

Jennifer Zanoni U.S. Census Bureau

Increase the Minimum Threshold to Qualify as an Urban Area

Total housing units <u>or</u> population

1

Cease
Distinguishing
Different Types of
Urban Areas

2

Reduce the Maximum Distance of Jumps

3

No Longer Include Low Density Hop or Jump "Corridor" in the Urban Area

4

Adoption of
Housing Unit
Density Threshold
for Qualification of
Census Blocks

5

Use of LEHD data for Splitting Agglomerations

6



1 Increase the Minimum Threshold to Qualify as an Urban Area

OR



Population: 10,000



Housing Units: 4,000

2 Cease Distinguishing
Different Types of Urban Areas

Urban Clusters: Urban Areas with population of 2,500 to 49,999

Urbanized Areas: Urban Areas with population of 50,000 or more



- **3** Reduce the Maximum Distance of Jumps
 - From 2.5 miles back down to <u>1.5 miles</u>
 - Extended to 2.5 miles in 2000
 - Impervious surface added in 2010
 - Combination led to overbounding in 2010
 - Excluded territory still extends hops and jumps to maximum of 5 miles
 - Water and wetlands





- 2010 Jump Blocks
- 2010 Qualified Urban Blocks



5 Adoption of Housing Unit Density Threshold for Qualification of Census Blocks

385 housing units (occupied or vacant) per square mile

Equivalent to 1 housing unit per 1.6 acres

Equivalent to approximately 1,000 persons per square mile

More direct measure of developed landscape

Ability to update extent of Urban Areas between censuses

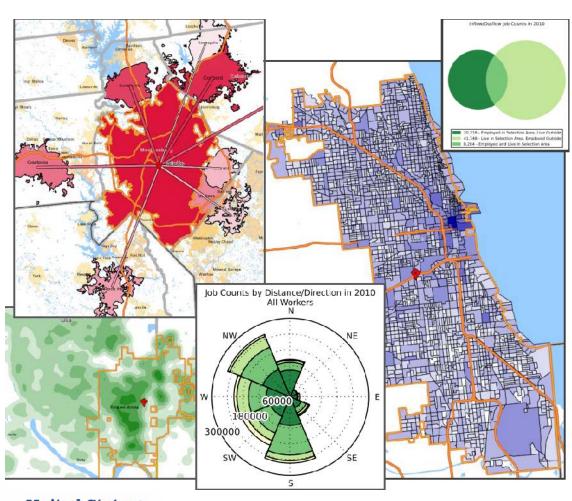
Census block-level housing unit counts are invariant



Proposed Urban Area Criteria: Splitting



Utilization of Longitudinal Employer-Household Dynamics (LEHD) data



OD

Filename of the OD datasets are described by the following templates [ST] od [PART] [TYPE] [YEAR].csv.gz where

[ST] = lowercase, 2-letter postal code for a chosen state

[PART] = Part of the state file, can have a value of either "main" or "aux". Complimentary parts of the state file, the main part includes jobs with both workplace and residence in the state and the aux part includes jobs with the workplace in the state and the residence outside of the state.

[TYPE] = Job Type, can have a value of "JT00" for All Jobs, "JT01" for Primary Jobs, "JT02" for All Private Jobs, "JT03" for Private Primary Jobs, "JT04" for All Federal Jobs, or "JT05" for Federal Primary Jobs.

[YEAR] = Year of job data. Can have the value of 2002-2018 for most states.

As an example the main OD file of Primary Jobs in 2007 for California would be the file: ca od main JT01 2007.csv.gz

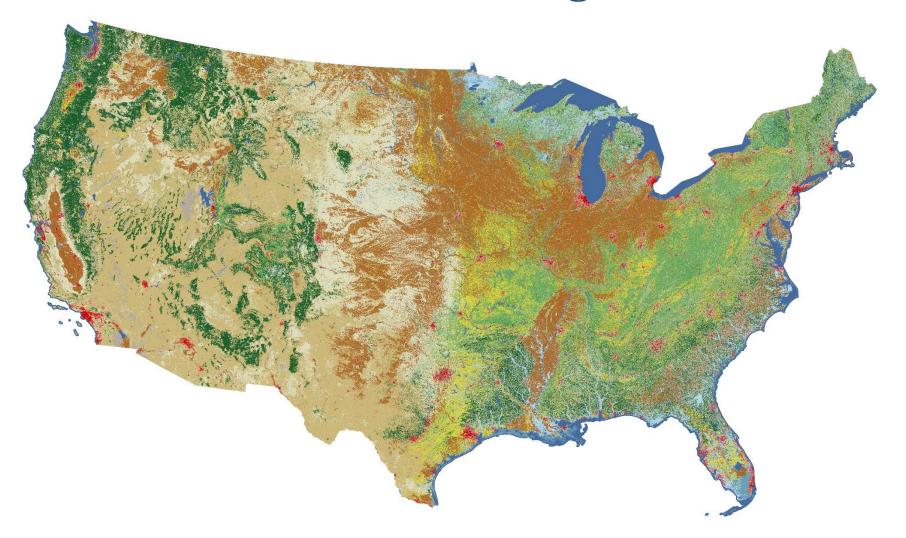
The structure of the OD files is as follows:

| Origin-Destination (OD) File Structure | | | | |
|--|------------|--------|---|--|
| Pos | Variable | Type | Explanation | |
| 1 | w_geocode | Char15 | Workplace Census Block Code | |
| 2 | h_geocode | Char15 | Residence Census Block Code | |
| 3 | S000 | Num | Total number of jobs | |
| 4 | SA01 | Num | Number of jobs of workers age 29 or younger ¹⁷ | |
| 5 | SA02 | Num | Number of jobs for workers age 30 to 54 ¹⁷ | |
| 6 | SA03 | Num | Number of jobs for workers age 55 or older ¹⁷ | |
| 7 | SE01 | Num | Number of jobs with earnings \$1250/month or less | |
| 8 | SE02 | Num | Number of jobs with earnings \$1251/month to \$3333/month | |
| 9 | SE03 | Num | Number of jobs with earnings greater than \$3333/month | |
| 10 | SI01 | Num | Number of jobs in Goods Producing industry sectors | |
| 11 | SI02 | Num | Number of jobs in Trade, Transportation, and Utilities industry sectors | |
| 12 | SI03 | Num | Number of jobs in All Other Services industry sectors | |
| 13 | createdate | Char | Date on which data was created, formatted as YYYYMMDD | |



LEHD Origin-Destination Employment Statistics (LODES) Dataset Structure (V 7.5) https://lehd.ces.census.gov/data/

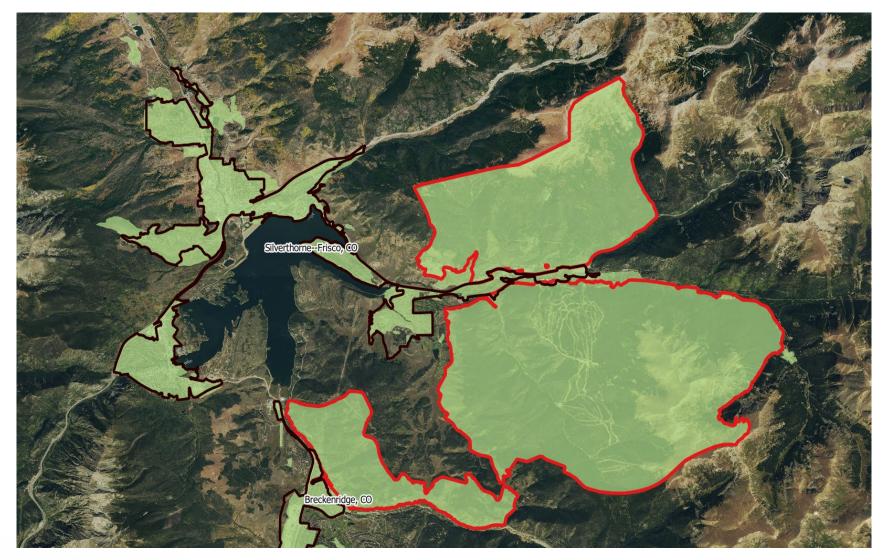
Possible Criteria Changes: NLCD





New National Land Cover Database (2019) released since Proposed Urban Area Criteria was published

Possible Criteria Changes: Group Quarters



The proposed criteria specified automatically qualifying blocks with Group Quarters as urban if they were adjacent to already qualified urban area. During criteria testing, this led to large blocks with low housing and population expanding the urban areas, sometimes by miles. Further testing is continuing.



Possible Criteria Changes: Minimum Threshold

Minimum Urban Area Qualification:

5,000 Persons or 2,000 Housing Units

Oxford, NC

Dense "downtown" core surrounded by lower density development



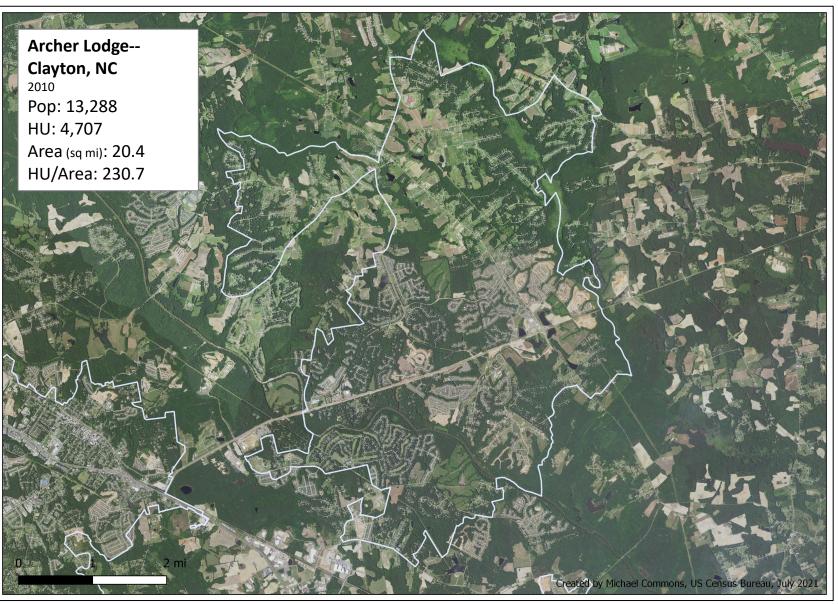


Possible Criteria Changes: High Density Cores

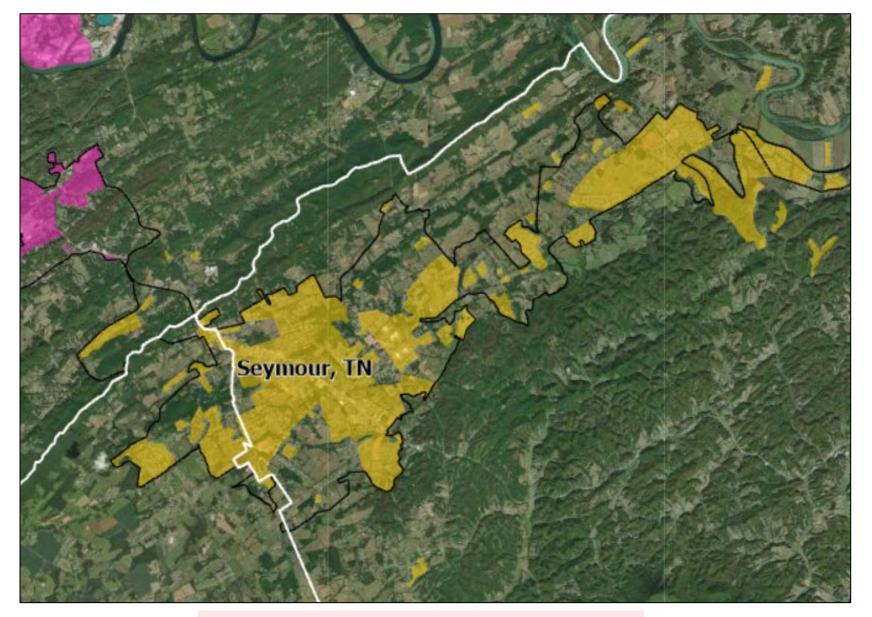
Minimum Urban Area Qualification:

5,000 Persons or 2,000 Housing Units

Archer Lodge – Clayton, NC
No dense core. Suburb of
Raleigh, mostly made up of
subdivisions









Density Classes

| HU/Acre | Acres/HU | HU/Sq mi | Pop/Sq mi | Acres/Pop | Pop/Acre |
|---------|----------|----------|-----------|-----------|----------|
| 2.00 | 0.5 | 1,280 | 3,328 | 0.19 | 5.20 |
| 1.00 | 1.0 | 640 | 1,664 | 0.38 | 2.60 |
| 0.67 | 1.5 | 427 | 1,109 | 0.58 | 1.73 |
| 0.60 | 1.7 | 385 | 1,001 | 0.64 | 1.56 |
| 0.50 | 2.0 | 320 | 832 | 0.77 | 1.30 |
| 0.40 | 2.5 | 256 | 666 | 0.96 | 1.04 |
| 0.33 | 3.0 | 213 | 555 | 1.15 | 0.87 |



Density Classes

| HU/Acre | Acres/HU | HU/Sq mi | Pop/Sq mi | Acres/Pop | Pop/Acre |
|---------|----------|----------|-----------|-----------|----------|
| 2.00 | 0.5 | 1,280 | 3,328 | 0.19 | 5.20 |
| 1.00 | 1.0 | 640 | 1,664 | 0.38 | 2.60 |
| 0.67 | 1.5 | 427 | 1,109 | 0.58 | 1.73 |
| 0.60 | 1.7 | 385 | 1,001 | 0.64 | 1.56 |
| 0.50 | 2.0 | 320 | 832 | 0.77 | 1.30 |
| 0.40 | 2.5 | 256 | 666 | 0.96 | 1.04 |
| 0.33 | 3.0 | 213 | 555 | 1.15 | 0.87 |



Primary Core 1275 HPSM & Impervious

500+ Total HU

Secondary Core 425 HPSM & Impervious

500+ Total HU

Hop/Jump Core 425 HPSM & Impervious

10+ Total HU

Final Fill 200 HPSM **Hop Connection**

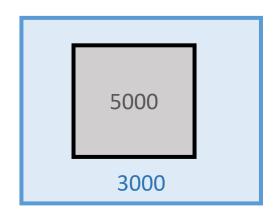
Jump Connection



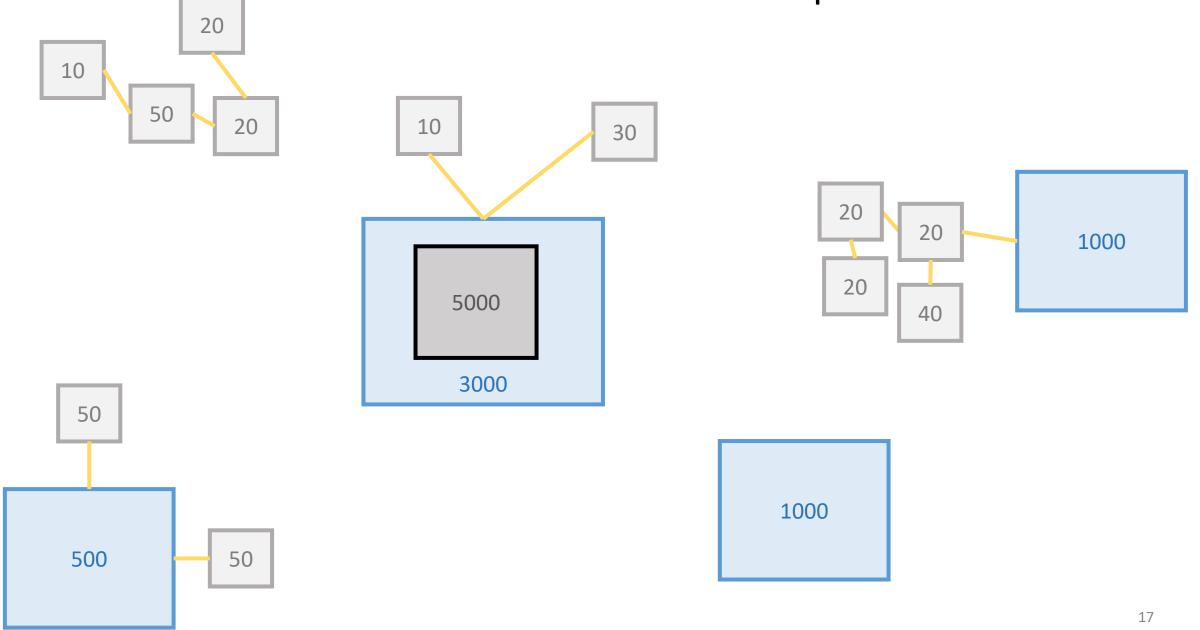
Primary Cores



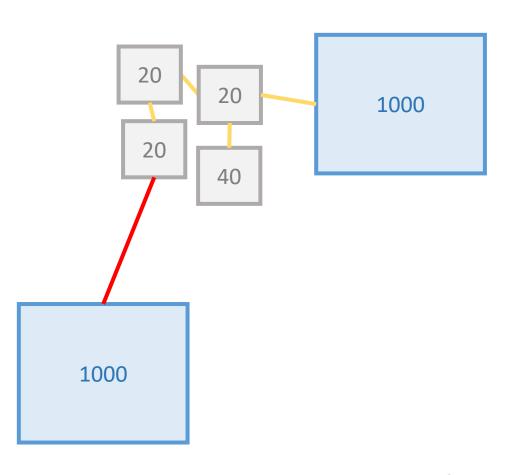
Secondary Cores

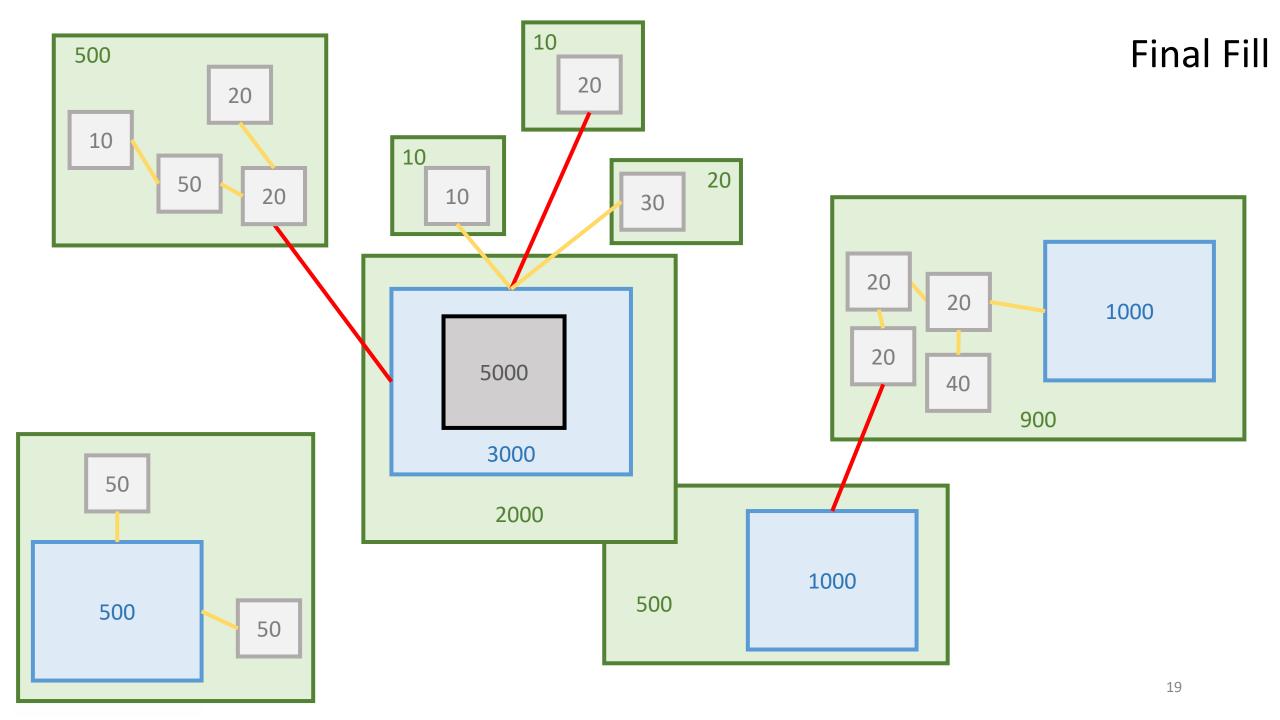


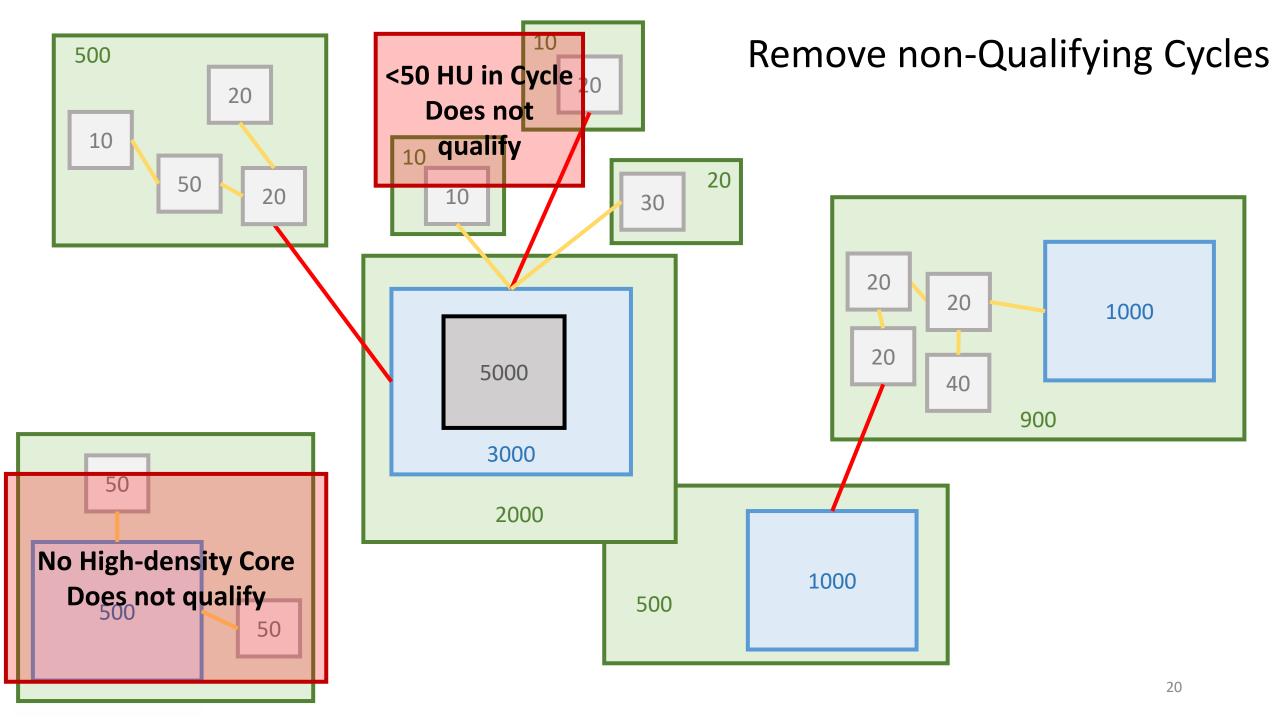
Hop Cores and Connections

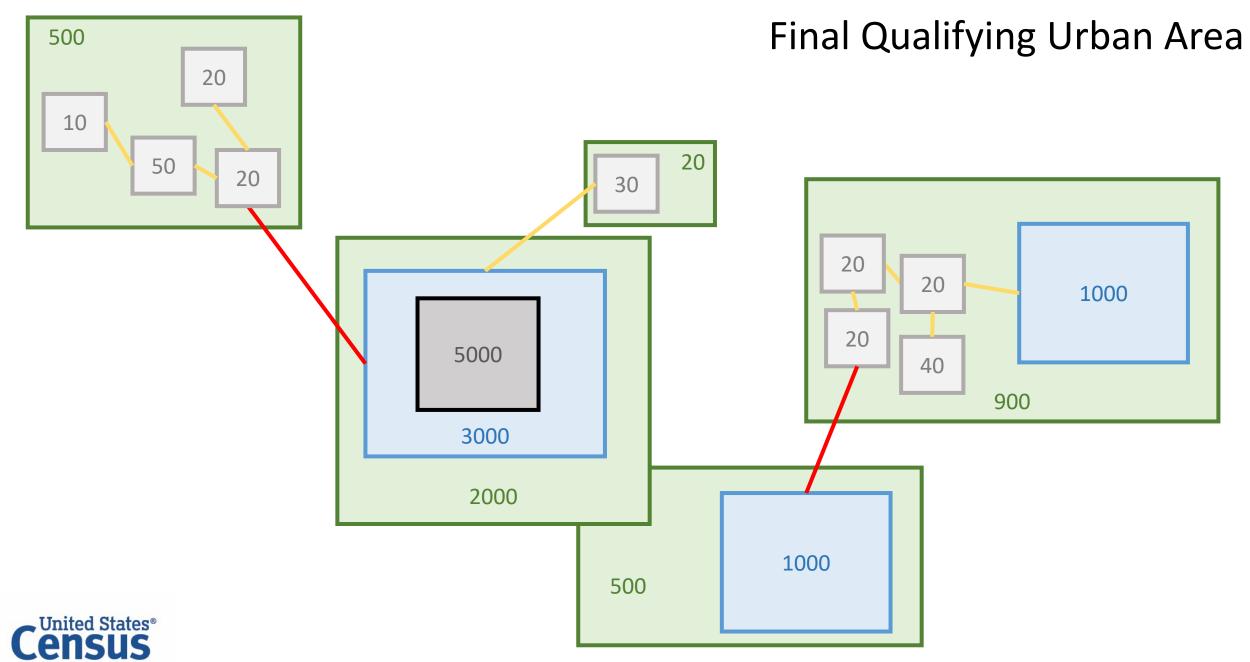


Jump Cores and Connections









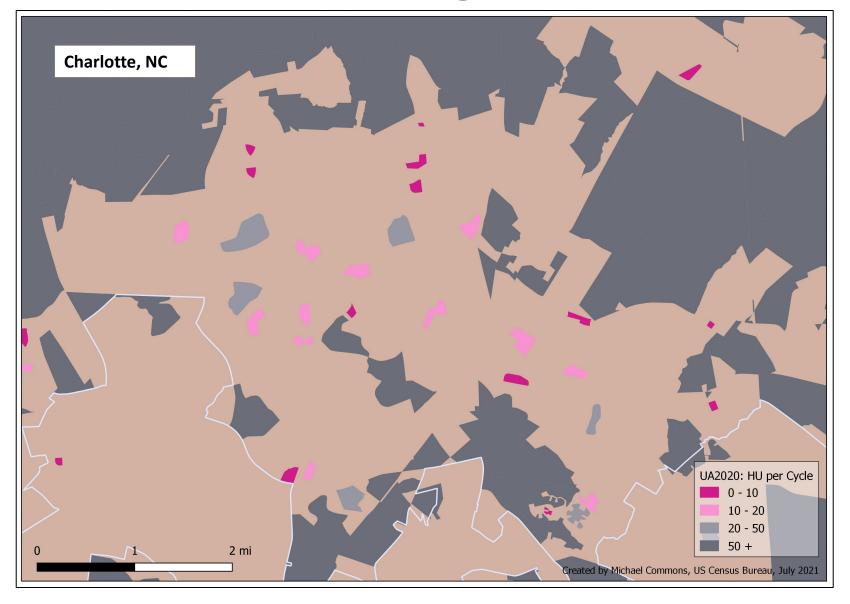
Parameterized Urban Area Criteria

| Criteria | 2010 Final | 2020 FRN-Proposed | 2020 Testing |
|--|-------------------------|----------------------------|-------------------------------|
| Minimum Threshold for UA Qualification | 2,500 persons | 10,000 persons OR 4,000 HU | 5,000 persons OR 2,000 HU |
| Minimum Threshold for Block Qualification* | 1,000 PPSM and 500 PPSM | 385 HPSM | 1275 HPSM, 425 HPSM, 200 HPSM |
| Minimum Threshold for Core to be Hopped from | 1,000 persons | 385 HU | 500 HU |
| Minimum Threshold for Core to be Jumped from | 1,500 persons | 577 HU | 500 HU |
| Maximum Jump Distance | 2.5 Miles | 1.5 Miles | 1.5 Miles |
| Hop and Jump "Corridors" | Included | Not included | Not included |
| Minimum Threshold for Final Cycle Inclusion | n/a | 1 HU | 50 HU |



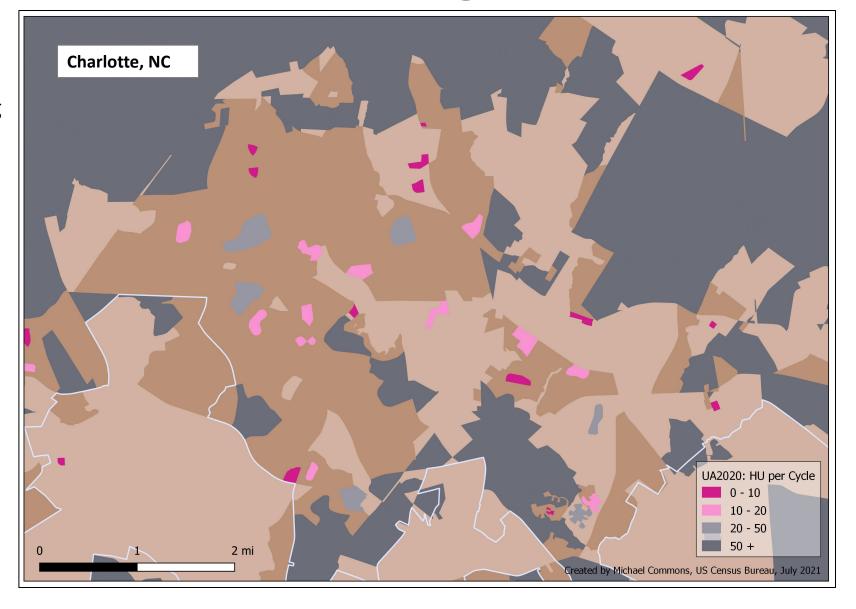
^{*} Impervious surface qualification is consistent for all criteria

- Minimum Urban Area Qualification
 - 5,000 Persons or 2,000 Housing Units
- High Density Cores
 - 1,275 HPSM (0.5 acres per HU)
 - 500 Persons
- Secondary Cores
 - 425 HPSM (3 acres per HU)
- Final Fill
 - 200 HPSM (3 acres per HU)
- Minimum Cycle Size
 - 50 Housing Units



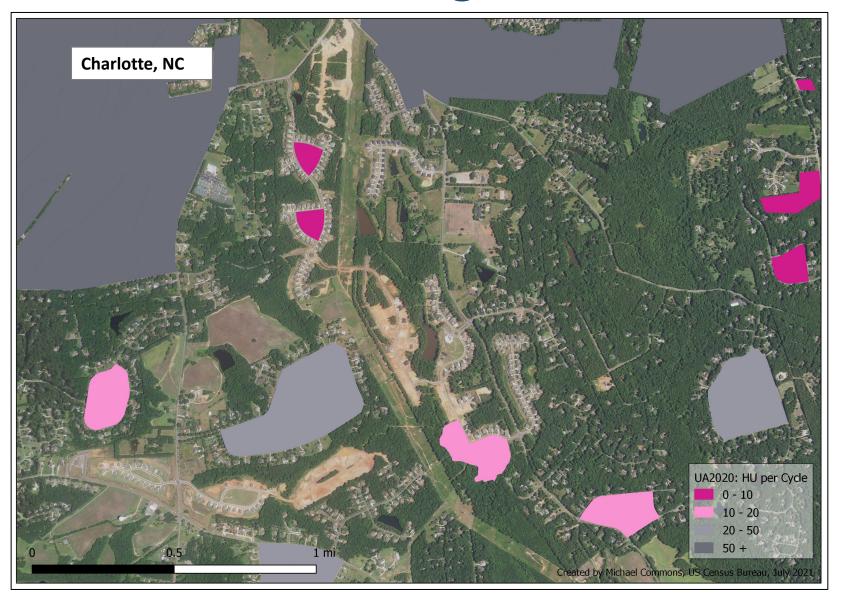


- Minimum Urban Area Qualification
 - 5,000 Persons or 2,000 Housing Units
- High Density Cores
 - 1,275 HPSM (0.5 acres per HU)
 - 500 Persons
- Secondary Cores
 - 425 HPSM (3 acres per HU)
- Final Fill
 - 200 HPSM (3 acres per HU)
- Minimum Cycle Size
 - 50 Housing Units



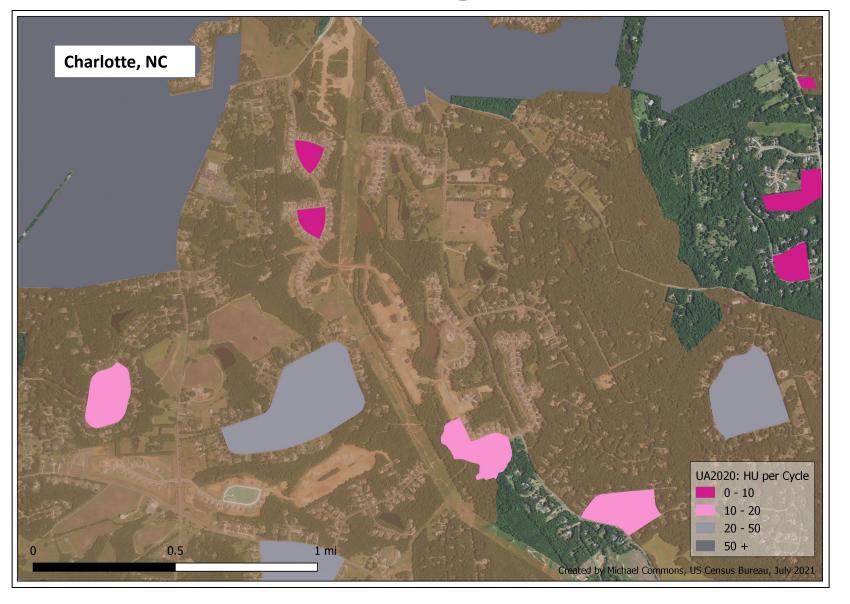


- Minimum Urban Area Qualification
 - 5,000 Persons or 2,000 Housing Units
- High Density Cores
 - 1,275 HPSM (0.5 acres per HU)
 - 500 Persons
- Secondary Cores
 - 425 HPSM (3 acres per HU)
- Final Fill
 - 200 HPSM (3 acres per HU)
- Minimum Cycle Size
 - 50 Housing Units





- Minimum Urban Area Qualification
 - 5,000 Persons or 2,000 Housing Units
- High Density Cores
 - 1,275 HPSM (0.5 acres per HU)
 - 500 Persons
- Secondary Cores
 - 425 HPSM (3 acres per HU)
- Final Fill
 - 200 HPSM (3 acres per HU)
- Minimum Cycle Size
 - 50 Housing Units





Schedule

| Spring 2021 | Publish Proposed Urban/Rural Criteria in the Federal Register Notice |
|---------------|---|
| Summer 2021 | Review comments on Proposed Urban/Rural Criteria published in the Federal Register Notice |
| Winter 2021-2 | Publish Final Urban/Rural Criteria in the Federal Register Notice |
| Summer 2022 | Publish Federal Register Notice announcing qualifying Urban Areas |



Contact Us

Send questions and comments to us at geo.urban@census.gov

Proposed Criteria Federal Register Notice:

https://www.federalregister.gov/documents/2021/02/19/2021-03412/urban-areas-for-the-2020-census-proposed-criteria

Census Bureau Urban and Rural page with link to 2020 Proposed Urban Area Criteria Viewer:

https://www.census.gov/programssurveys/geography/guidance/geo-areas/urbanrural.html

