

# Herts *Smart* Scheme

## Herts Smart Card Initiative

Spencer Robeson  
County Transport Services Manager  
Hertfordshire County Council



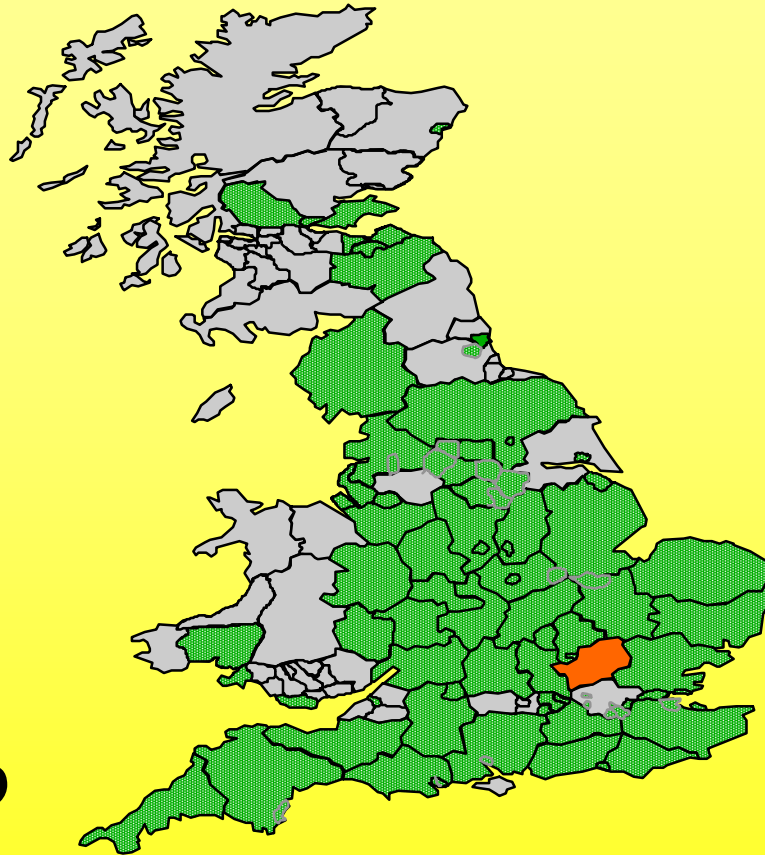
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# Herts *Smart* Scheme



1999



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## Hertfordshire

- Population - 1,033,616
- Population without own transport - 45%



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## why Herts is going smart

- “The Green County” committed to promoting and providing a sustainable environment and TravelWise transport alternatives
- Arriva Buses committed to promotion and improvement of passenger transport
- welcome new technology to improve value for money, auditable systems and better information
- smart technology will pay for itself in transport applications



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## political background

- passenger transport initially high on political agenda with Integrated Transport
- John Prescott announced his vision for an integrated transport system, and Transport Bill “Queen’s Speech” November 1999, now Transport Act 2000



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## Prescott's key requirements

- Integrated Transport calls for:
  - better use of existing capacity: a framework of regulation and accountability through capturing and analysing accurate usage data
  - pricing and charging alternatives and demand management
  - changing attitudes to transport, achieving a safer more reliable public transport system



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## a national example

- Herts Smart Scheme - illustrates how technology can be used to meet Prescott's vision
  - accurate information & cost re-allocation
  - ability to offer pricing initiatives and through ticketing
  - convenient & improved services



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## the Citycard vision

- makes services easier to use
- provides service providers with accurate data on usage trends
- enables services to be improved



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SCHOOL  
SERVICES

LEISURE &  
LIBRARY

SEASON  
TICKET

RETAILER  
LOYALTY

the Citycard vision

TRAVEL  
CARDS

E PURSE

PARKING

CONCESSIONS



# Herts *Smart* Scheme

## the Herts Smart Scheme

- contactless smart card technology
- starting with bus travel
- bus travel - mass application, quick payback
- rolling out to other services



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## key points

- one of the largest smart card transport schemes in the UK
- by mid 99 30,000 smart cards issued
- accepted on 300 buses in area



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## the roll out

- started Dec 97 with school children in Hemel Hempstead, Watford and Three Rivers areas
- roll out to pensioners in 98
- include commercial cards in 99
- then roll out to rest of county and other services (eg school meals, parking, libraries) for 2000 - 2002



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## benefits to users

- Electronic Purse means no cash to drop!
- Speed of Transaction
- Service better matches requirements
- Discounts automatically accounted



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## benefits to operators

- Transaction Capture
- Revenue Foregone Calculations
- Prepayment
  - Reduction in working capital
  - Enhanced Cash Flow
- Low (almost no) Maintenance



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## benefits to authorities

- Promotional Aspects
- Value for Money Transactions
- Auditable Systems
- Better Information



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## accurate information

- TCC feeds back management information reports to Herts CC and Shires
- information enables better planning of services and routes
- accurate tracking of public expenditure



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## value for money

- traditionally councils pay a blanket charge based on estimated usage figures
- until now there was no accurate way of recording whether and how often passes were used
- smart card technology enables payments based on exact per journey usage
- projected to pay for investment



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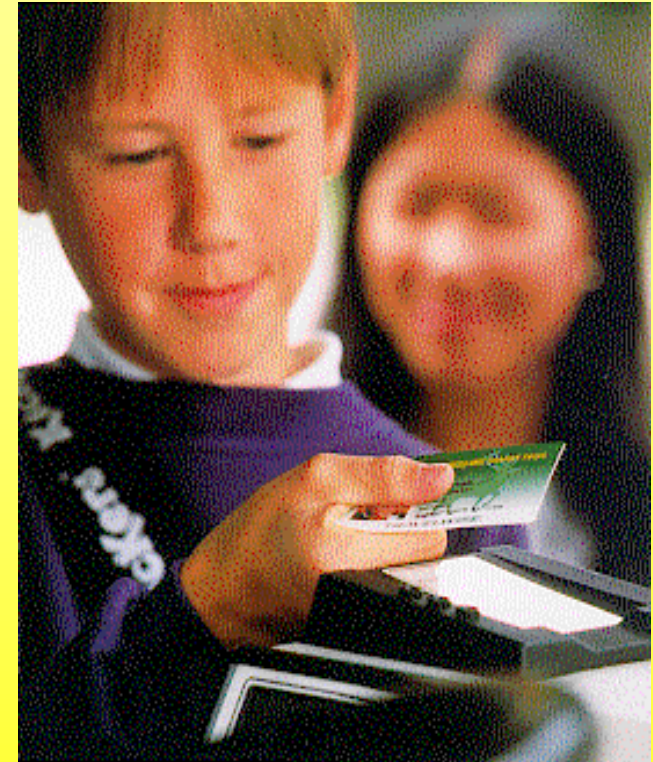
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## the card

- personalised to card holder
- provides pass and low value e-purse functions
- contactless technology means no need to insert into reader - just pass over the top



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## data gathering

- in the bus ticket machine there is a module which records all fares
- smart buses have an additional SM (Security Module)
- journey details and fares are recorded by the SM



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## data transfer

- the bus driver downloads all data from module after each shift
- from Arriva central PC the data is transmitted to the Clearing Centre (CC)
- encoded using signature encryption
- reconciliation of costs & revenues arranged between card issuers and card acceptors
- eg payment by Herts County Council to Arriva for transporting entitled school child



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## LESSONS SO FAR

### Legal Issues

- Scheme Development PPP/PFI/Joint Working
- Procurement Process/Contracts/Partnerships/Agreements
- Copyright, IPR, Source Codes, Trade Marks
- Personnel Details, Data Protection Issues
- Audits - Audit Commission, District Audit, Best Value Reviews
- Transport Act 2000 / LTP / IT



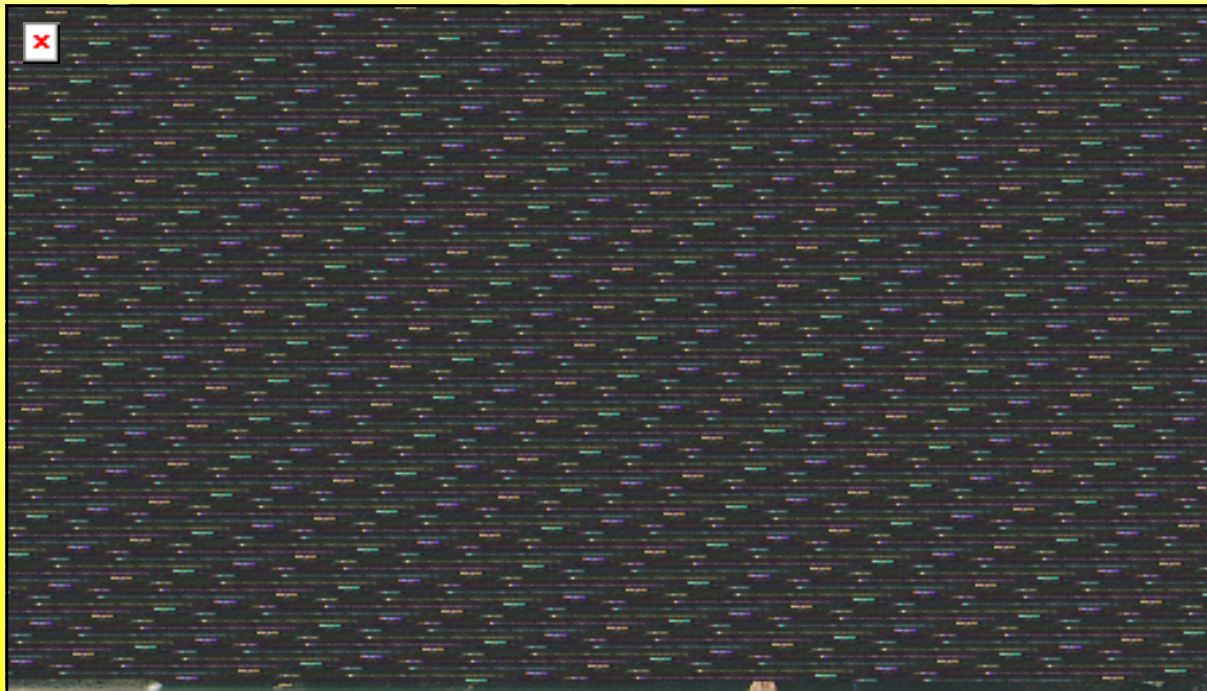
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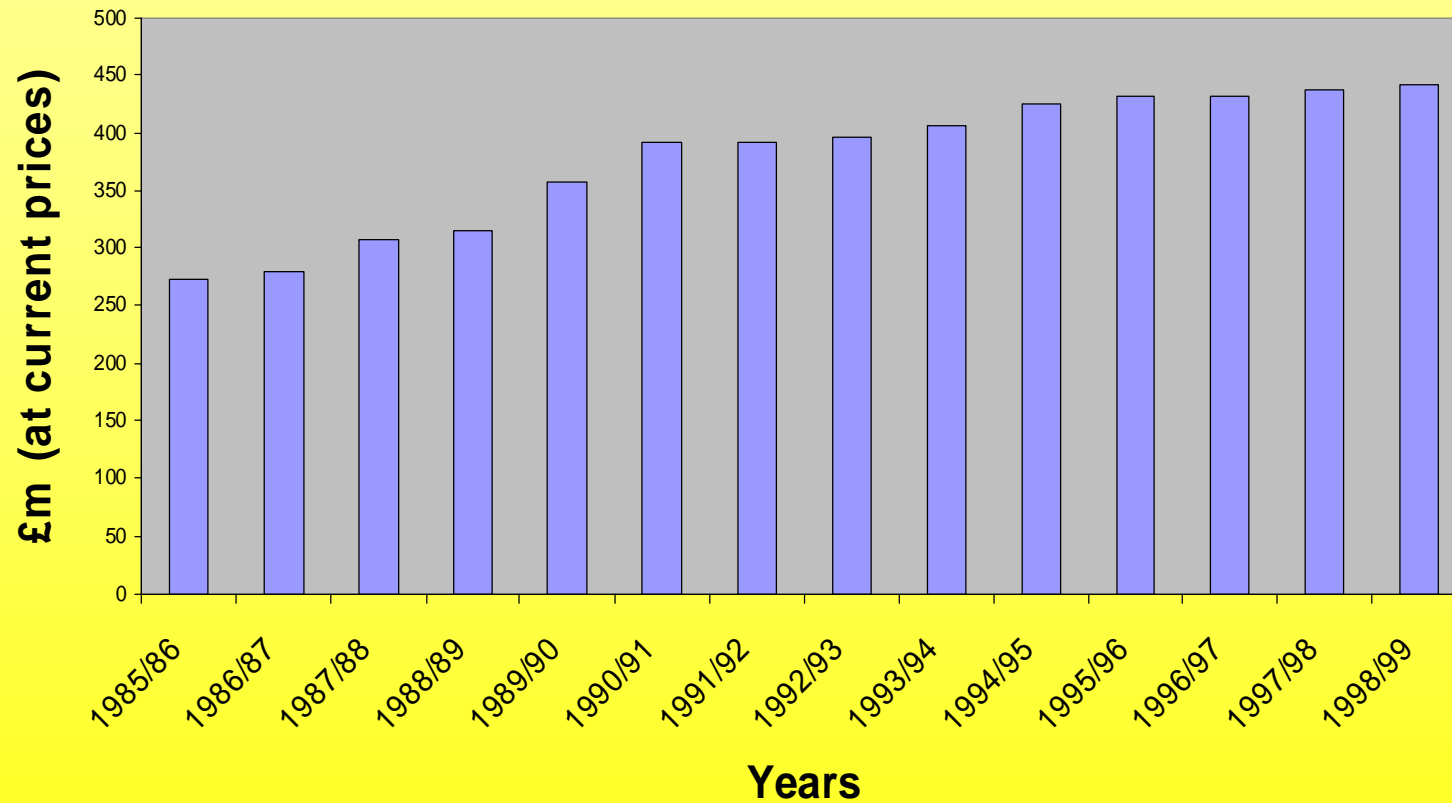


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## GB Concessionary Fares Expenditure 1985 - 1999



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