Core National Indicators – The Lessons so Far

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Developing and Piloting the Core Indicators 2003-2005

- Making the connections with evidence
  - If you do not measure what you value you will end up valuing what you measure (Audit Commission)
- Developing the indicators
  - Policy review and discussion of shared values within government
  - Piloting the core indicators
    - DHC and University of Westminster 2004
      - http://www.dft.gov.uk/pgr/regional/ltp/accessibility/developing/research/accessibilityplanningdevelop3614

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Options for the Indicators

- Origins, destinations and connections
  - Destinations - Catchment population – e.g. number of people within 20 minutes of a hospital
  - Opportunities available from origin – e.g. number of jobs within 20 minutes of an origin
  - Connections through the transport system – e.g. total travel time of x minutes to nearest GP
- Choice of indicator relevant to decisions required

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Piloting Indicators and Consensus

- Negotiation and compromise
- CLWGAP
  - LGA, ATCO, PTEG, DfT, SEU, Pilot and Beacon local authorities
- Other Government Departments
  - DCLG, HM Treasury
  - DCSF, DoH, BERR, Home Office, Defra
  - HDA, Jobcentre Plus, Commission for Rural Communities, Neighbourhood Renewal Unit

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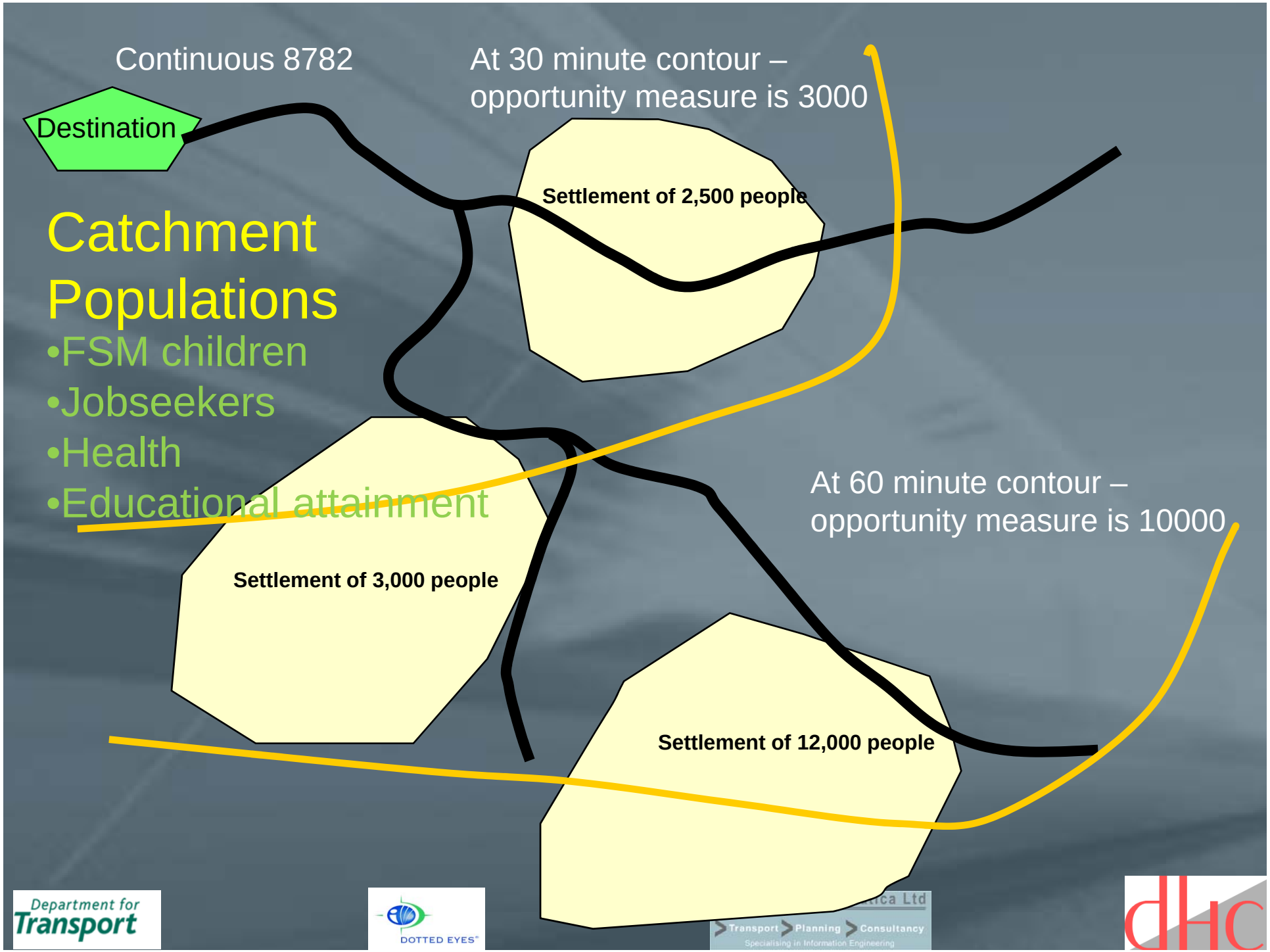
Continuous 8782
Destination
At 30 minute contour – opportunity measure is 3000
Settlement of 2,500 people
Catchment Populations
•FSM children
•Jobseekers
•Health
•Educational attainment
At 60 minute contour – opportunity measure is 10000
Settlement of 3,000 people
Settlement of 12,000 people
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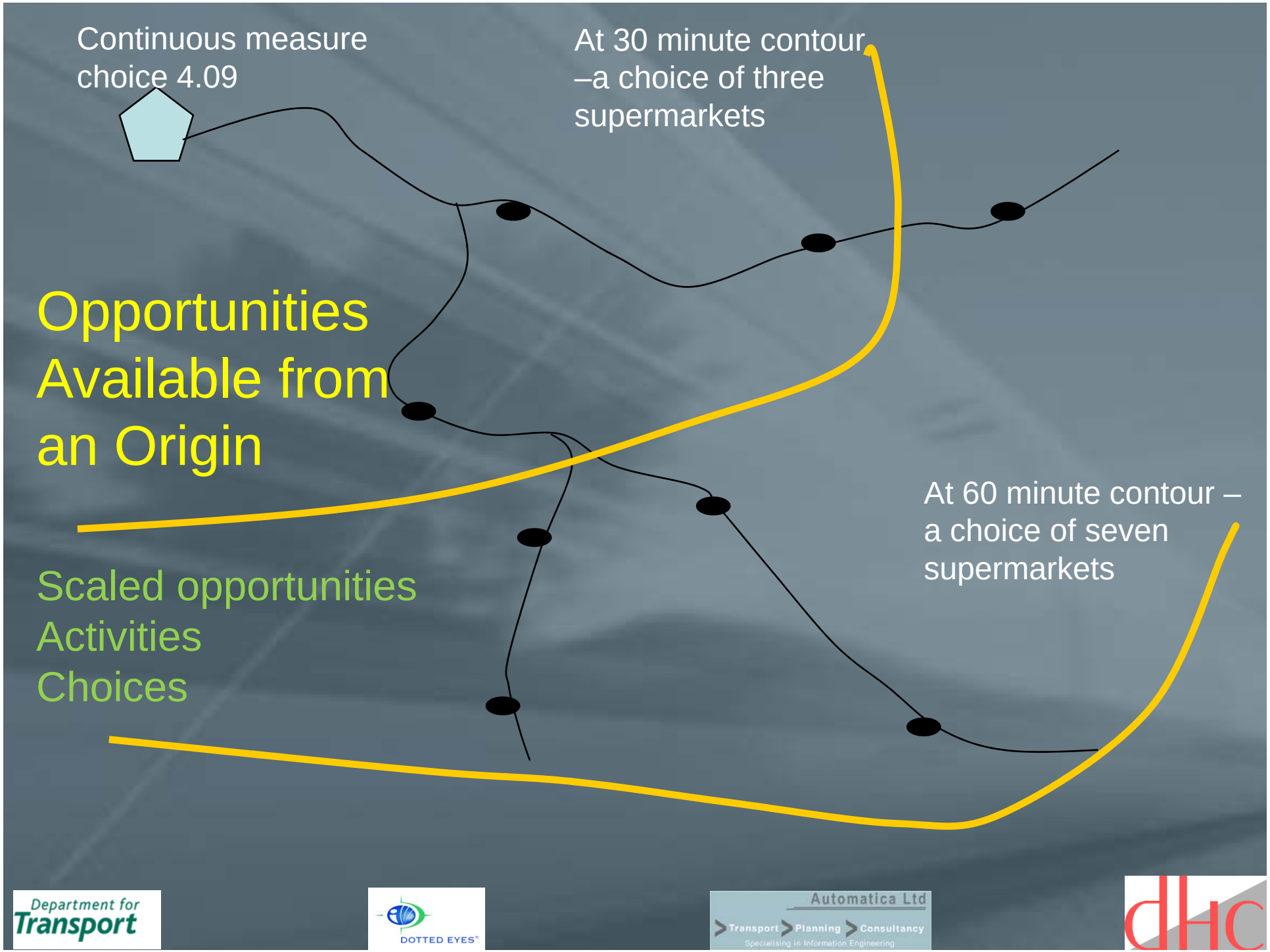
Continuous measure choice 4.09
At 30 minute contour –a choice of three supermarkets
Opportunities Available from an Origin
At 60 minute contour – a choice of seven supermarkets
Scaled opportunities
Activities
Choices
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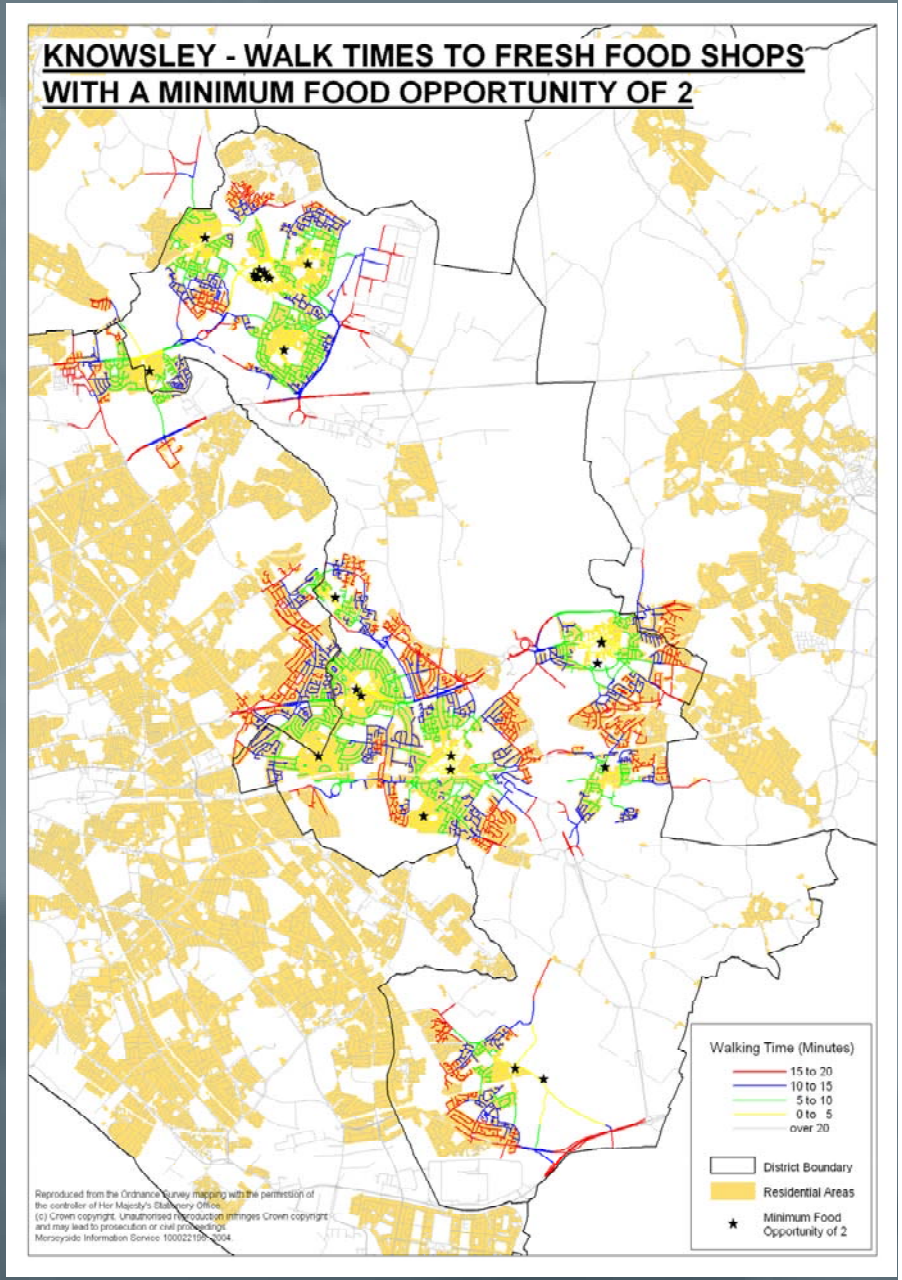
Connections

- Components
  - Spatial
  - Temporal/frequency
  - Financial
  - Physical
  - Environmental
  - Information/knowledge
- Data inputs
  - Travel times
  - Land uses/locations
  - Cost/quality factors
  - Peoples needs and circumstances



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Rationale for the Indicators

- People, data and simplicity
  - Focus on catchment populations
  - Destination locations from government data
  - Normally achievable travel times by PT, walking and cycling
- Recommendations for national, local and project level
  - Comparative more interesting than absolutes
    - Over time, between modes, between people

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The National Core Indicators Project 2006-2011

- Core accessibility indicators in England
  - Employment, hospitals, GPs, food shops, schools, colleges
  - 2005 and 2007 data used so far
- Access to Pharmacies, GPs
- Indices of multiple deprivation
- Post offices
- Access to Legal Services

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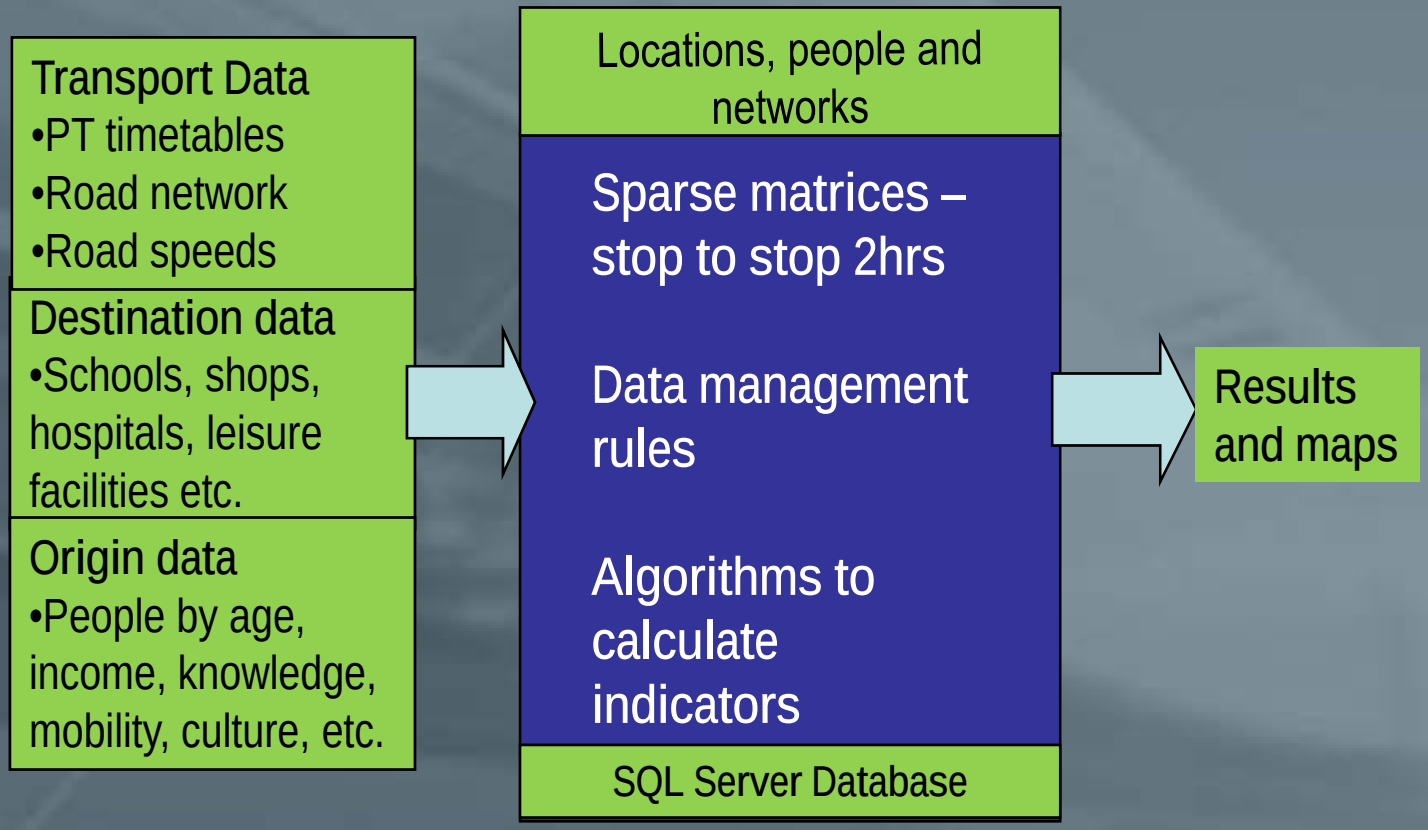
The Core National Indicators

Destination	Population Catchment	Modes
Major Employment sites	Population of working age (16 - 74 years)	PT/ DRT/ walk/ cycle
	Population in receipt of Jobseekers Allowance	
Major hospitals	Households	PT/ DRT/ walk
	Households without access to a car	
GP surgeries	Households	PT/ DRT/ walk
	Households without access to a car	
Primary schools	Compulsory school age children (5-10 years)	PT/ DRT/ walk
	Children (5-10 years) getting free school meals	
Secondary schools	Compulsory school age children (11-15 years)	PT/ DRT/ walk/ cycle
	Children (11-15 years) getting free school meals	
Colleges	Population aged 16-19 years	PT/ DRT/ walk/ cycle
Supermarkets	Households	PT/ DRT/ walk/ cycle
	Households without access to a car	

The National Accessibility Model



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The Calculation Process

- 1. COA centroid to destination travel time
  - Six PT time windows
  - Car and cycle journey times and check for better DRT journey
  - 402 model runs (600 hours)
- 2. Calculate catchment populations by time bands
- 3. Aggregate results to LSOA
  - Population weighted by COA
  - Weighted by mode share PT/walk and cycle

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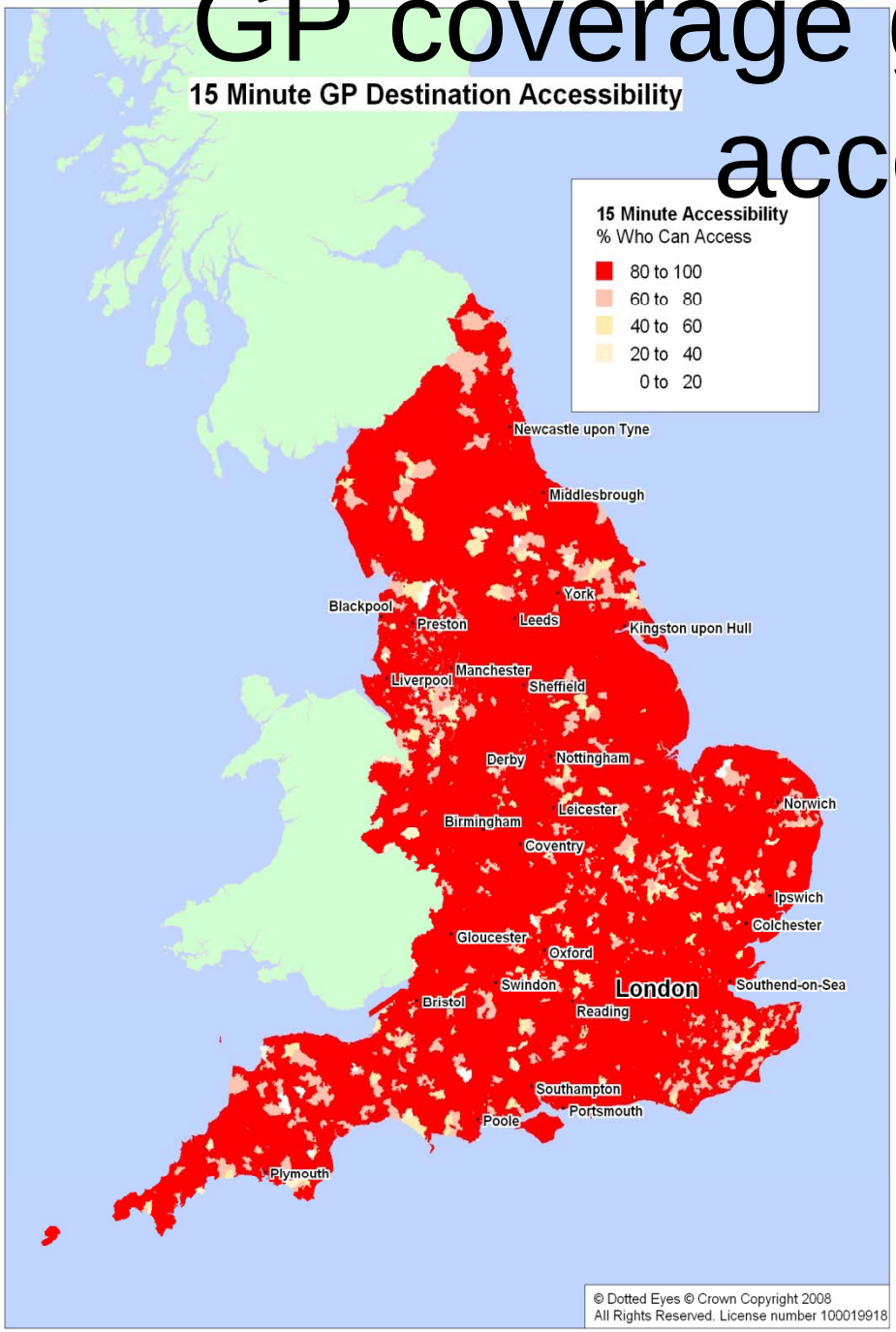
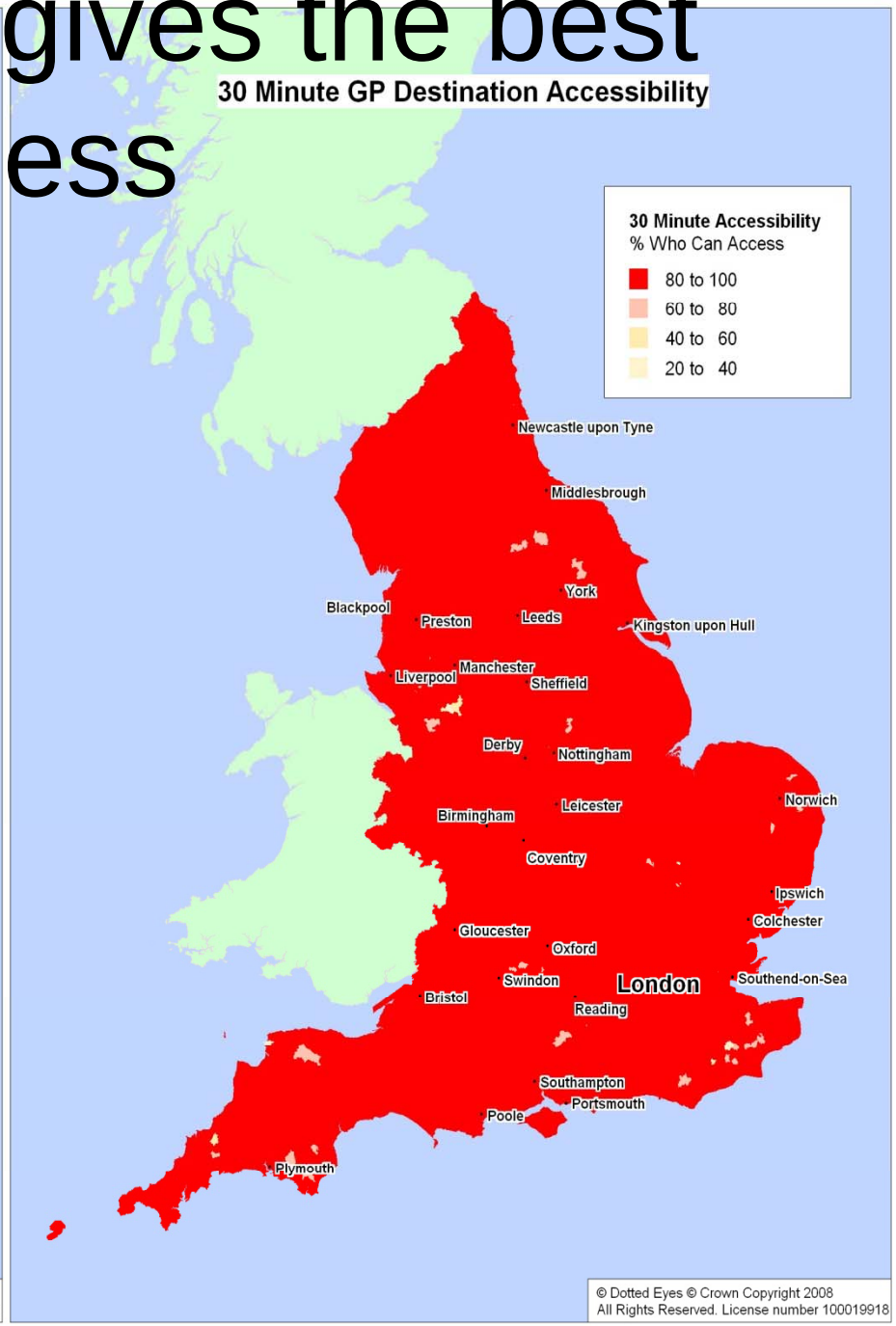
Thresholds and Results

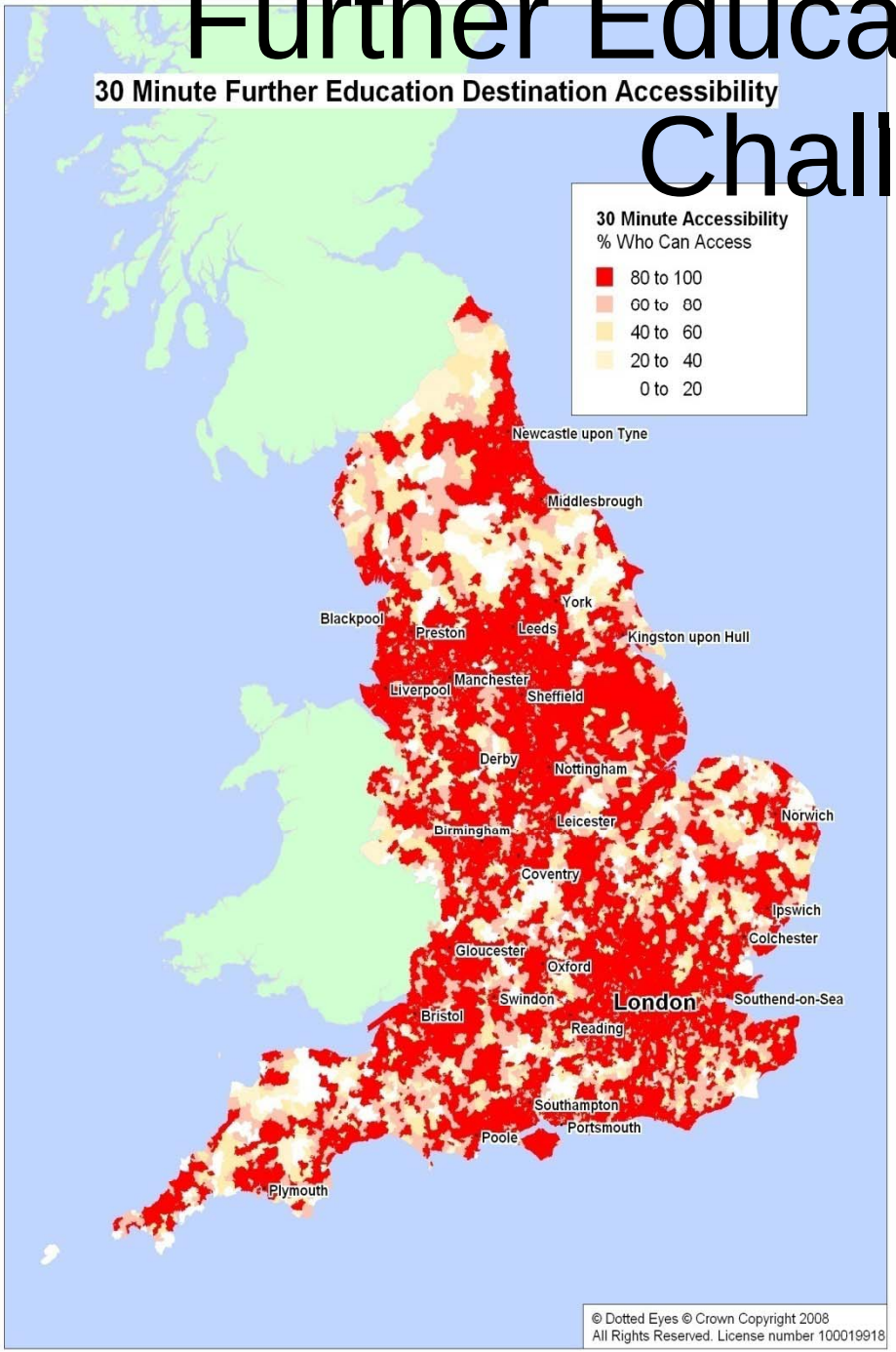
Dest	Population Catchment	Thresholds		Results		
		Lower	Upper	Lower	Upper	Cont
Empl	16 - 74 years	20	40	98.9	99.9	87.6
	Jobseekers Allowance	20	40	99.4	99.9	88.6
Hosp	Households	30	60	94.5	99.8	50.7
	0 car	30	60	96.2	99.9	52.3
GP	Households	15	30	98.3	99.0	78.0
	0 car	15	30	99.2	100	79.7
PS	5-10 years	15	30	96.8	99.6	68.1
	5-10 years FSM	15	30	98.4	99.9	69.6
SS	11-15 years	20	40	92.1	98.3	60.9
	11-15 years FSM	20	40	95.3	99.3	62.9
FE	Population aged 16-19 years	30	60	93.6	98.4	66.9
S'mkt	Households	15	30	97.8	99.8	73.2
	0 car	15	30	98.9	99.9	75.2

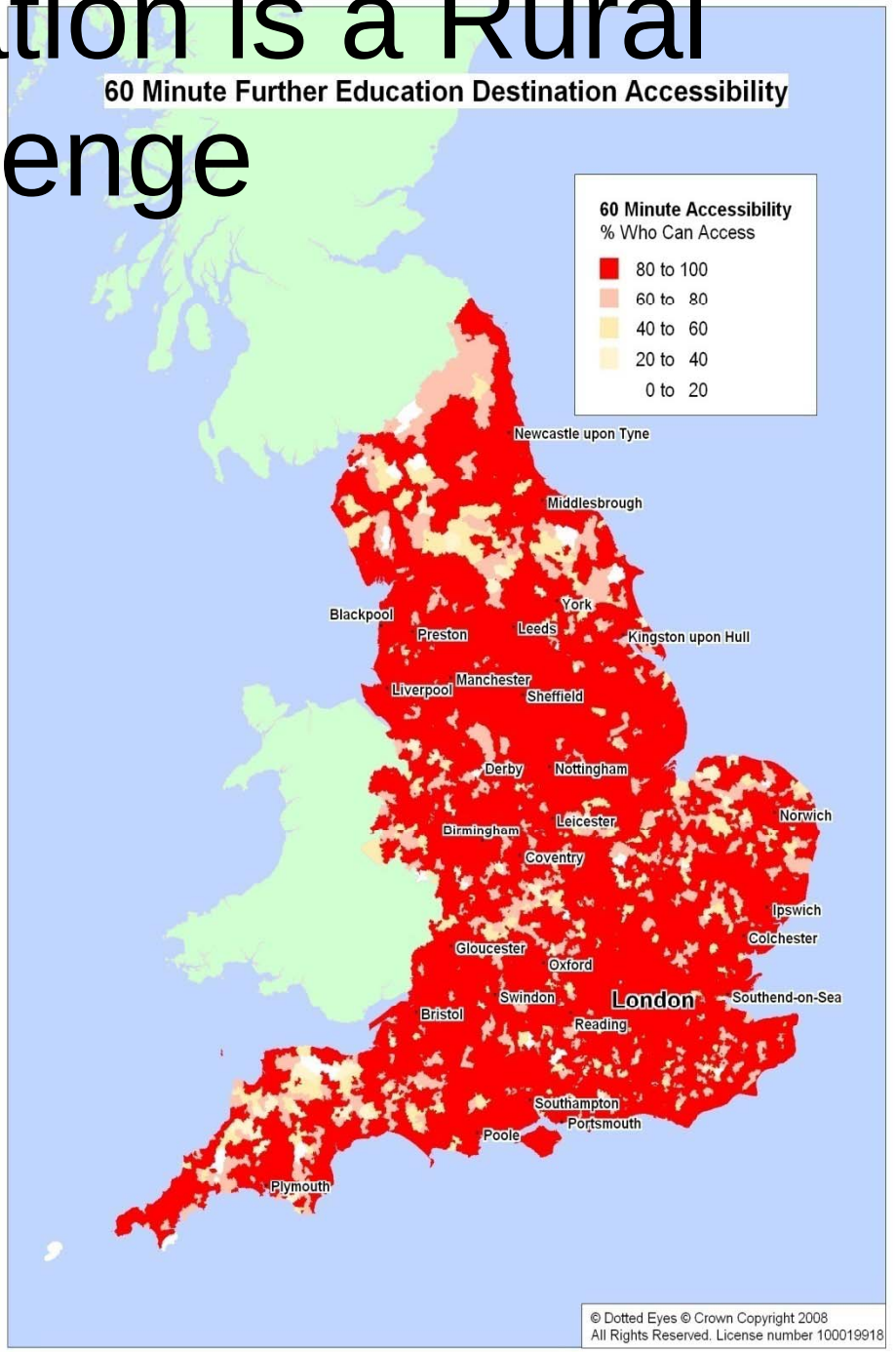
GP coverage gives the best access





Further Education is a Rural Challenge





Experimental Origin Indicators

- Each indicator involves journey options across the region

Dest	Choice of destinations (if there were no market or administrative constraints)	Thresholds		
		Lower	Upper	Cont. Param.
Empl	Number of jobs	20	40	0.022
Hosp	Number of hospitals	30	60	0.055
GP	Number of GPs	15	30	0.055
PS	Number of schools	15	30	0.107
SS	Number of schools	20	40	0.056
FE	Number of colleges	30	60	0.032
S'mkt	Number of stores	15	30	0.080

Indicator Relevance

- Policy or behavioural relevance
  - Locally relevant indicators are most important
  - Thresholds include most of the population
  - Continuous measures use average behavioural data
- Representing the real world
  - To what extent are destinations substitutes for each other
    - Is a traveller satisfied with the nearest ?
  - What need is there to consider choice?
    - Levels of activity - Scaling the opportunities
      - Job markets, health treatments, school catchments

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Where Next?

- Improvements to the quality and stability of the input data
- Achieving greater consistency between the uses of the data and the types of indicators
  - National, regional, local issues
- Developing the dialogue

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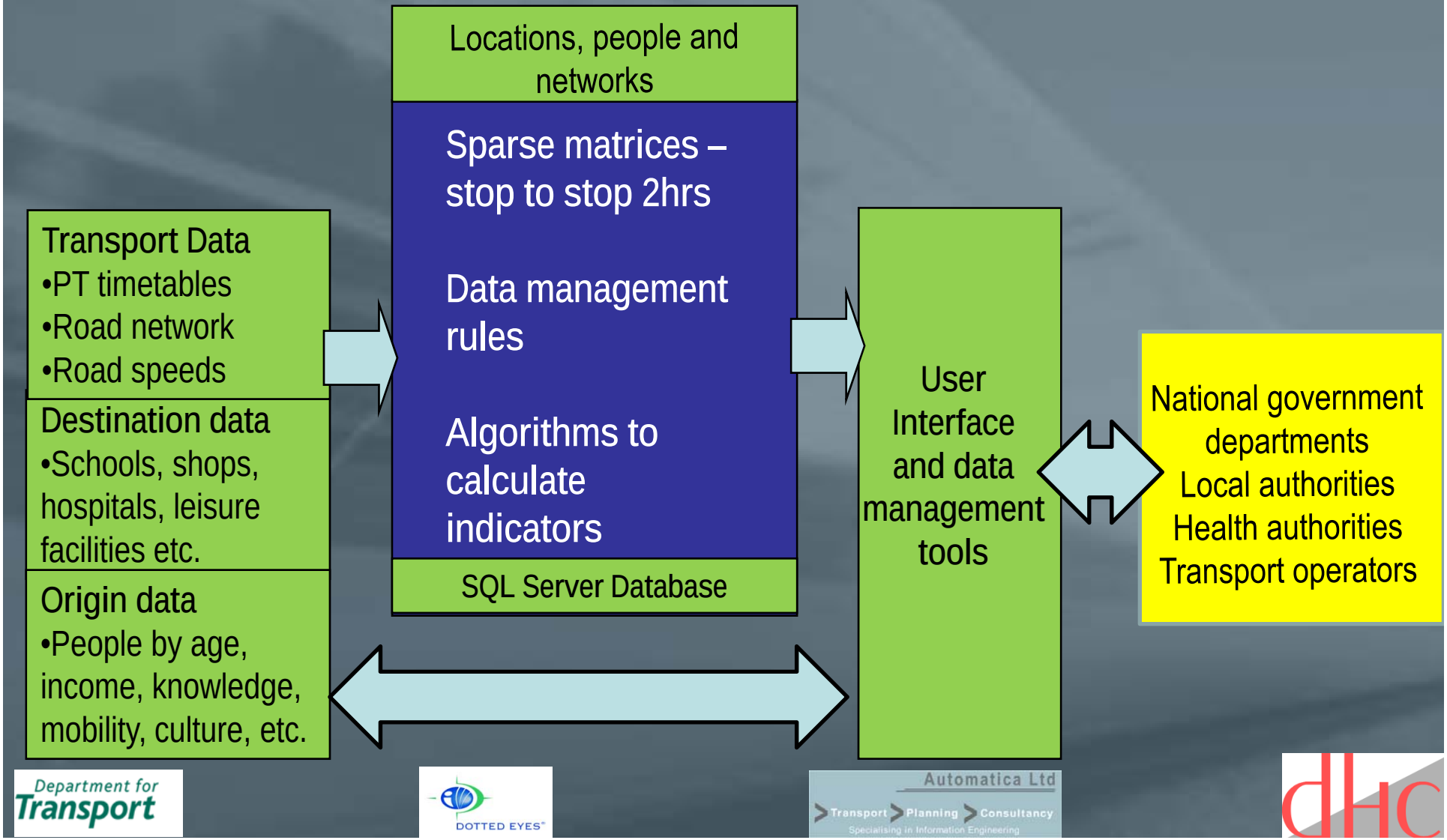
A Future Partnership on National Accessibility Modelling?



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