

# COMPILING PRECINCT- LEVEL POPULATION

# Census Data Sources

“County legislative body must use the latest federal census data whenever a reapportionment is made”

TCA 5-1-111, Section D

# Census Data Sources

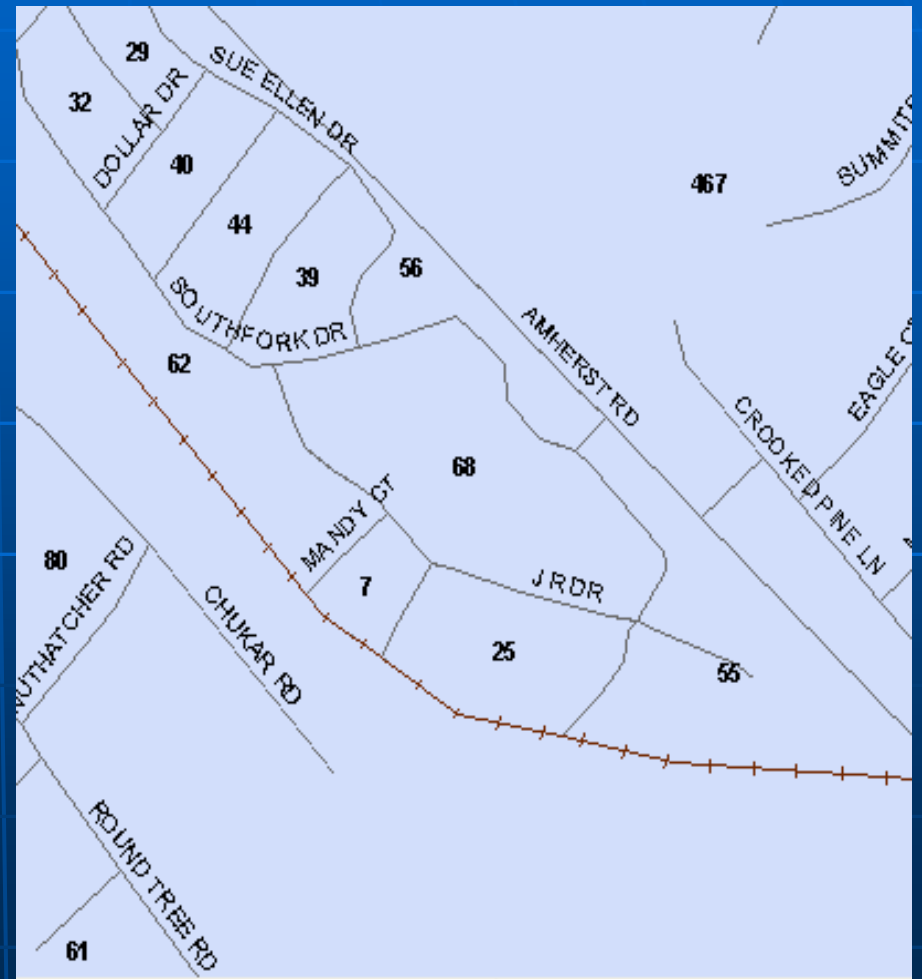
- Public Law 94-171 specifies that within 1 year of Census Day (decennial census), the Census Bureau must send each state the data it will need to redraw districts
- Census Bureau's *Redistricting Data* are specified for use in the redistricting of federal and state legislative districts

# Census Geographic Datasets

- The smallest level at which redistricting data are available from the Census Bureau is the census “block”
- Census block characteristics
  - Generally small
  - Bounded by physical features and, in some cases, political subdivisions such as corporate limits

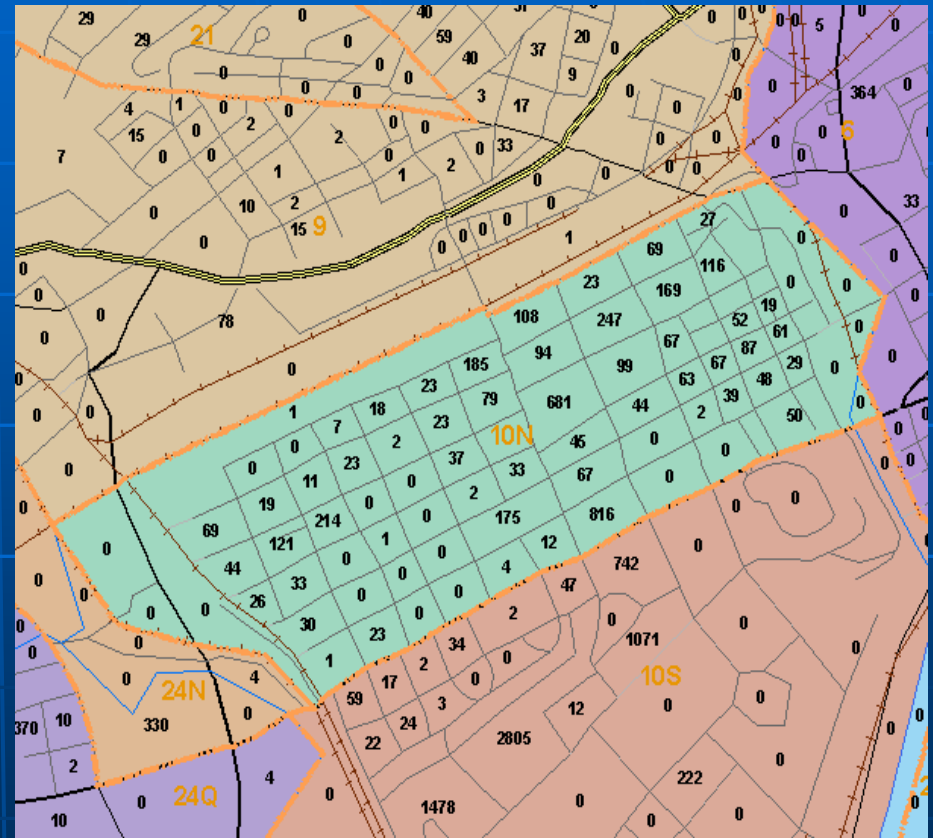
# Census Geographic Datasets

- Block data contain counts of population as well as age, race and ethnic makeup



# Census Geographic Datasets

- Census blocks can be aggregated into larger geographic areas, such as precincts
- Population and demographic summaries within precincts can be generated



# Census Geographic Datasets

- Census geography is a schematic representation of real-world features
- Spatially, it is highly inaccurate compared to the KGIS database

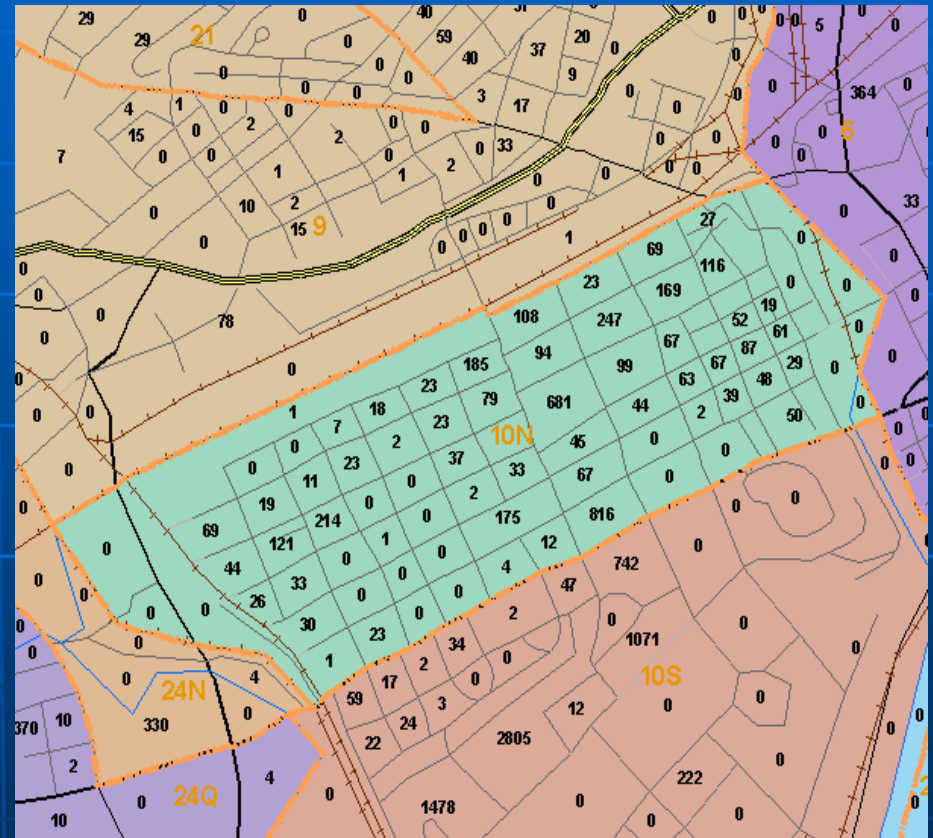


# Census Geographic Datasets

- Inaccuracy of the Census GIS datasets presents challenges when compiling accurate precinct-level population totals
- Overview of procedures used to develop precinct-level population counts

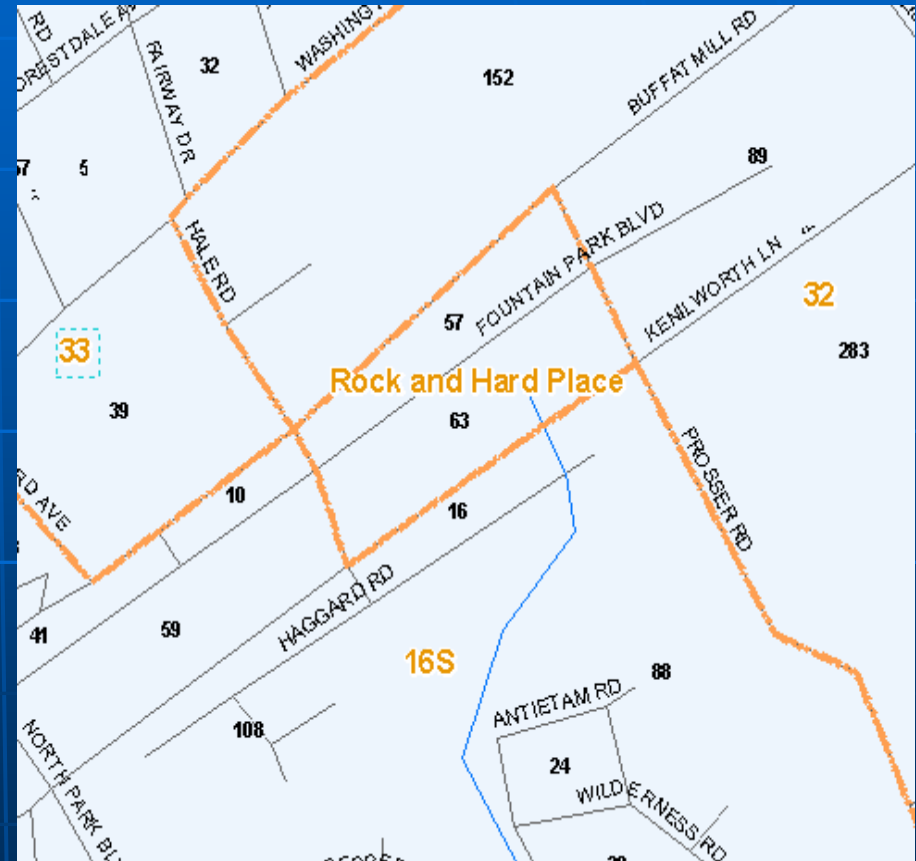
# Census Geographic Datasets

- Census Bureau's datasets for redistricting include precinct boundaries
- Step 1: Assigned each census block to a census precinct



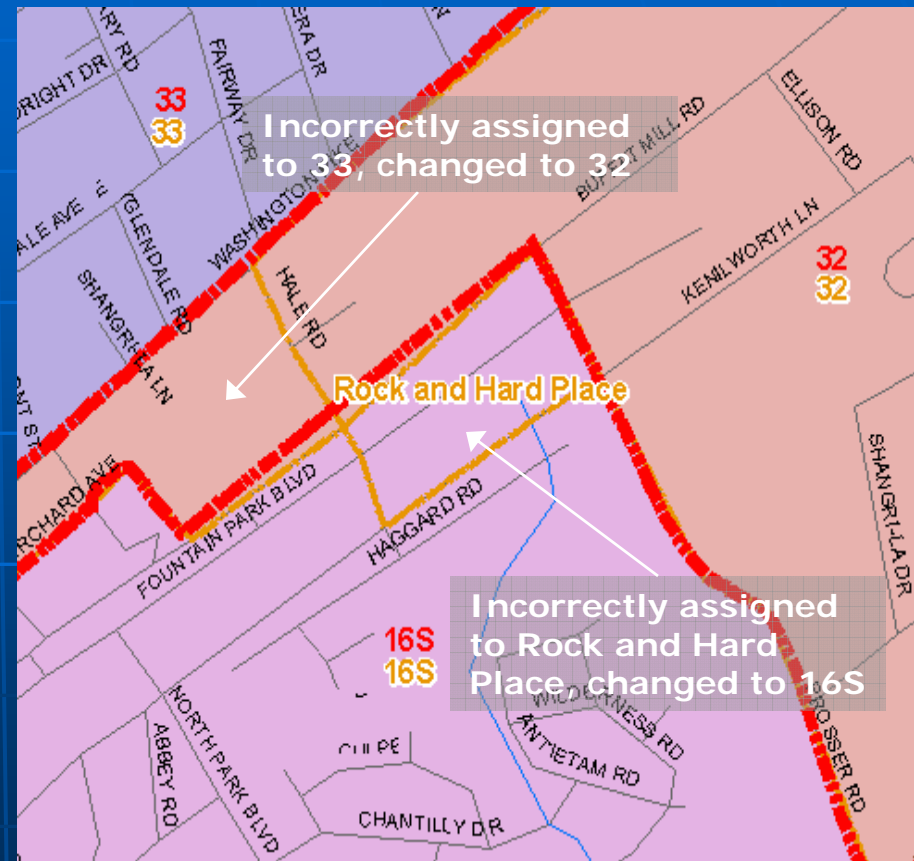
# Precinct-Level Population Data Development

- Census precincts do not match Knox County precincts
  - 107 precincts are included in the Census dataset
  - Only 94 precincts in Knox County
  - Some questionable precincts are included as well...



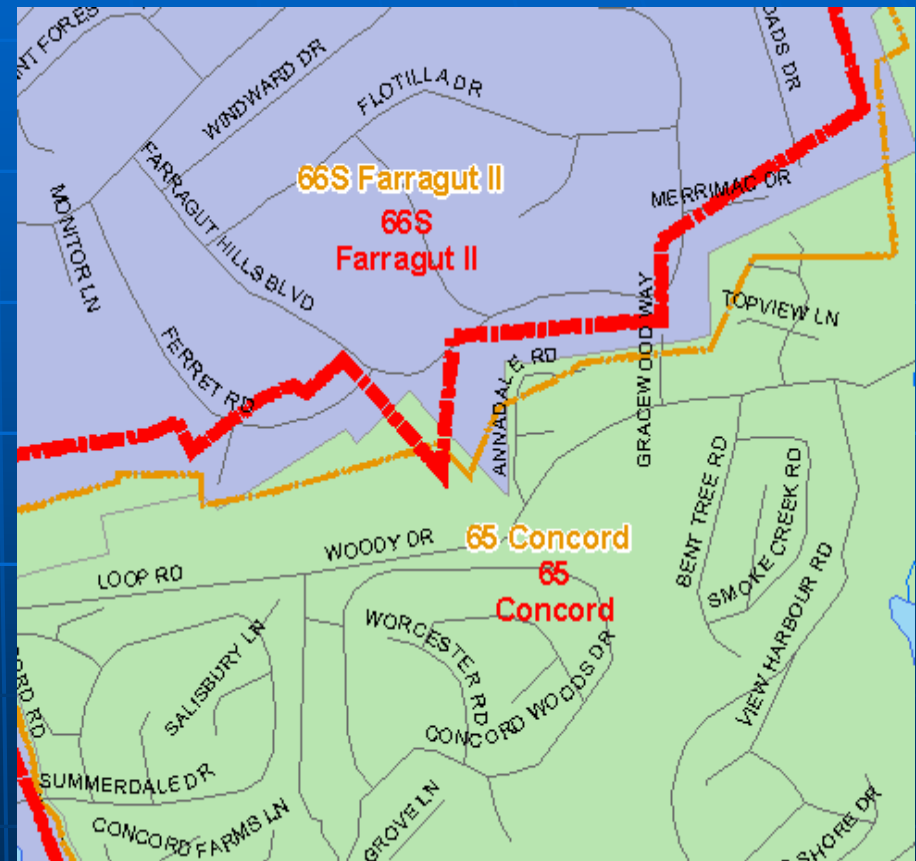
# Precinct-Level Population Data Development

- Step 2: Assigned each census block to Knox County's official precincts and compared with the Census assignment
- Where differences were found, the block was visually inspected to determine its correct precinct



# Precinct-Level Population Data Development

- Step 3: Reviewed the bounding blocks of each precinct to determine if blocks had been assigned correctly through the automated procedures used in Steps 1 and 2



# Precinct-Level Population Data Development

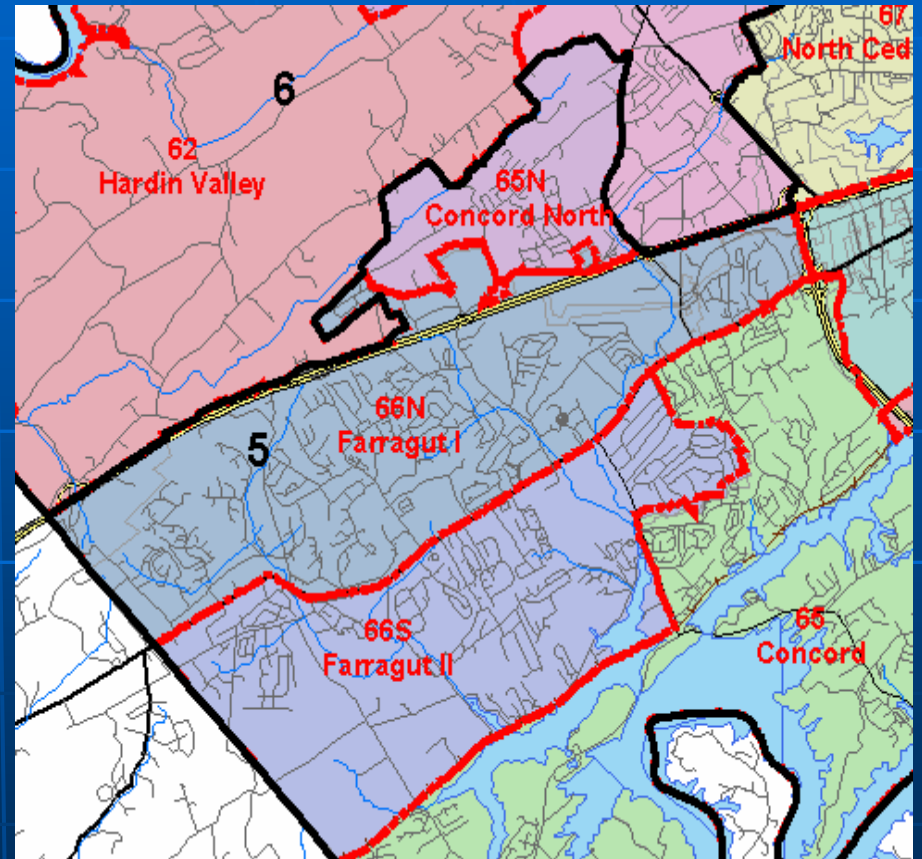
- Step 4: Aggregated the block-level population into precinct-level population
- These totals were compared to the precinct population totals maintained by the State Comptroller
  - Pass 1: MPC's totals agreed with the Comptroller's in 69 of the 94 precincts

# Precinct-Level Population Data Development

- Step 5: Each of the 25 precincts that did not match were visually reviewed and additional corrections were made
  - Pass 2: 79 of the 94 precincts matched the Comptroller's totals
  - 15 remaining precincts represent incorrect block assignments on the part of the Comptroller

# Precinct-Level Population Data Development

- Precincts 65N (Concord North) and 66N (Farragut)
- Two precincts form the northern boundary of the 5<sup>th</sup> Commission District



# Precinct-Level Population Data Development

Precinct	MPC	Comptroller	Difference
65N (Concord North)	2,247	2,051	196
66N (Farragut)	10,309	10,505	-196

- 196-person difference between the two precincts suggests there is a disagreement over a block's assignment



# Precinct-Level Population Data Development

- Discrepancy of 196 persons could potentially have a substantial impact on a redistricting plan's overall range (10-percent rule)
- A redistricting plan which places these two precincts into two different Commission districts could have as much as a 0.44% swing on the overall range, depending upon which set of numbers is used

Difference	Ideal Population	Impact on Overall Range
196	44,428	0.44%

# Recommended Action

- MPC Staff Recommendation

1. The Redistricting Committee should adopt "Table 5: Knox County Precincts Summary of Population, Demographics and Voter Registration"
2. These total numbers should serve as the official source for evaluating a redistricting plan's deviation, overall range and minority representation