Elana and Sohair worked on GIS

* Found 1991 county information. Too old?
  + State FIPs
  + County FIPs
  + Name of county
  + Number 1 or 2—in state or out of state
  + Adjacent counties with state and county FIPs, whether they’re in the same or a different state
  + Actually contiguous = A
  + Connected by road = B
  + Etc.
* Looks different when you open it in Excel—hierarchical data
* Put it into GIS, calculated centroids
* Fay can teach us to work smarter, not harder
* Need population—embedded in innovation index
* Elana and Sohair have area
* Need to weight things somehow
* Rings, Sohair’s lit review on quantifying spillovers
  + Accessibility to markets—impedance function measuring cost of travel
  + Index of accessibility
  + This stuff isn’t available in the US
  + R&D expenditures recorded in neighboring regions weighted by inverse of bilateral distances—distance decay
  + Variables weighted by geographical distance
  + Mobility—labor mobility came up in readings. Should we go there?
  + Geographic boundaries?
  + Also a weight driven by density—if you’re more dense there are more people chatting on the subway
    - Hicks-neutral: optimal capital to labor ratio is not changing as you have productivity growth
  + Do we want density and distance in the same measure?
  + Distinguishing between local and non-local innovations
  + Telecommunications??? Broadband lines laid down? In innovation index
  + CC’S advisor’s paper—using rings to measure spillovers
  + “No knowledge spillovers beyond 80-110 km”

April and employment specialization

* Found data, but in fragments
* Integrated public use microdata samples (IPUMS) at University of Indiana
* Found two different specialization measures
  + Krugman—counties that are the same as everyone else are 0, different is 2
  + Herfindahl—the standard is uniform shares, how specialized are you?
  + And then there’s more variations
  + Use both? Not at the same time.
* Paula found 19 industries, but that can be changed
  + If you have lots of industries, average employment share will be little
  + If you have few, average employment share will be big
* Are we going to have something for each year, or just 2000? Panel or cross section?
  + Cross section means we want wide data
  + Panel means we want long data

Libby and income

* Found median even though per capita is the standard—find per capita
* In long data, we need a record for each year (balanced panel)
  + Clifton Forge
  + Kalawao
* Supposed to have data for 3142 counties over the 10 years
* Next week: find population, find per capita

Next steps:

* Get innovation index data (Sohair)
* Compute the d weights—get a file 3142 counties long and d1, d2, etc weights (Sohair and Elana)
* Continue to think about rings
* Get per capita income and population (Libby)
* Employment specialization (April)
* Educational attainment (Libby)—may get more detail than I want
* Googling distance between centroids to get travel time and road distance? (Sohair, Elana, and the guy at the map room)
* Physical infrastructure
* Anything else? Look at other papers
* Craft an email telling them what we have, and asking for, if they have it or if they have a recommendation of where to go:
  + Per capita
  + Innovation index
  + Income
  + Employment
  + Educational attainment
  + Physical infrastructure

Definitions:

* Panel – we have it for every year
* Cross sectional – we have one for all years