Development

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# 1. Case for Port Centric Development

## - locating national distribution centres at or near dock estates

- Proportion of goods consumed imported in the UK and Europe has grown
- Optimum location to minimise transport costs for (some) distribution centres may therefore shift towards the coast
- Current use of inland national distribution consolidation centres can add to the distance goods moved between supplier to receiver
- Ports already provide excellent multimodal hubs (road/rail/coastal shipping)
- Port centric strategies can therefore offer lower cost and environmentally sustainable solutions
- But a potential conflict with local land use planning concerns

**So what evidence can be brought to bear to make a planning and investment case?**

## 2. Historical context

- **Pre containerisation imports handled break-bulk through dockside sheds**
  - storage of goods in dock estates saved expensive double handling
  - imported manufactures small relative to overall domestic consumption
- **Containerization and the consumer society: 'pre China'**
  - most goods consumed were produced domestically
  - imports predominantly from the Continent and transported by HGVs through ferry ports
  - decline in use of rail: cargo distribution too fragmented
  - emergence of modern supply chains
  - centrally located NDCs minimised trucking costs but maximised trucking!
  - containerisation weakened the link between shipper and receiver and the port of entry
- **'Post China'**
  - Increased concentration of imports on deepsea ports
  - Intermodal rail growing
  - emergency of port-centric projects – e.g. at Teesport and London Gateway
  - increased interest in sustainable transport strategies

**But port centric opportunity not limited to deepsea ports**

### 3. Trade Growth from 1996 - 2007

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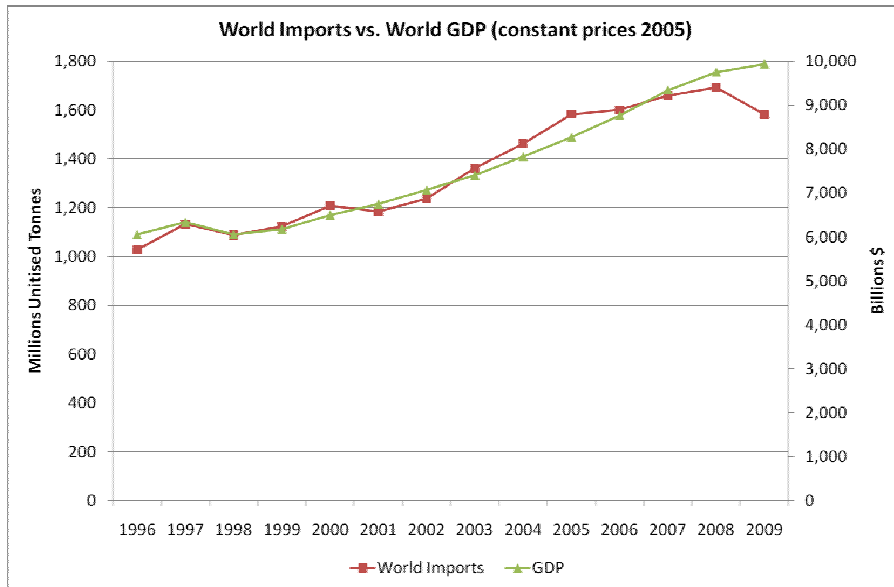
- Global volume of containerisable trade grew 61%
- Volume of deep sea trade grew faster at 70%
- Non food consumer goods grew fastest, tied closely to credit availability in the UK
- Short sea imports grew 61%
- Deep sea imports grew faster at 86%
- Over same period total UK domestic road freight grew only 16%
  - Implying proportion of goods 'starting' from the ports rose strongly
- Recession has cut volumes but effect likely to be temporary

#### Overall

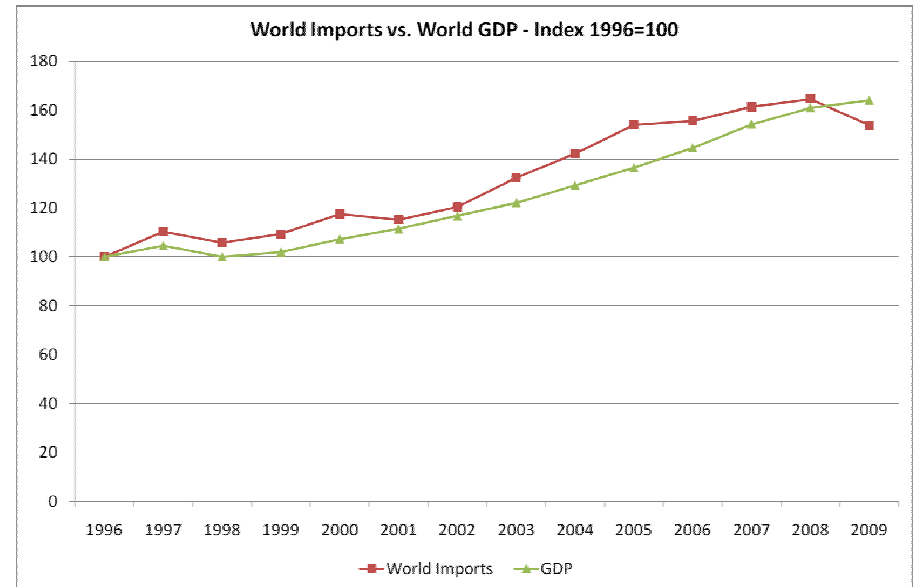
- Increasing proportion of goods consumed imported
- A rough estimate is that 1996 to 2007:
  - non bulk goods consumed grew by 20%
  - imported unit load goods grew by 68%
  - proportion of these goods originating from abroad grew from 17% to 25% - but majority still from the Continent

# 4. Worldwide International unitised volumes

million tonnes



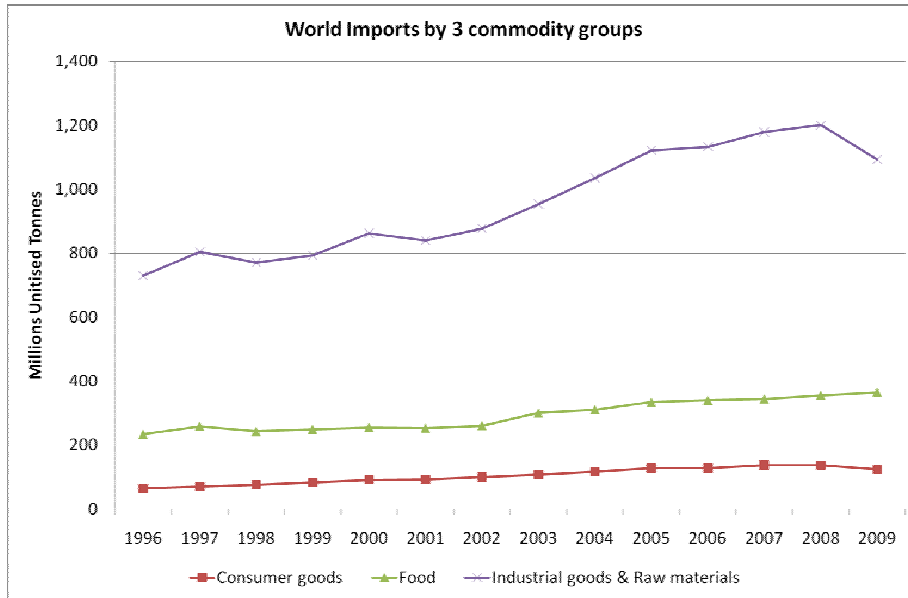
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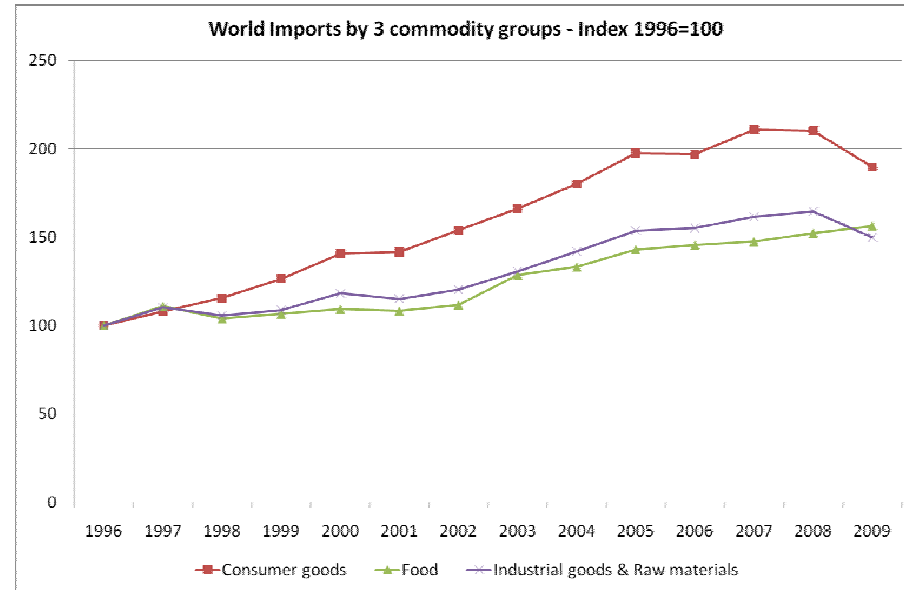
- Growth in unitised tonnages matches GDP in over the longer term
  - faster growth 2001 – 2006 now cancelled out by recession

# 5. Worldwide international unitised volumes

million tonnes

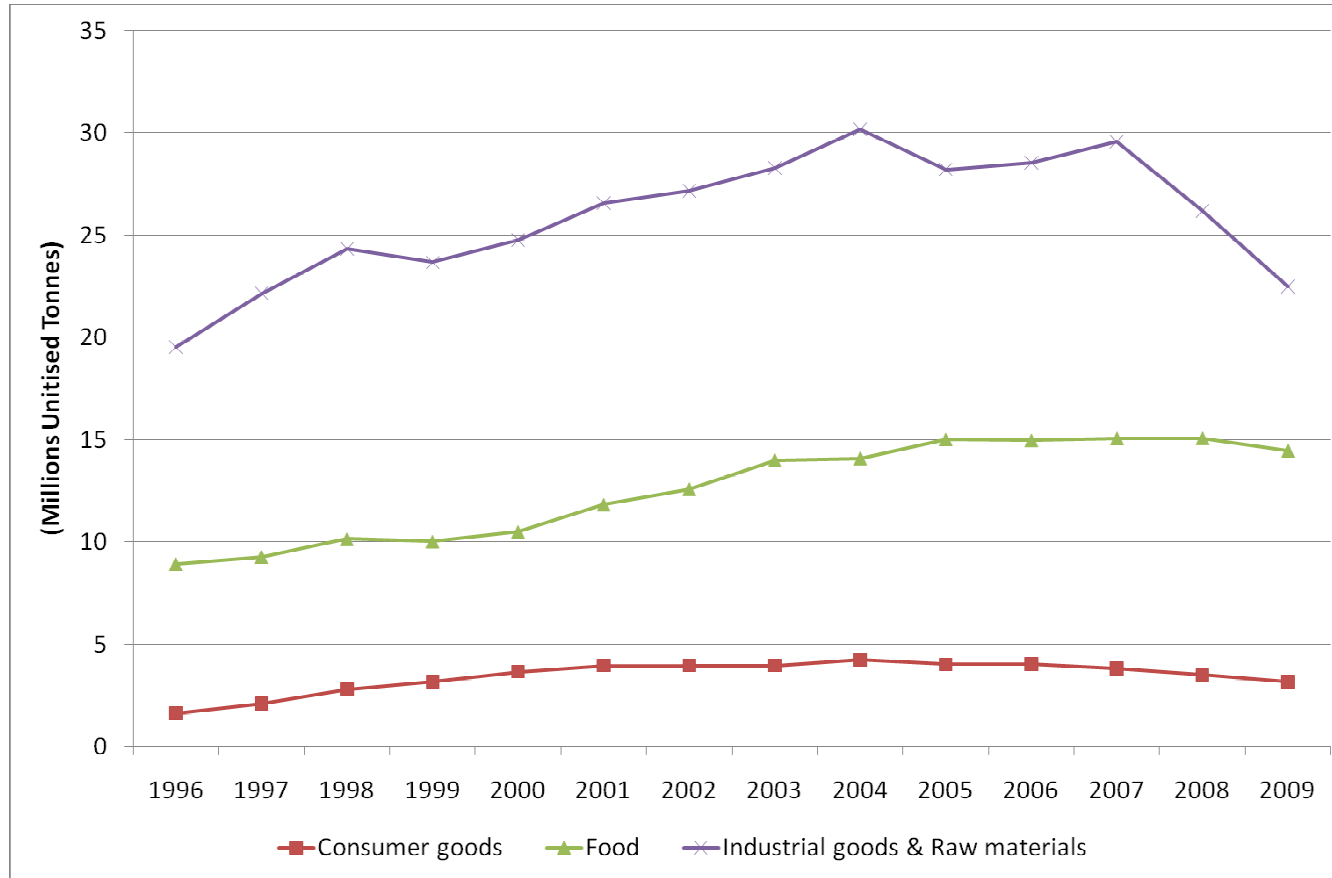


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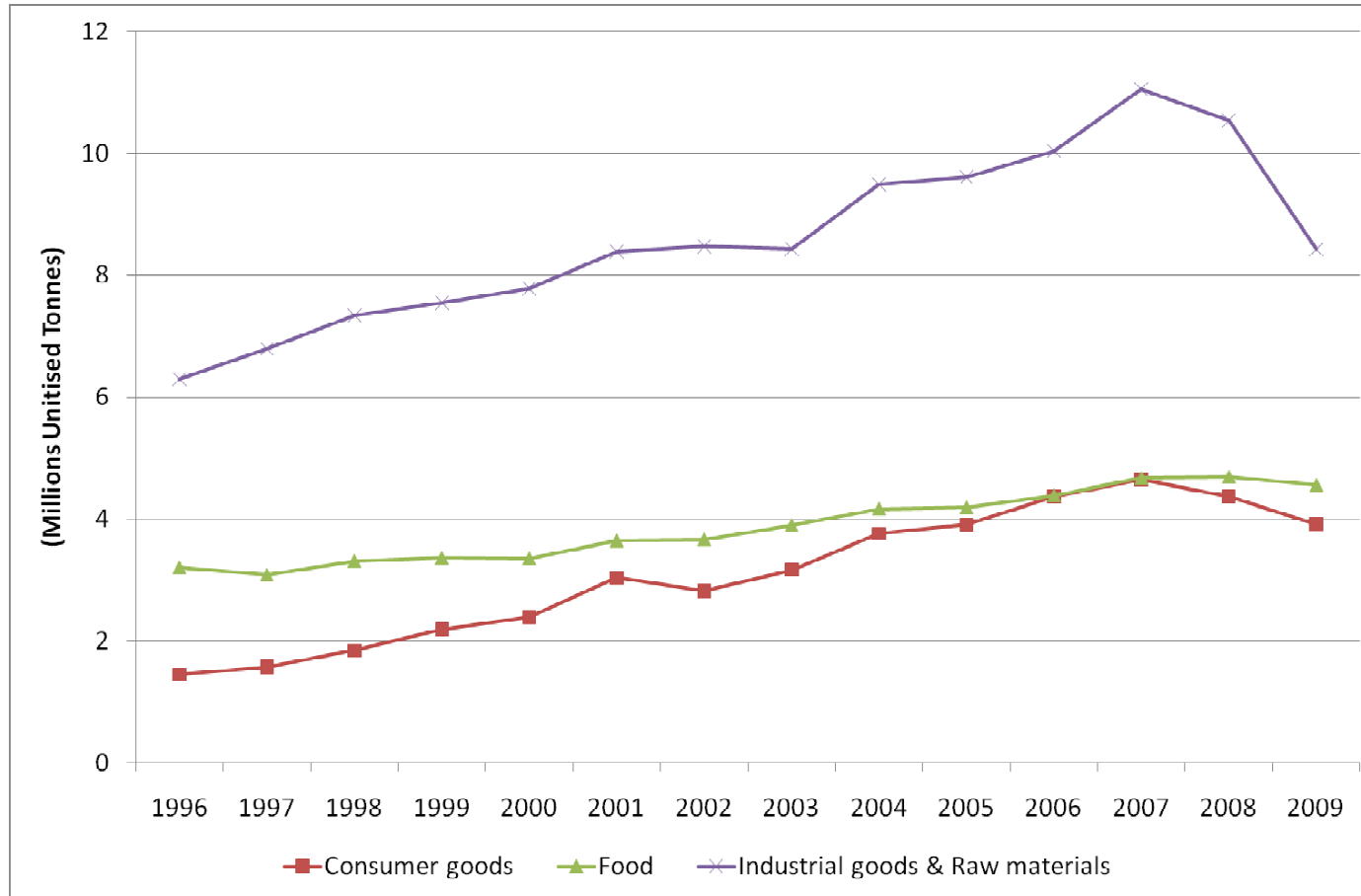
- Cargo growth fastest in consumer goods
  - but food cargoes more resilient in the recession!

## 6. UK Imports - Short Sea



- UK experience that industrial inputs dipped most in recession
  - reflection of economic relationship with Continent

# 7. UK unitised Imports - Deep Sea



- UK deep-sea food imports also more resilient
  - deep-sea consumer goods more vulnerable

## 8. UK Warehousing

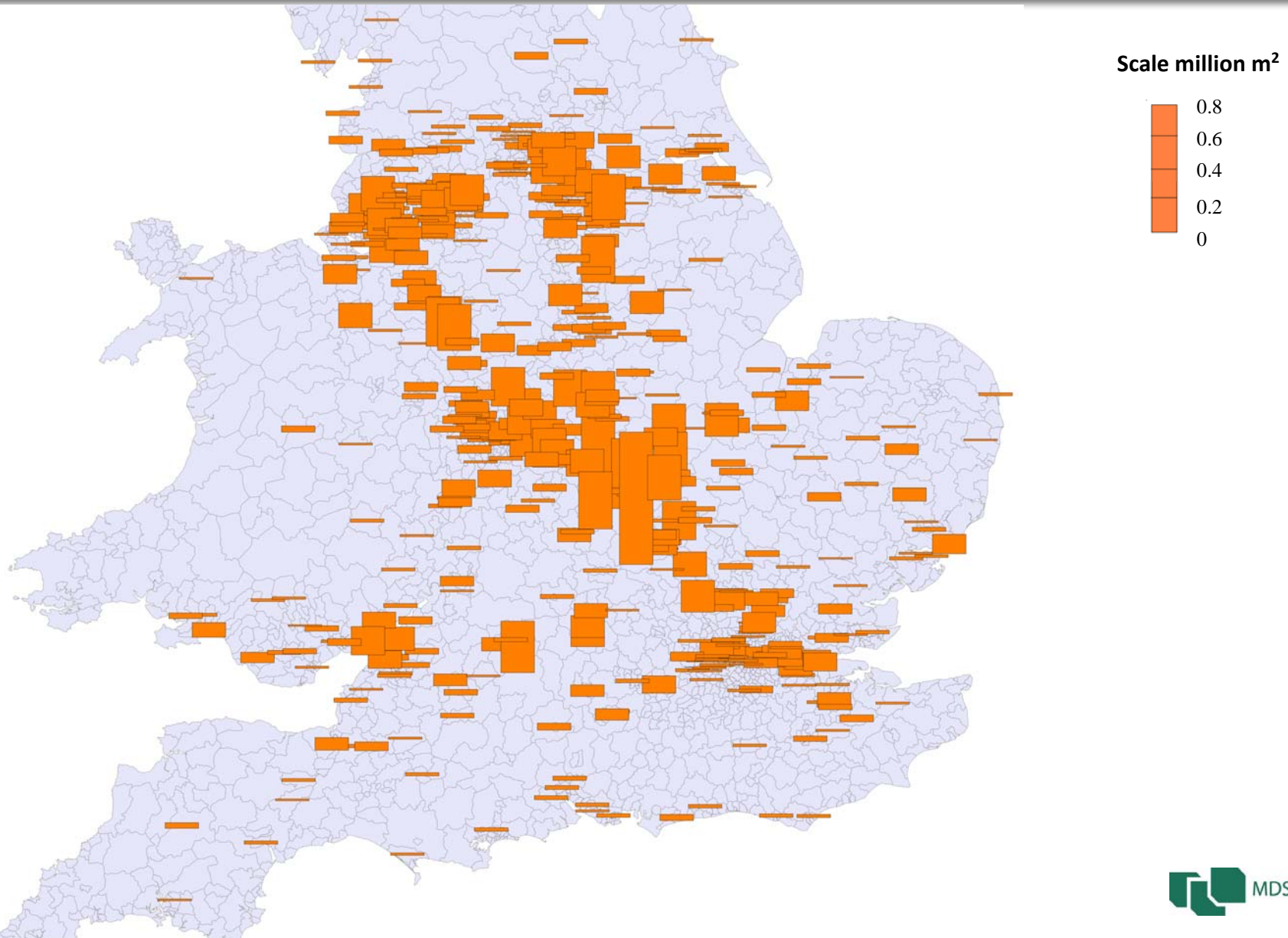
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- Total supply > 10,000m<sup>2</sup> sheds approximately 27m m<sup>2</sup> (England & Wales)
- East & West Midlands account for 37%
- Total imports of unitised freight approx. 87m tonnes in 2008
- 63% of UK deep sea & short sea unitised imports to ports in Kent/Essex/Suffolk/Greater London
- But these counties account for only 10% large warehousing
- Evident that current warehousing distribution does not address port centric opportunity

# 9. Warehouses - England and Wales (>10,000m<sup>2</sup>) by counties with total warehouses >200,000m<sup>2</sup>

Counties	Sum (m <sup>2</sup> )	N. of warehouses
Northamptonshire	2,534,803	94
Staffordshire	2,322,396	92
Greater Manchester	1,714,289	83
Leicestershire	1,439,285	62
West Yorkshire	1,345,814	67
South Yorkshire	1,303,073	49
West Midlands	1,299,871	71
Greater London	1,204,070	74
Merseyside	927,676	46
Cheshire	890,078	43
Essex	772,451	37
Lancashire	764,829	40
Nottinghamshire	725,098	24
Cambridgeshire	691,862	26
Warwickshire	595,540	26
Hertfordshire	578,772	30
Humberside	576,870	34
Bedfordshire	533,016	20
Buckinghamshire	530,481	28
Wiltshire	516,983	21
Derbyshire	409,965	21
Oxfordshire	405,064	22
Avon	404,015	23
Kent	377,996	20
Hereford And Worcester	361,240	23
Hampshire	328,148	19
Gwent	311,774	12
North Yorkshire	297,159	15
Durham	281,821	15
Suffolk	257,193	13
Clwyd	244,889	10
Tyne And Wear	211,286	10
Somerset	205,775	9
Norfolk	203,572	11
Others	1,457,666	81
<b>Total</b>	<b>27,024,820</b>	<b>1,271</b>

# 10. Warehouses - England and Wales (>10,000m<sup>2</sup>) by Post Code District



# 11. Unitised imports by port region (> 5m tns p.a.)

	<b>Port throughput</b>	<b>Warehousing (exc. Scotland)</b>
Kent	30%	1%
Suffolk	18%	1%
Essex/London	15%	7%
Humberside	13%	2%
Hampshire	7%	1%
Merseyside	7% *	3%
All others	<u>10%</u>	<u>85%</u>
	100%	100%

\* Inc traffic from N.Ireland

# 12. The Physical Opportunities

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- Deep sea container hubs
  - Warehousing within dock estates to minimise haulage costs
  - Adjacent to railheads to facilitate modal shift
  - But potential problem because not all competing lines will serve the same port!
- Port centric development at feeder ports
  - Potentially more space available and accessible by common user feeders to all lines can be located in areas of dense population
  - Could still lead to national distribution from a single such port
- Short sea ‘interceptors’
  - Located where cargo can be consolidated and redistributed in the vicinity of groups of ferry ports for onward distribution to RDCs
- All encourage long secondary distribution leg better suited to rail
- All offer economic regeneration opportunities for traditional port communities

# 13. The arguments in favour of Port Centric sites

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- To minimise overall distances covered
- To maximise distance from NDC to RDCs/receivers to encourage modal shift
- To increase access to rail & coastal shipping

# 14. The Transport Cost Argument

- For imported unitised goods
  - Based upon population distribution for secondary deliveries

	Traditional approach via Midlands	Port centric (SE location)
Primary leg	180	0
Secondary leg	<u>190</u>	<u>280</u>
<b>total kms covered</b>	<b>370</b>	<b>280</b>

- Overall distance covered reduced by 90 km
- At £0.75 per HGV km saving worth **£67 in financial savings per load**
- At mean Sensitive Lorry Mile rate of £0.33 'worth' further **£30 in public sector interest value per load**
- Longer secondary leg distance and consolidation opportunity **better suited to rail**
- Port centric location therefore generate public and private sector savings

**Similar arguments apply from each major unit load port area!**

# 15. The Planning Position

- 2008 Planning Act establishes concept of nationally important infrastructure
  - includes new port terminals and rail linked distribution parks
- Policies being enshrined in national policy statements
- For ports threshold definition is >500,000 TEU/250,000 ro-ro units
- For rail linked distribution parks threshold definition is to be > 60 hectares
- No equivalent port centric concept in ports national policy statement
  - London Gateway distribution park could be defined as a 'strategic rail freight interchange'!
- Economic regeneration arguments potentially lost if benefit of co-location of port terminals and warehousing not clear.
- Important to provide evidence based arguments for port centric development to both potential occupiers, Government and Infrastructure Planning Commission

# 16. Summary

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- Trade growth means the optimum location for some national distribution centres worth reconsideration
  - Import volumes grew 68% versus 16% in domestic haulage 1996 – 2007
- Current pattern of warehouse location has been developed to minimise secondary distribution costs
  - Important to factor in savings in primary transport costs in making investment decisions
- Planning regime needs to be informed of the public interest advantages