



MoSeS

**Modelling, Simulation,
e-Social science**



MoSeS Chronology

- Hydra (2002-2003)
 - Birkin, Dew
- Hydra II (2003-2004)
 - Birkin, Dew
- MoSeS (2005-2008)
 - Birkin, Chen, Clarke, Dew, Keen, Rees, Xu
- GENeSIS (2008-2011)
 - Birkin, Clarke, Heppenstall, Xu; Batty et al

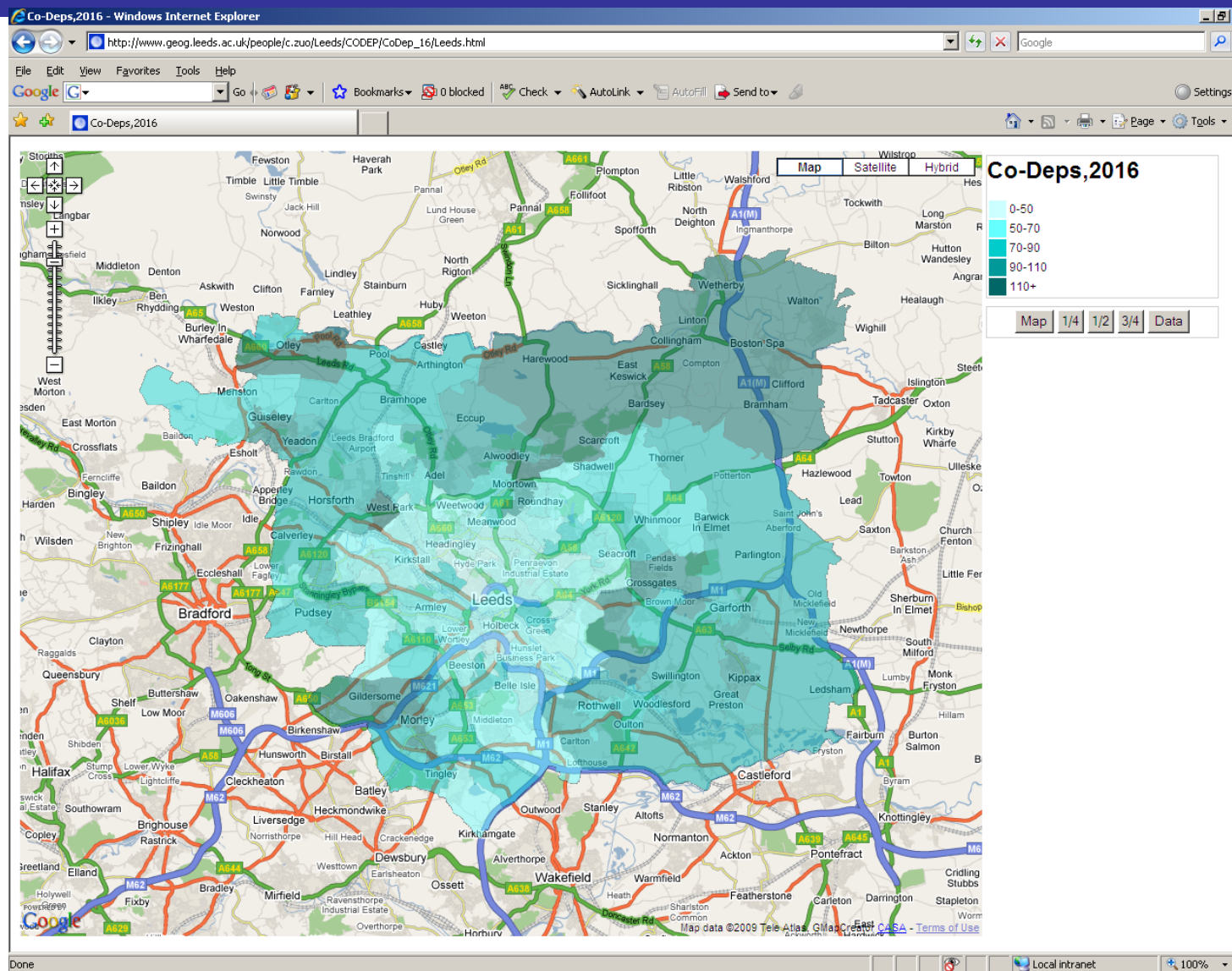


MoSeS: Overview

- Part of the ESRC e-Social Science programme
- Challenge of constructing simulations which represent the behaviour of real people in real cities.
- Deployment of various demographic models of population composition and its change through time
- Construct an e-infrastructure for urban simulation
- Applications of the simulation approach to problems in planning health care, housing and transportation



MoSeS: Objectives





MoSeS: Components

- Population Reconstruction Model
- Dynamic Simulation Model
- Activity and Behaviour Models
- Applications
 - Health
 - Transport
 - Housing
- Models
- Data
- Services
- Maps
- Workflows
- Archives
- Portlets



MoSeS: Partners

- HEFCE
- DCLG
- RTPI
- BGS
- Auckland
- NATSEM
- Morehouse Institute
- Leeds City Council
 - Social services
 - Regeneration
- Leeds THT
- Three Cities
- Boots
- Acadametrics
- Landmark Info Gp
- Dr Foster



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MoSeS: Related Activity

- SeeGeo (Chris Higgins, EDINA)
 - Development of a Geographic Linking Service
- EUAsiaGrid (Marco Paganoni, University of Milan)
 - MoSeS Taiwan!
 - EGEE
- NCeSS e-infrastructure project
 - Security protocols for social science research environments
 - Deployment of MoSeS via an eResearch portal



From MoSeS to GENeSIS

- **GENerative e-Social Science**
 - Simulation from the bottom up: agent-based models; theoretical and applied
- **New techniques for visualisation**
 - Second Life; Computer Gaming...
- **Grid + Web 2.0**
- **High impact social simulation**
 - Third Runway at Heathrow?
 - 2012 Olympics...