Population Yield from New Housing Development

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Developing New Population Yield Assumptions

- GLA Intelligence & the Census Information Scheme
- Current population yield modelling
- Proposed new approach
- Work so far
- Future work

Project Goal

 To create improved assumptions of population yield from new development

Applications of Yield Assumptions

- Local authority planners use to estimate infrastructure requirements of new development
 - School place planning
 - Local population modelling
- Section 106/CIL negotiations
- Used in the London Plan the city's spatial development strategy

Existing Assumptions?

- Current assumptions largely based on either
 2001 Census data or new housing surveys
- Neither adequate

Existing Census Approach

- 2001 Census commissioned tables
 - C0549 provides housing characteristics of all existing households
 - C0511 provides characteristics of households that had a different address than they did one year earlier

Positive:

Consistent data available for all local authorities

Negatives:

- Neither identifies movers into new dwellings
- Together give very limited sense of how households mature over time

New Housing Surveys

Negatives:

- Not many available expensive
- Even fewer have been analysed to produce yield assumptions
- Sample sizes often small
- Geographically specific validity of transplanting results often questionable

Positives:

Specific to new development

New Housing Surveys

- LB Wandsworth produced a yield calculator from their 2005 survey and 2007 resurvey
- Widely used across London
 - E.g. in GLA Supplementary Planning Guidance on children's play space

Proposed Approach

- Identify new housing developments using LDD data
- Identify new 2011 output areas that consist wholly or primarily of new development
- Use Census data for output areas to identify housing characteristics and population yield
- Build a searchable matrix for predicting yield from future developments

Project timeline

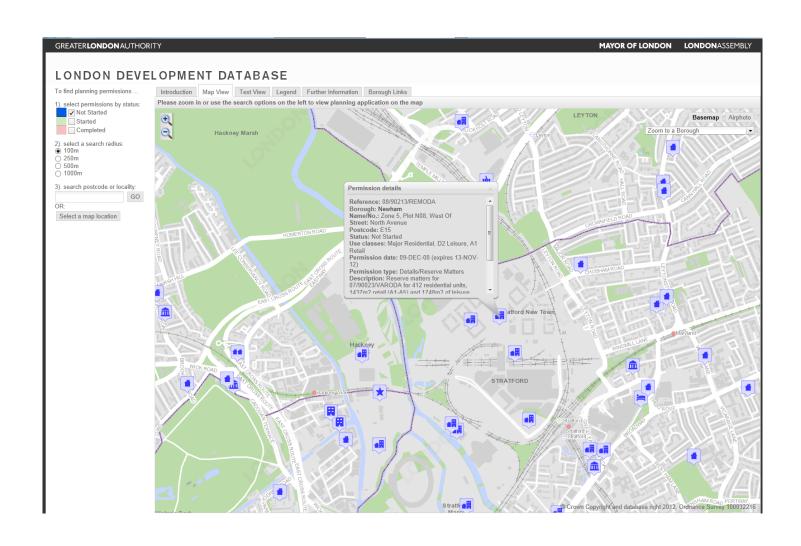
- Necessary census inputs will form part of the Local Characteristics census outputs
- Originally scheduled for March-June 2013
- Now scheduled for release 4.4 in December
- Depending on content of standard tables, may need to commission further data

The London Development Database

- Pan-London Housing Development Database
- 33 London borough submit monthly statistics on residential development
- Includes
 - permission date
 - commencement date
 - completion date
 - number of units

- eastings & northings
- area polygons

The London Development Database



New Output Areas

- Output areas are based on population thresholds (100-625)
- Where intercensal population increased beyond the maximum, OAs were split
- London's population increased by 1 million between 2001 & 2011 census estimates
- 549 OAs were split into 1,552 new OAs

Process

Identify new development sites



Filter to:

- Sites completed 2002-2011
- Sites with >50 units

Suitable Sites



Identify which sites are in new Output Areas

Suitable Output Areas



Suitable Output Areas



Match to Census data



Housing characteristics





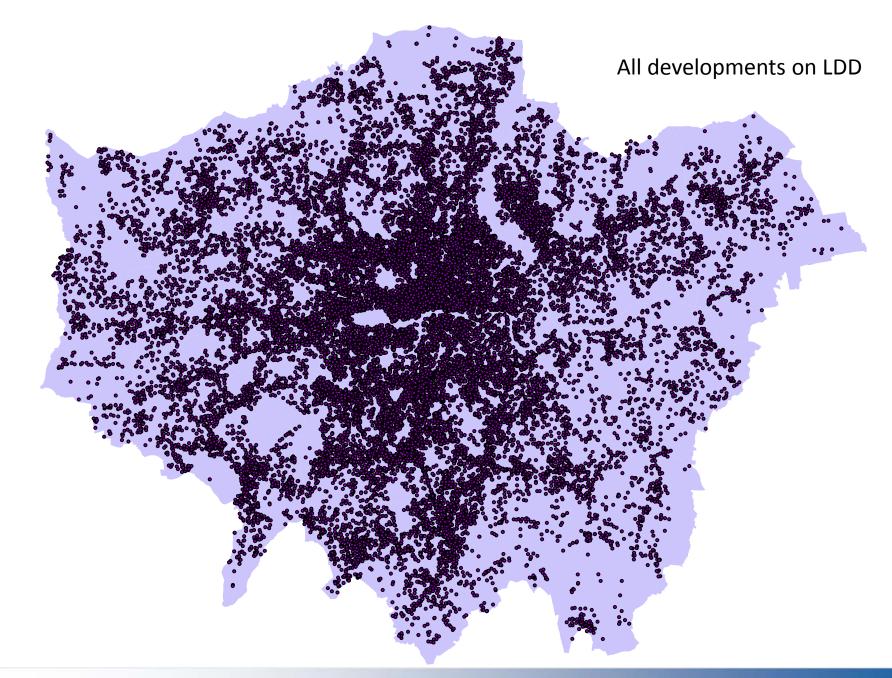


Matrix of population characteristics by accommodation type, location, and completion date

Filtering the LDD

LDD Database

55,816 completions



Filtering the LDD

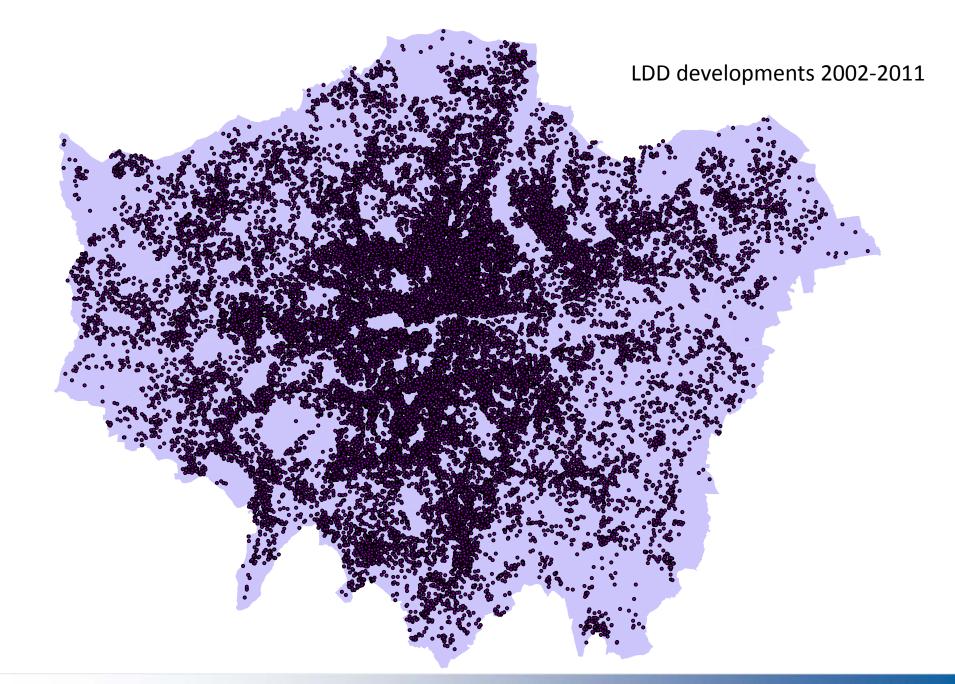
LDD Database

55,816 completions

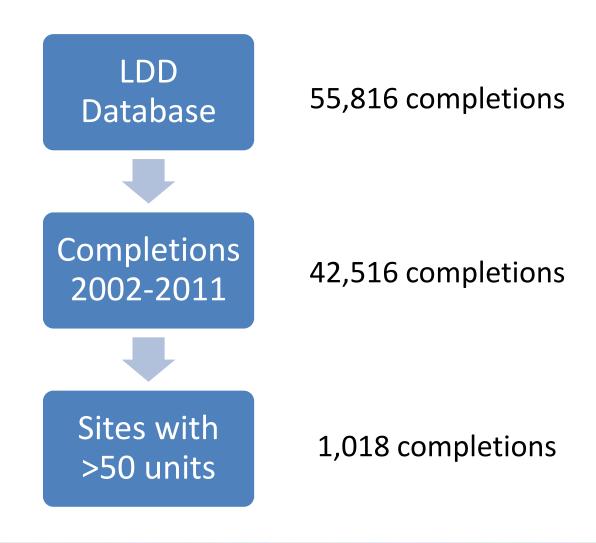


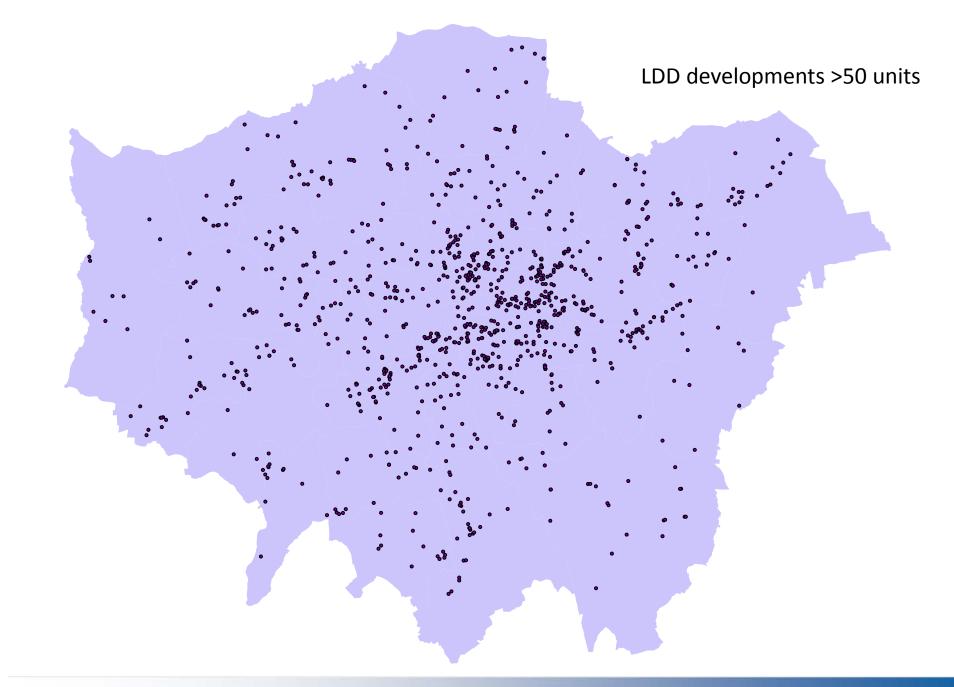
Completions 2002-2011

42,516 completions



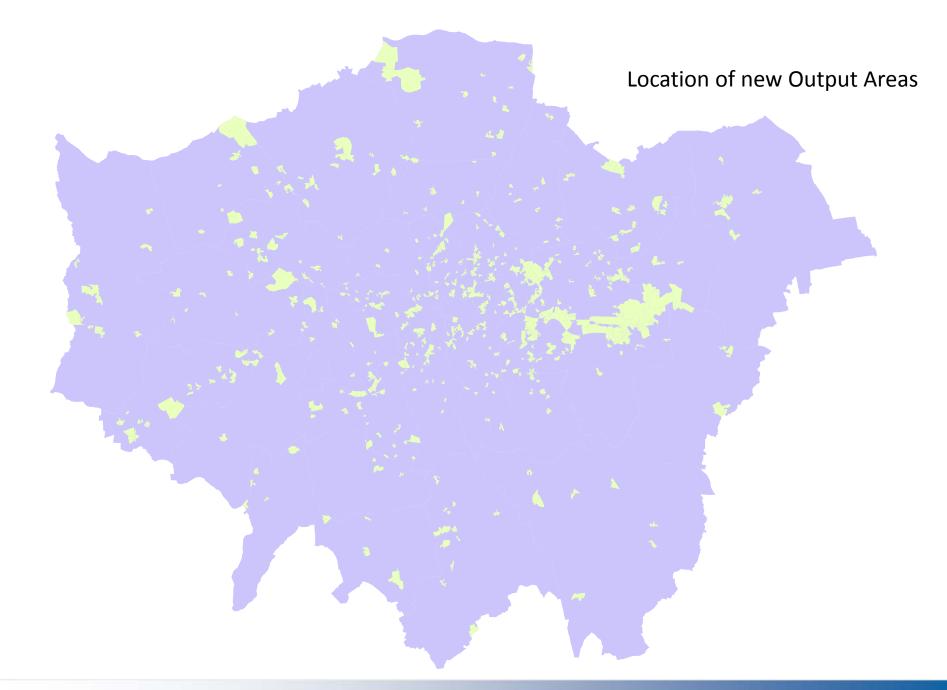
Filtering the LDD

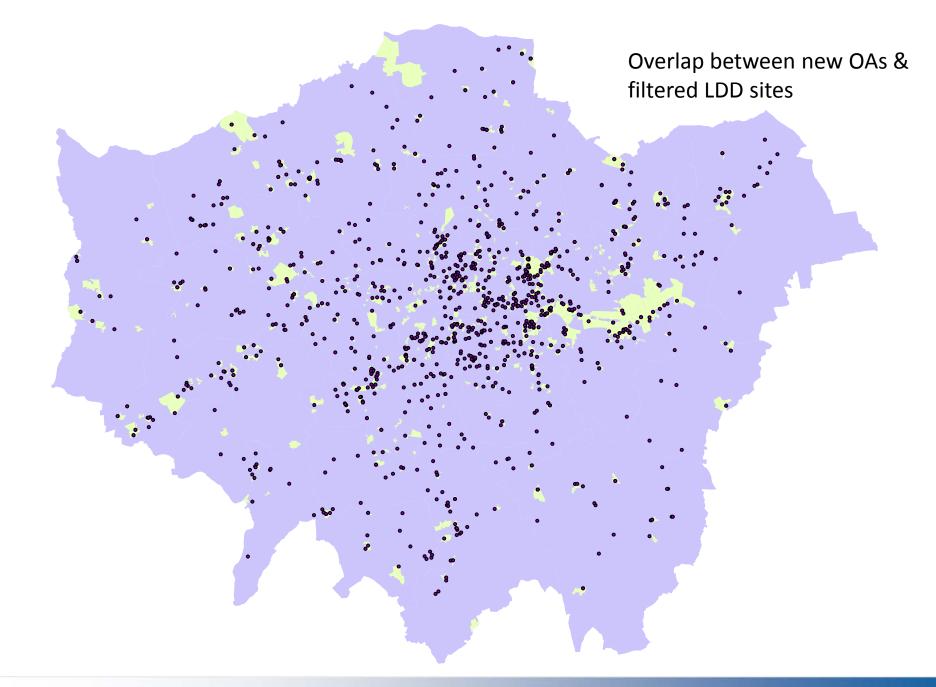




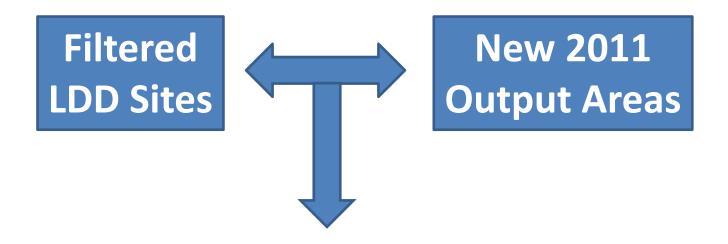
Matching Filtered Sites to New Output Areas

Filtered LDD Sites New 2011 Output Areas



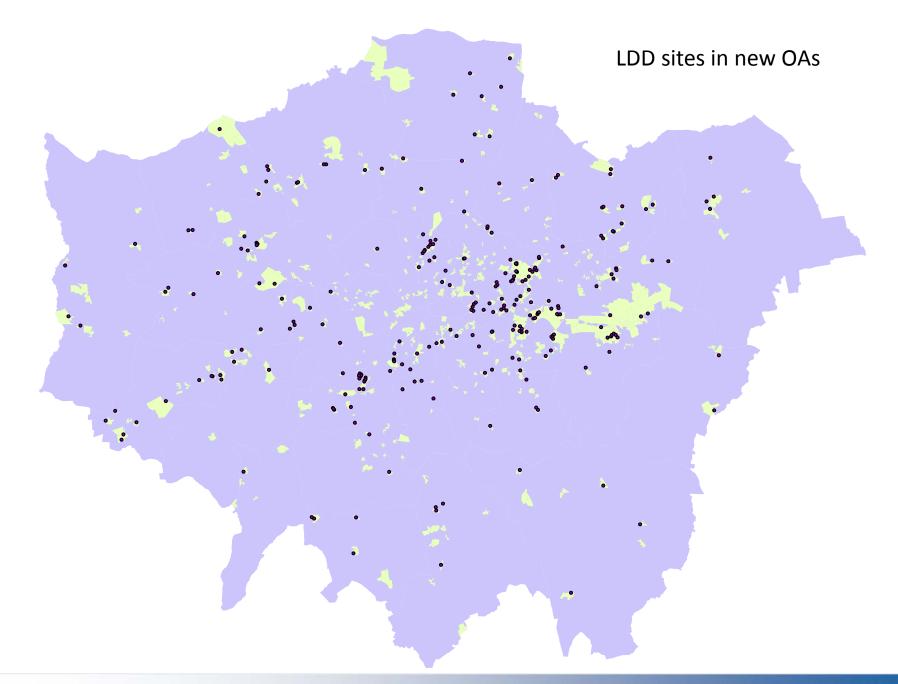


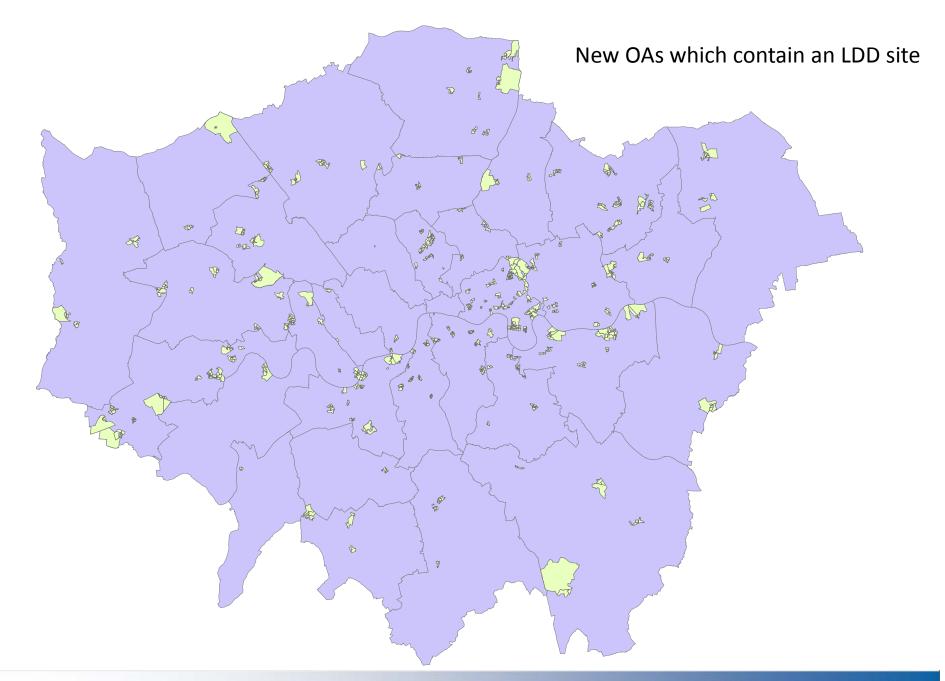
Matching Filtered Sites to New Output Areas



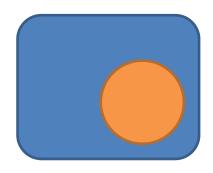
Output Areas which contain new development

267 sites across 664 OAs

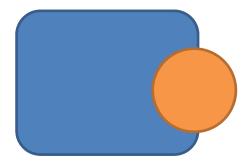




Development/OA overlap

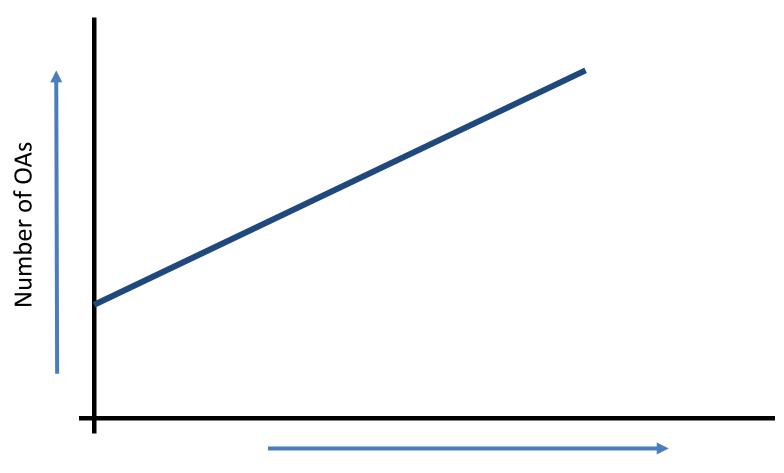


OA sits entirely within development



OA sits partially within development

% of OA that is new development



Decreasing % of OA within new development

Sample Size

- Sample sizes will dictate the way the data can be grouped
- Large sample sizes will mean more geographically specific outputs are possible
- Smaller sample sizes would necessitate larger (sub-regional) groupings

Next steps

Identify household characteristics of each development Categorise sites by location, tenure, bedrooms Create a searchable matrix

Using Local Characteristics data on household characteristics (December)

Future work

- Supplement this dataset with postcode level data on child yield
- Provide London local authorities with lists of new postcodes
- Ask them to return the numbers of children by age in the school census for each postcode
- Create set of yields specifically for children attending state-funded schools

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