

Discussion: Fraenkel's "Property Tax Induced Mobility and Redistribution"

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Research Question & Approach

- Do property tax bills induce homeowner mobility?
 - Use predicted values from first stage RF regression of out-of-sample housing prices to predict assessed values as instrument for actual property assessment
 - Relative tax share change from property reassessment induced by plausibly exogenous market factors in the assessed value
 - Increased tax share → higher probability of sale
 - No effect on foreclosure (placebo test)

The paper is great!

- Nice link of theory to empirical tests
- Novel approach for tackling classic/important question for plausible endogeneity of within school district neighborhood effects



The Pickerington Board of Education recently issued a position statement calling for a limit to new residential development in the school district. The board recommended a density of two units or fewer per acre...

The population of Columbus residents in the Pickerington school district grew tenfold between 1990 and 2000. ...

Zoning in some of these developments [in the city of Columbus but in the Pickerington schools] allows densities as high as 8.8 units per acre. The district simply cannot support the influx of new students that this density represents.

~Columbus Dispatch, 2010



Ohio as Case Study

The Part with Too Many Maps

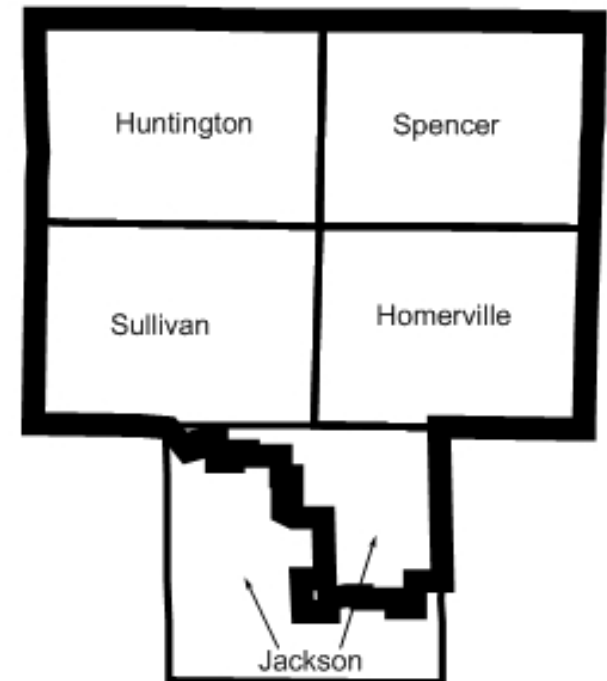
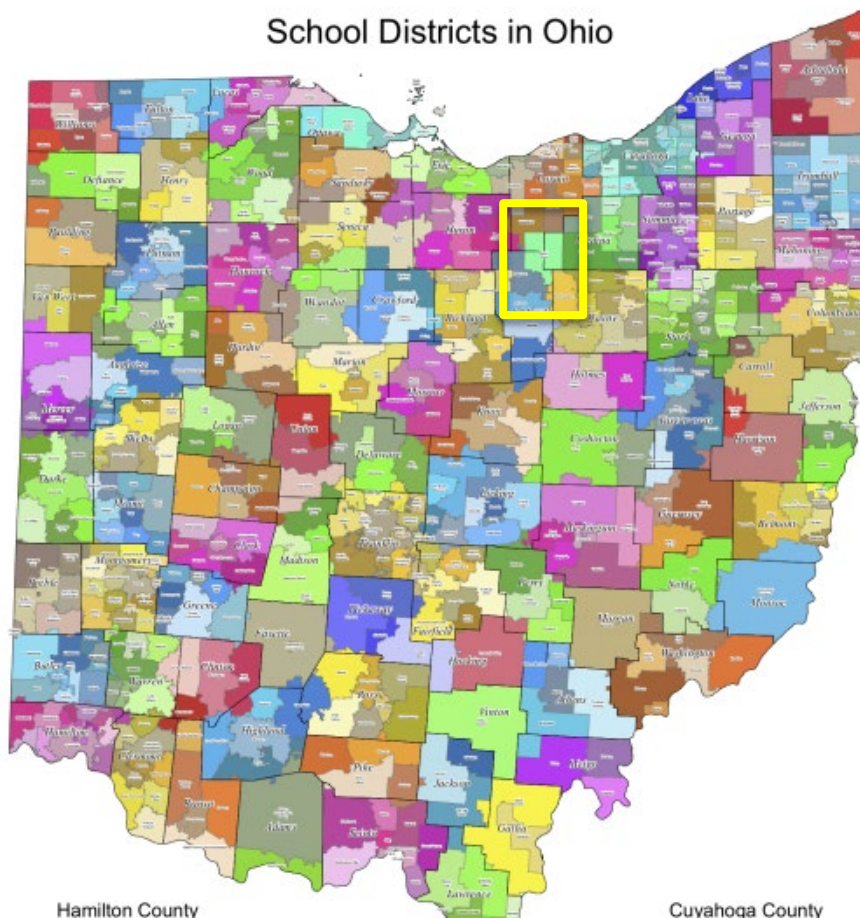


Ohio as a Case Study

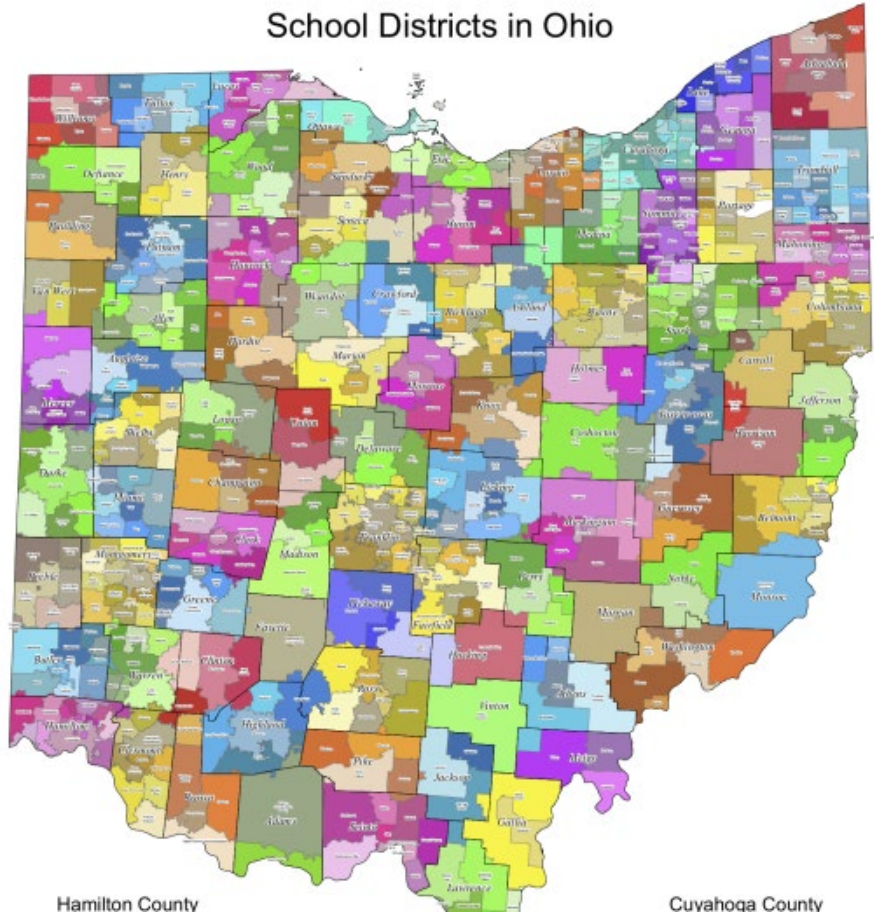
- Strong home rule state
- Uses the Classic American Property Tax System Design
 - “Outside Mills” is just the residual rule, the rate is whatever rate needed to produce desired revenues.
- Counties
 - Like most non-Southern states, mostly just handle coordination of general public administration like property assessment
- Assessors (“Auditors”)
 - Like majority of states they are elected (not appointed) at the county level
- School Districts have Income Taxes
 - 30% of school district revenue is derived from school income taxes
- Lots of overlapping, non-contiguous boundaries!!
- Schools have some influence on zoning



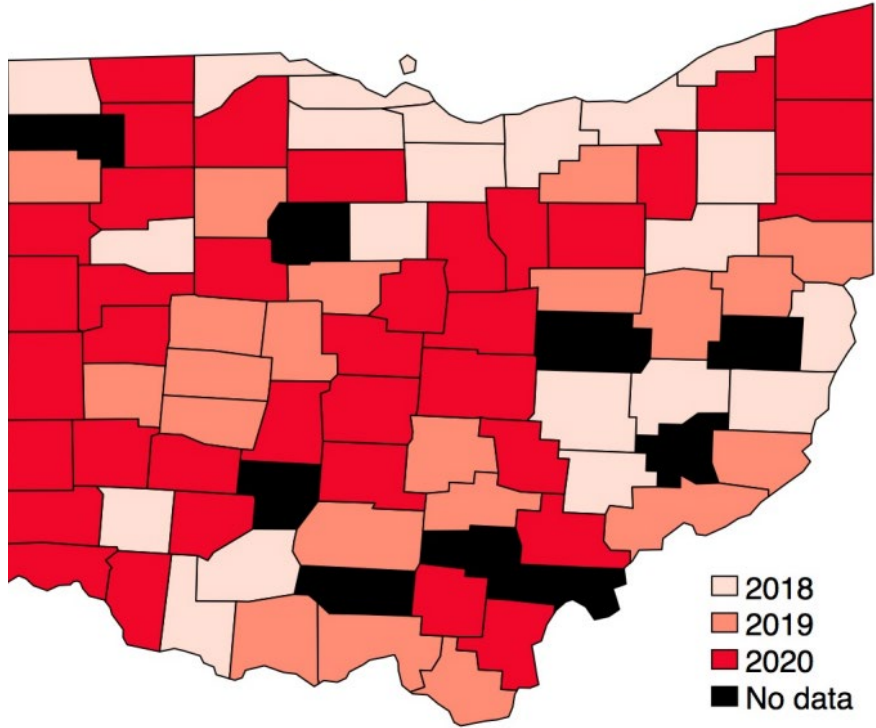
Figure 7: Schools by County



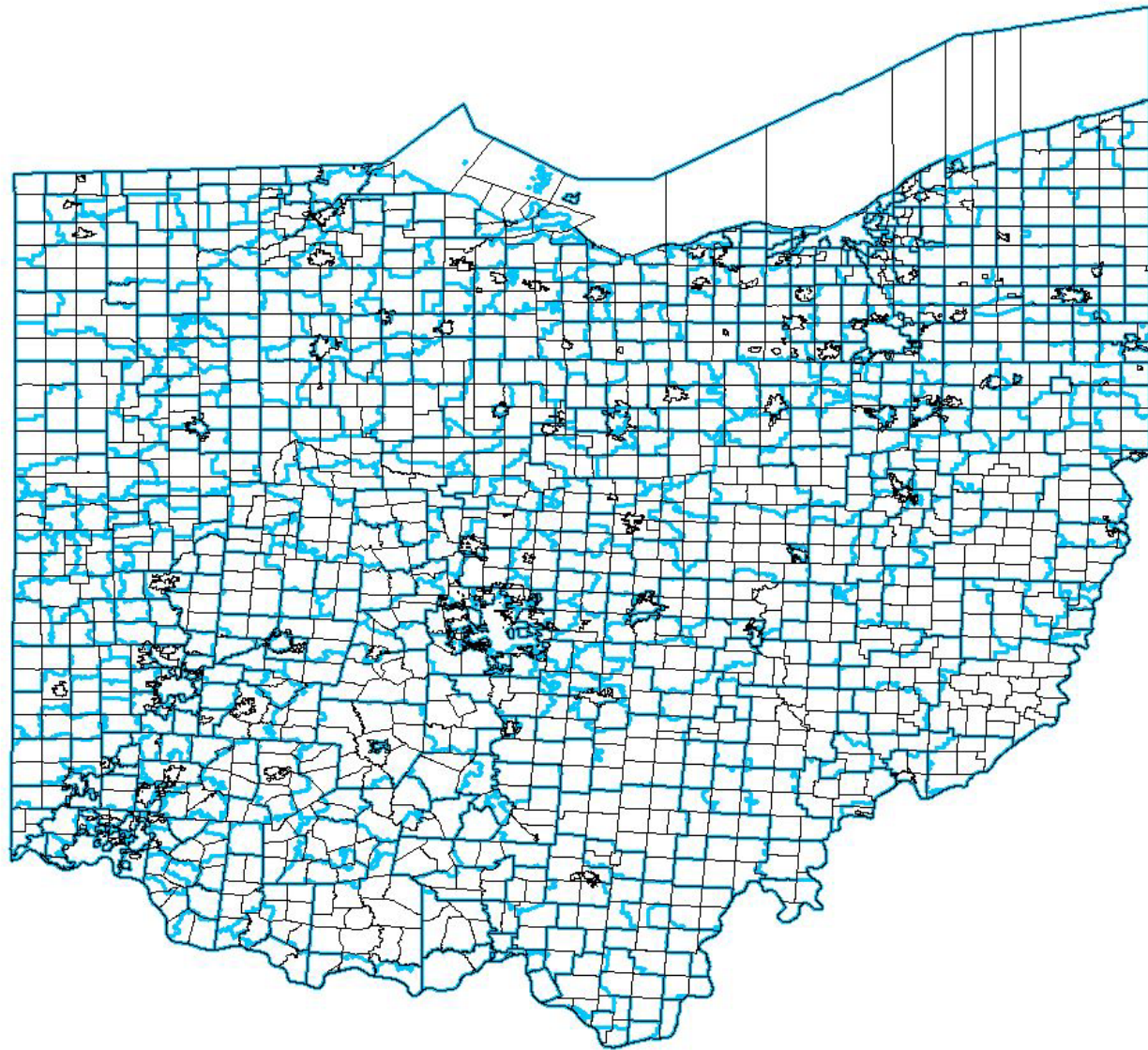
School Districts in Ohio



Zillow Counties







Clarifications



Questions for Clarification

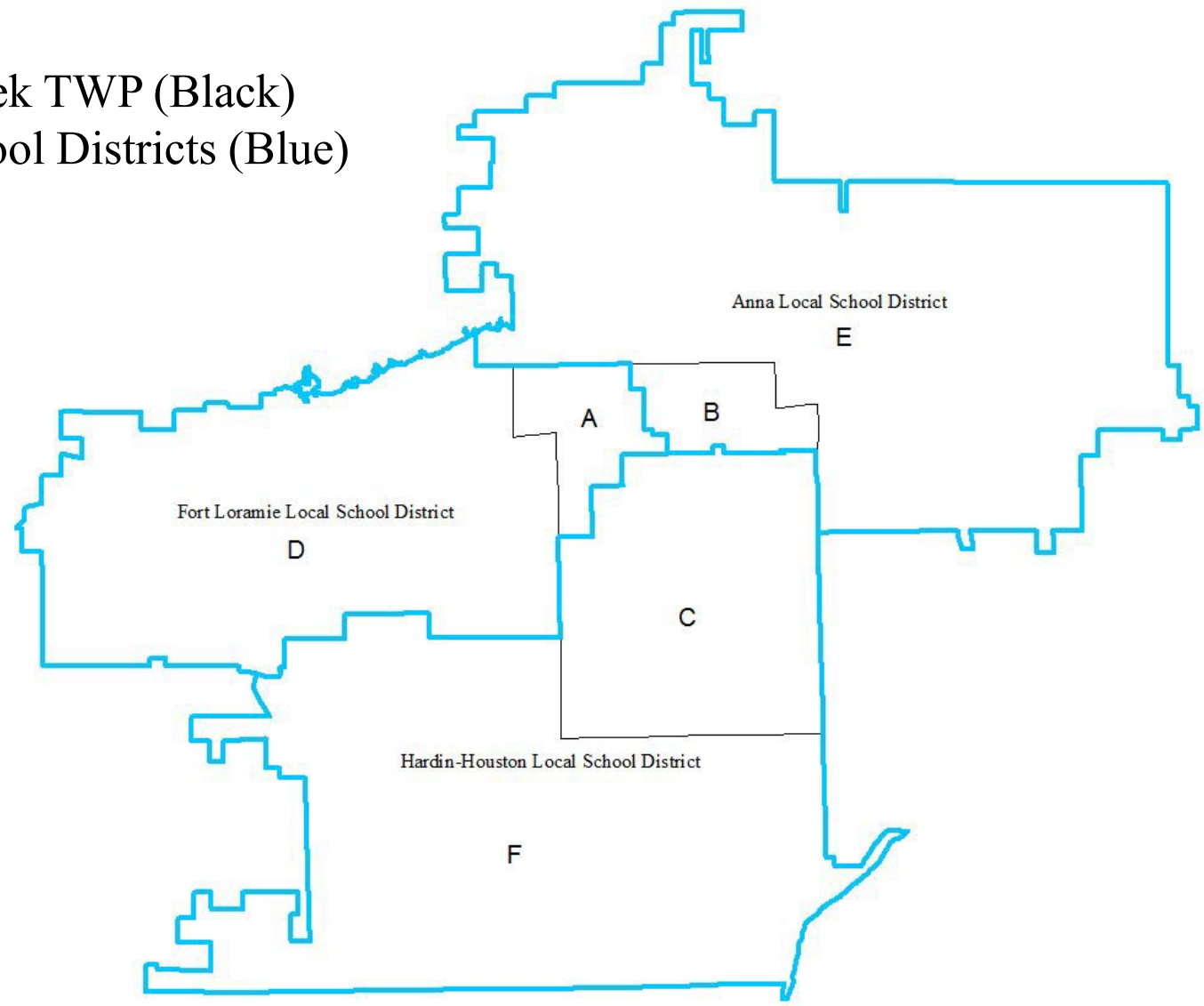
- First stage procedure:
 - Populate school districts where observed “homes” are 90% within a single county (608 pairs down to 544 schools)
 - For each county, random sample of 20% of properties from all other counties
- To clarify.....
 - How many counties of the 88 counties are now represented in the sample?
 - 20% property sample...random? Stratified random?
 - Number of RFR=Number of Counties in Sample? Or Number of School Districts?
 - For each RFM, is the to-be-forecasted county data the test data? Or is test data a subset of the 20% sample?

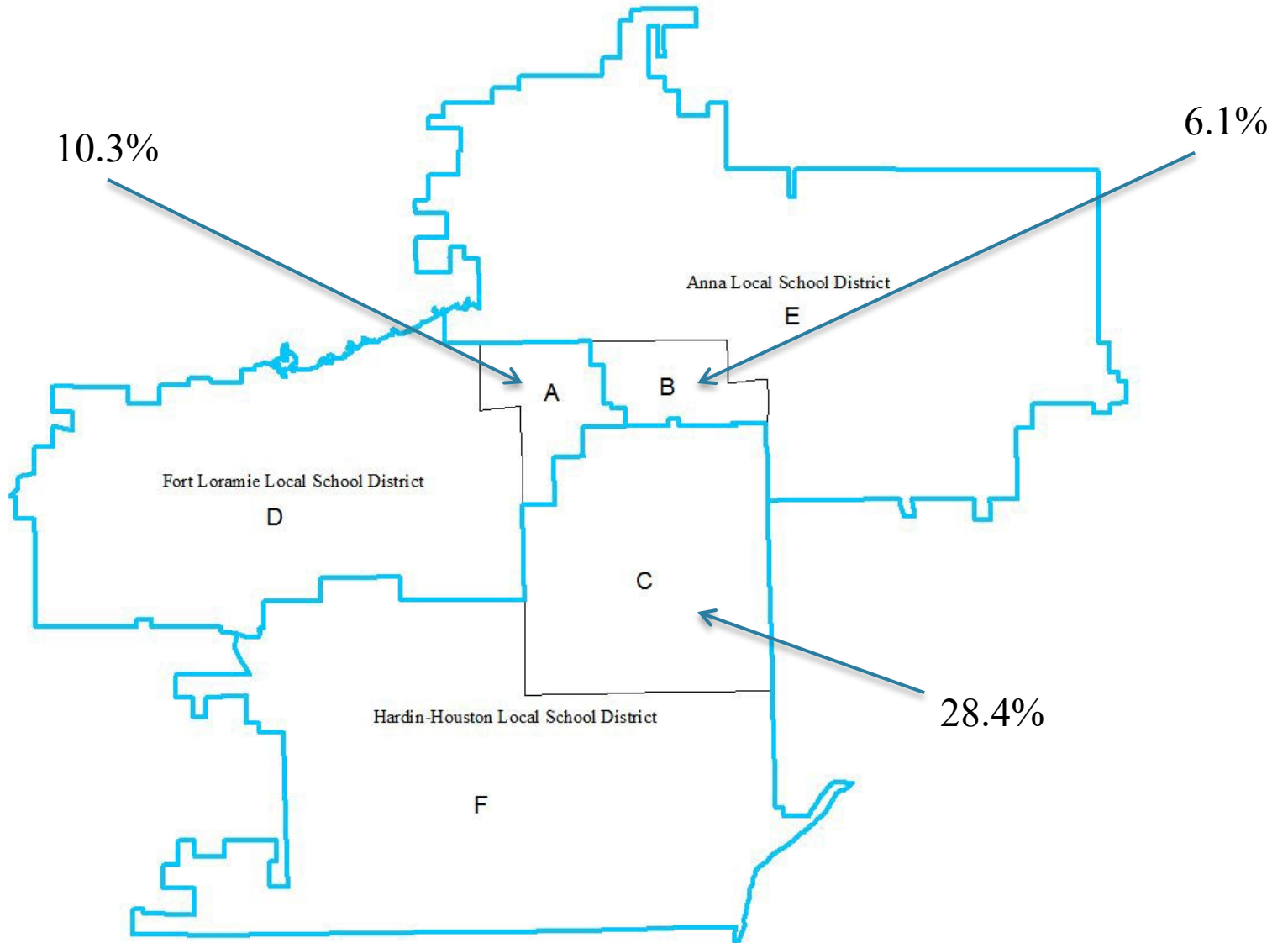
Clarifications continued

- $T_{it} \approx \frac{A_{it}}{\bar{A}_t}$
 - Where does \bar{A}_t come from?
 - I would assume it is from the state's property tax abstract for the school district and therefore inclusive of all property (commercial, residential, etc.)

Discussion

Turtle Creek TWP (Black)
Local School Districts (Blue)





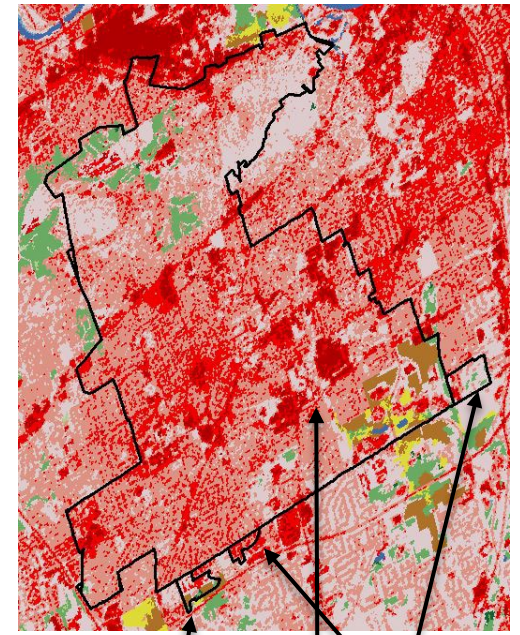
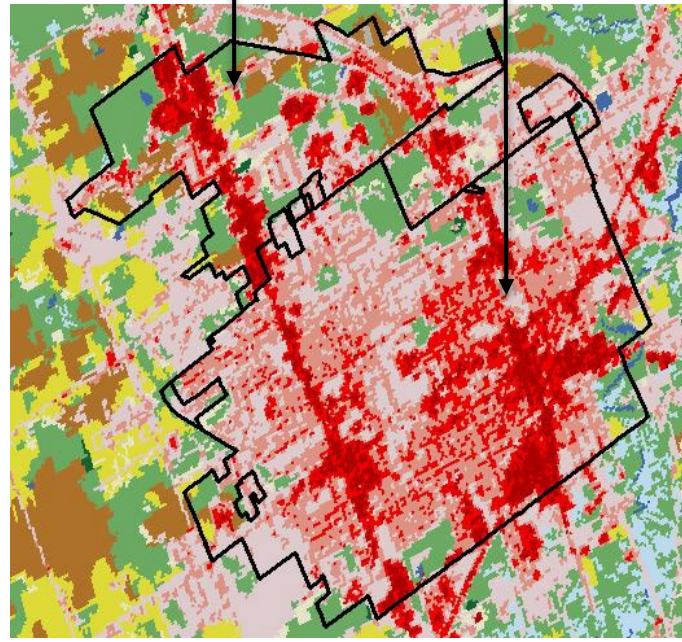
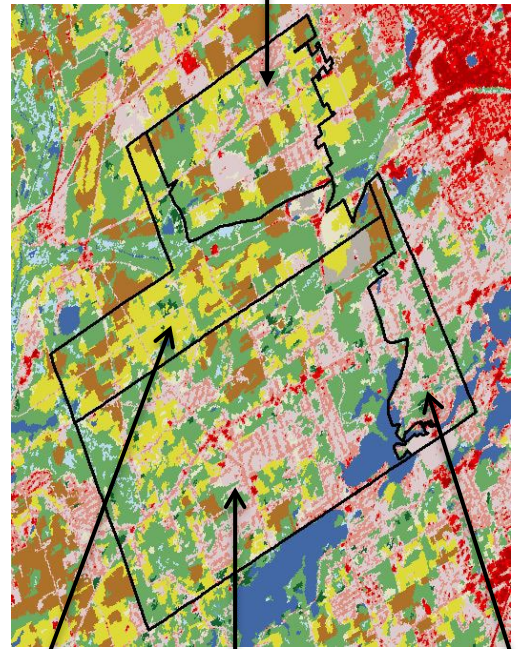
Development Intensity Index (2011)

Norton (0.11)

Marlington (0.58)

Alliance (1.01)

Kettering City



New Franklin City

Arlington City

Northwest (0.04)

Coventry (0.23)

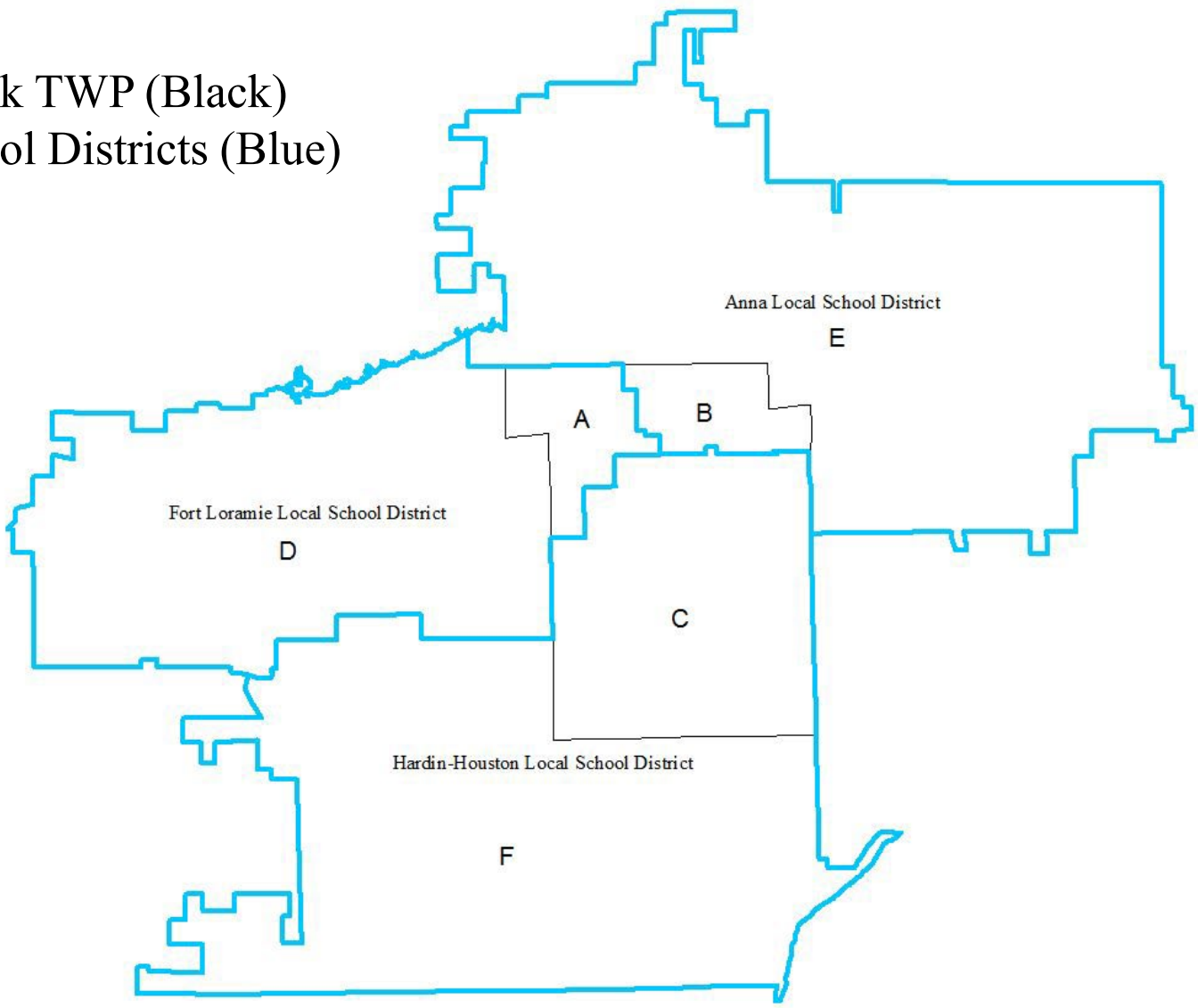
Manchester (0.14)

Sugarcreek (0.54)

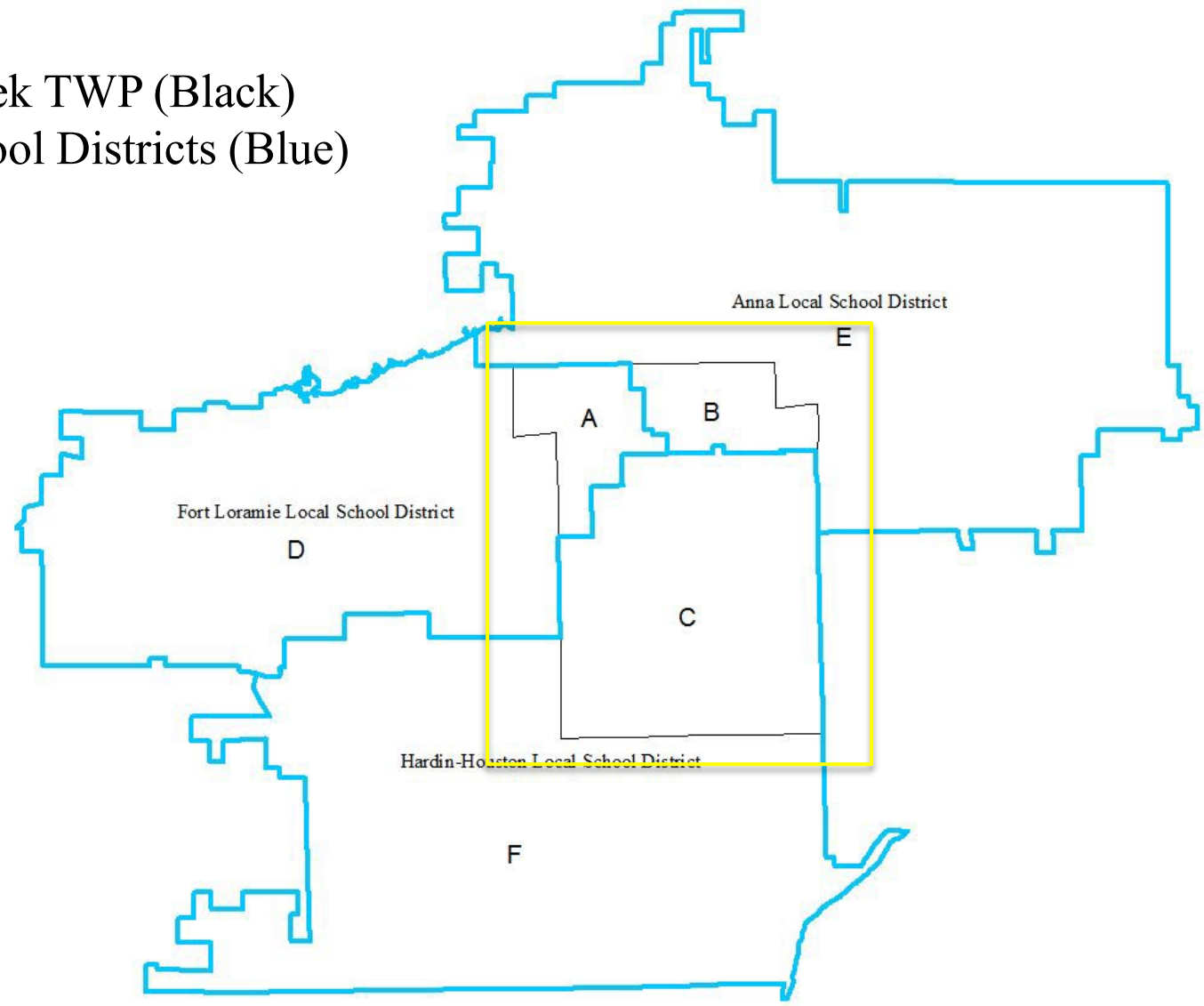
Beavercreek (0.52)

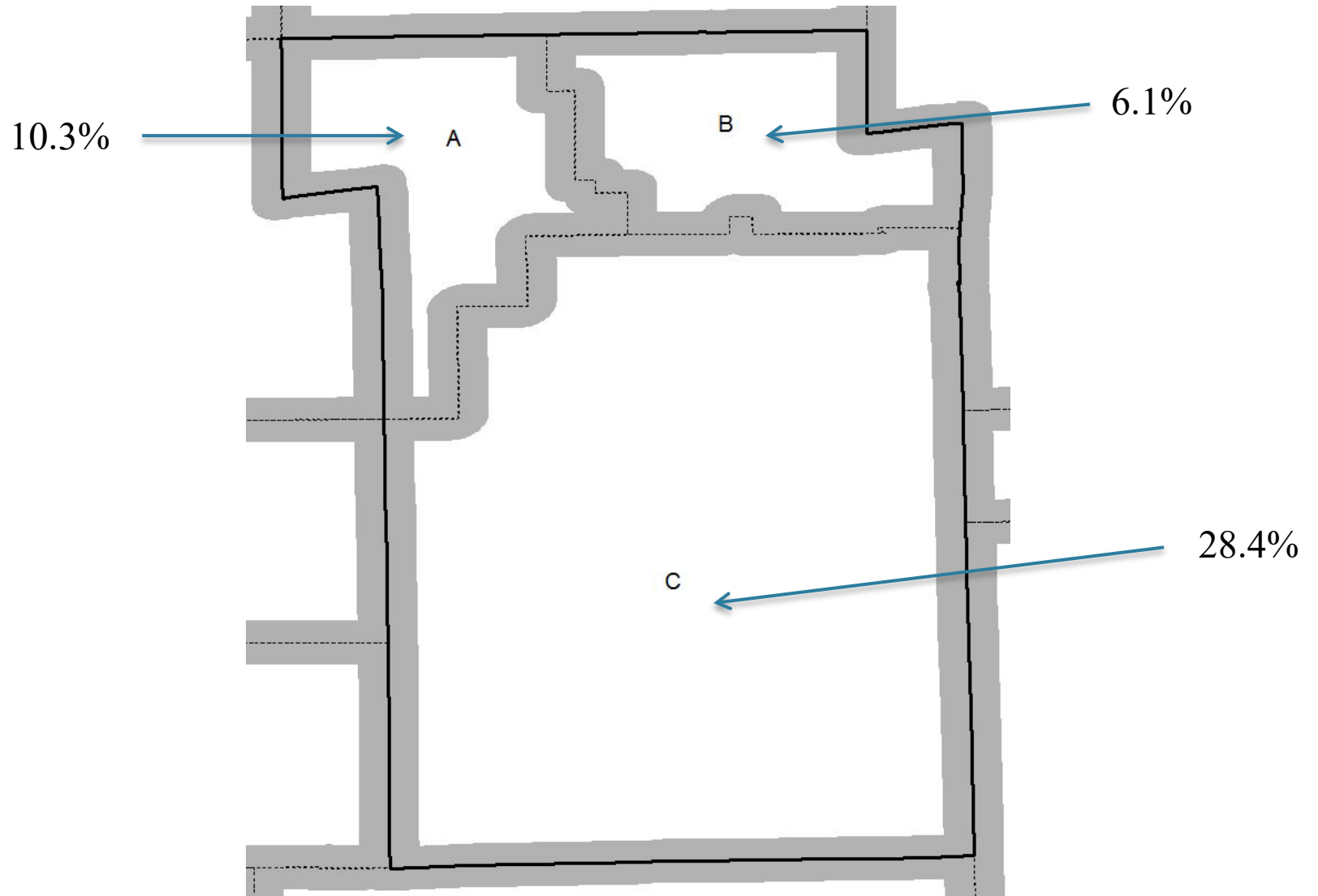
Kettering (1.11)

Turtle Creek TWP (Black)
Local School Districts (Blue)



Turtle Creek TWP (Black)
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New Franklin City

Norton (0.11)



Northwest (0.04)



Coventry (0.23)



Manchester (0.14)

