Supporting school place planning in London local government

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Greater London Authority

19th September 2018

Greater London Authority (GLA)
City Intelligence Unit

Over 40 staff specialising in:

- Economics

- Demography

- GIS

- Opinion research & polling

- Census

- Crime and safety

Provide support to strategic planners, mayor, local authorities

How we use the NPD

- Current products
  - London schools Atlas
  - School roll projections

- Work in development
  - Analysis of school preferences
  - Projections of pupils with SEND

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Schools Atlas: Overview
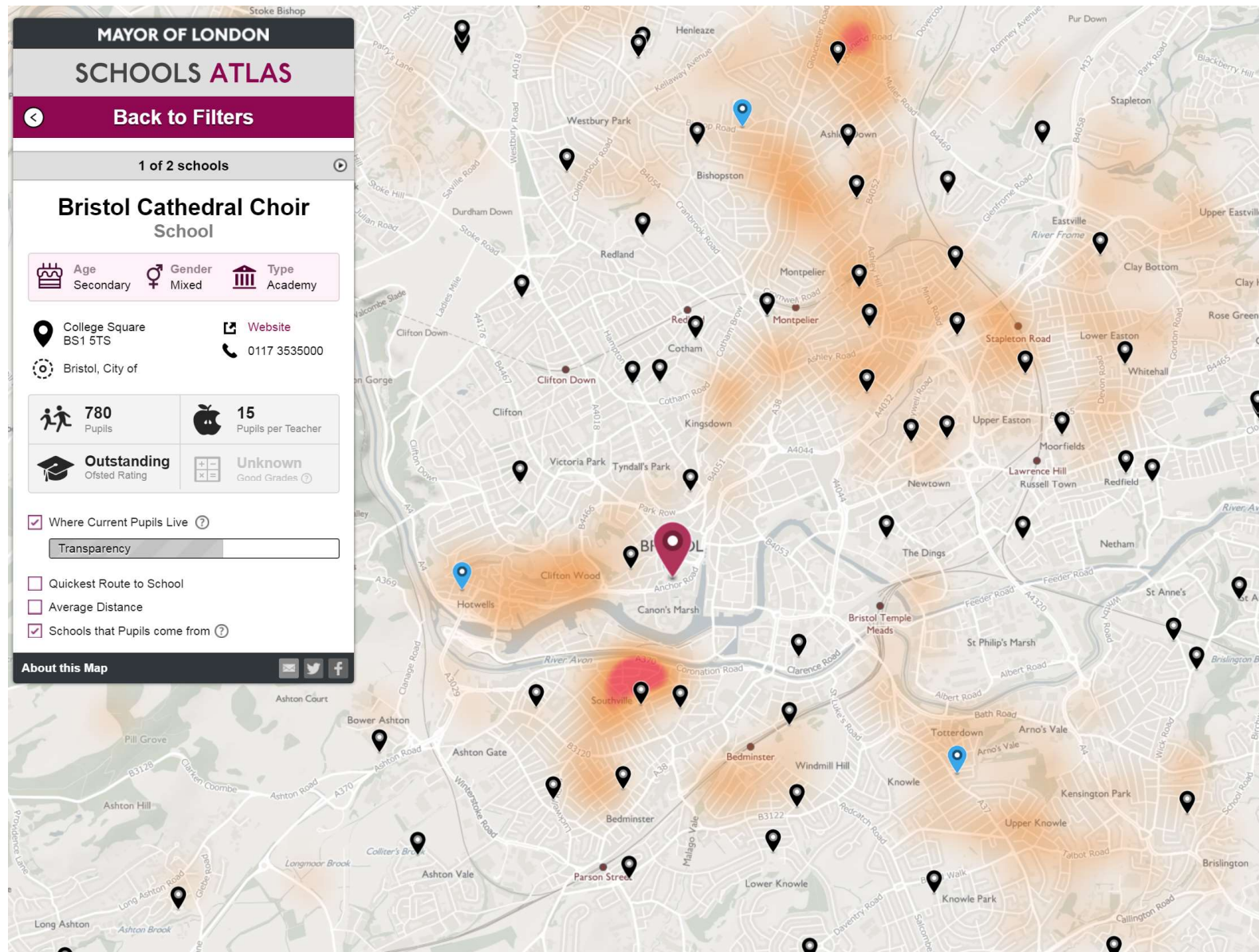
- Open Interactive tool

- Launched in Nov 2013

- Visualises:

  - Pupil flows
    (home <-> school)
  - School flows
    (Primary <-> Secondary)
  - Pupil distance travelled
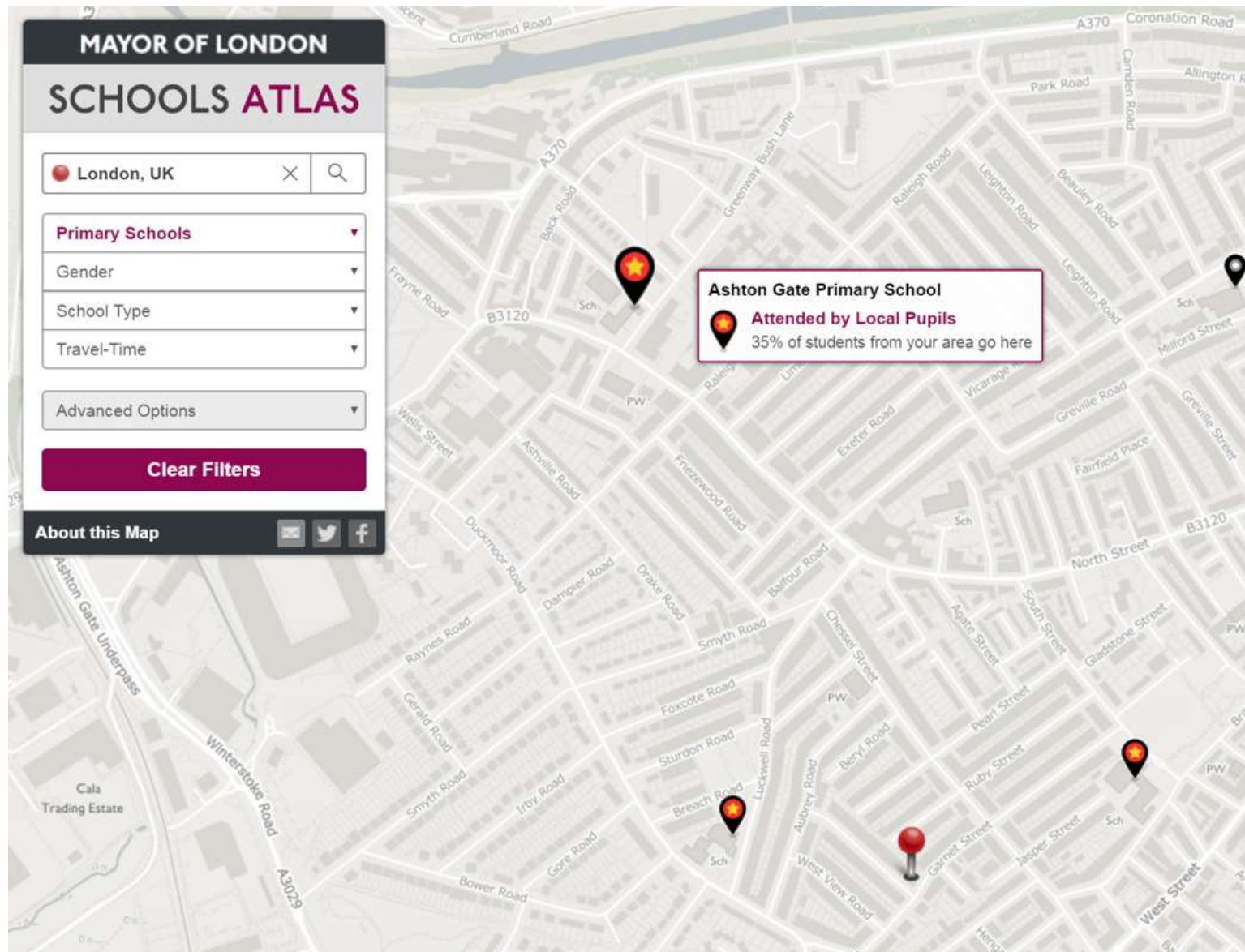 - Travel time
  - School performance

https://maps.london.gov.uk/schools

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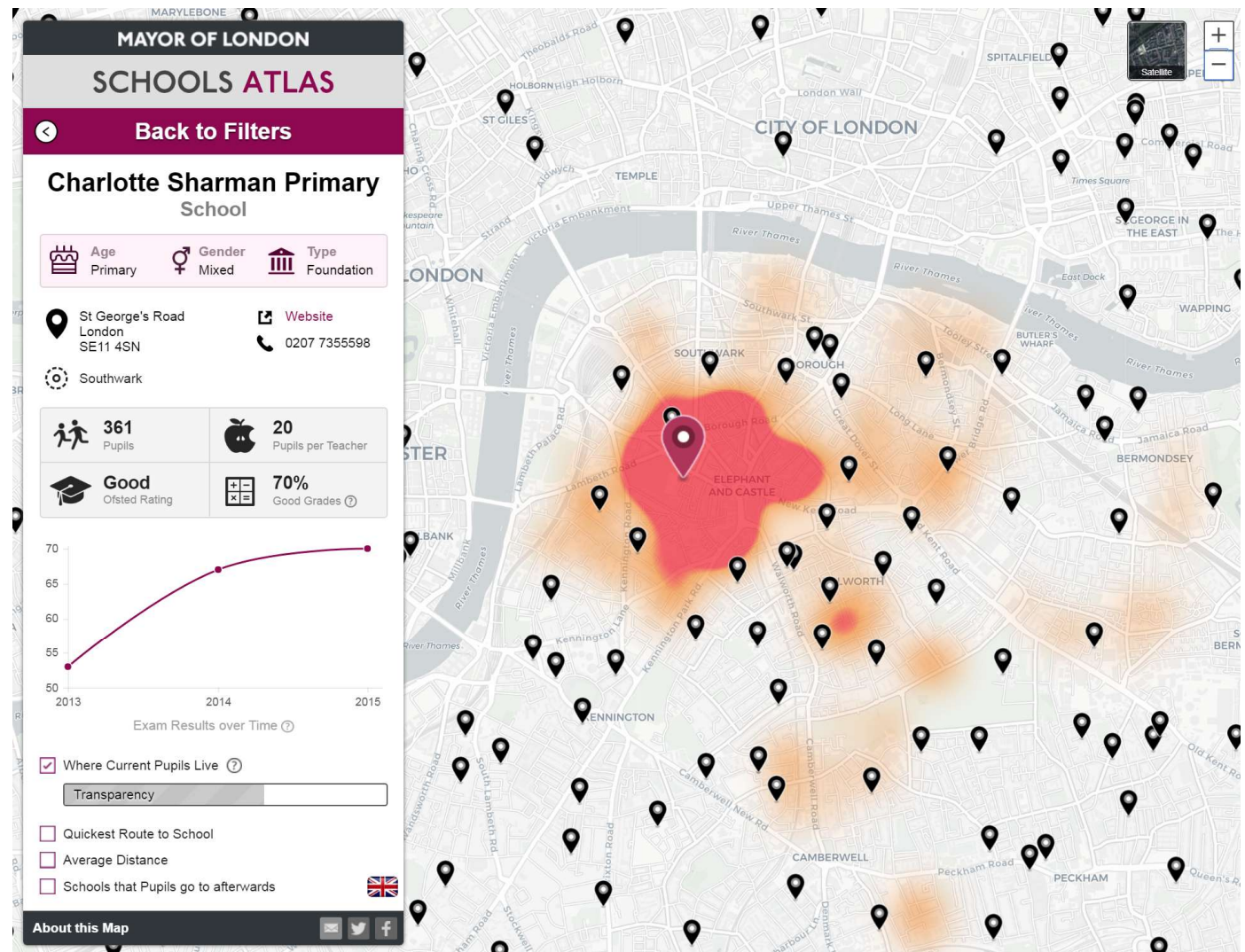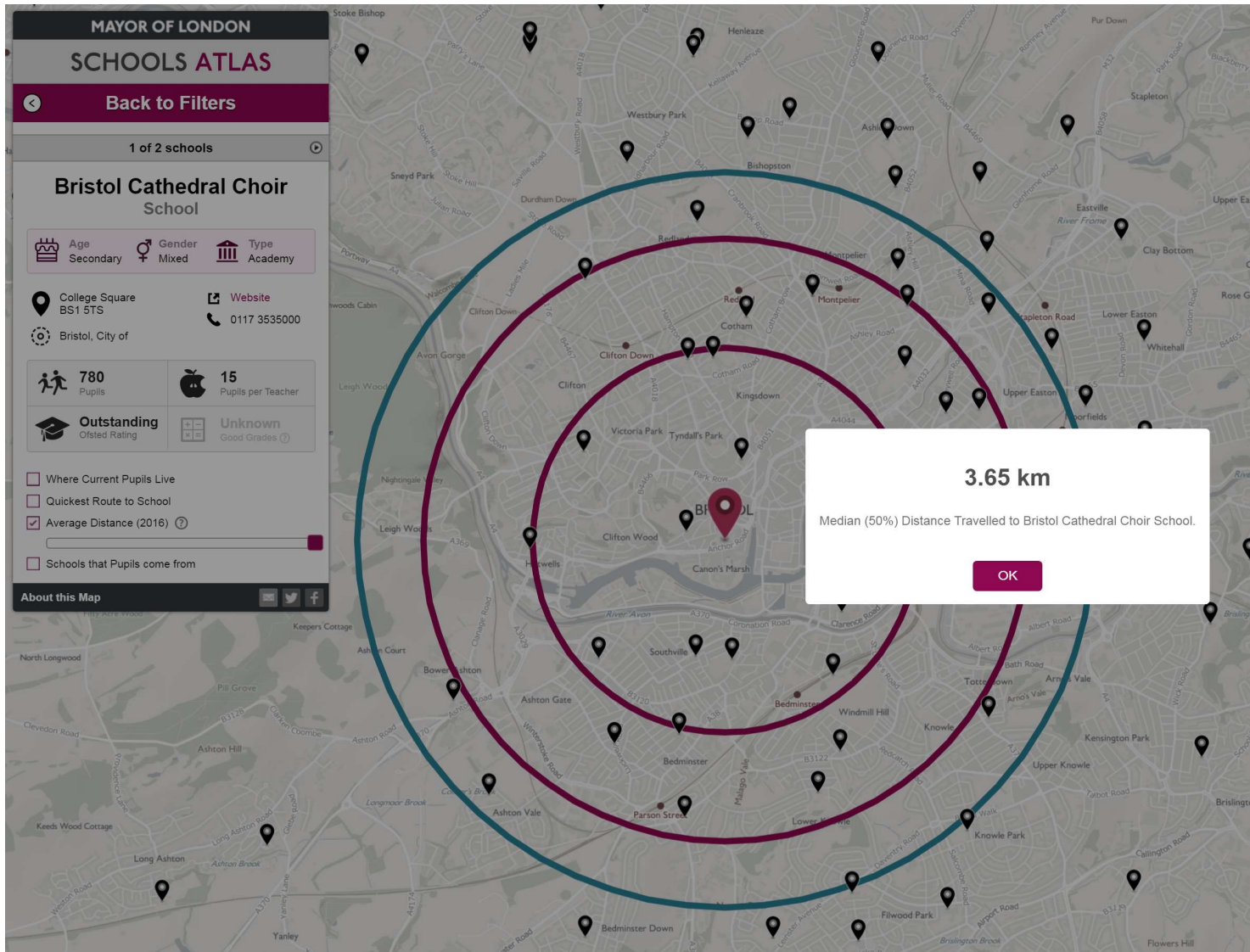
School flows Primary to Secondary
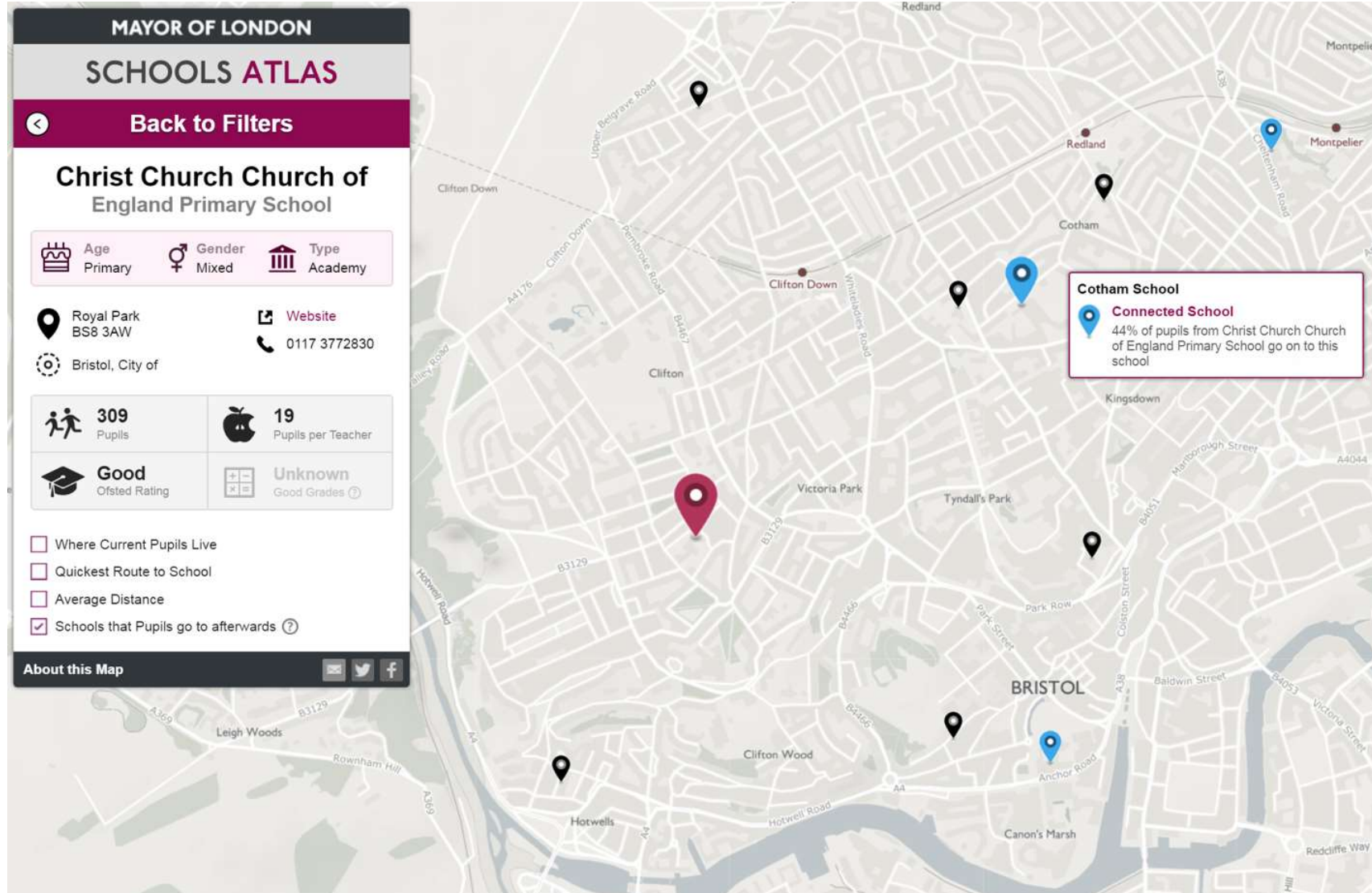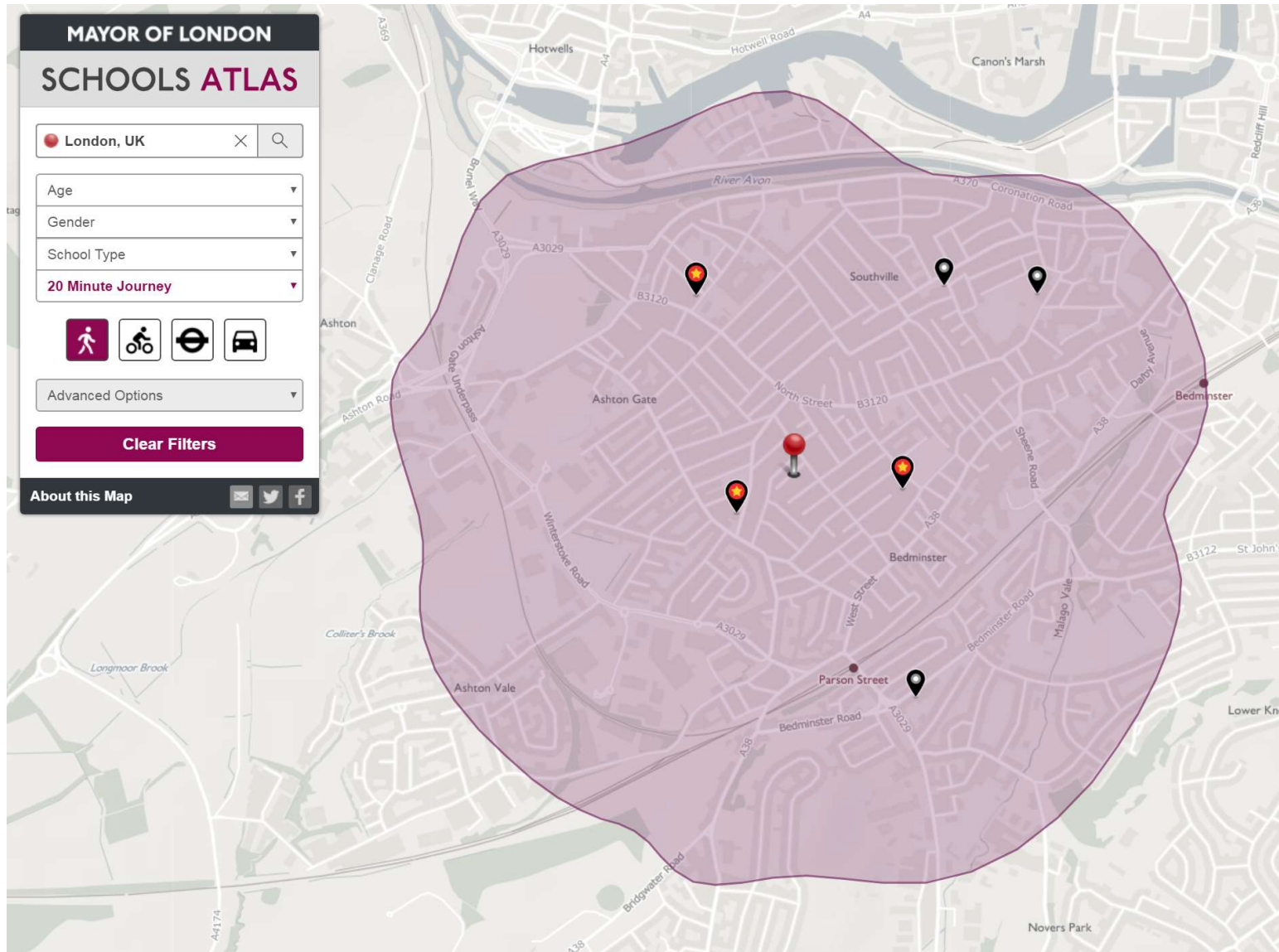
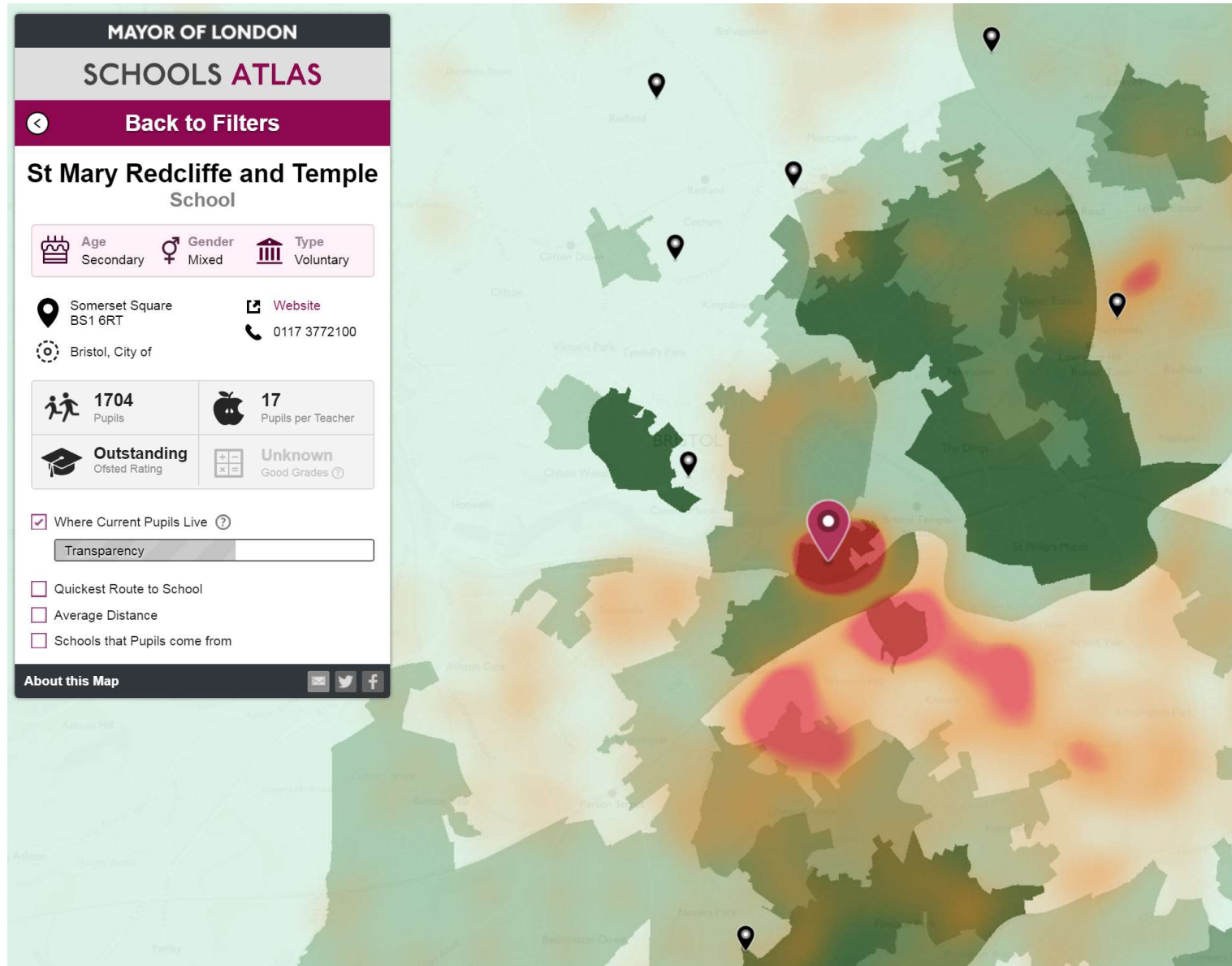# School catchments

Home to school flows

Distance travelled by pupils

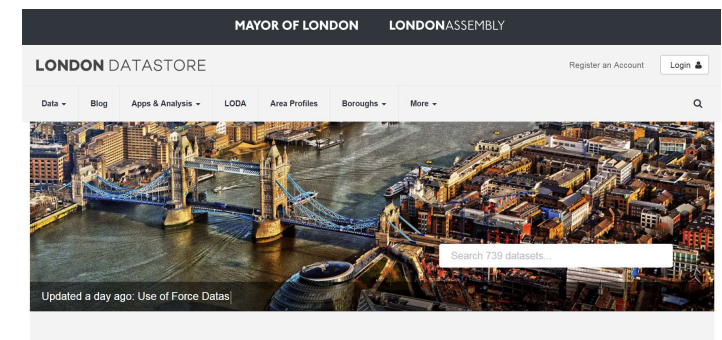# Schools within a 20 minute travel

Combine layers

Technologies/data

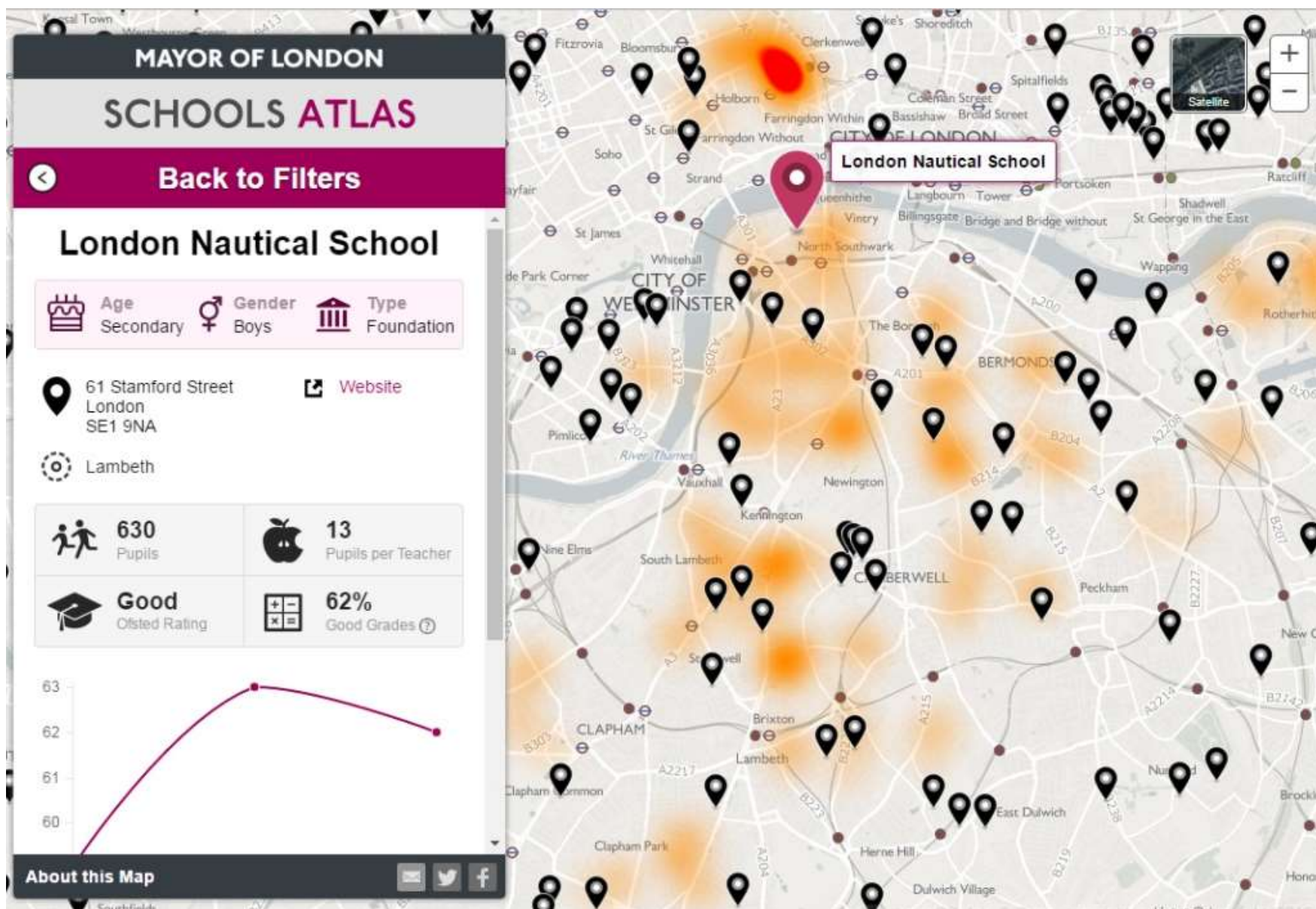- Javascript Web Application

- Built on ESRI ArcGIS API & Travel time API (igeolise)

- Processed in FME

- Storage: PostgreSQL

- Data sources:

  1. NPD   4. GLA Demographic projections

  2. Edubase   5. London Output Area Classification

  3. DfE school performance

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School roll projections

School roll projections products

- Pan London projections
  - Consistent strategic view for policy makers
  - Code and results online (https://data.london.gov.uk/dataset/pan-london-school-place-demand)

- Bespoke borough projections
  - Subscription service
  - Informs SCAP return
  - Allows housing development scenarios

Benefits of using the NPD

- Link to the population projections of the areas where schools draw their pupils
- Complete and consistent data for all areas

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Work flow for producing projections

Work flow for producing projections

Projections work flow

How we'd like to develop the model

Incorporate more data to understand demand and place allocation

- Drivers of parental preference

- School capacity data

- Scenario testing

Preferences data

- More than 81,000 pupils' preferences data (secondary schools, 2014/2015)
- Linked to January 2015 census
  - 56,000 pupils attending first preference (70%)
  - 4,800 pupils attending a school that was not one of their preferences (6%)
  - 3,500 pupils not found in the year 7 census
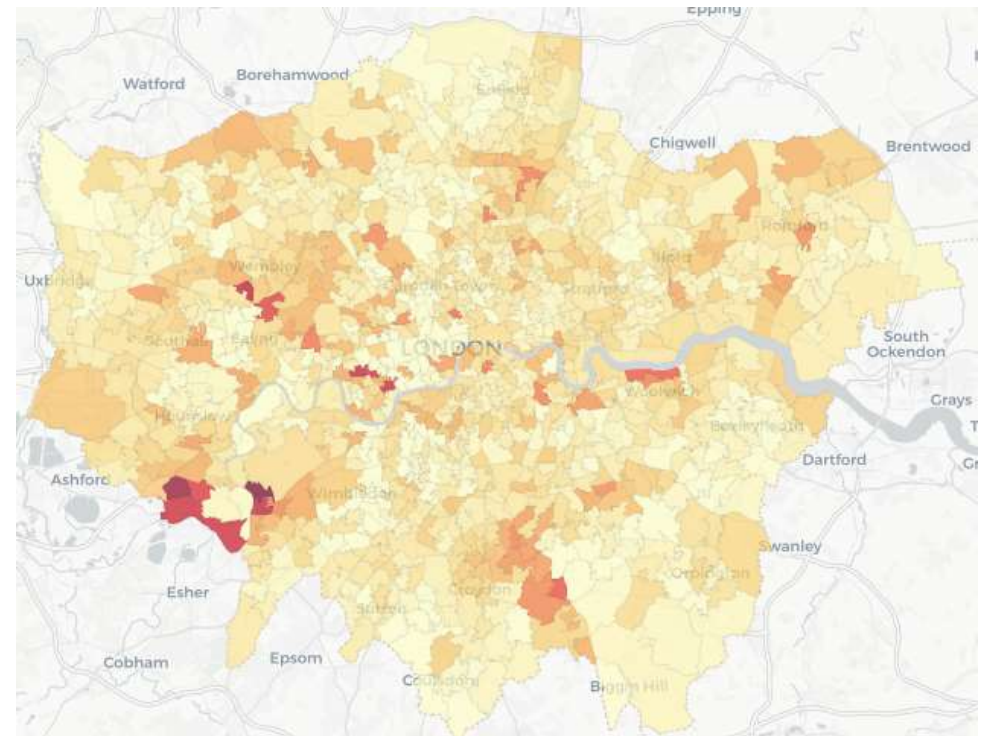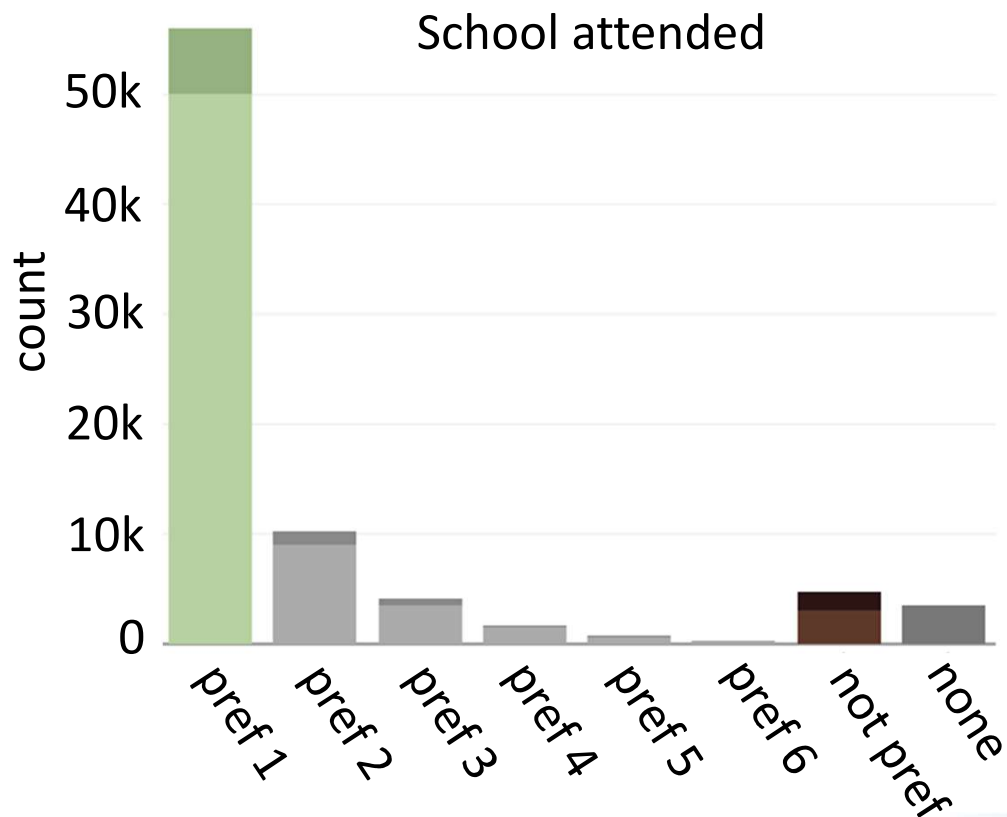
Preferences data - IMD

- Residents in less deprived areas:
  - More likely to get offer for first preference, less likely to get no preferences
  - More likely to be missing from Year 7 (probably private school)

Category	N	Offered 1st pref	Offered no prefs	Not in Yr7	FSM %
Most deprived 10%	6,148	68.4%	4.8%	2.5%	53.7%
IMD 10-20%	16,383	69.0%	4.7%	2.5%	47.8%
IMD 20-30%	14,158	69.3%	4.8%	3.1%	39.1%
IMD 30-40%	10,188	67.4%	4.8%	3.9%	30.9%
IMD 40-50%	7,742	68.6%	4.4%	4.1%	26.1%
IMD 50-60%	6,279	69.9%	4.0%	5.0%	20.5%
IMD 60-70%	4,878	73.1%	3.9%	6.4%	15.9%
IMD 70-80%	4,628	75.5%	2.8%	6.8%	12.3%
IMD 80-90%	4,437	75.7%	2.8%	9.3%	8.5%
Least deprived 10%	2,949	76.2%	2.1%	10.6%	5.2%

In Yr7 Census

<- more deprived | IMD deciles | less deprived ->

Missing from Yr7

<- more deprived | IMD deciles | less deprived ->
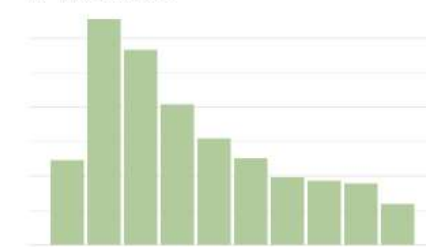
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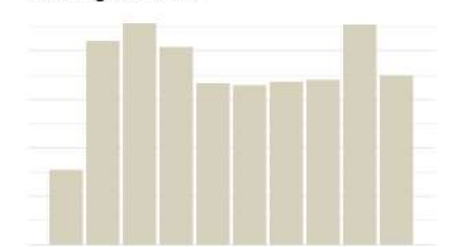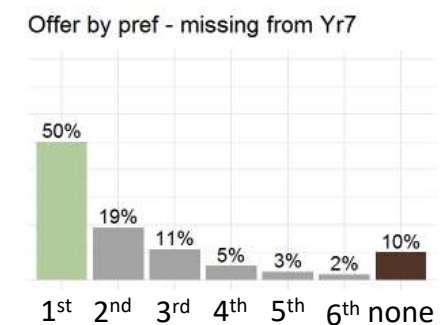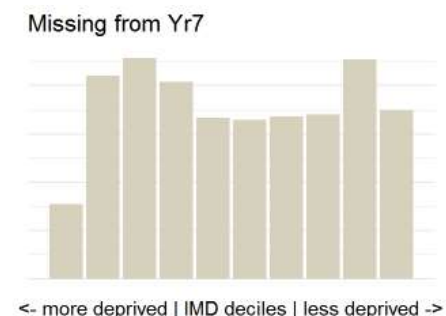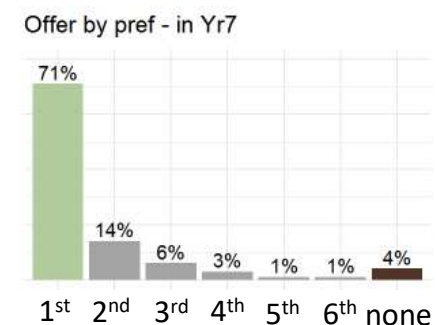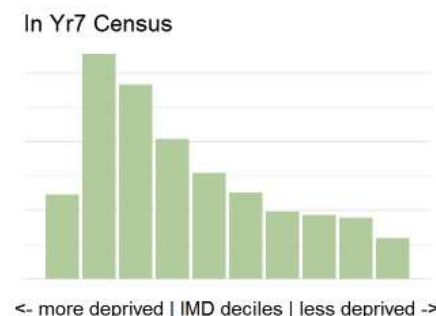 - More likely to be missing from Year 7 (probably private school)

- Pupils not offered first preference more likely to be missing from year 7

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In Yr7 Census

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Missing from Yr7

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Offer by pref - in Yr7

71% 14% 6% 3% 1% 1% 4%

1st 2nd 3rd 4th 5th 6th none

Offer by pref - missing from Yr7

50% 19% 11% 5% 3% 2% 10%

1st 2nd 3rd 4th 5th 6th none

Projections of pupils with Special Educational Needs

- ~ 15 % of pupils have some form of SEND

- Statutory duty to ensure suitable school places

- Vulnerable pupils

- Cost

- Consistent pan-London picture to support planning

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Data categories

- **Primary need type (+ Secondary need type)**
  - ASD = Autistic Spectrum Disorder
  - SEMH(/BESD) = Social, emotional and mental health
  - MLD = Moderate Learning Difficulty
  - SLCN = Speech, Language and Communication Needs
  - SPLD = Specific Learning Difficulty
  - SLD = Severe Learning Difficulty
  - PMLD = Profound & Multiple Learning Difficulty
  - HI = Hearing Impairment
  - VI = Visual Impairment
  - MSI = Multi-Sensory Impairment
  - PD = Physical Disability
  - OTH = Other Difficulty/Disability
  - NSA = SEN support but no specialist assessment of type of need (from 2014/15)

- **Need level**
  - EHC plan (statement)
  - SEN support (school action/plus)

- **Setting**
  - Mainstream
  - Resourced Provision
  - SEN unit
  - Special school

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% of resident pupil population with SEND
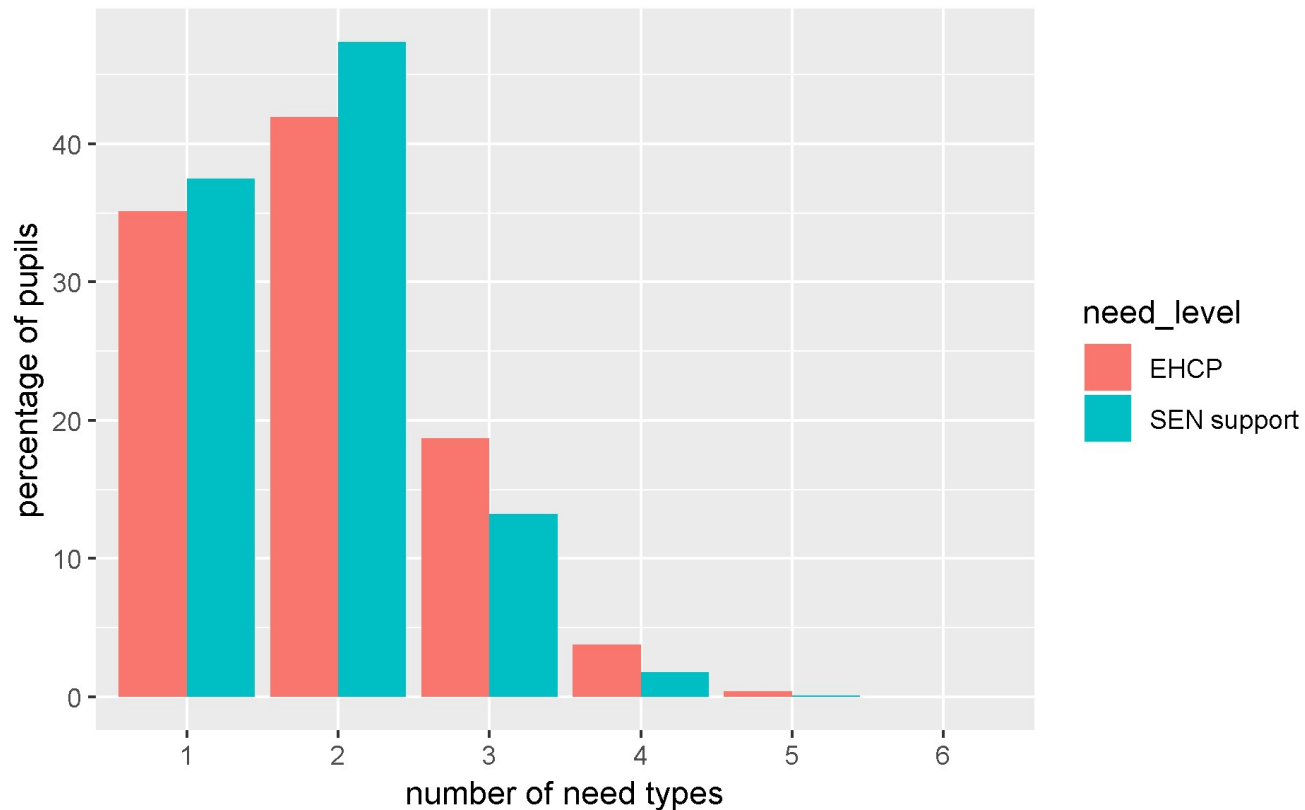

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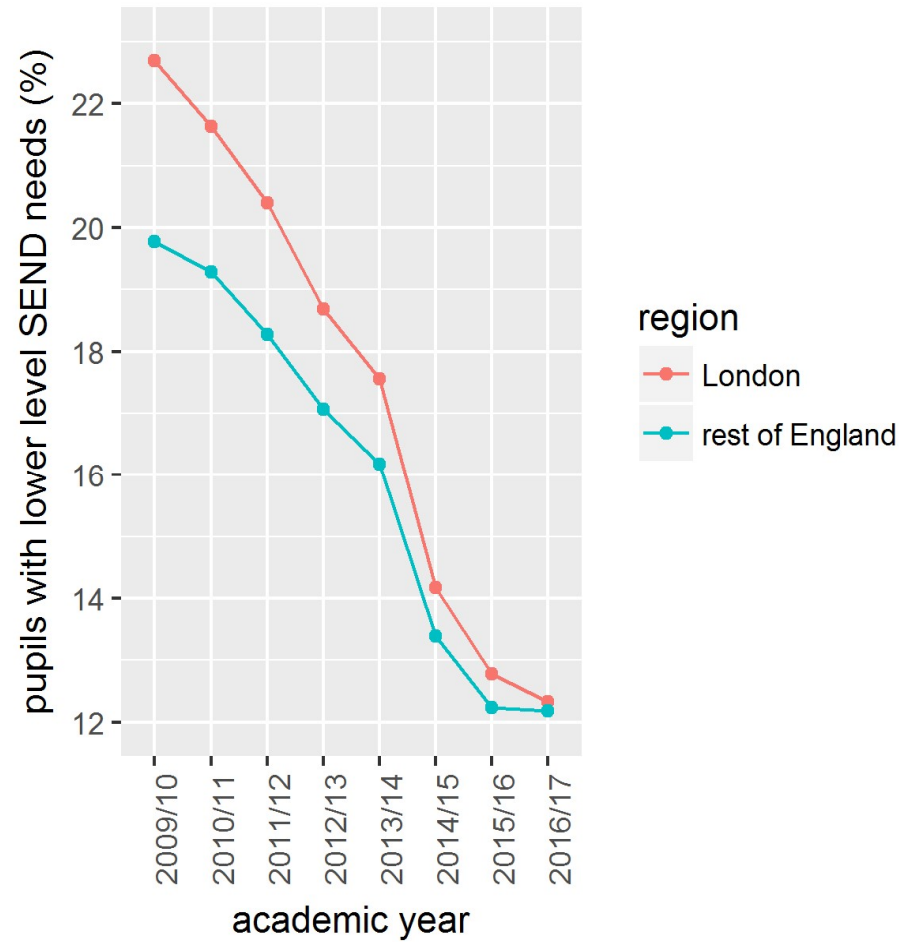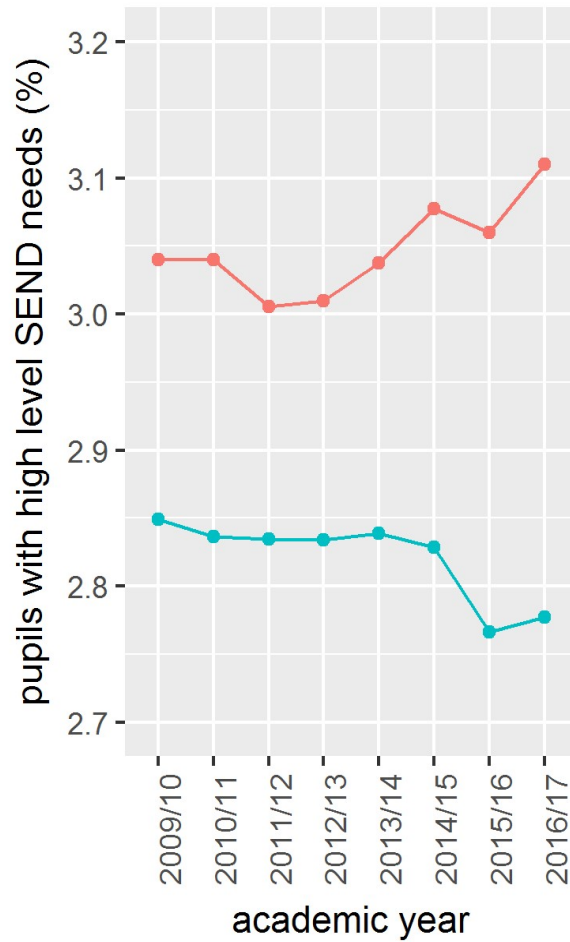
# London vs rest of England resident pupils with EHC plans
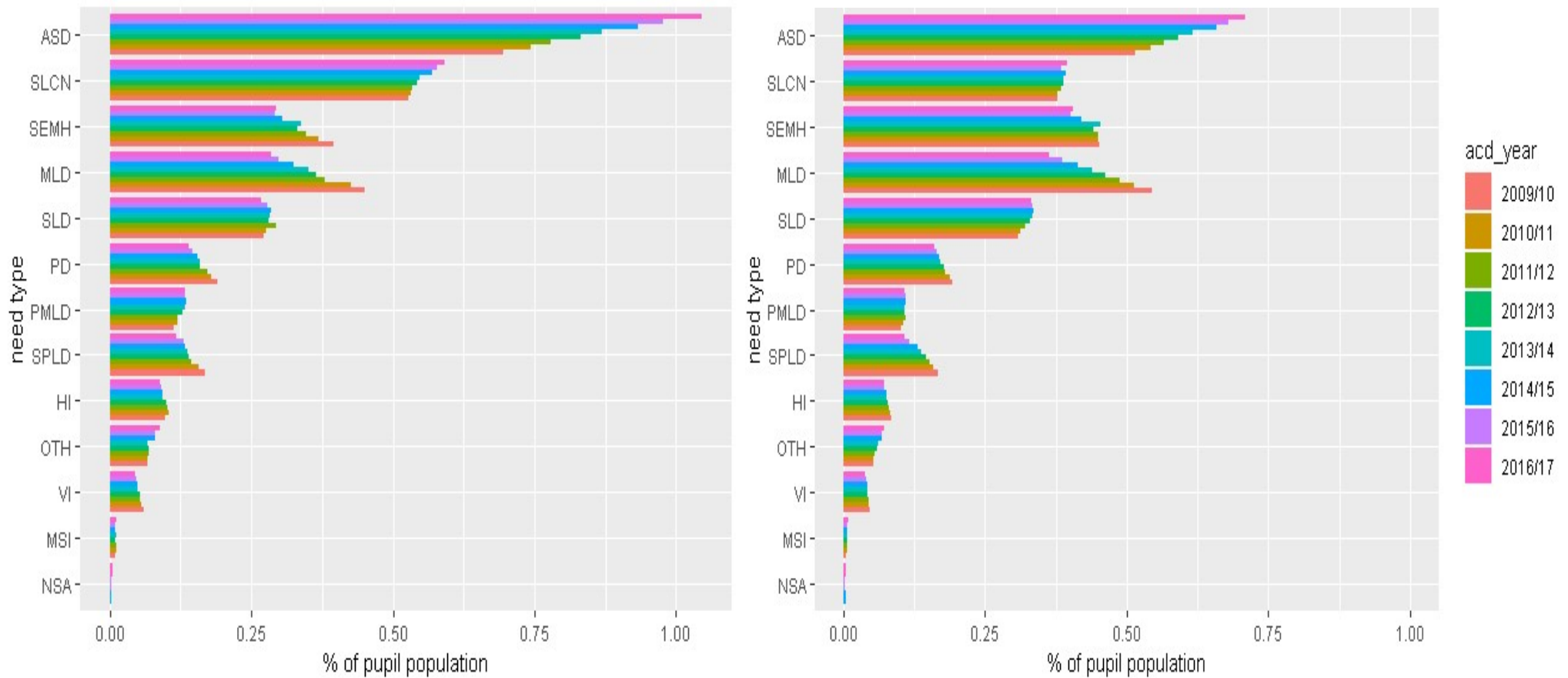
Data issues and complexities

- Diagnosis/provision, not underlying need
  - Thresholds for EHC plans
  - Depends on setting
  - Recording of need types not always accurate
- EHC plans cover a broad range of need levels
- Multiple/changing needs
- 2014 reforms

Changing need types of individual pupils

For pupils present in all 8 years of our data who have a SEND need at any point in those 8 years and who have lived in London at any point.

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Speech, Language and Communication Needs
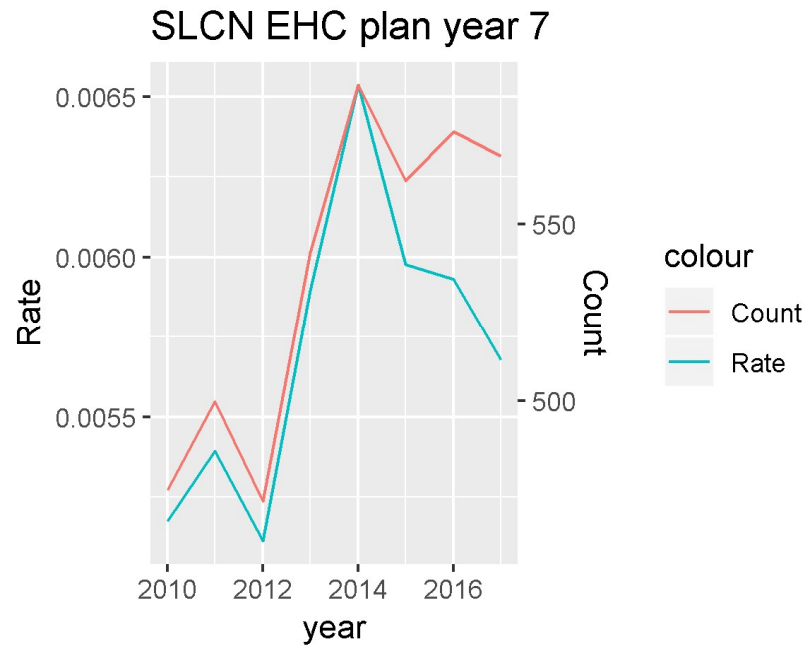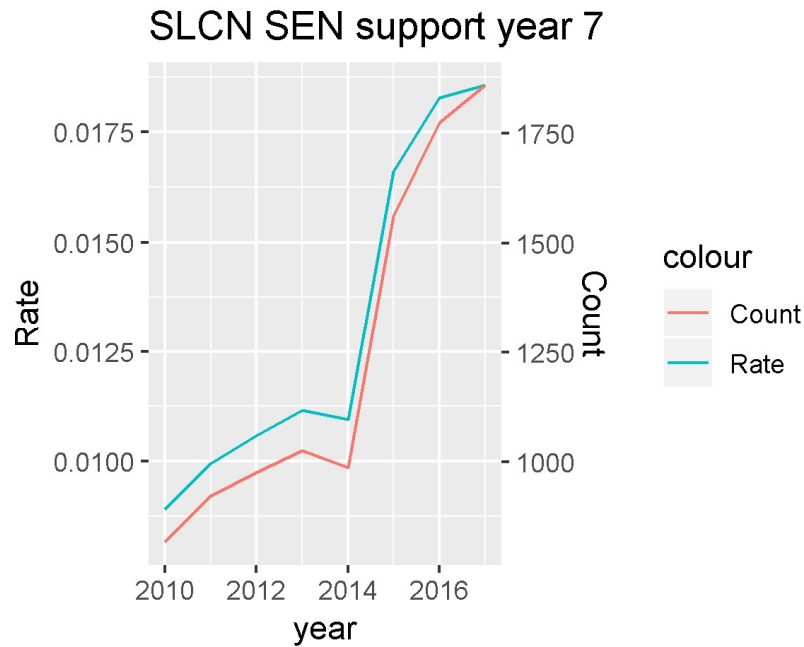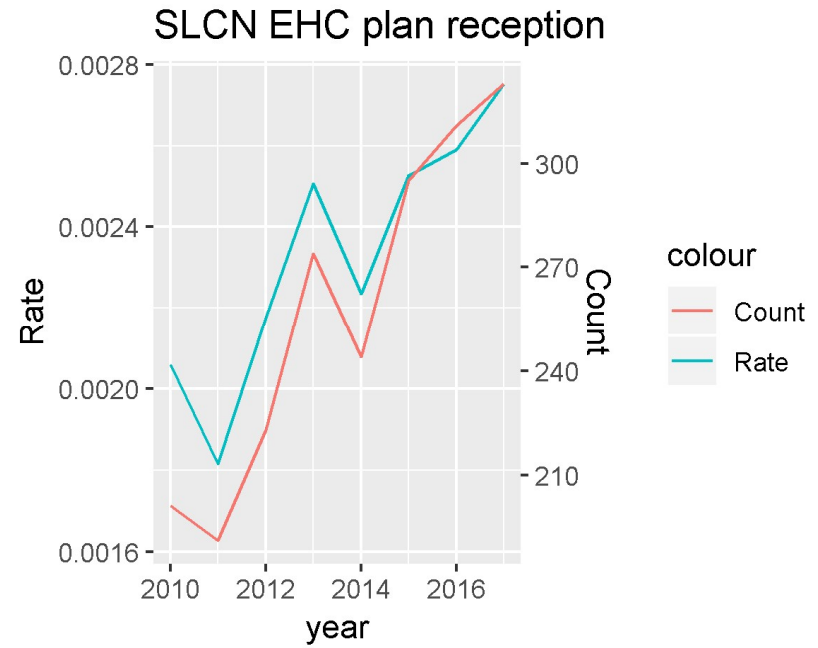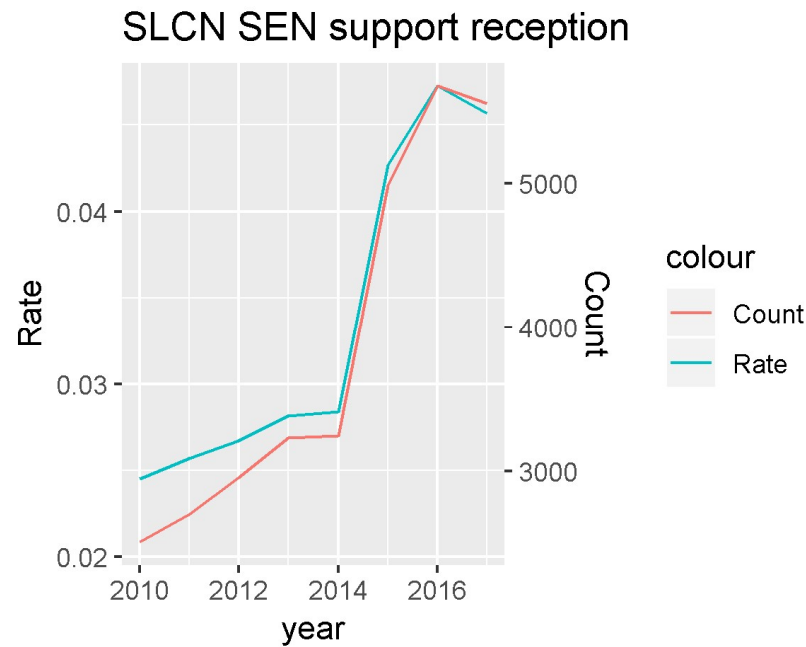
Initial projection approach

- Calculate new intake at R and year 7 as a percentage of the population

- Use transition rates in the interim years

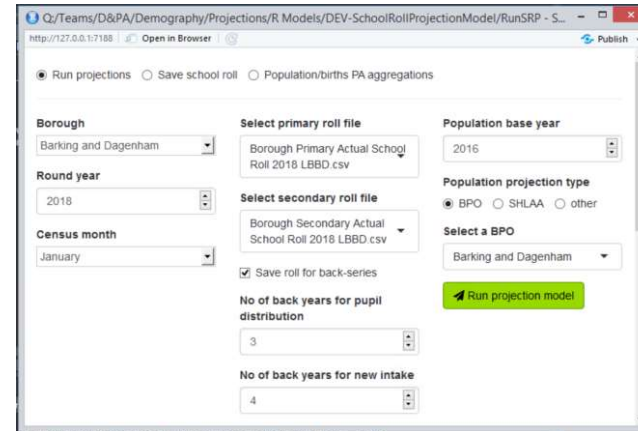- Where there are small numbers, use relationships derived from London level, applied to borough level numbers

Results

- Not yet published
- Working with boroughs to finalise methodology
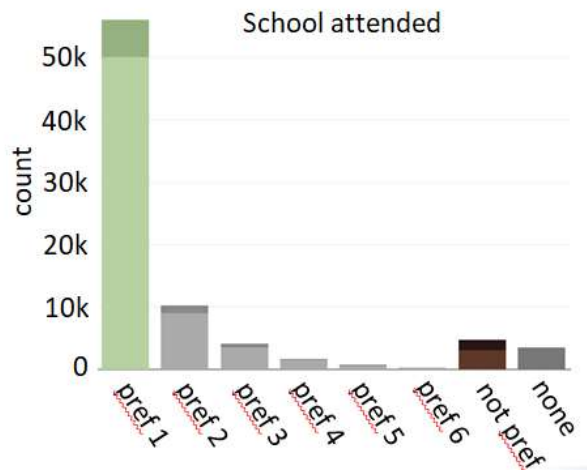- Identified need for supporting analysis
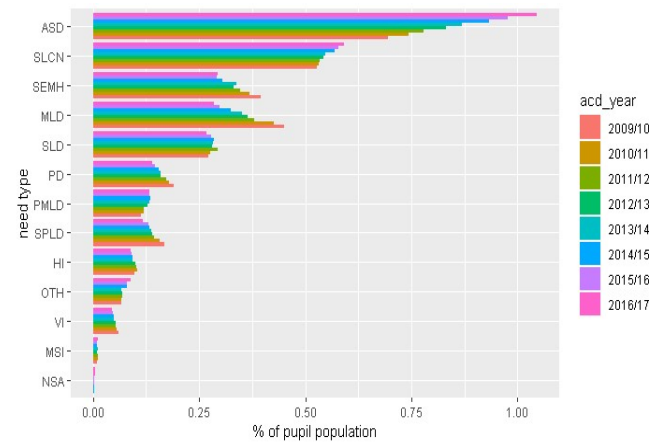
Questions?
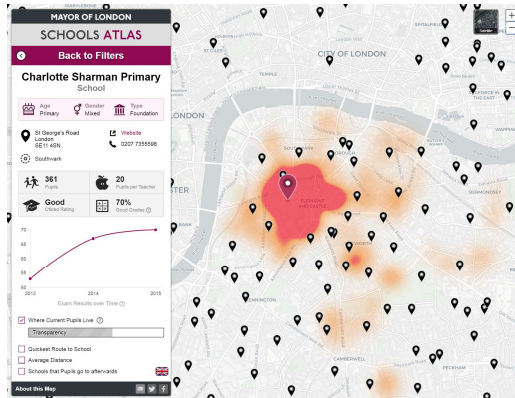
London Schools Atlas

School roll projections

Pupil preferences

SEND projections

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