Notes for Presentation – School Admissions Project LIDA

* Project funded by the DfE looking at school admissions data
* 33 figures on the board, this is a potential class of y6 students ready to enter secondary school
* In England 80% will go to a school rated good or outstanding by ofsted, the remaining 20% will go to a school rated below this (Requires Improvement or Inadequate)
* In Bradford the number going to a good or higher school falls to 55%
* For Free School Meals pupils in Bradford (those most disadvantaged) this falls again to just 44%
* Improving educational standards is the clear priority here however it does raise questions about the role of the school admissions process in giving different pupil groups access to Good schools
* To familiarise those who don’t have experience with the school application process:
  + Parents apply to up to 5 schools stating their preferences
  + Schools rank students that have applied according to their oversubscription criteria
  + Algorithm accepts students to their top preference school they got in to
  + Those not accepted to any preference school are assigned their closest school with available places
* Three intersecting things that might affect different student groups accessing good schools
  + Geography – where the schools physically are
  + Parent’s school preference
  + Schools’ selection criteria
* Starting with **geography :**
  + Bradford is the 13th most deprived local authority in England, however, there are also some wealthy areas.
  + Map demonstrates this – coloured by Index of Multiple Deprivation (red = high deprivation, green = low)
* Within areas with inequality there is a well-researched phenomena of **selection by mortgage** 
  + In areas where schools do well, house prices increase in that area and less wealthy families are priced out – preventing them from accessing these schools
* In Bradford this may be the case in some areas – e.g. Ilkley and Keighley
* However what is interesting about Bradford is some of its best performing schools are in very deprived areas in the city centre.
* Question following this is what role does **parental preference play**?
* Previous research has shown that there are barriers to lower income families applying to good schools
  + Cannot afford bus fair
  + Working hours/ single parent prevent driving children to school
  + Middle class parents do more research (Sutton Trust)
  + Well established routes between primary and secondary schools
* All this may be the case but we do know that a high proportion of children don’t receive an offer from any of their preference schools
* Working with preference data at the moment to see if this is more prevalent in certain areas/ amongst certain groups than others
* Next we move onto **school selection criteria** – this is the key emphasis of my project as it is something policy makers have most control over and is researched the least.
* Three groups of school selection criteria in Bradford
  + Those that select by distance/catchment area
  + Those that select by religion
  + Those that select by fair banding
  + Fair Banding is the one that is the most complicated but – all children applying to fair banding schools must sit a test
  + They are then broken up into ability bands and a proportional number is accepted per band
  + Works well in London – checks all school intakes ability is similar
  + But in situation when only some schools are using it there is the potential that if applicants are wealthier and higher ability (aspirational parents) and lower income and lower ability students are put off applying due to test, this could skew the intake like this (higher ability on a whole)
* Question of whether this is happening in Bradford?
* “How does a school’s selection criteria effect the demographic of its intake **but also the intake of the schools around it**?”
* To address thus using **spatial interaction models**
* SIMs are used to predict the flows of people (or good/services) moving between two locations.
* Known as a gravity model - flows are a function of the origin, destination and distance between them
* In my model the origins are LSOAs, destinations are schools – lsoas have IMD attached so can link this
* Closer look at the SIM
* I’m using Wilson (1971) doubly constrained model so the number of students from each lsoa is conserved as is the number of students attending each school to make it realistic
* Outcome of SIM is simulated data which predicts flows according to distance
* This can then be compared to real flows
* For example this is the flows of Born in Bradford students from primary to secondary school
  + Already you can see unusual flows e.g. long distances between catholic primary and secondary schools
* By comparing SIM and real results we can quantify this difference and identify which flows are unusual and if they differ depending on school type. – And especially if they differ according to the IMD of the origin zone.
* Summary
  + Hopefully this will have given you some understanding of the school admissions process in Bradford and the potential issues with it and how modelling can help us understand these issues.
  + But more to come and hopefully the outcomes of running these models will be really interesting.