The Role of Taxis in ‘Low Demand’ Areas

Rural Transport services in the United Kingdom

Chris Hardwick (chris.hardwick@mottmac.com)
Who are we?

- DfT - Department for Transport
- CfIT - Commission for Integrated Transport
- CRC - Commission for Rural Communities
- Mott MacDonald
- ITS Leeds and CAG Consultants
The Research

• CfIT Study ‘Public Subsidy for the Bus Industry’ identified higher subsidy costs for buses than taxis.

• Research recommended:
  – Examination of utility of taxi based services; and
  – Identification and consideration of barriers to further development of taxi based services.
The Research

- Mott MacDonald, with CAG Consultants, and ITS Leeds appointed to:

  ‘establish whether flexible taxi schemes could offer similar or better transport services in rural areas and be at a lower cost to the taxpayer than standard bus services’
Taxi services in the United Kingdom

• Number of licensed taxis has increased by 100% since 1985
• Number of trips 3x higher than in 1970’s
• 3x as many trips made by those without access to a car
• For those in ‘low demand’ areas and low income families, taxis are a key method of accessing food shops
• Taxis are vital for disabled people in ‘low demand’ areas
‘Low Demand’ Areas in the United Kingdom

- ‘Low Demand’ corresponds well with low population density in the UK

but

- Also important to consider time of day
  - ‘Shift’ workers
  - Difficulty with ‘un-commercial’ services
  - Poor vehicle utilisation
Other Issues!
Transport Planning in the UK

- UK Department for Transport
  - Non-Governmental bodies – CfIT / CRC (national)
  - Regional Government Offices
    - Regional Transport Strategies
  - Integrated Transport Authorities (Urban)
    - Integrated Transport Strategies
- Local Transport Authorities (rural)
  - Local Transport Plans
- Issue Specific Organisations
  - Taxis – District Councils manage licensing
  - Charities play a key role
Key Research Questions

• Can taxis help bring about a ‘step change’ in transport provision in rural areas?
• Would taxis offer a cost effective replacement for rural buses?
• Can taxis offer a way of reducing car dependence and environmental impact, as well as achieving greater social inclusion?
• Why have flexible taxi services not developed on a large scale in the UK, unlike in other European countries?
Approach to the Study

• Policy and Literature Review

• Examination of ‘taxi based’ schemes in operation
  – 70+ schemes identified across Europe
  – 10 in-depth analysis case study schemes

• Consultation with key stakeholders

• Analysis of demand in rural communities
A wide range of information was collected on each case study scheme:

- The area and communities served
- The development of the scheme and barriers encountered
- The role of key stakeholders
- The policy and legislative background to the scheme
- Service characteristics
- Scheme finance (income, expenditure, funding etc)
- Scheme ‘performance’
Not just ‘big bus’!
In-depth case study schemes

Rural Wheels, Cumbria, UK
Taxi-management scheme for rural parts of County using smartcard payment

Devon Fare Car, Devon, UK
County wide: timetabled shared taxis within defined rural areas

Connect2, Wiltshire, UK
County wide scheme: bookable public transport using bus, taxi and CT

Billilinks, West Sussex, UK
Single scheme: shared taxi service on two specified routes around small town

Taxitub, France
Sub-regional scheme: on-demand taxi-based service with defined corridors and stops, providing access to conventional public transport

Publicar, Switzerland
National scheme: Flexible, on-demand minibus to provide links to public transport for rural areas and small towns

North Sutherland, UK
Single scheme: discounted taxi service in sparsely populated area to provide key transport links

Treintaxi, Netherlands
National scheme: shared taxis providing access to train stations

Regiotaxi, Netherlands
Regional case study of a nationally managed network: shared taxi for general accessibility

Anruf Sammel taxi, Germany
Sub-regional scheme: fixed, semi-fixed and flexible supplementary public transport providing access to key services

North Sutherland, UK
Single scheme: discounted taxi service in sparsely populated area to provide key transport links

Regiotaxi, Netherlands
Regional case study of a nationally managed network: shared taxi for general accessibility

Treintaxi, Netherlands
National scheme: shared taxis providing access to train stations

Billilinks, West Sussex, UK
Single scheme: shared taxi service on two specified routes around small town

Anruf Sammel taxi, Germany
Sub-regional scheme: fixed, semi-fixed and flexible supplementary public transport providing access to key services

Publicar, Switzerland
National scheme: Flexible, on-demand minibus to provide links to public transport for rural areas and small towns
Wiltshire Connect2
Cumbria – Rural Wheels

- Project focussed on the use of ‘smartcard’ ticketing
- DfT provided financial assistance to trial technology in rural transport
- Provides operators and local council with greater information on scheme performance
- Security benefits for older members of the public
Devon Fare Car
Devon Fare Car

Number of Passengers

- F6
- F7
- F8
- F9
- F10
- F11
- F12
- F14

2005-2006
Anruf Sammel Taxi

Political Level

Public Transport Authorities (PTAs) / Tendering Organizations

Ensure the provision of adequate local public transport services for the population; financial responsibility for services provided in their areas.

Guidance and Management Level

Hamburger Verkehrsverbund (HVV) GmbH

Management of local public transport on behalf of the PTAs. Co-ordination of transport operators in the HVV partnership.

Operational Level

Transport Operators in the HVV partnership

Provide transport services and customer service (operational tasks)
Anruf Sammel Taxi
Anruf Sammel Taxi
What we found

• Differences between schemes in mainland Europe and UK

• From a passenger viewpoint:
  – mainland Europe services may be booked as little as 1 hour before travel
  – and are available 7 days a week, from early in morning till late at night
  – with fares and services integrated with other public transport
What we found

• From a policy viewpoint:
  – some mainland Europe schemes now operate at a large scale (e.g. 100,000 passengers p.a.)
  – cost (and subsidy) per passenger journey is lower
  – costs kept down by efficiencies of scale e.g. booking via central call centre
  – important role of ‘management’ organisations
What we found - Scale of Operation

Number of passenger trips per annum, by geographical scale of operation.
Key Issues
Scheme Management

• Scheme Management
  – The role of ‘arms length’ management organisations is particularly apparent in ‘European’ schemes
  – Move away from using volunteers in scheme management and administration – Cumbria / Devon / BilliLinks
  – Providing a centralised management function allows schemes to provide interesting ticketing and customer service options – AST/ Regiotaxi/ Cumbria
  – Bring together different operators – bus, taxi, private hire vehicle
  – Good for small operators
  – But costs more!!
Key Issues
Scheme Operation

- Scheme Operation
  - ‘European’ schemes have all been operating for a longer period of time
    - Does this explain lower costs?
    - Public acceptability
  - Also able to offer a wider service ‘offer’
  - Influence of the ‘school run’ limiting capacity – UK schemes have all noted this constraint on development
  - Important to ensure that the scheme operating area is able to ‘sustain’ the service provided
  - An area which is too small is unable to generate sufficient momentum in passenger numbers – BilliLinks illustrates this.
Key Issues
Licensing and Legislation

- A number of issues have been raised by each of the UK schemes:
  - Inability to accept Concessionary Bus Pass on taxis – Particular issue where taxis replace bus
  - 2 tier authority system affects quality standards, decision making - Devon
  - Restricts cross boundary travel even within ‘shire’ counties
  - Quantity licensing is still an issue in some areas - consistency
  - A lack of guidance and clarity to the legal frameworks - All
The role of the Taxi Sector

- The taxi sector is often enthusiastic about becoming involved but there are problems…

- Capacity
  - Vehicles
  - Management Systems
  - Driver training
  - ‘School run’ – go where the money is!!

- Cultural differences
  - Cash in hand
Key Issues
Funding and Resources

• The ‘cost’ of using taxis
  – Commercial pressures – Yellow TaxiBus
  – The impact of privatisation and benefits of public sector support are particularly apparent in the Netherlands

• Long term funding
  – No replacement ‘kickstart’ funds in the UK
  – Integration with ‘core’ networks in Europe

• Fuel Duty Rebate and BSOG – an opportunity?

• Reliant on UK LA’s to find ‘core’ funding – but it is not always cheaper!
What we found – Funding and Subsidy

Proportion of total cost met by subsidy
(schemes ranked by gross cost)
Key Issues
Policy and ‘Politics’

- Procurement restrictions
  - LA officers may be prevented from working with enthusiastic operators

- Policy Frameworks
  - 2 ‘tier’ authorities – different priorities and objectives
  - Minor issues can have a profound affect – seating, livery, vehicle design
Summary

- No ‘best solution’ for rural areas – recognise variation in communities
- Integration with other forms of public transport is key
- ‘Multi-Modal’ ticketing is fundamental to developing co-ordinated public transport across ‘regions’
- Study Recommendations
  - ‘Pilot’ a network level taxi based scheme to test performance of larger schemes in the UK, like those in ‘mainland’ Europe
  - Explore opportunities offered by Local Transport Act(08)
  - Commit to longer term funding and evaluation to gather robust evidence of success.
Summary - Benefits

• Provide wider social benefits
• Offer local authorities the ability to develop a range of schemes to reflect different local circumstances
• Offer the potential to provide transport in very isolated communities
• Valuable service for elderly, disabled and mobility impaired
• Offer potential for rural residents to access employment opportunities
There are ‘barriers’ to be overcome:

- Taxi Industry – awareness and ‘willingness to change’
- Local Authorities and ‘Governance’ – ‘two tier’ licensing arrangements and policy
- Bus Industry – move away from ‘big bus’ in rural areas
- Customers – requirement to ‘pre-book’
- Funding – requirement to ‘innovate’
- Role of ‘Central Government’ – concessionary fares, BSOG, licensing, promotion of good practice
Next Steps

DfT, CfIT, CRC and Mott MacDonalld working together to develop a ‘pilot’ service in a rural part of England
Demand Model

- **Purpose:**
  - Provide guidance on appropriate scheme for different types of rural area
  - Explore financial implications of national roll-out

- **Possible Elements:**
  - Population profile for scheme area
  - Categorisation of types of schemes
  - Capacity/cost relationship for different types of scheme
  - Indicative cost ranges for types of schemes
  - Indicative range of subsidy required
Demand Model

- Aim to identify areas in England which would particularly benefit from a taxi-based service
- Each Super Output Area (data collection area) given a score based on:
  - Geographical isolation
  - Population density
  - Evidence of ‘need’ for service through examination of data collected in 2001 census
- Areas most in need, highlighted in red
Going Forward

• Areas have now been identified which would benefit from large-scale, taxi based services
• Discussions taking place on developing new services
• Efforts now focussed on securing resources and ‘political’ support
• DfT is also exploring changes to taxi licensing in England to help scheme development