

Adding the Geographical Dimension

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BUSINESS
GEOGRAPHICS



Adding the Geographical Dimension

- Background to Business Geographics
- What is spatially-referenced data?
- Available data
- Mapping software
- MR applications
- Worked example - random location quota sample
- Internet/intranet applications



Background to the Company

- Business Geographics formed in 1993
- A member of the Interpublic Group (IPG)
- Based in Clerkenwell
- 10 members of staff
- Main work areas
 - Geographical analysis and modelling
 - Sampling and survey design
 - Desktop mapping and spatial data sales
 - Web-based mapping systems

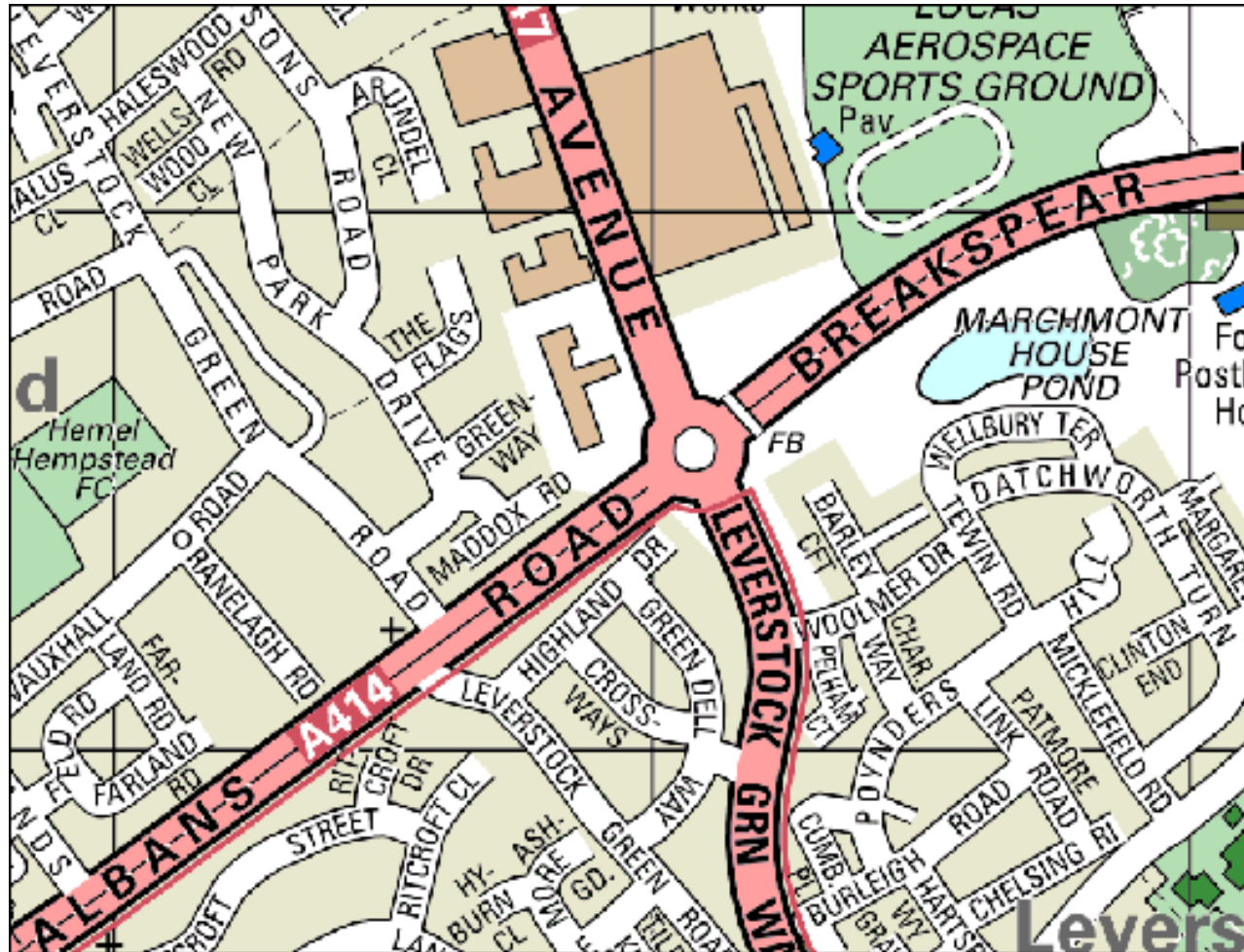
What is spatially-referenced data?

- Information relating to a geographical location or feature
 - Eg 2001 Census data at small area level
- Digital data
 - Point data - towns, stations
 - Lines - roads, rivers
 - Regions - constituencies, postcode sectors
- Geodems

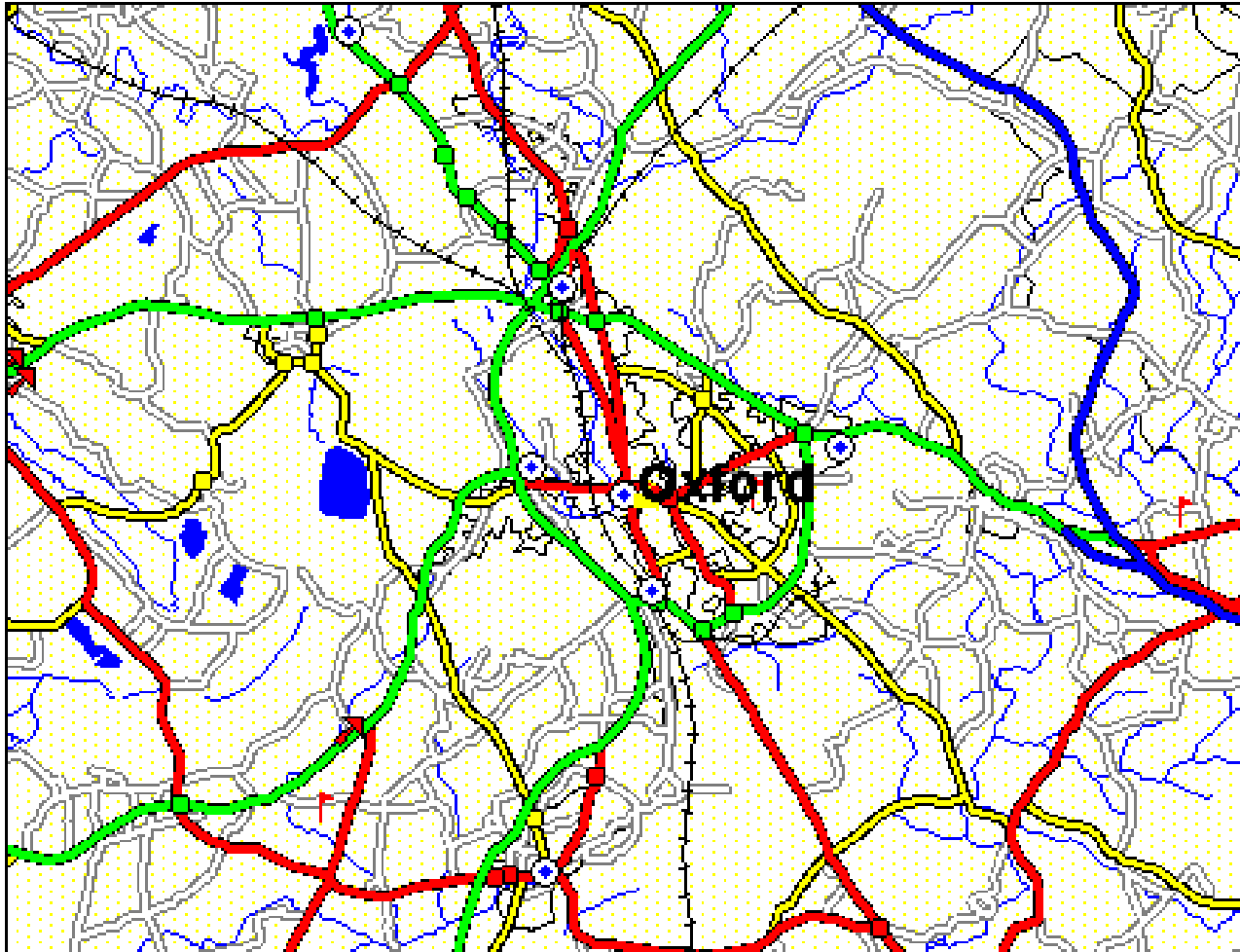
Available Data

- PAF
- Census 2001
- Road mapping

Road Mapping - Raster



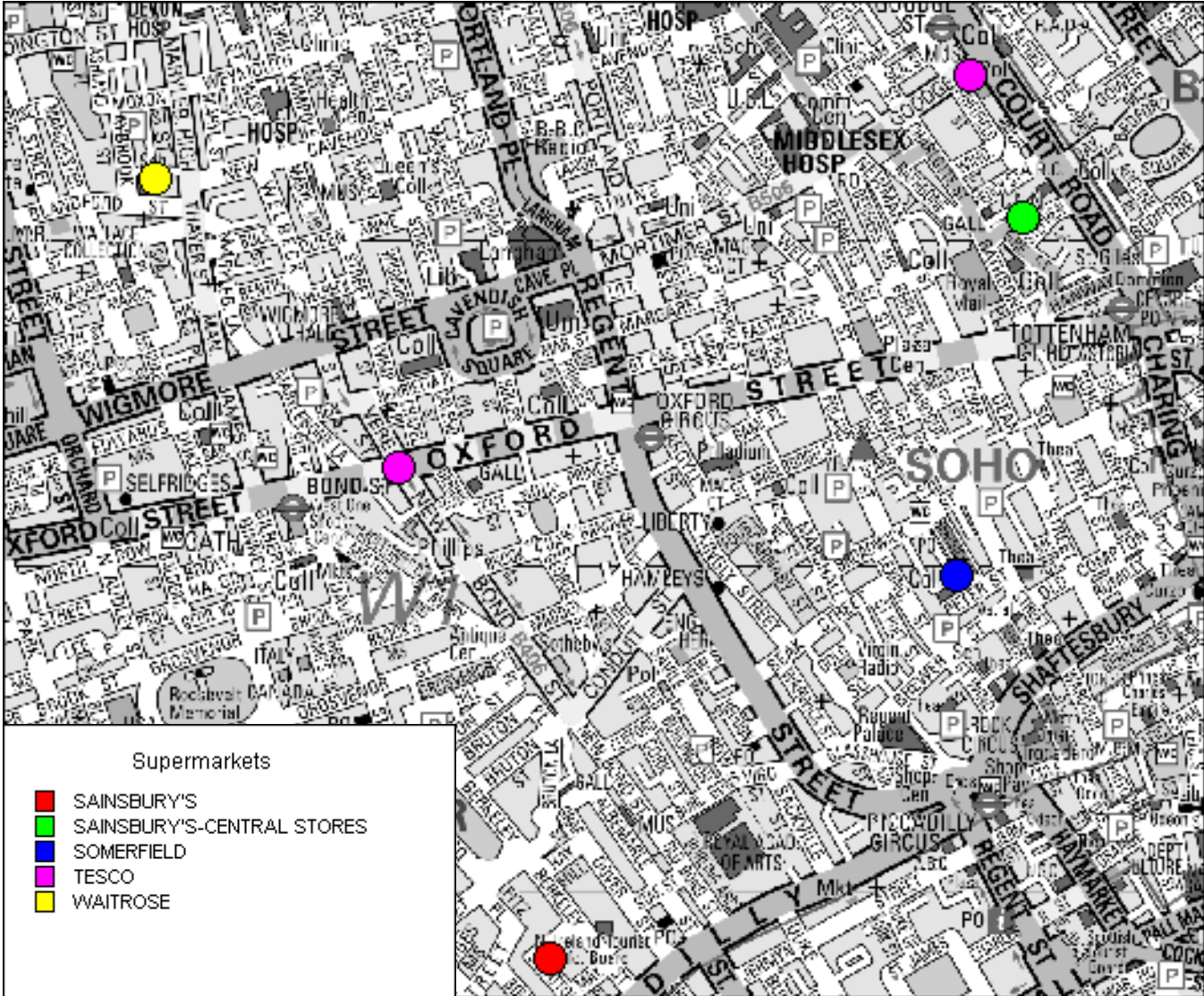
Road Mapping - Vector



Available Data

- PAF
- Census 2001
- Street-level mapping
- Retail outlets

Retail Outlets

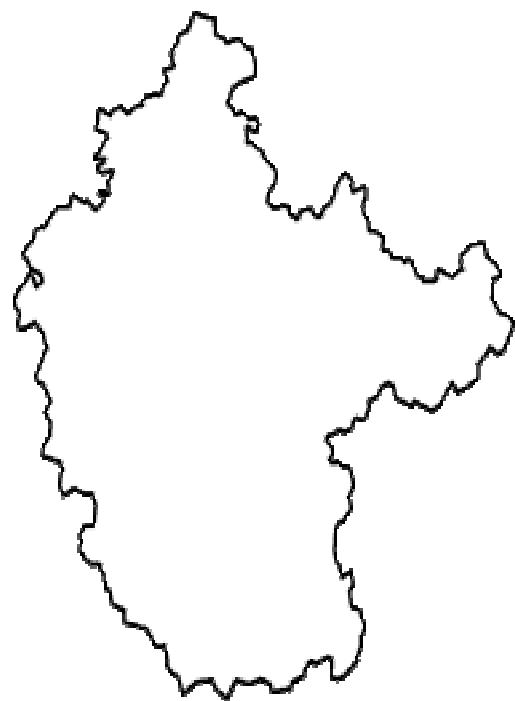


Available Data

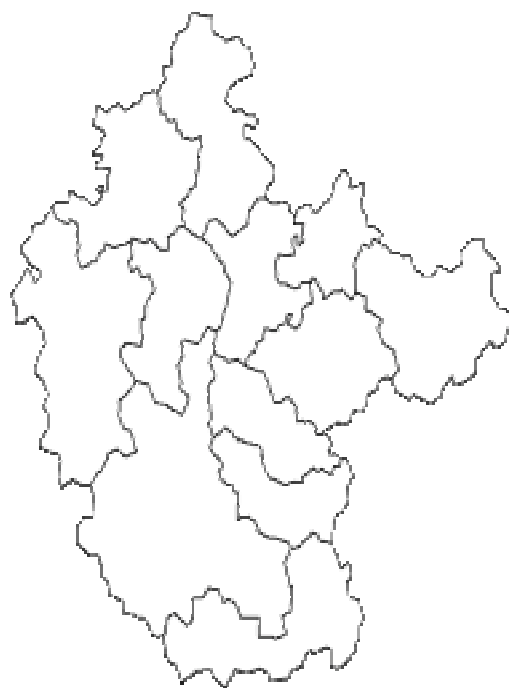
Geographical boundaries

- Postal hierarchy
- Administrative regions
- Parliamentary constituencies
- Drivetime isochrones
- Media boundaries – Rajar, BARB, ISBA,
Jicreg
- Customer-defined

Postal Boundaries



POSTCODE
AREA



POSTCODE
DISTRICTS

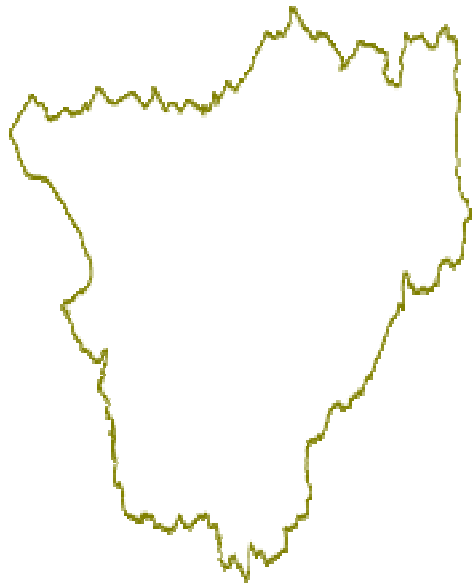


POSTCODE
SECTORS

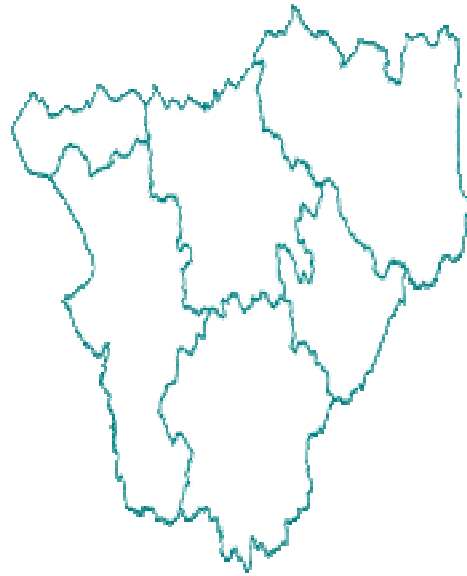
Full Unit Postcodes

- About 1.7 million in the UK
- Usually defined by point centroids
 - PAF grid references
 - OS grid references
- Important link between admin/Census geography and PAF

Administrative Boundaries



COUNTY



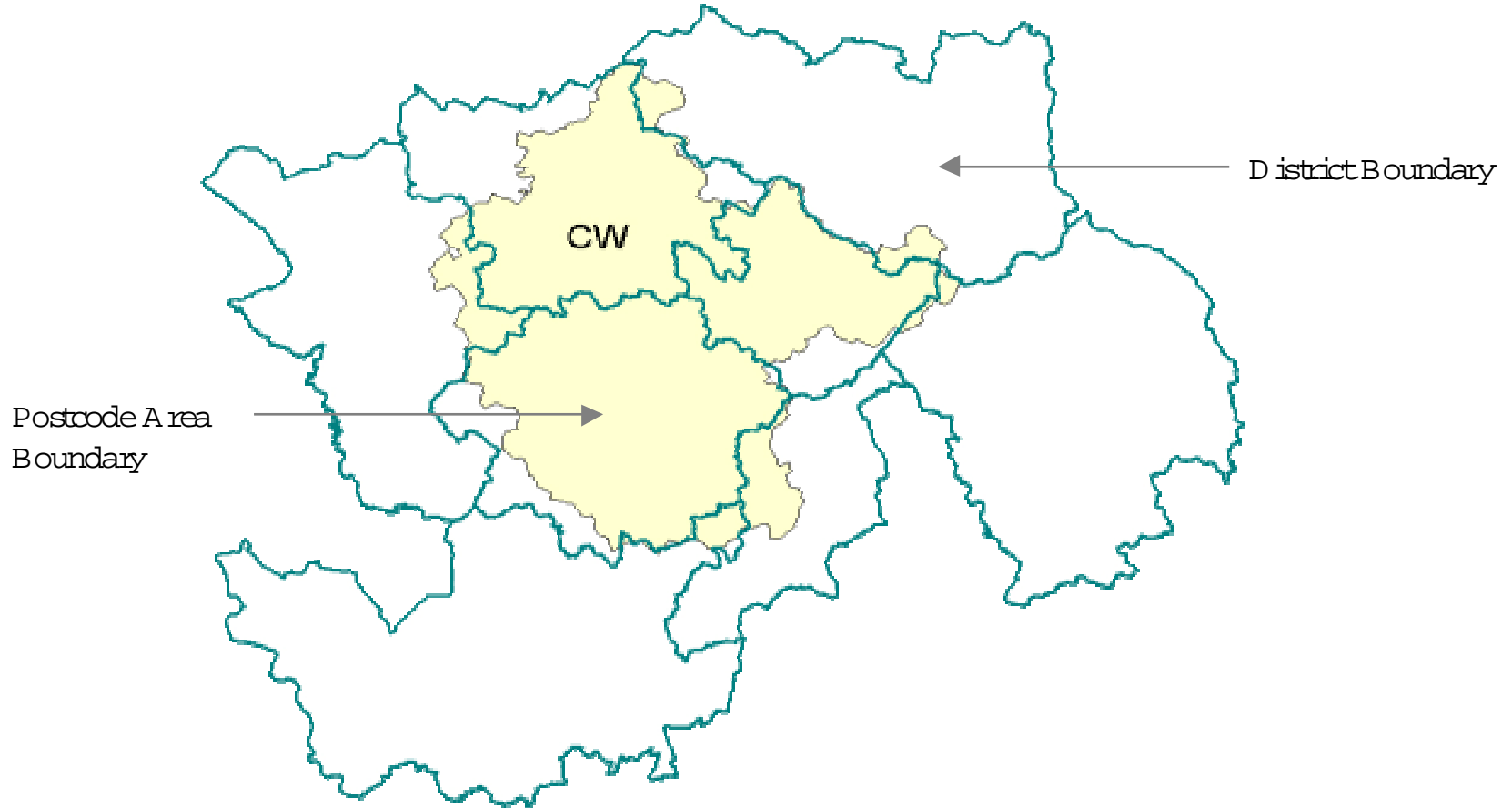
DISTRICTS



WARDS

Relationships Between Postal and Administrative Geography

Postal geography is not nested within administrative geography



Enumeration Districts (EDs)

- 1991 Census dissemination units
- Approximately 150-200 households
- Widely used in random-location quota sampling
- ED address listings not available
- Postcode-to-ED links
- Pseudo-EDs

Geodemographic Classifications

- Census/lifestyle/MR data used to create small area classifications
- Useful in market research for:
 - Sample stratification
 - Checking that samples are representative
 - Reporting
- 2001 Census opens the door to new players

Available Software

- Mapping software (GIS)
 - Eg Mapinfo, Arcview
- Drivetime software
- Territory planning
- Routing

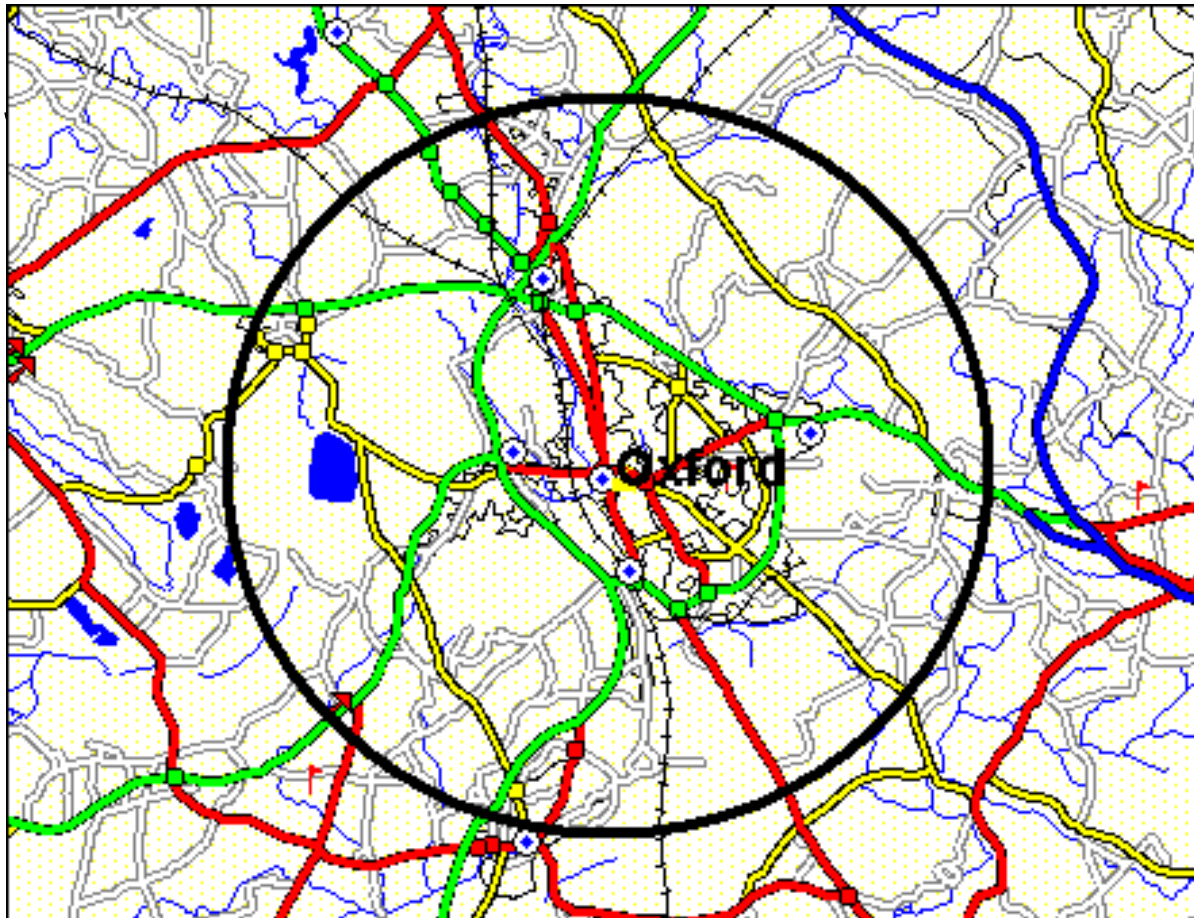
MR Applications

- Survey area definition
- Profiling
- Sampling
- Mapping
- Reporting
- Route planning/mileage estimates

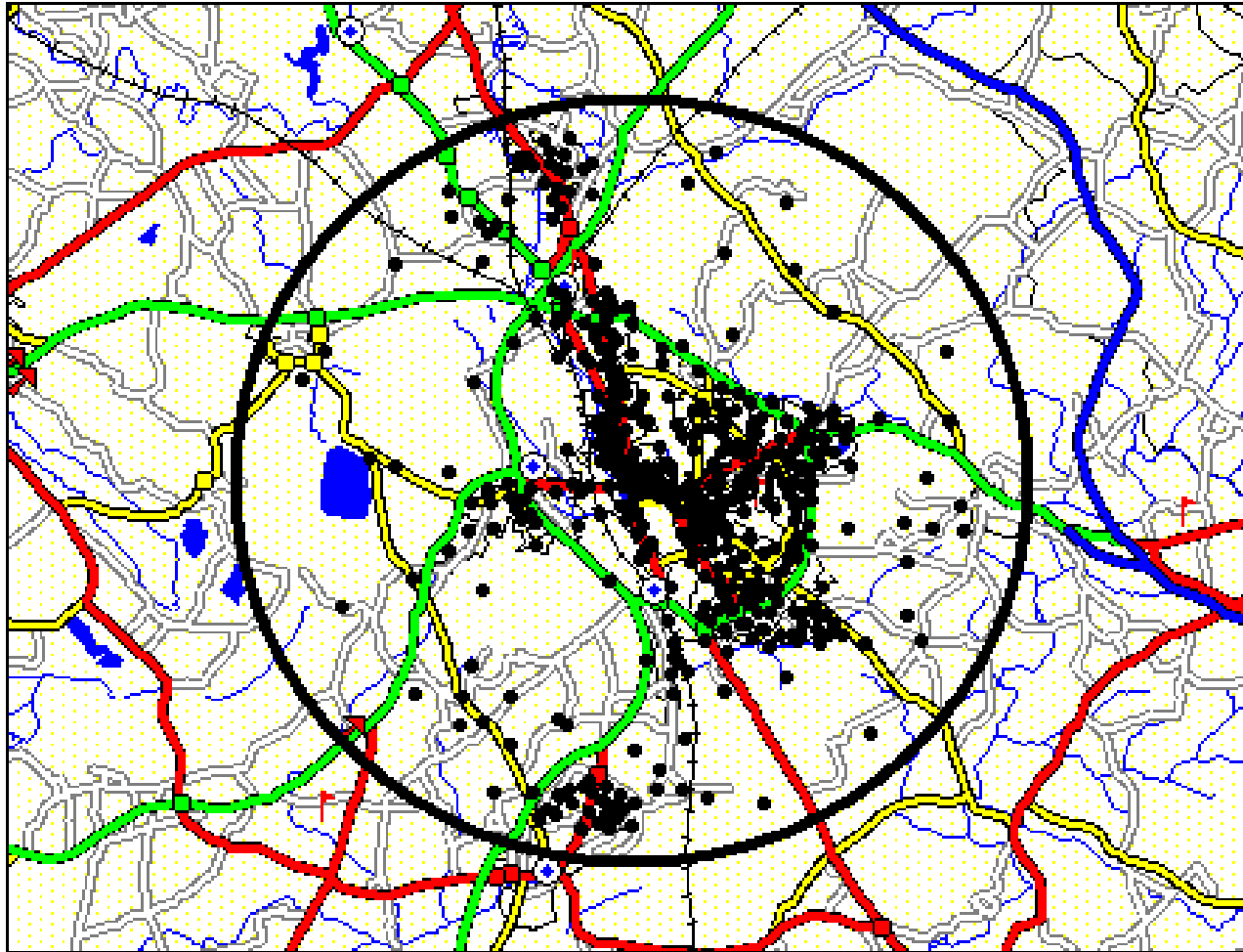
Worked Example – Random Location quota sample

- A sample of 1,000 individuals within 5 miles of Oxford town centre
- 100 ED sample points with quotas of 10 interviews in each
- Quotas on gender, age (18-34, 35-54, 55+) and working status (full time/other)

Worked Example – Random Location quota sample



Worked Example – Random Location quota sample

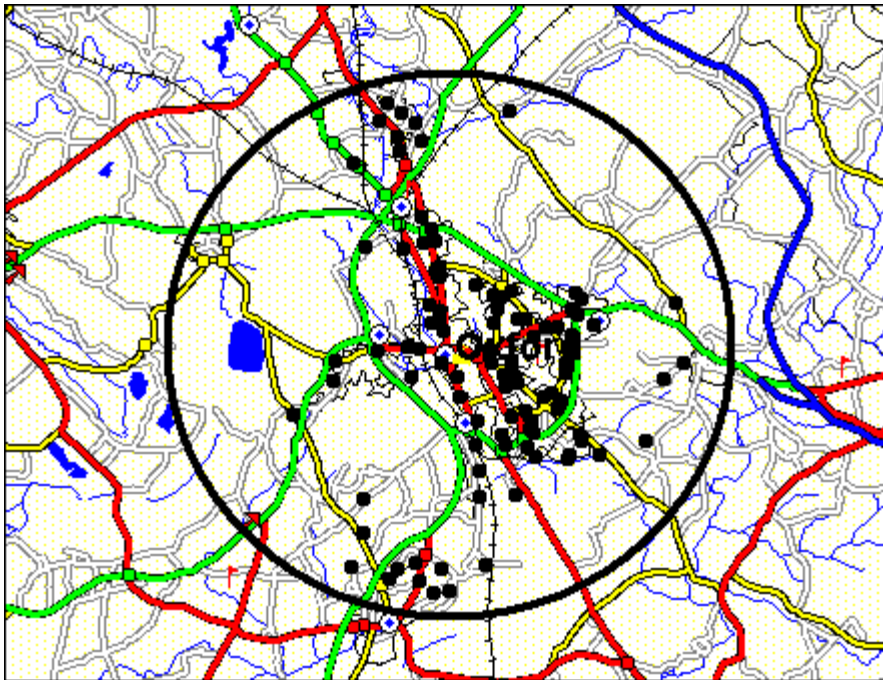


Worked Example – Random Location quota sample

- Sampling universe
- Universe stratification
- Sample selection
- Is the sample representative?
 - Mapping
 - Profiling

Worked Example – Random Location quota sample

Sample Point Locations



Worked Example – Random Location quota sample

Demographic Profile

<u>Demographic</u>	<u>Study Area</u>	<u>Sample Quotas</u>
Men	48.2%	47.8%
Women	51.8%	52.2%
18-34	30.5%	31.4%
35-54	34.5%	34.2%
55+	35.0%	34.4%
Working FT	45.2%	45.5%
Other	54.8%	54.5%

Worked Example – Random Location quota sample

- Matching postcodes to EDs
- Selecting addresses from PAF
- Calculation of quotas
- Interviewer worksheets

Worked Example – Random Location quota sample

First Address Listing

Sampling Point	ED	First Address
01	39PPFQ02	1, Cleveland Close, Kidlington, Oxon, OX5 2LH
02	39ALFN02	7, The Moors, Kidlington, Oxford
03	39ALFN04	12, Oxford Road, Kidlington, Oxon, OX5 1AA
04	39ALFN06	2 The Cottage, Kings Lane, Islip, Oxon, OX5 2RZ
05	39ALFN07	2, Mill Street, Kidlington, Oxon, OX5 2EF
06	39ALFN08	45, Evans, Lane, Kidlington, Oxon, OX5 2HZ
07	39ALFN10	71, Balfour Road, Oxford, Oxon, OX4 6AG
08	39ALFN13	2, Sunderland Avenue, Oxford, Oxon, OX2 8DG

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Worked Example – Random Location quota sample

Full Address Listing

SAMPLE POINT : 01
ED : 39PPFQ02
QUOTA : 10

SEX	INTERVIEWS REQUIRED	AGE	INTERVIEWS REQUIRED	WORKING STATUS	INTERVIEWS REQUIRED
MEN	5	18-34	3	FULL TIME	4
WOMEN	5	35-54	3	NOT FULL TIME	6
		55+	4		

No. Add	Postcode	Street	Addresses
26	OX5 2LH	Cleveland Close, Kidlington	
			1 :3 :5 :7 :9 :11 :13 :15 :17 :19
			... 21 :23 :25 :29 :31 :33 :35 :37 :39
			... 41 :43 :45 :47 :49 :51

Internet/Intranet Applications

- Dissemination of survey results
- Web-based mapping systems