Introduction

- Real property taxes are locally administered and collected

- State has oversight role to insure value equalization and to assist in calculating effective tax rates

- No parcel level data is captured or reported at the state level, other than when a property transfers owners
Introduction

- Ohio has three real property relief programs that are paid for through state reimbursements to schools and local governments.
- The 10% rollback reduces every property tax bill (except for business property) and the 2.5% rollback does the same for all owner-occupied homes.

Introduction

- The homestead exemption program gives relief to elderly and disabled taxpayers.
- Historically, the homestead exemption has applied only to low income homeowners.
- The most current state budget extended the relief to all elderly and disabled homeowners.
Introduction

- Every legislative session we have seen proposals to expand the homestead exemption program, to cap property taxes paid by the elderly, to means test or cap the 2.5% credit, or to implement a circuit breaker program.

- This gave us the need to create some kind of tool to estimate such proposals.

- This was particularly important this budget as the administration developed the expanded homestead program because we were working with a fixed dollar amount to spend.
Data Collection

- While no parcel data is collected at the state level, most counties have parcel based GIS

- Depending on the county, there are varying abilities to extract all the underlying data into a single portable database

Data Collection

- I collected detailed parcel data for 7 of our 88 counties
  - cross section of urban, rural, and suburban counties

- This gave me real property values to work with, but I still needed matching income data since many of the proposals we see are income restricted
Data Collection

- The key was then to merge the parcel data with income data from our income tax returns
- Unfortunately, the real property data files do not contain the property owners’ SSN
- So I did a series of address merges to combine the datasets

Data Collection

- For parcels where the county data showed the homeowner claimed the homestead exemption, but no income tax return was present because the income was too low, I imputed the income based on the value of the homestead exemption
  - Example: if the homeowner claimed the homestead exemption in lowest of three income brackets, I assigned an income equal to the mid-point of the income range for the lowest bracket
Data Collection

- This process left me with about 470,000 owner-occupied properties for which I had both income and valuation information (out of about 3.1 million statewide).

- The next step was to take the 470,000 matches and make them look like the population as a whole.

Representing the Population

- From the 2000 Census, I obtained a cross-tab of income and property values for both all owner-occupied homes in Ohio and for owner-occupied homes where the homeowner was age 65 and over.

- Two-stage process:
  - Using the two Census tables, I assigned weights to each record for the purpose of blowing up the 470,000 record sample to the whole population of homeowners.
  - I then flagged within each cross-tab cell the correct number of records to insure that when blown up to the population, I accounted properly for the 65 and over group.
Representing the Population

- At this point I had a dataset that represented the statewide allocation of properties.

- However, I did not want to have to use an average statewide property tax rate and I wanted to be able to do analysis at a sub-state level.

Representing the Population

- Since we have good income tax related information at the school district level, I was able to allocate the 470,000 sample records among Ohio’s 614 school districts.

- This was done in two steps, the first allocating records with incomes under $50,000 and the second allocating those over $50,000.
I was most interested in properly allocating the senior population
  - Ohio has a senior citizen tax credit that allows us to easily identify senior citizen income tax filers
  - I used relative shares of income tax senior citizen credits (school district/state) to allocate records with incomes below $50,000 to school districts

For taxpayers with over $50,000 income, I allocated records to school districts using the share of income tax returns with incomes above $50,000 in each school relative to such returns statewide
  - Using this allocation procedure for simulating property tax burdens assumes there is a strong correlation between home values and income regardless of other economic factors within a school district
Representing the Population

- With each record now assigned to a school district, I could use the property tax rate in each school district to estimate property taxes and costs of the various property tax relief programs at both the state and local levels.

Simulating Existing Programs and Proposed Changes

- The final step in the estimation process was building a SAS simulator.
- The simulator estimates the current costs of property tax relief programs as well as allows for simulation of proposed expansions (or contractions) to the programs.
Simulating Existing Programs and Proposed Changes

- The simulation results include statewide estimates of cost, number of beneficiaries, and average change in benefits.
- The simulation results also show these impacts by school district.