Cedar Rapids Buyouts

Background

- Cedar Rapids experienced severe flooding in June 2008
- Recovery included a federally-funded land acquisition program
  - Idea is to buyout homeowners in flood-prone areas (ie, near Cedar River)
  - Program is *voluntary*
  - Eligibility depends on federal grant (HMGP, CDBG), flood exposure, and benefit-cost ratio Tate et al. (2015)
    * **TODO**: Determine eligiility in the data (currently assuming flooded == eligible)
- Based on federal grant and hazard exposure, about 1300 properties acquired under one of three designations:
  - Construction Area
  - Greenway Area
  - Neighborhood Revitalization Area
- Properties were acquired over the period 2009-2014
  - Many properties acquired under condition there will be no future reconstruction (hence reducing future hazard exposure)
  - [TODO] Check restrictions on how long homeowner can stay *if they reject buyout*

Research questions

1. Conditional on eligibility, what drives decision to accept buyout or not?
2. Conditional on accepting, where do owners go?
   - In particular, do people stay in Cedar Rapids or not? Why?
3. Conditional on not accepting, how long do owners stay?
4. Conditional on accepting/not accepting buyout, what is value of owner's property in 2016 (relative to pre-flood)?
   - Are people who receive buyout better off or worse off (in terms of property value), relative to pre-flood value? people who reject buyout?

Data

- `buyouts.csv`: list of *eligible* properties (assuming flooded == eligible), including buyout status, buyout amount (if buyout status = 1), buyout area, and annual assessor data
- Assessor data for Cedar Rapids and Linn County, 2007-2016: parcel-level data including address, owner, land value, building value

- GIS data - parcels (I've matched to assessor data) - boundaries - 2008 flood extent - flooded parcels, including buyout area designation

Immediate tasks

The immediate goal is to identify properties and their owners *across time*, to see who got a buyout and where they went

See `docs/tasks.pdf`