

Transport Data Access Issues

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Personal mobility and data issues

- The perception of accessibility is central to its realisation
- This presentation focuses on the role of data in mediating this process
- Four major stages -
 - ◆ Data Capture
 - ◆ Data Reduction and Organisation into Information
 - ◆ **Data and Information Availability**
 - ◆ Ways to ensure effective usage (organisational and individual)
- This presentation is focussed on the **third** of these





Context

- Transport related Data is no longer scarce
- Information and Data are still only selectively available
- **Asymmetries in access really do matter**
 - ◆ Distortions of the market undermine the full potential of what is essentially a Data Commons
 - ◆ Limits on the realistic potential community gains
 - ◆ Selective availability by price stratifies user access
 - ◆ Lack of transparency effects: Proposal substantiation
 - ◆ Community disempowerment: Differential expert power
 - ◆ Response times: limitations on contestable processing
- Policy impacts of information sharing are substantial
- Realising technical potential demands too much of users
- Barriers to entry: price, IT skills, timely awareness





IT covers...

- Data collection
- Data management
- Data processing
- Data delivery
- Communications
- Control
- **Increasingly** the **social context** of information
- Web access has broadened both the ability and expectations of access and the range of demands





Data sharing

- Rising levels of education drive **public** data
- Expertise in the community is rising relative to Government - but it is still hard to harness this
- Access to data is increasingly needed for empowerment of different interest groups
- A major difference between immediacy and retrievable data
 - ◆ Location and Surveillance applications
 - ◆ En route advice and forward trip planning
 - ◆ **Adding a specific local situation** to the rich but more stable transport and accessibility contexts





IT generates Data.. Not Information

- Transport IT can now generate very large volumes of transaction data
- This does not readily translate to information
- Effort is spent on making use of by-product data
- Targeted information is still scarce
- Data registration improves quality, but...can also limit utilisation
- Pricing policies limit access and assessment
- Privacy policies constrain integration





Some implications for Organisations

- Many Publics are demanding more information
- Sheer volume can overwhelm archiving and access
- The volume of ‘easy’ data masks **genuine data gaps**
- Data **interpretation** processes need to be in house
- Care and imagination with ‘purpose of use’ declarations
- Spatial data is central to many transport issues [esp. GIS]
- Data **integration** from different areas creates critical assets
- Organisational value resides, **in addition to integration**, in:
 - ◆ Monitoring
 - ◆ Assessment
 - ◆ Marketing and targeting
 - ◆ Selective pricing





Some implications for Individuals

- Access to data **for contestability** may not get any easier
- **Integration** of individual data will be sought
 - ◆ By organisations for CRM(customer management)
 - ◆ By people for use, empowerment and participation
- Knowledge and expert power increasingly asymmetric
- Yet the ability to use data is rising, **IF accessible**
- Consultation processes should improve - but will they?
- The Data Commons are not being used wisely
- **Formulation** of wanted information provision is valuable
- What channels are available?
- Geospatial data can be both of critical value and also problematic from a privacy standpoint





Specific applications for individuals

- Spatial and temporal details of transport services, opportunities and accessibility
- Immediate conditions (webcams, air quality etc)
- Immediate opportunities (activities , services)
- Planned conditions (travel services etc)
- Future conditions (planning etc)
- Empowerment (currency plus communications supports cases)
- Consultation and transparency become demandable





Some Specific opportunities for organisations

- Transport organisations to address very large scale real time data reduction to usable forms
- Government organisations to take advantage of the ability to substantially improve safety information and its use in broader contexts
- Community organisations to mediate far more informed consultation and issue establishment





Specific opportunities for research

- Manage the data we have better (Metadata)
- Find and access it faster and more reliably
- Find ways of making large volume operational data into information
- Bringing wider currency to more people
- Increased attention to the social and organisational impacts of current and emergent IT+transport mixes
- Expand on the rapidly increasing cross overs between IT research and issues and transport concerns





Summary

- Transport has critical social and economic roles
- Communications and information are central
- IT has moved to address the social and organisational results of greater information access, data provision and communications
- Transport is now under pressure to do the same
- IT and transport have a major synergy which has not yet been fully realised or addressed
- There are still major gaps in transport, travel and key related information for access and mobility

