

2020 CENSUS COUNTS ALLOCATION TO COG 3722 TAZ SYSTEM UPDATE

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Blocks to TAZ Allocation

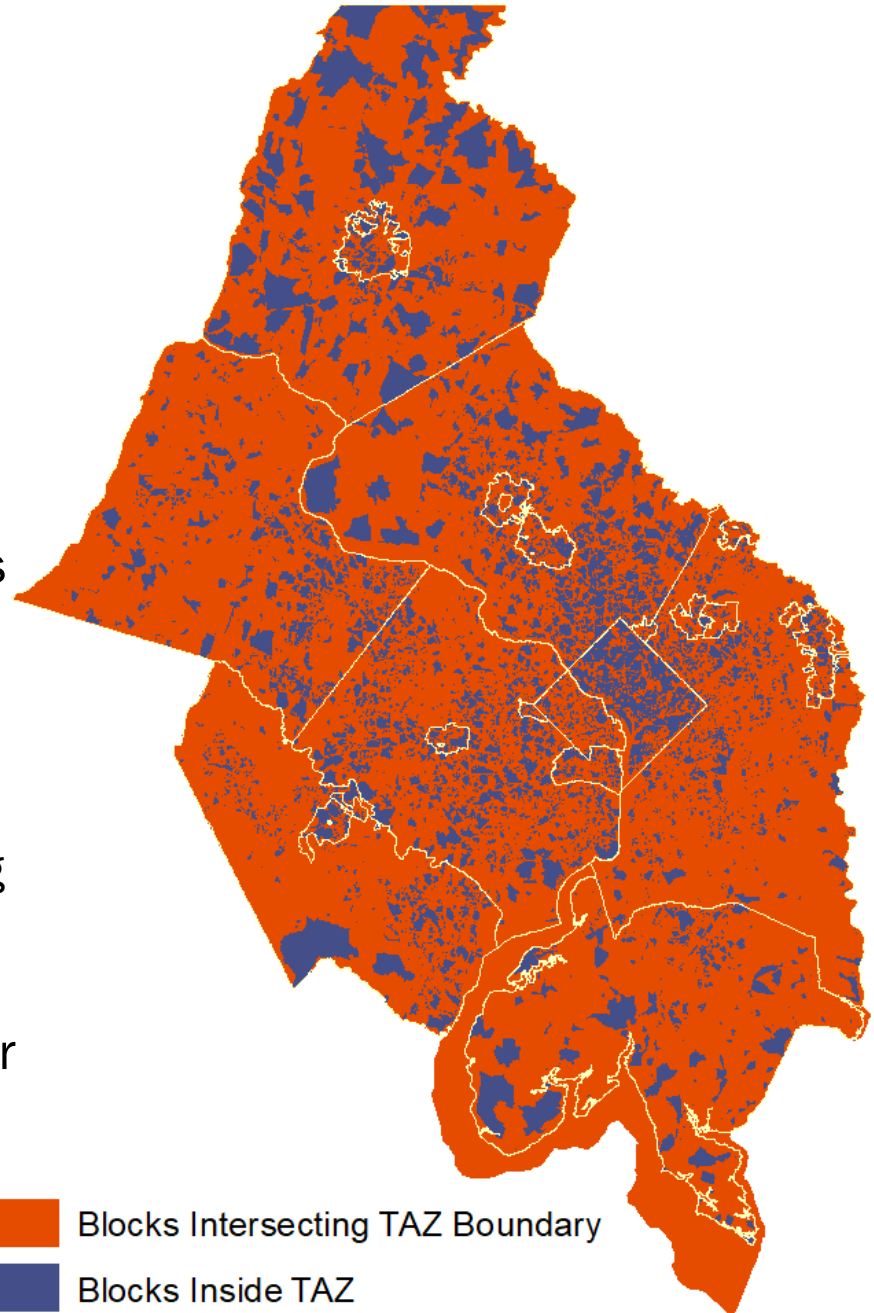
- COG and/or TPB Staff analyze and allocate Block- or Block Group-level Decennial Census data to the COG/TPB TAZ system every 10 years.
- Allocation is inexact due to differing geographic levels and noncommon boundaries between the two systems
- Elimination of Census TAZs and addition of differential privacy “fuzziness” are new complications for the 2020 Census.

Allocation Methodology

- COG and TPB staff assessed several methods for distributing 2020 Census count data to COG TAZs
 - Chose to use block-level data for allocation
 - Tested two methodologies:
 - Allocate 100% of block level count data to a TAZ if the block centroid falls within the TAZ
 - Allocate count data based on the percentage of a block's developed land area that falls within each TAZ it overlaps

“Centroid” Method Not Selected

- Too many Census blocks overlap multiple TAZs
- 23,864 out of the 54,293 blocks in COG jurisdictions overlap at least one TAZ
 - Over half of all households in the region live in an overlapping block - 1,172,933 HHs
- Still applied methodology in order to compare Centroid results to Overlapping Area method



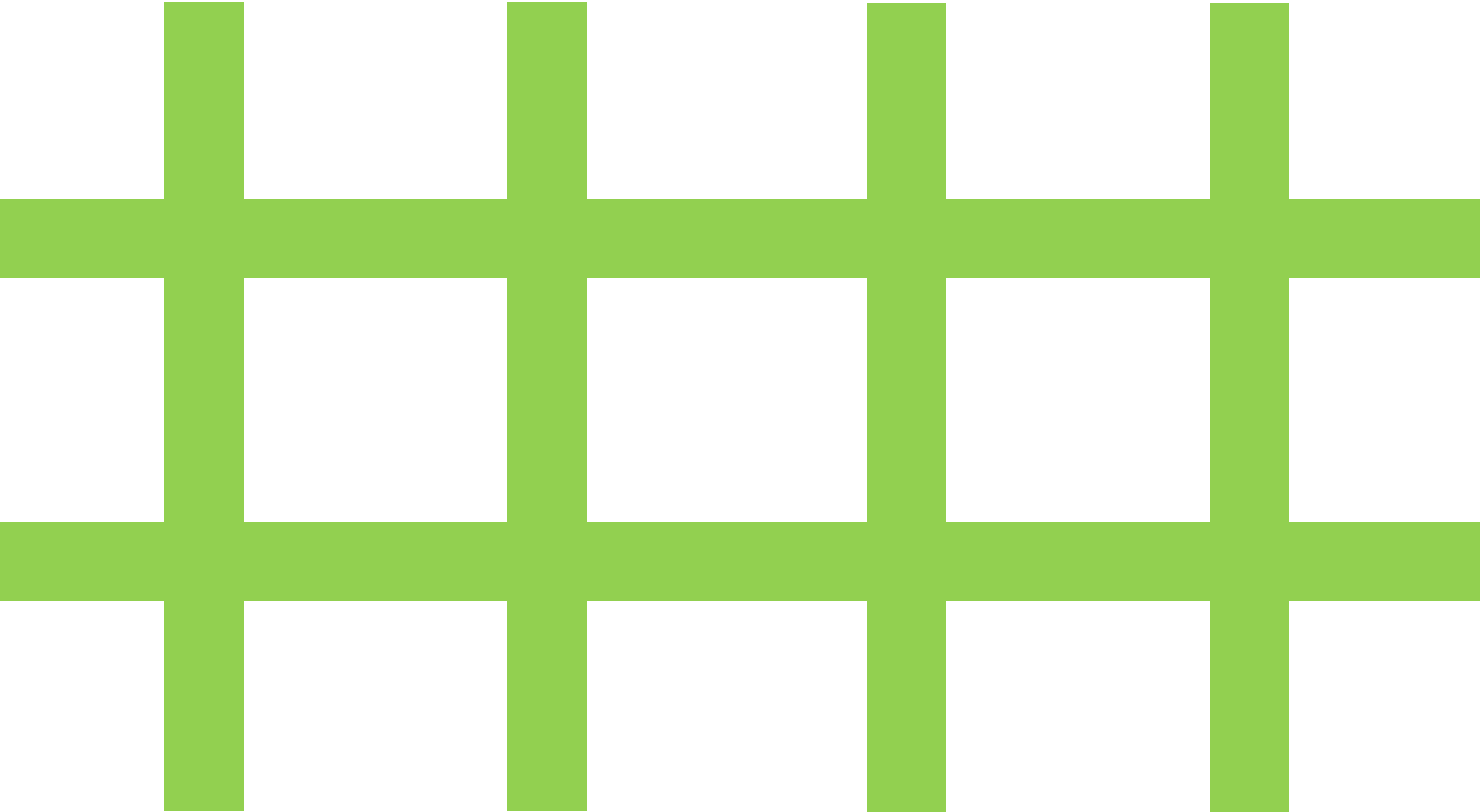
Overlapping Developed Land Method

- This method used a GIS to approximate how much of each block and TAZ area are likely to have residential land use
 - A portion of a block's count data was allocated to a TAZ based on the percent of the block's area that overlaps the TAZ
 - Only the portion of the block that was likely to have residential development was used when measuring the area of the overlap

Identifying Residential Land: Transportation Access

- Only the area that was within 80 feet of a street or road was considered.
 - Buffered 80 feet on each side of the HERE (formerly NAVTEQ) street network file
 - Interstates, highways, overpasses and access ramps were excluded from buffer
- Prevents large TAZs with limited public access from “grabbing” too much of an overlapping block’s count data

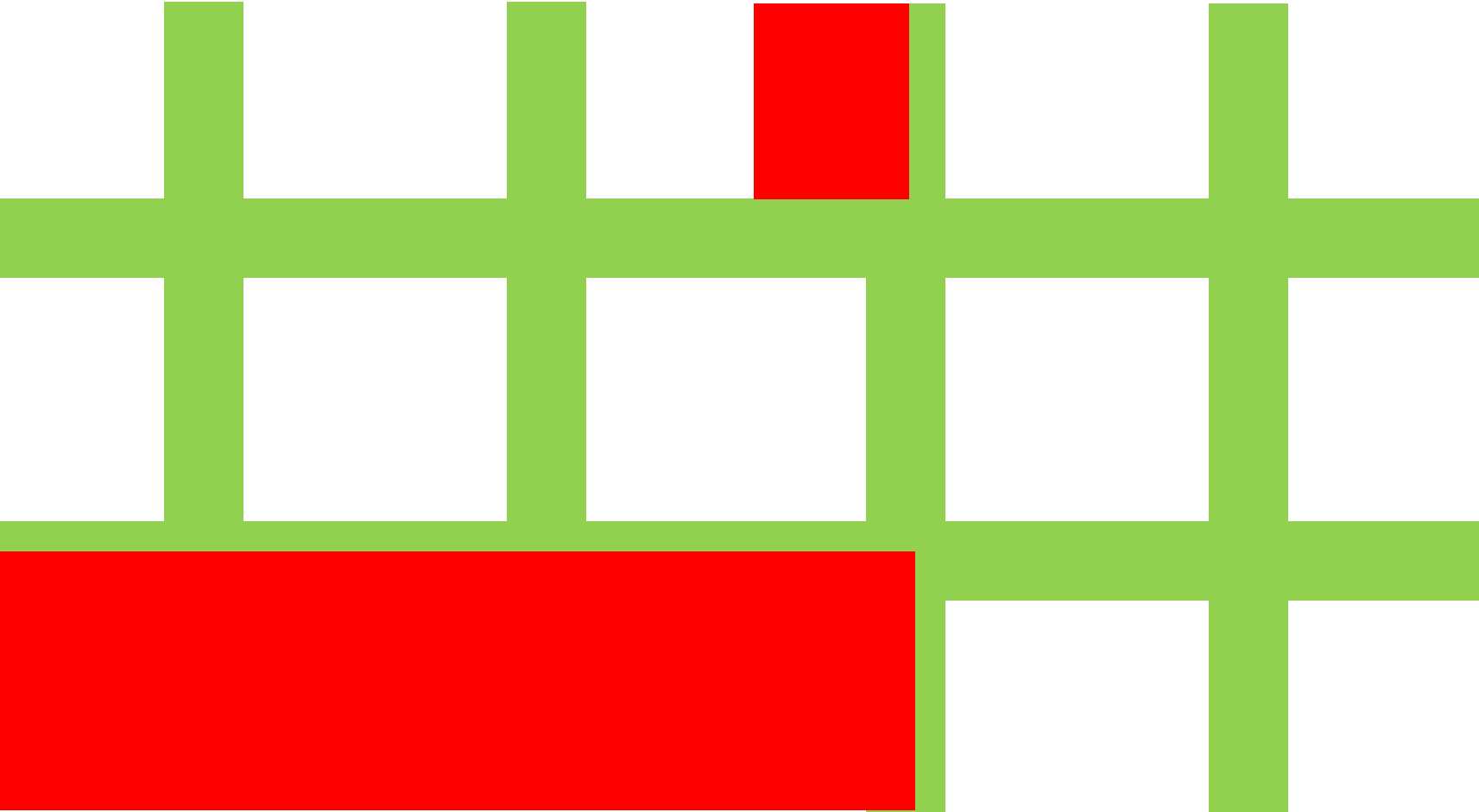
Identifying Residential Land: Streets Buffer



Identifying Residential Land: Incompatible Land Uses

- From the road network buffer, removed the land area covered by the following HERE land use or environmental polygon files:
 - Water
 - State Parks
 - National Parks
 - Local / County Parks
 - Cemeteries
 - Golf Courses
 - Sports Complexes
 - Airports
 - Railyards
 - Harbor/Seaport

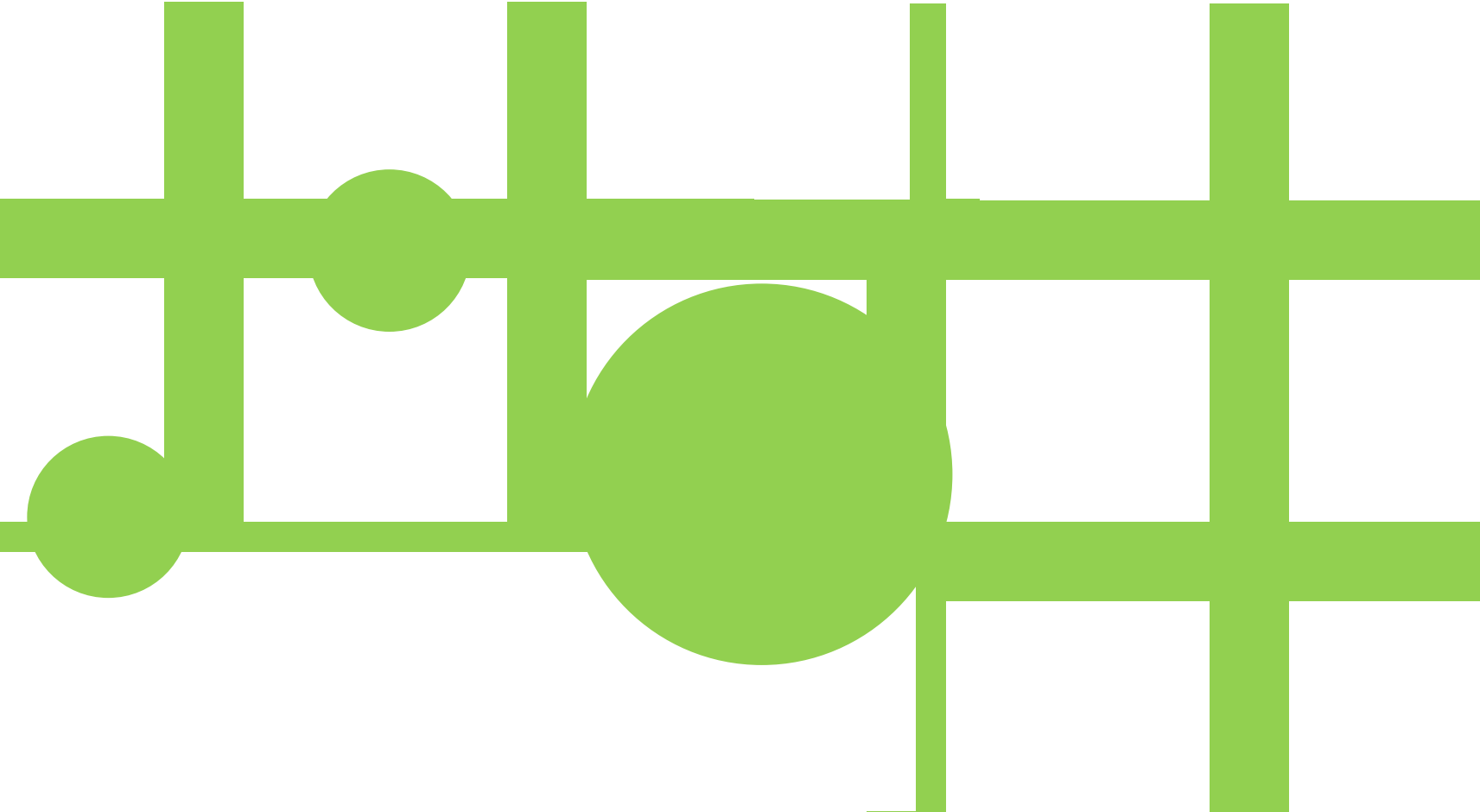
Identifying Residential Land: Remove Other Uses



Identifying Residential Land: Accounting for Density

- Increased the residential portion to account for the density of multi-family buildings
 - Created buffers around each multi-family property in the CoStar database
 - Circles with an area of 6,400 feet for each unit
- Prevents single-family side of a TAZ from “grabbing” an equal share of count data from a block as the multi-family side

Identifying Residential Land: Add Multi-Family



Final Allocation

- The percent share of the approximate residential land is calculated for each TAZ-Block overlap
- The percentages are then applied to the count total for each block
- Data in each overlap is aggregated by TAZ
- Round resulting TAZ counts to nearest integer
 - Adjust data to eliminate rounding errors and ensure the TAZ County total matches the Census County total

Next Steps

- COG and TPB staff check for anomalies in results
- The final 2020 Census data allocated to TAZ will be available as an Excel spreadsheet with *Total Population, Household Population, Group Quarters Population, Occupied Households and Vacant Households*