

National Road Infrastructure and Spatial Planning

LAND USE & SPATIAL
PLANNING CONFERENCE
Dublin Castle, 26th February 2003.

Outline of Presentation

- Theories and Relationships
- Current Thinking
- National Spatial Strategy
- Road Development in Ireland
- Conclusions

Theories and Relationships

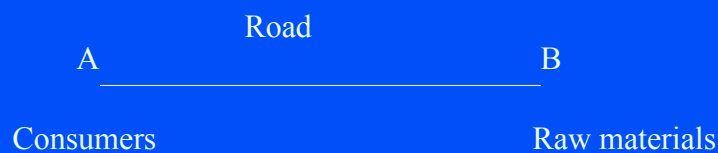
- Relationship between road infrastructure and planning/economic development is complex –
- Can only be assessed readily through research and data
- Road infrastructure can influence spatial planning, and can be affected by it through demand

Theories and Relationships

- Economic activity can be influenced by location, time, infrastructure, labour market, etc.
- The spatial relation of an economy is often expressed in terms of units such as tonne-kms
- If goods have to be transported to the market place, then the unit costs must be reduced for the price to remain competitive, all other things being equal.

Theories and Relationships

- At a simple level, we can consider a locational line linking consumers with raw materials/firm location
- Where will industry decide to locate ?



If the raw materials are immobile, then industry would locate
At B, e.g. ore deposits
Decision to locate is complicated by other factors – labour
mobility and costs, government incentives, tax rates, etc.

Theories and Relationships

- Concise studies in the US on employment trends in the period 1958-63 found higher job growth in areas with Interstate highway access
- FHWA has concluded that economic progress could be correlated with highway improvements

Current Thinking

- Balanced regional development
- High quality road infrastructure
- Encourage the growth of the Gateway and Hub cities and towns
- Maintain economic development
- Support sustainable mobility, particularly in urban areas

Road Infrastructure

- Facilitates the movement of goods, raw materials, and people;
- Facilitates the provision of bus based public transport;
- Reduces transportation costs;
- Provides labour mobility;
- Reduces congestion costs;
- Reduces the incidence and costs of accidents.

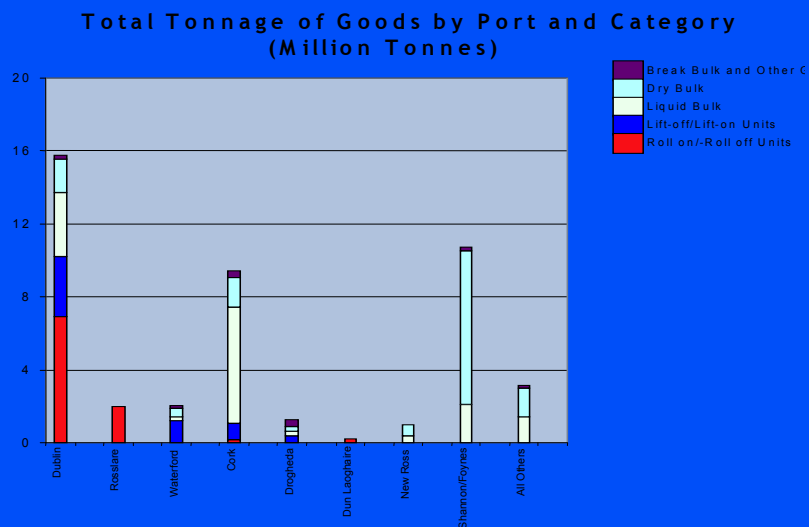
Road Infrastructure

- Roads continue to be the primary mode of internal transport in Ireland
- Carry 96% of passenger traffic
- Carry over 90% (about 93%) of freight transport
- Quality Access to Dublin Port is vital to support international goods movement

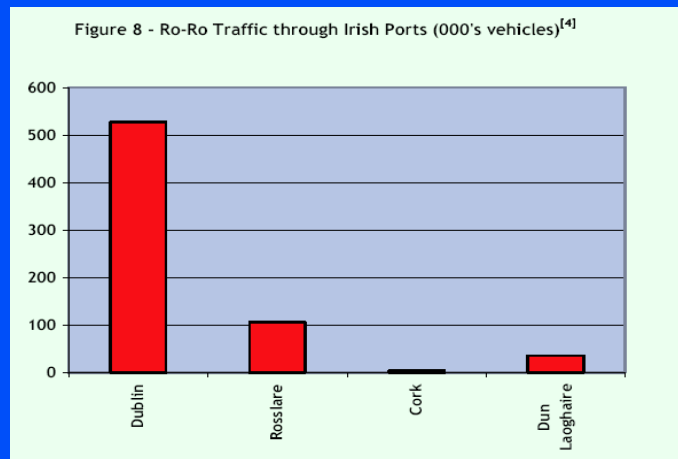
International Access

- Approx 95% of all imports and exports are carried by sea
- Dublin Port is the main sea access
- 2001 – approx 73% of all RO/RO tonnage, and 66% of all LO/LO tonnage, passed through Dublin Port
- Quality road links are vital – Dublin Port Tunnel

Movement of Goods



Ro-Ro Traffic



Main modes of Transport - EU

	Car	Bus/Coach	Tram	Rail	Air
1970	74%	13%	2%	10%	2%
1997	79%	8%	1%	6%	7%

Transport of Goods – EU (tonne-km)

	Road	Rail	Waterways	Pipelines	Intra-sea
1970	412	283	103	66	472
1997	1202	237	119	86	1124

National Spatial Strategy

- Identified Gateway cities and towns and associated hubs
- Linked by Strategic Radial Corridors and Strategic Linking Corridors
- International Access Points to air and sea transport
- NDP roads investment programme generally complements NSS

National Spatial Strategy

- Seeks to encourage improved regional development
- Improved connections between the gateway towns and cities
- Focus on international access, particularly through Dublin Port and Airport, while promoting alternative locations for port activities

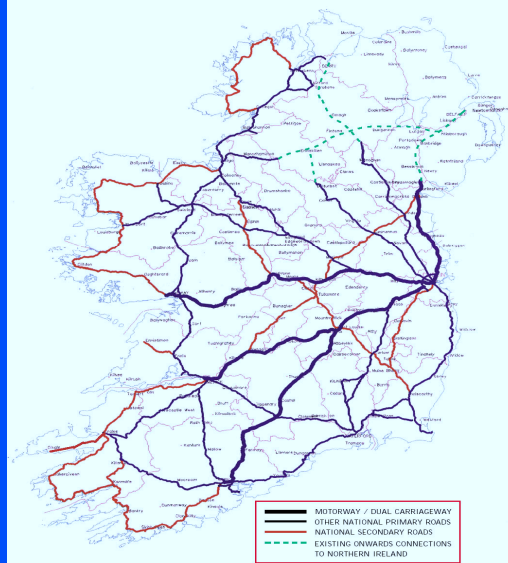
National Development Plan

- Planned investment in road infrastructure between 2000 and 2006
- Underpins the NSS
- 5 strategic interurban routes linking Galway, Cork, Limerick, Waterford, and Belfast, with Dublin
- Motorway/High Quality Dual Carriageway network – high capacity and safety

National Development Plan

- Major improvements on other national routes
- Completion of the M50 motorway and Dublin Port Tunnel
- Improvements to the radial routes approaching the M50, and the M50 Upgrade to three lanes
- Investigation of the feasibility of new routes

INVESTMENT IN ROAD IMPROVEMENTS 2000 - 2006



Map 3 National Transport Framework



Conclusions

- NDP and NSS provide a framework for planned development
- NRA review to ensure consistency with NSS over the medium to long term
- Road infrastructure will provide the key links between the gateway cities and towns, and to the international access points
- Road infrastructure will assist in reducing transit times and congestion costs
- Platform for economic development