

Output Areas

An Introduction

2001 Census: A New Output Geography

- Meeting the Requirement to provide a specific geography for statistical purposes
- 1991: EDs designed for data collection, but used for both data collection and output
- 2001: separation of collection and output geographies - purpose-specific geographies

2001 Census: A New Output Geography

- Synthetic unit postcode polygons created using ADDRESSPOINT^(TM)
- Application of automated zone design (after Openshaw, 1977)
- Adopted for Neighbourhood Statistics output

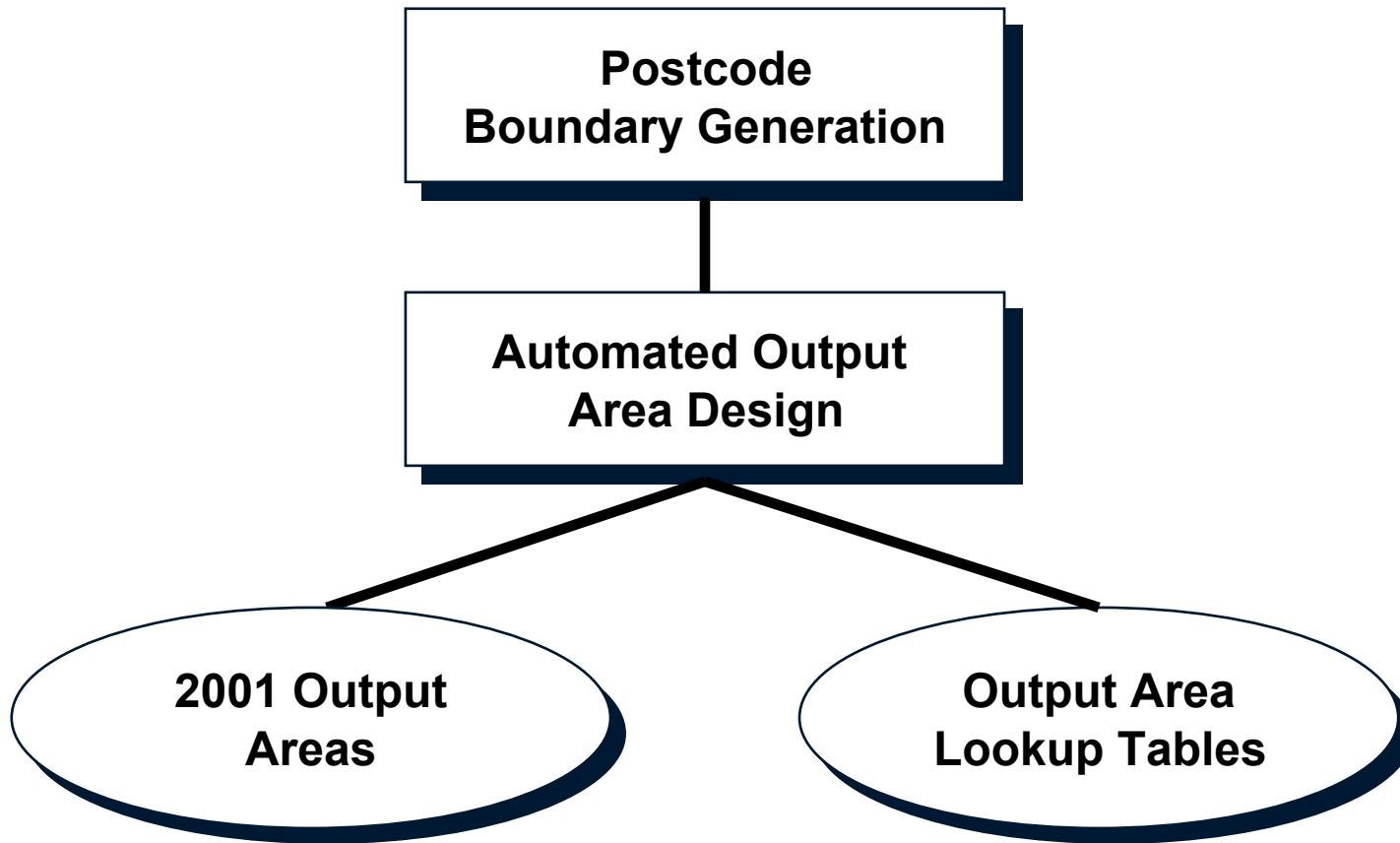
2001 Census: A New Output Geography

- Automated System
 - Minimal operator intervention
- 2001 Data
 - No drafts (trials use 1991 data)
- Postal and Admin geographies

Postcode building blocks

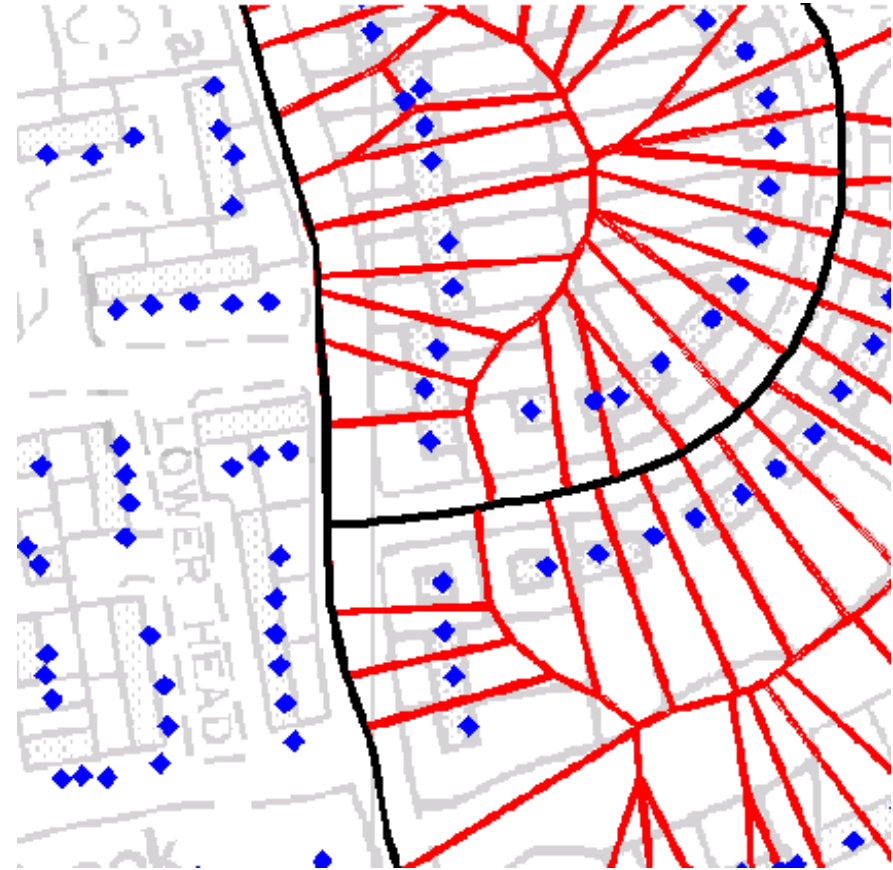
- Approx 1.7m unit postcodes
- Aggregation of these small building blocks into output areas (OAs) ensures best census-postal geography match
- No pre-existing polygons, (exc. Scotland)
- NISRA to digitize, ONS to generate
- OS Agents supply separate products

Output Area Production System



Generation of postcode polygons (1)

- Thiessen polygons around individual ADDRESS-POINTS, clipped to statutory boundaries.

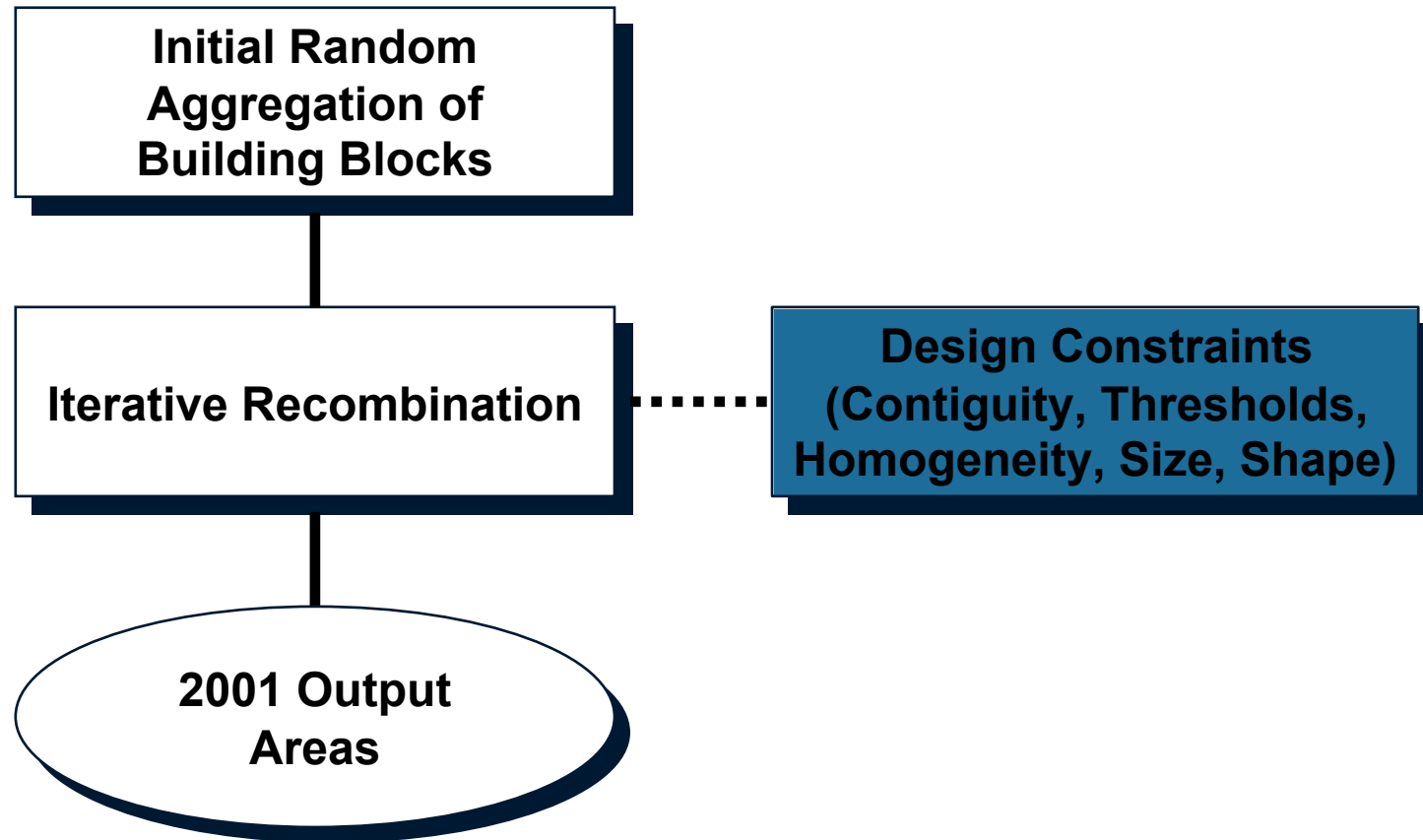


Generation of postcode polygons (2)

- Boundaries dissolved between adjacent address polygons with common postcode, to form postcode polygons



Output Area Design



Output Areas

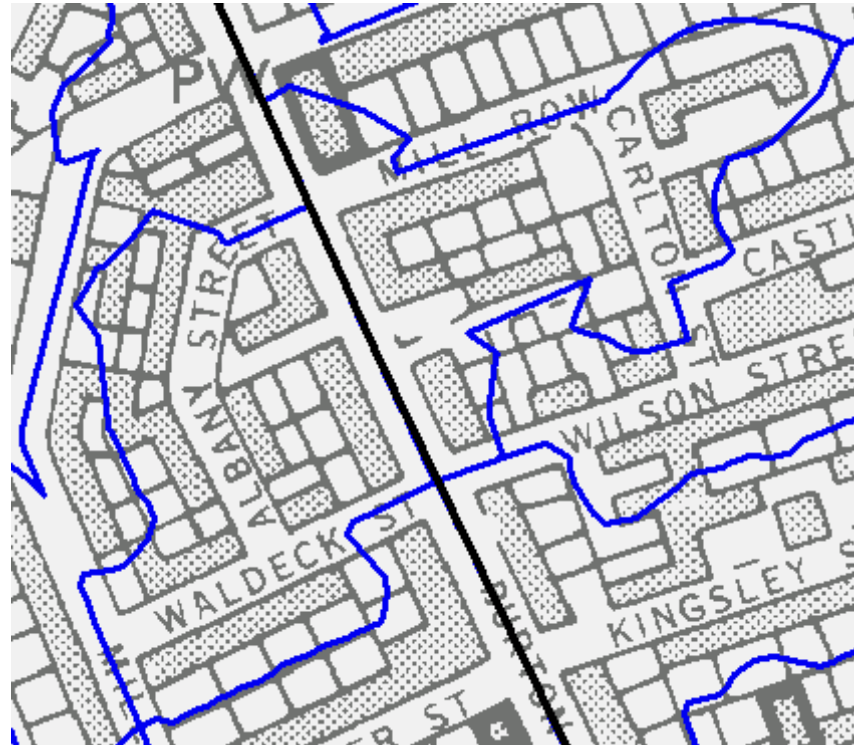
- **Constraints**
 - **Confidentiality thresholds (mandatory)**
 - **Contiguity (mandatory)**
 - **Homogeneity**
 - **Target Size**
 - **Compactness of Shape**
 - **Urban/Rural Mix**

Output Areas - Lincoln

Ward



Output Areas



OA CODE

- County (2 numeric)
- District/UA (2 alpha)
- Ward (2 alpha (numeric in N.I.))*
- OA (4 numeric)**

Example: 24 UE FE 0034

* Amended in response to feedback from 2000 CAS
Discussion Paper

** Amended to ensure UK consistency