

Intermodal Transport

'Destination Italy 2020' conference
Turin
30 January 2009

Peter White
Professor of Public Transport Systems
University of Westminster
London, UK

Data on the long-distance market

- Definitions:
- In the National Travel Survey (Great Britain), 'long distance' trips are those over 50 miles (~80 km), elsewhere in Europe typically 100 km used as the definition
- Most international traffic (apart from short cross-border) also in this category

Long-distance market

- Main characteristics
- Low frequency of personal travel (22 one-way trips per annum out of 1044 all lengths, NTS 2006) apart from small commuting market. In addition each GB resident makes about 2 one-way international trips by air (i.e. one visit) and 1 one-way trip by other modes (car, coach, rail)
- High overall price elasticity
- Greater pre-booking/planning of trips than over short distances (but asymmetries in outward/return legs, and effects of shorter routes/high frequency)
- Higher average car occupancy than urban (approx 1.6, and about 2.0 for holidays)

Long-distance market

- Split by purpose
- Overall averages in Britain (NTS 2004-2006 average):
- Commuting 12% (mostly <160 km)
- Business 18%
- Other non-leisure (education, shopping, personal business, escort) 14%
- Visiting Friends and Relatives at home 23%
- Holiday 15% (mostly >240 km)
- Day trip 10%
- Other leisure 9%

Long-distance market

- Split by mode (NTS 2004-06 average)
- Car 83% (majority, except >550 km)
- Bus and coach 4%
- Rail 10% (increasing with distance)
- Air 1% (but substantial >550 km, 39%)
- Other 2%
- NB These are national averages for all directions, larger shares for public tpt. to/from South East and between major cities

Long-distance market

- Factors affecting modal choice:
- NB 'door to door' journey
- Perceived cost (effect of car occupancy)
- Total journey time
- Interchange times and penalties
- Check-in/security (esp. air)
- Frequency/need to pre-book
- Comfort
- Ease of ticket purchase

Multi-modal travel over short distances

- Car tends to be used for home-based trips where available (convenience and cost)
- Constraints at destination may limit desirability of car access – historic cities, areas of scenic or scientific interest.
- Role of bus-based park & ride in Britain, especially in compact older cities (Oxford, Cambridge, York, Norwich, etc.) for last section of the journey.

Moving the interchange point back

- Can we make the car to public transport interchange close to the home trip end?
- Where destination is the centre of a large city, scope for diversion to rail (and possibly coach)
- Need for good parking facilities, e.g. provision of 'parkway' dedicated rail stations (Bristol 1970s, Warwick 1990s, East Midlands this week)

Interchange within the public transport market

- Need to offer door-to-door facilities for those without cars
- Need for good bus/rail interchange. Development of 'Plusbus' concept
- Wider role for shared taxis?
- Need for good information prior to making journey (Traveline, Transport Direct)

Coaches

- Two main roles:
- Scheduled express services (fixed route and timetable)
- Private hire, excursions and tours. Direct service for passenger groups to destination (including remote rural). High load factor – possibly the most efficient mode in terms of energy and environmental emissions.
- Tours tend to be used by older age groups - 'image' problem for younger customers?

Long-distance and air travel

- Air travel dominates over longer distances ($\sim > 500$ km) and for international travel, except where high-speed rail links
- Problem of airport location and access trips, at both ends of the journey
- Example of UK resident visiting Italy

Home to airport access

- Car will tend to be used (very high share at smaller UK airports with mainly leisure market)
- Constrained by parking cost and availability (especially large airports, e.g. Heathrow)
- Higher parking cost for longer duration trips (e.g. holiday v. business)
- Some scope for shift to public transport if convenient (preferably direct) service and acceptable price

Airport to final destination access

- Far greater public transport potential (car not available, unless hired)
- Strongest for city centre access – often dedicated service, rail in bigger cities (Heathrow Express etc.)
- But also need for good links to other areas (e.g. VFR, rural destinations)
- Where well-sited rail stations, direct links to other regions available by rail (e.g. Charles de Gaulle, Schiphol) but only justified for high-density flows

Express Coach deregulation

- Market in Britain deregulated in 1980 for scheduled express (already liberal for tours) Competition with rail for domestic market, but also new airport services (esp. Heathrow) where coach in stronger position vis a vis rail to offer through services
- Coach links developed both by diverting existing routes, and new direct services solely for the airport market (separate brand within National Express)
- Shift to internet booking and yield management pricing in recent years

Growth of coach share

- Rapid growth by mid 1990s in Britain, so that coach taking majority public transport share between Heathrow and other regions
- Overall share at Heathrow by coach 26%, rail (as main mode) 14% (balance by car)

Coach share up to 30% for South Wales, and South West England

Scope for marketing with dedicated brands, e.g. Terravision from Stansted

Express Coaches

- Parallels with other European countries
- Growth in competition within Irish Republic, and of services to Dublin Airport
- Deregulation in Norway (extensive services to Gardermoen Airport, Oslo) and Sweden, with some liberalisation elsewhere
- But still strict regulation favouring rail, especially Germany and France

Alternative scenarios (1)

- 'Business as usual'
- Car use growing at about 2-3% p.a., air at about 5% (high income elasticity)
- Growing congestion at airports would point to need for higher public transport share of access trips (at both ends)
- Strong growth in short stay/weekend market, often focussed on cities
- Short-term (?) effects of recession

Alternative scenarios (2)

- Energy and environmental constraints, high price/scarcity in oil. Bigger proportionate impact on short stay trips?
- Inconsistent taxation policy – high on express coach and car fuel, very little on rail or air. Possible effects of ‘green’ taxes.
- Effects on overall economic growth and disposable income for long-distance tourism
- Potential large loss of income to tourist-receiving areas
- BUT possible offsetting increase in longer-duration trips (i.e. less air travel, but similar total visitor days in destination region), especially with ageing population
- Points to greater role for intermodal transport at destination end, to cover wider range of destinations (e.g. rural regions as well as city centres)