Infrastructure and Transport: Transportation

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# Organisational Context

11 Government Departments

1. Agriculture & Rural Development
2. Culture, Arts & Leisure
3. Education
4. Employment and Learning
5. Enterprise, Trade & Investment
6. Environment
7. Finance & Personnel
8. Health, Social Services & Public Safety
9. Policing & Justice
10. Regional Development
11. Social Development
12. Office of the First Minister & deputy First Minister

**BUT** - no single department for Transport
### Organisational Context

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- Significant gaps in transport policy, particularly in relation to sustainability
- Need identified for more integrated and strategic focus with an immediate focus on sustainable transport
Population

- High rate of growth
- 630,000 households
- 1.7m population
- Little change in settlement patterns
Population Density

- 1/3 resident in Greater Belfast Area
- Highly dispersed population with low population density – particularly in the west
- 35% of population rural based
Population Density - Europe
Projected Growth to 2025

Highest rate of growth (22-44%) in south and west

Expected to decrease in Belfast

Population in the west is growing faster than the number of jobs, further increasing commuting
Sub-regional Differentials

1. Income

2. Employment
3. Proximity to services

- Significant variations in income, employment and access to services – higher levels in East

- Majority of employment and FDI has tended to locate in Greater Belfast Area -

- Executive have set out their commitment to promote more balanced regional growth – implications for transport?
Main Markets & Gateways

Broad Destination of North of Ireland Sales 07/08

- GB: 52%
- Rest of EU: 12%
- ROI: 15%
- Rest of World: 21%
Socio-economic Context: Emerging Key Issue(s)

- Highly dispersed population / low levels of population density
- Continued movement of population out of Belfast area
- Significant socio-economic differentials at sub-regional level
- Sub-regional economic growth requires effective access to main gateways – primarily located in the Greater Belfast Area
- Economic growth requires an efficient sustainable transport infrastructure providing continued access to key markets
Regional Transportation Strategy for Northern Ireland 2012 (July 2002)

- Identifies strategic investment priorities
- Recognises years of underinvestment in transport infrastructure and public transport
• 25,000 km of road
• 380 kilometres of rail
• 10 million passenger journeys were made on our railways
• 70.5 million passenger journeys on buses
• 320 million journeys by car (estimated)
• £2 200 million
• £511 million
• £544 million
**Eastern Seaboard Corridor**

**A8 Coleman Corner to Kilraughts** £102m
- 14.0km of Dual Carriageway

**M2 / A8(M) Sandyknowes Junction** £10m - Direct link Between A8(M) & M2

**Westlink / York Street Flyover** £50m
- Grade Separated Junction linking Westlink / M2 / M3 / York Street

**M1 Slip Roads at Blacks Road** £5m
- 2 West Facing on/off slip roads

**M1 / A1 Sprucefield Bypass** £45m
- 4km high standard dual carriageway Bypassing Sprucefield Retail Park

**A1 Junctions** £22m
- Grade separate 4 A1 junctions Close all at grade crossings
Northern Corridor

Proposed

A2 Broadbridge Dualling  £25m
6 km dual carriageway
Maydown R’bt - Eglinton Airport

A2 Ballykelly Bypass  £30m
6 km 2+1 carriageway

A26 Ballymoney - Coleraine  £35m
7.0 km dual carriageway
Portrush Road Roadabout - Windyhall

A26 Glarryford - A44  £33m
7.0 km dual carriageway

A26/M2 Balle Road East  £7m
1.5km dual carriageway

A26 Nutts Corner to M1 Moira  £15m
2+1 carriageway widening schemes
Western Corridor

Proposed

A5 Londonderry – Aughnacloy
£560m
88 km dual carriageway
North Western Corridor

**Proposed**

- **Buncrana Road**
  - £18m
  - Border – Skeoge Link – Pennyburn Rbt

- **A6 Londonderry to Dungiven**
  - £250m
  - 30km dual carriageway

- **A6 Randalstown to Castledawson**
  - £70m
  - 14km dual carriageway
Proposed

A4 Enniskillen
Southern Bypass
£18m
3.2km 2+1 carriageway

Proposed

A4 Fivemiletown Bypass
£12m
3.4km 2+1 carriageway
Trends in Transport
Bus Passenger Journeys

![Chart showing bus passenger journeys from 1995/96 to 2008/09. The chart displays two lines: one for U/B and one for C/B, with a downward trend for U/B and an upward trend for C/B over the years.](chart_url)
NI Railway Passenger Journeys

- NI Railway Passenger Journeys
- Year
- Passenger Journeys (Millions)

- Chart showing the increase in NI Railway Passenger Journeys from 1995/96 to 2008/09.
Traffic Growth On The Key Transport Corridors

Traffic Growth on Key Strategic Network

![Bar chart showing traffic growth on different routes by year.]

- Eastern Seaboard (106km)
- Belfast - Derry (121km)
- Northern (161km)
- Western (91km)
- South Western (168km)

Route by Year:
- 1996
- 2001
- 2006

Vehicle Kilometres of Travel (x 10^6)
Average Speeds on Key Transport Corridors

Average Speeds on Key Transport Corridors (AM Peak)

Key Transport Corridors

Eastern Seaboard
North Western
Northern
Western
South Western

MPH

2003
2005
2007
Overall GHG and CO₂ emissions decrease by 13% and 9% respectively

Transport Increases by 47% (GHG) and 49% (CO₂)

Emissions data in presentation taken from:
Change in GHG / CO₂ Emissions 1990-2007

- Agriculture
- Business
- Energy Supply
- Industrial Process
- Land Use Change
- Public
- Residential
- Road Transport
- Other Transport
- Waste Management

CO₂ emissions
Total GHG emissions

Emissions (kt)

- 2,500
- 2,000
- 1,500
- 1,000
- 500
- 0
- 500
- 1,000
- 1,500
- 2,000
- 2,500

Department for Regional Development
www.trdni.gov.uk
Trends in Vehicle Ownership

- Significant increase in number of registered vehicles, with potential for further growth

- Significant increase in the proportion of households owning 2 or more cars
Average Number Of Journeys Per Person 2001-2007

Graph showing the average number of journeys per person from 2001 to 2007, with categories for Other, Public transport, Walk, and Car. The data is displayed for each year from 2001-03 to 2005-07.
Journeys by Distance

Proportion of Trips by Distance

- > 5 miles: 37%
- 1 to 2 miles: 18%
- 2 to 5 miles: 28%
- < 1 mile: 17%

Modal split of Trips under 5 miles

- Car: 65%
- Walk: 28%
- Other: 18%
- Bicycle: 30%

65% of all trips under 5 miles are made by car

30% of all trips under 1 mile are made by car

6 out of 10 trips are less than 5 miles

Department for Regional Development
www.trdni.gov.uk
The Future

• Need to change behaviour
  – public transport
  – Park and Ride
  – car sharing
  – walking or cycling
  – Intelligent transport systems
Plan for Belfast
RAPID TRANSIT VEHICLE

Streetcar - Wrightbus
Bus Rapid Transit

Bus Rapid Transit is high-quality, customer-orientated bus transit that delivers fast, comfortable and low-cost urban mobility.

Characteristics

- Segregated/high priority bus lanes
- Rapid boarding and alighting
- Efficient fare collection
- Comfortable shelters and stations
- Clean bus technologies
- Modal integration
- Sophisticated marketing identity
- Excellence in customer service

Department for Regional Development
www.trdni.gov.uk
Why Bus Rapid Transit?

- **Customer Focus**
  - Reliable, safe, convenient service
  - Competitive in cost, reliability and travel time to attract car drivers

- **Costs**
  - Lower costs per km than LRT or Metro
  - Avoids major relocation of utilities and track construction
  - Lower vehicle costs
The Economics of Bus Rapid Transit

Bus Rapid Transit
$1-10 million / km

Metros & Light Rail
$20-207 million / km
# BRT Systems in Operation

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Guidance

Optical
Rouen, France
TEOR

Kassell Kerb
Amsterdam
Zuidtangent

Mechanical
Leeds, UK
Belfast Rapid Transit Pilot Route Options

KEY
- CITI Route
- EWAY Route
- WWAY Route
Regeneration / Integration

• an inclusive citywide identity
• driver for the regeneration of Belfast;
• high quality access and connectivity between major regeneration projects
• link the most deprived communities to key employment locations, shopping facilities, leisure, health and education services.
• facilitate the growing integration and partnerships between the different communities across the city.
Questions?

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