

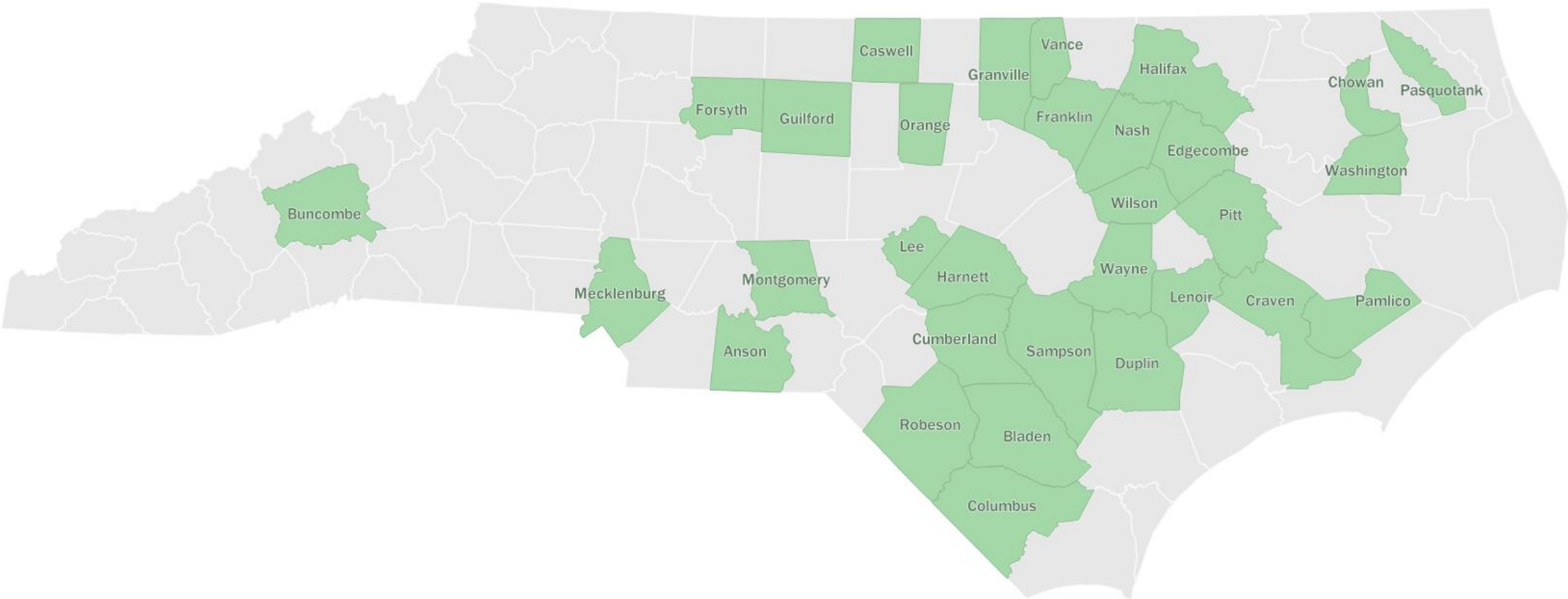
Changing Demographics, Drawing Districts, and County Impacts

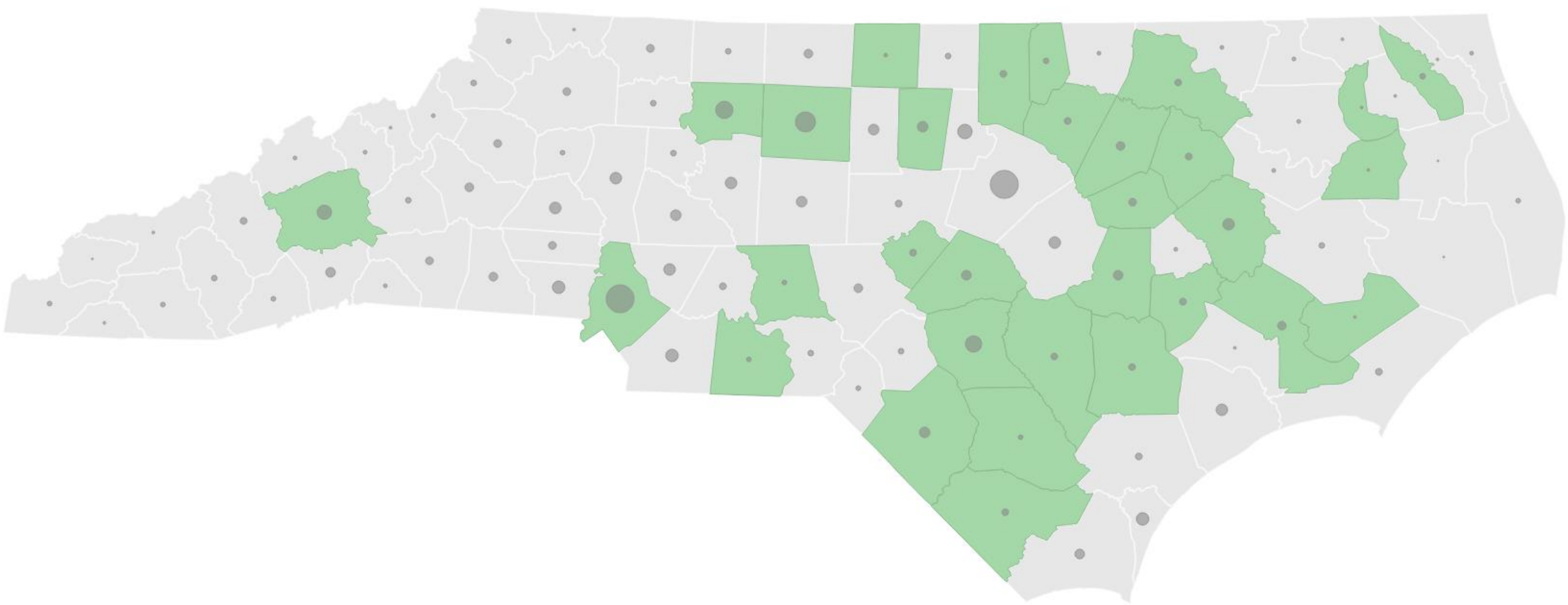
North Carolina Association of County Commissioners 113th Annual Conference

Deborah Stagner, Blake Esselstyn

August 6, 2020

Redistricting consultant:
demography + geography + ...



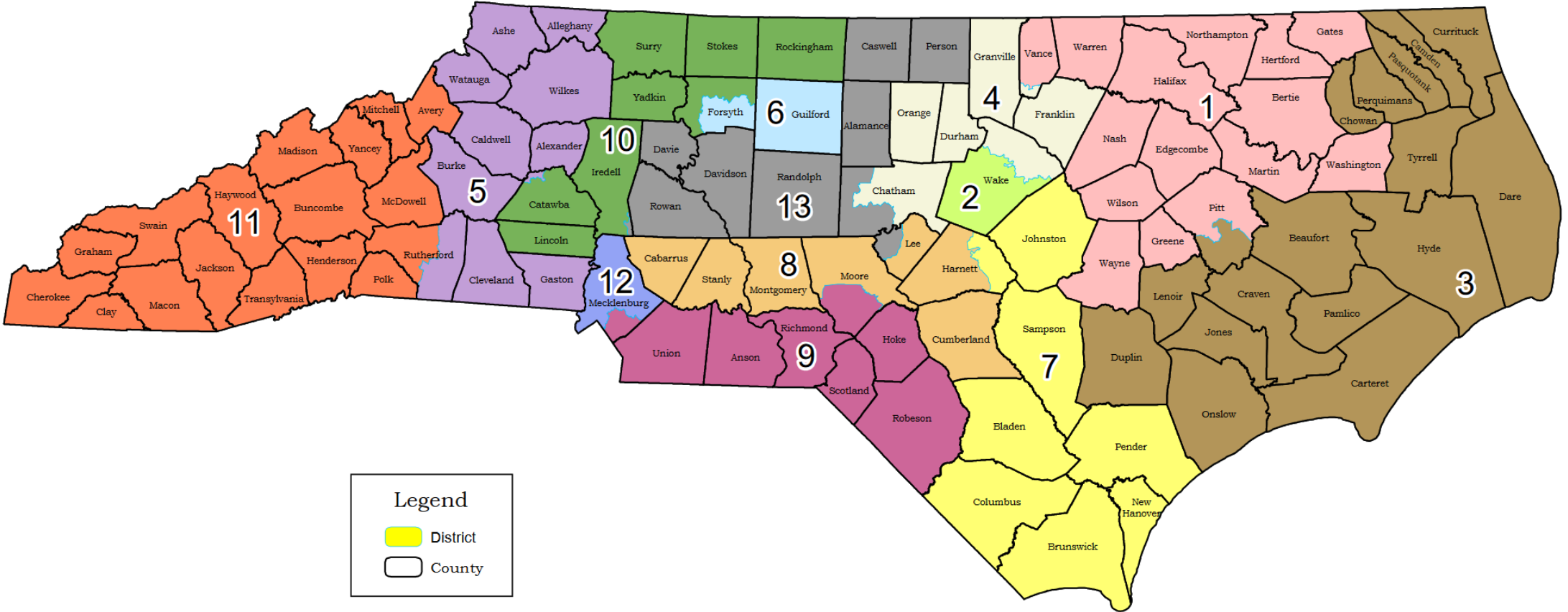


The only constant is ...

The only constant is ...
change.

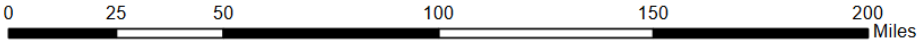
Changing Population

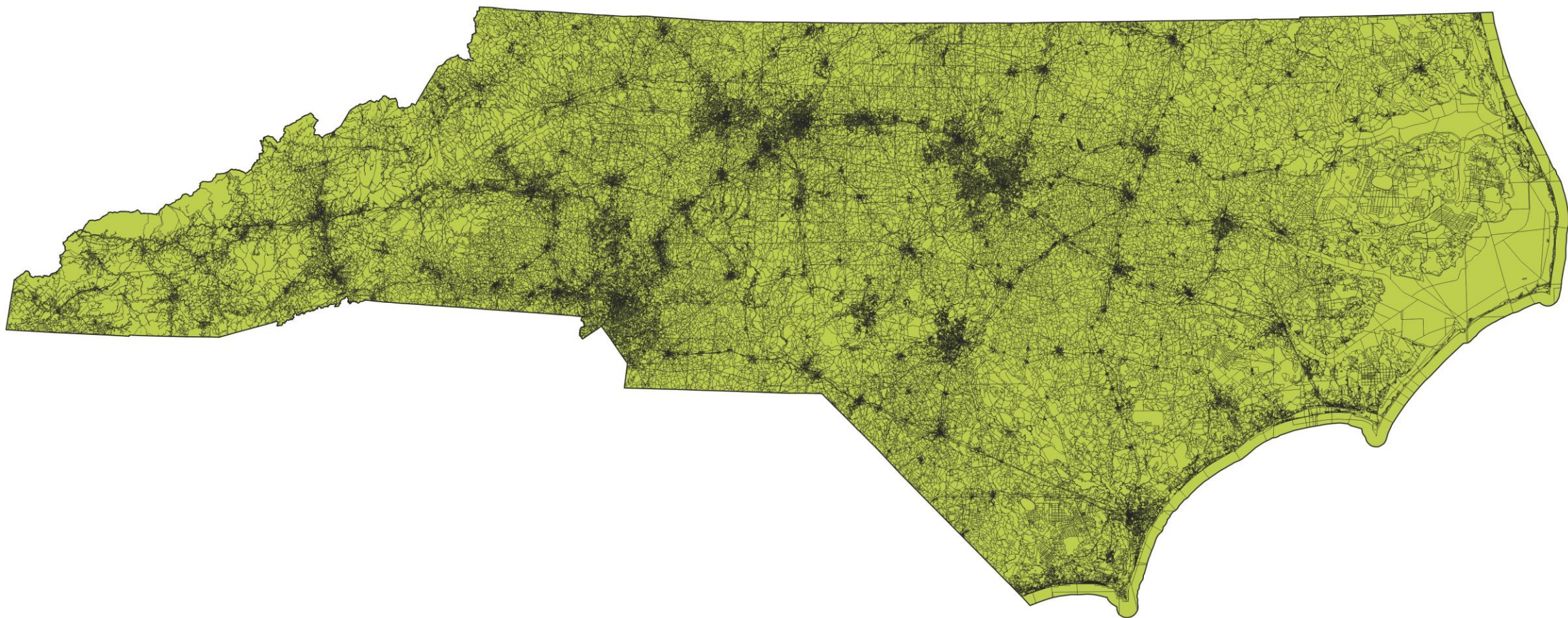
HB1029 3rd Edition

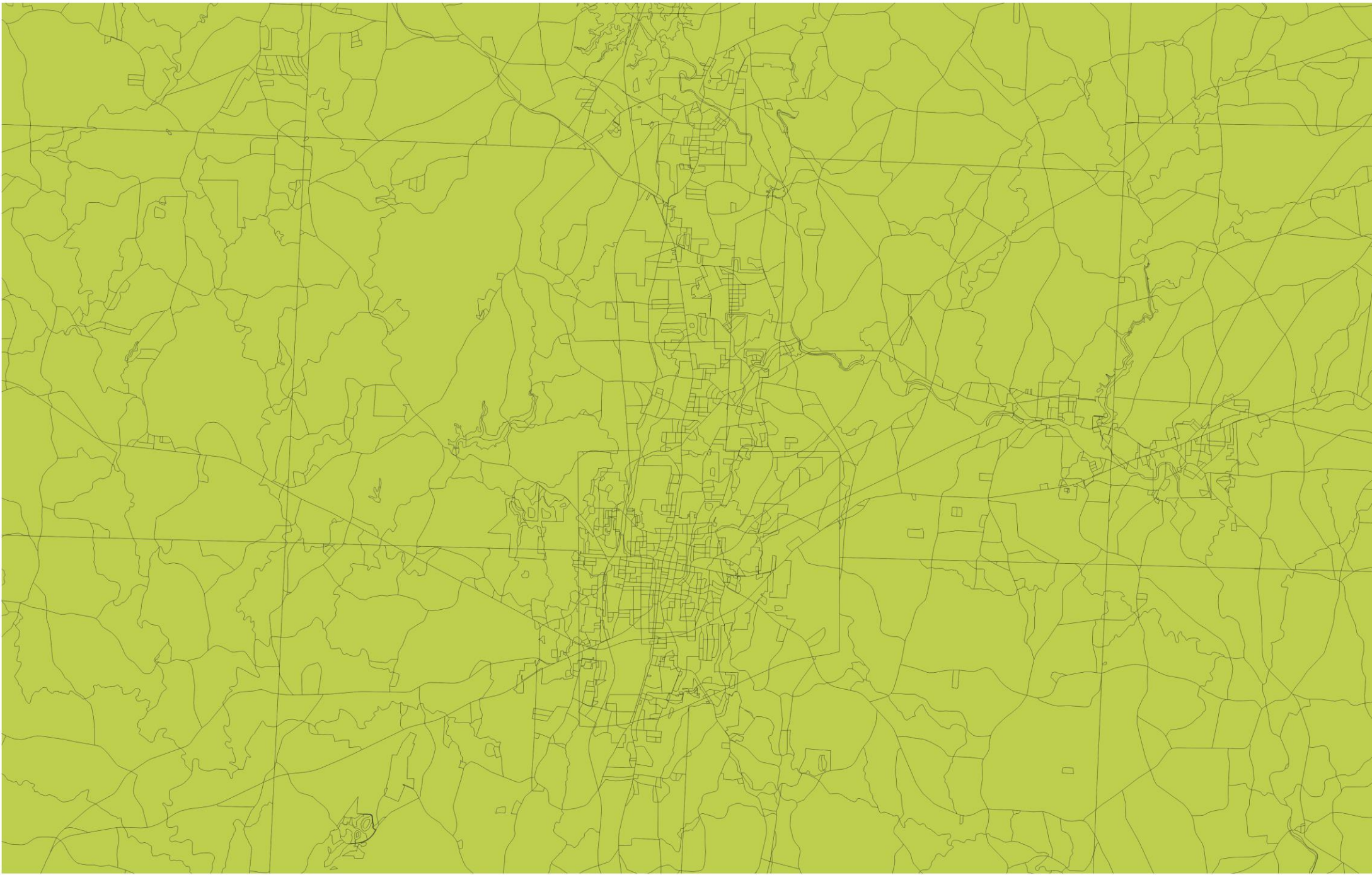


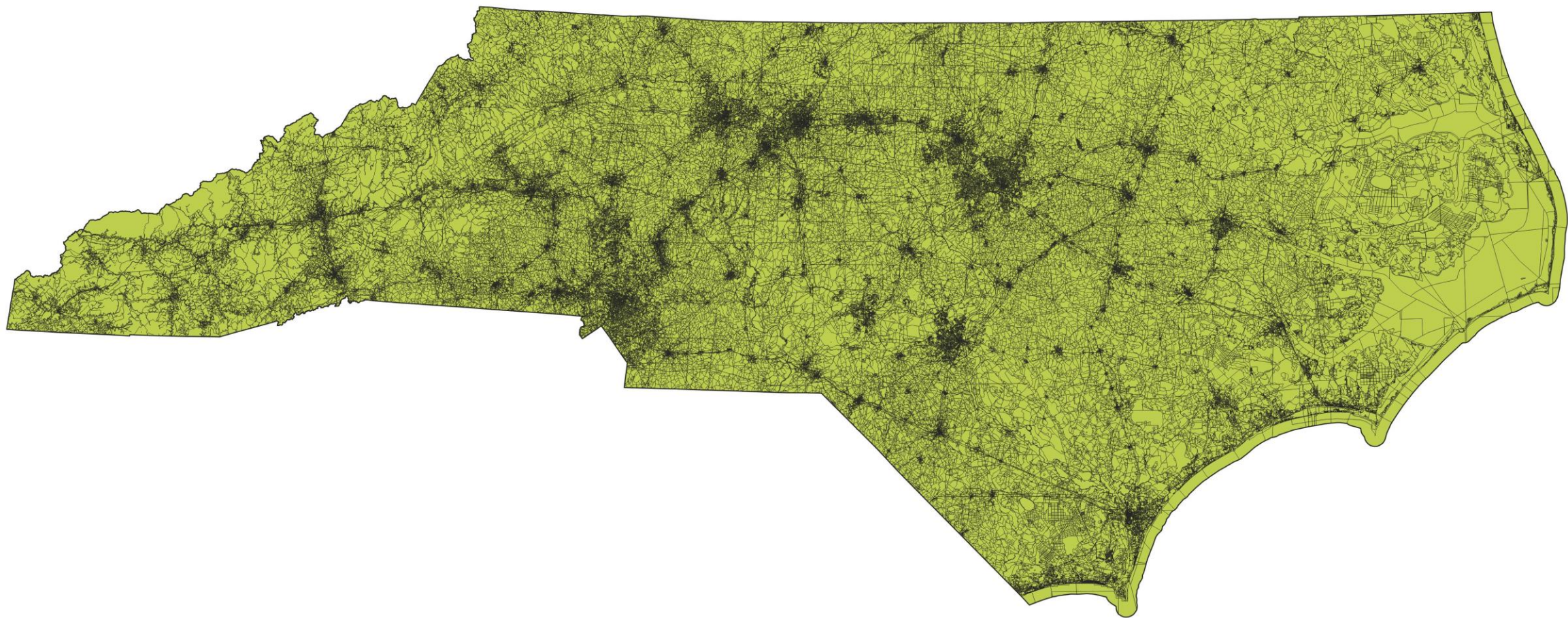
Legend

- District
- County





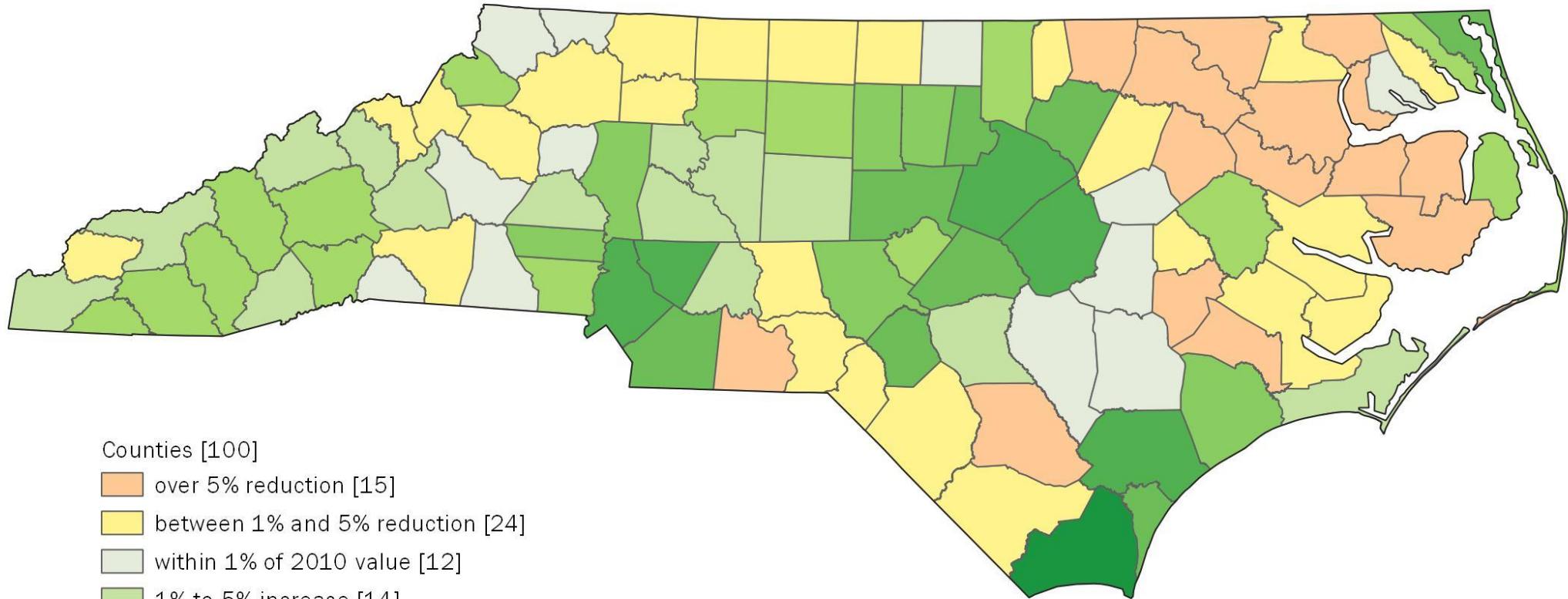




Estimates

(Census, ACS, NC OSBM)

County Population Change as Percentage 2010-2019

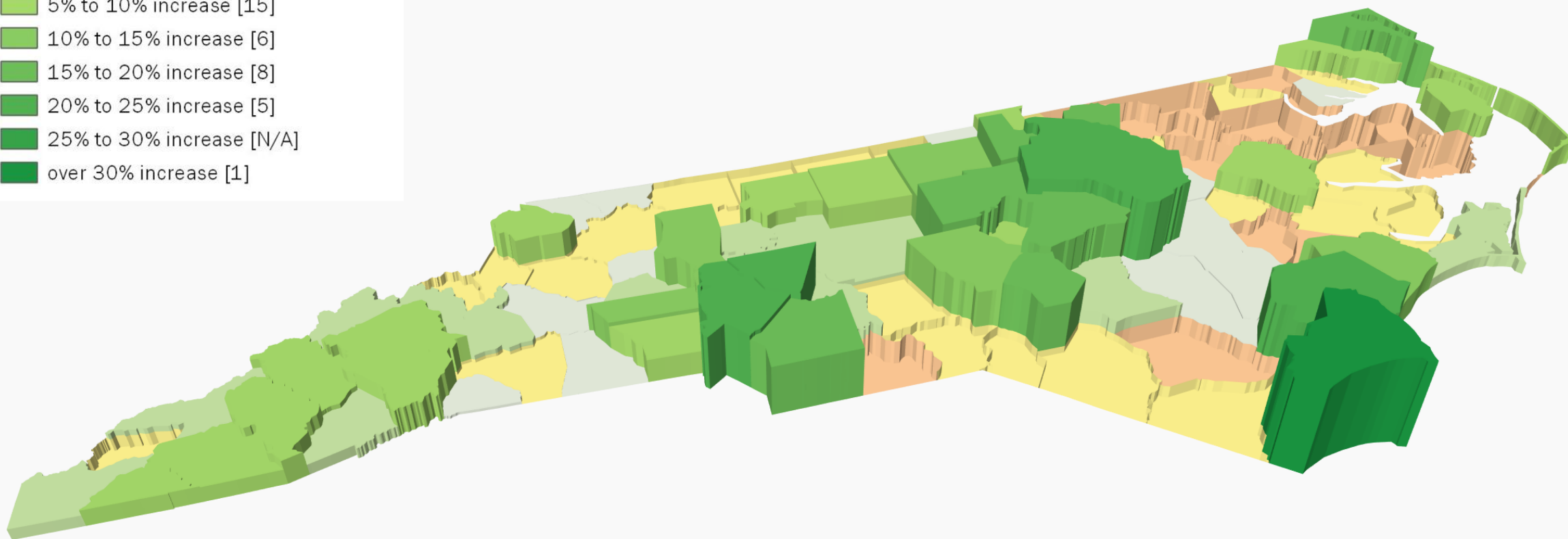
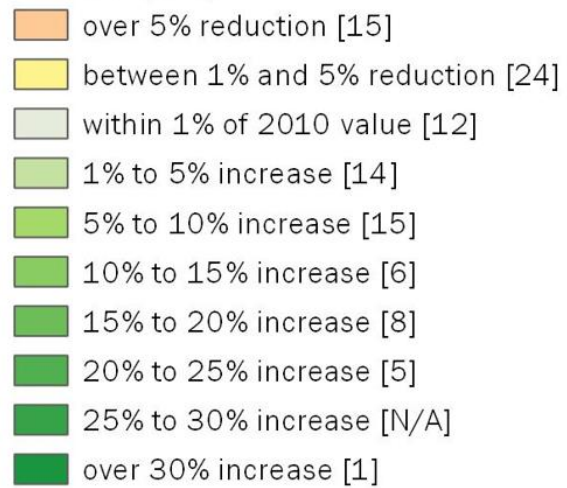


Counties [100]

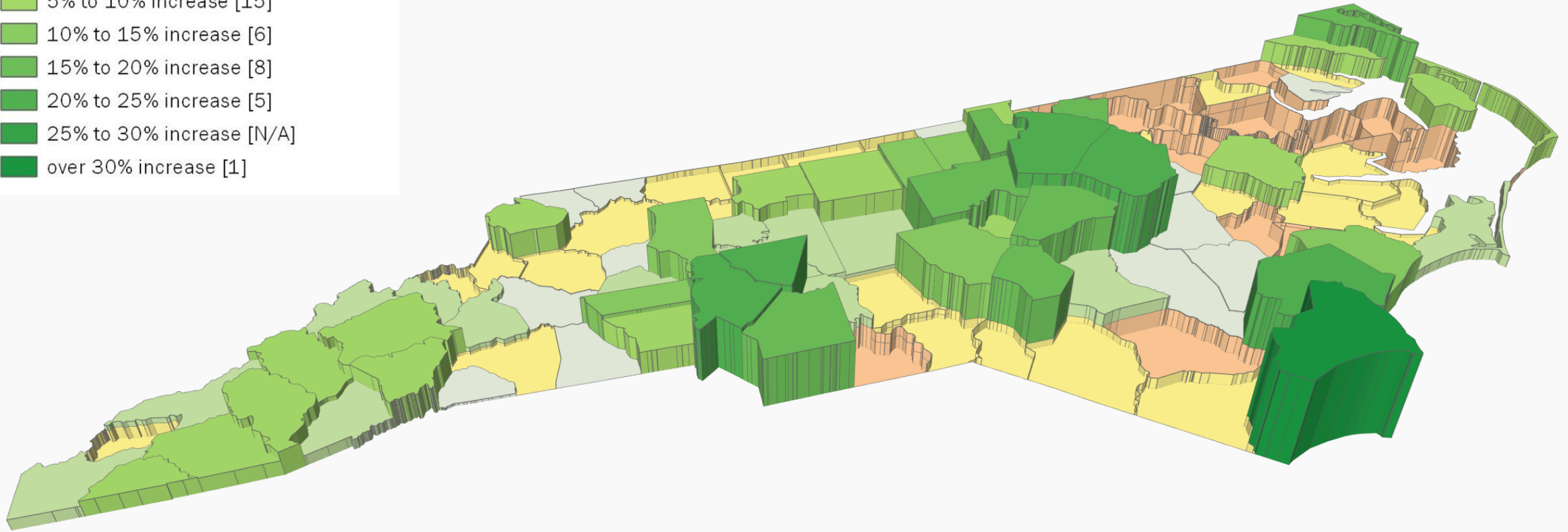
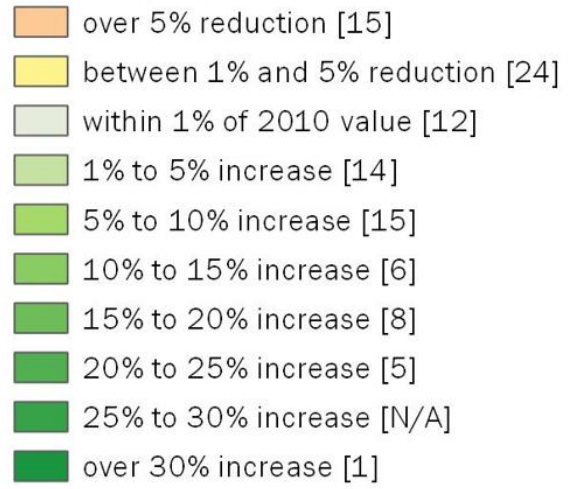
- over 5% reduction [15]
- between 1% and 5% reduction [24]
- within 1% of 2010 value [12]
- 1% to 5% increase [14]
- 5% to 10% increase [15]
- 10% to 15% increase [6]
- 15% to 20% increase [8]
- 20% to 25% increase [5]
- 25% to 30% increase [N/A]
- over 30% increase [1]

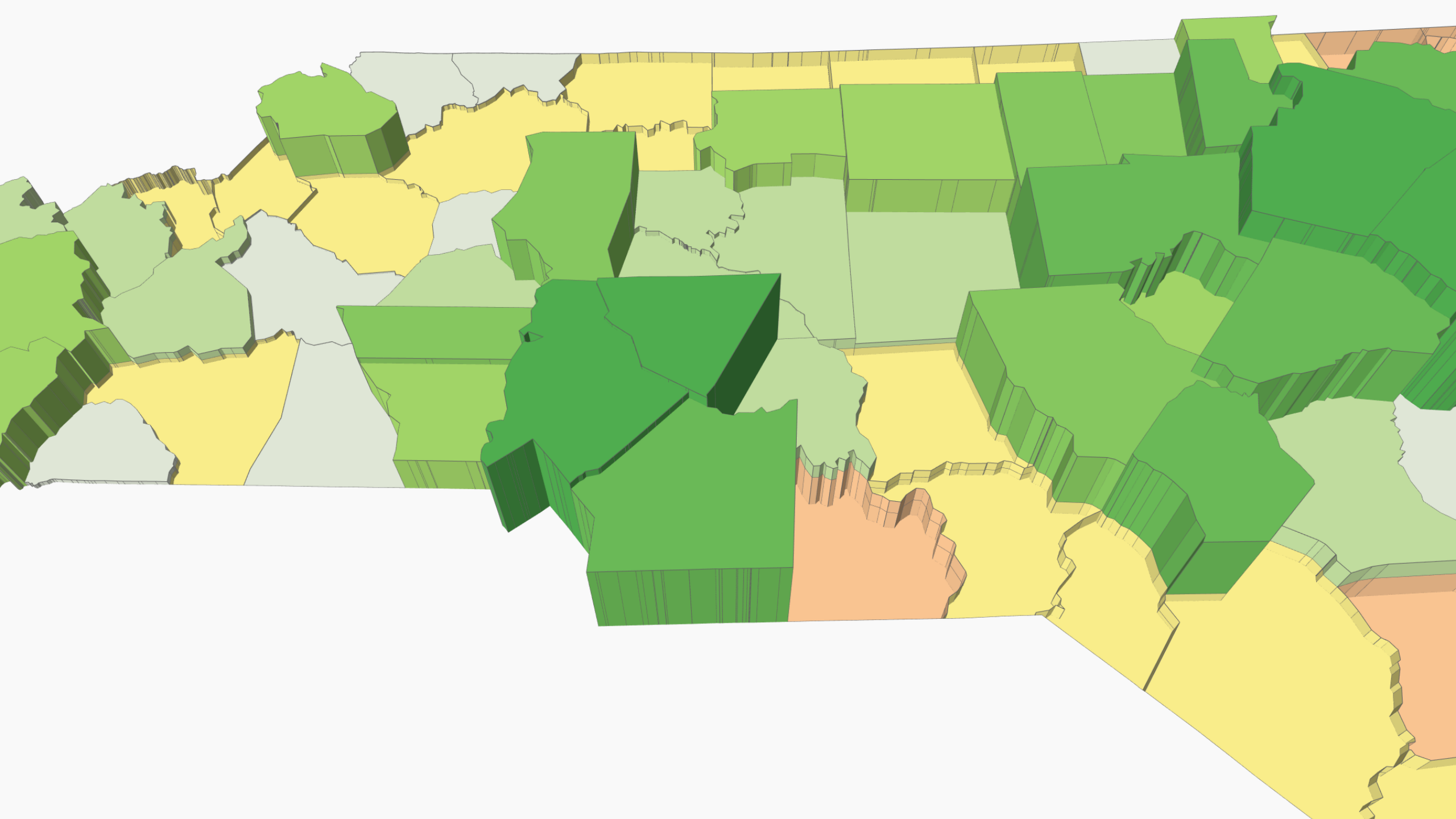
Change from 2010 Census count to Census Bureau 2019 county estimates

Counties [100]

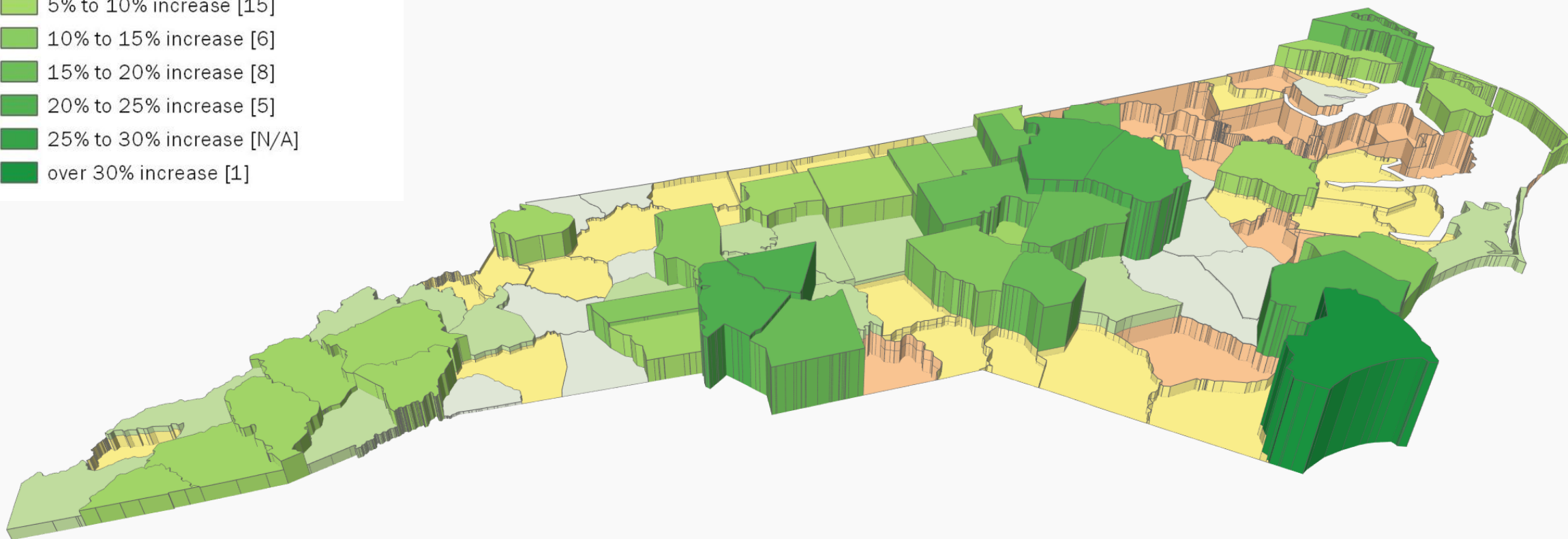
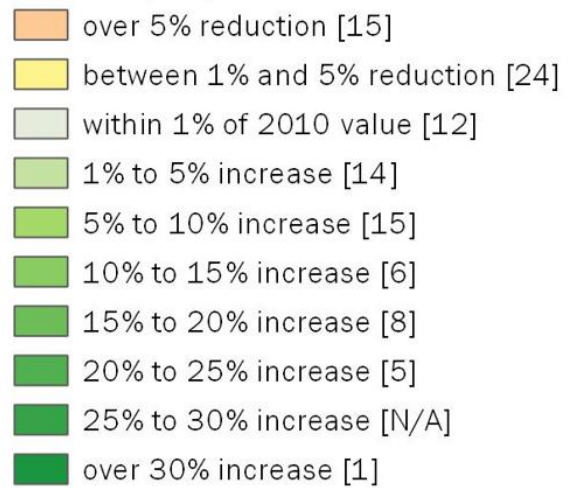


Counties [100]

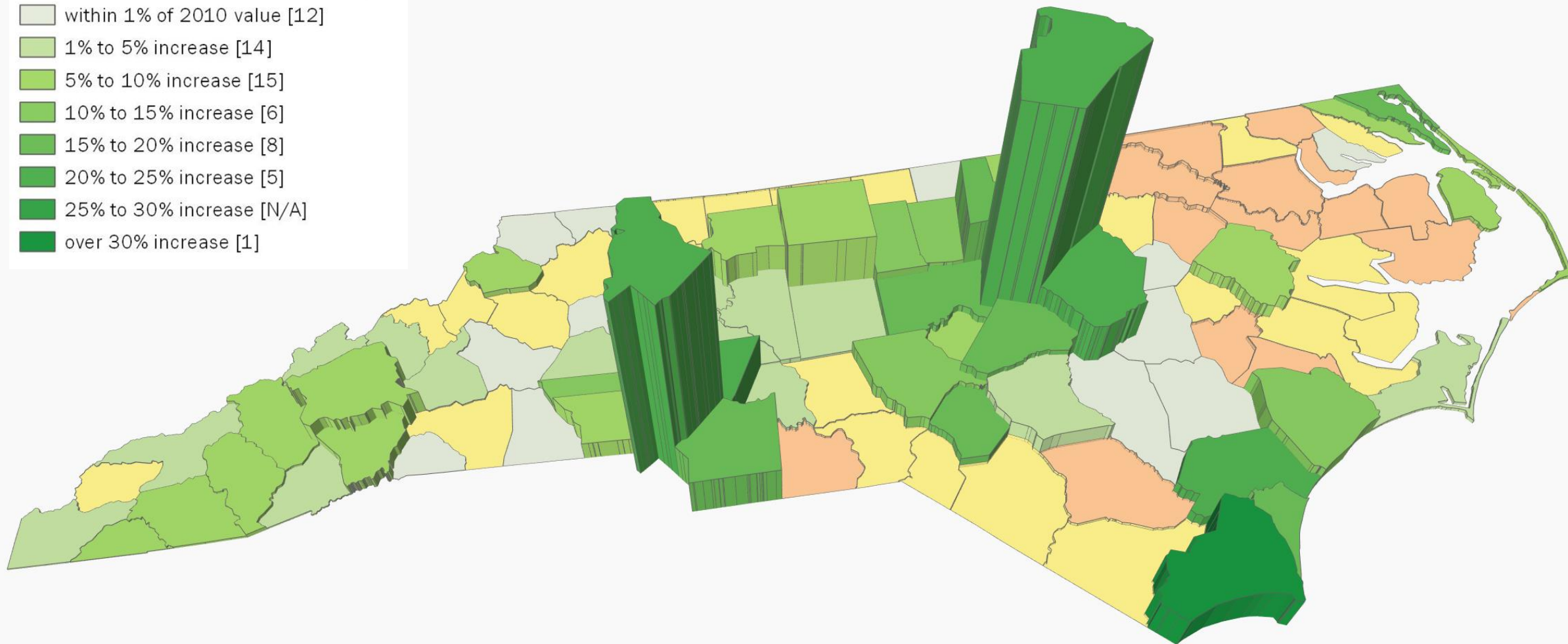
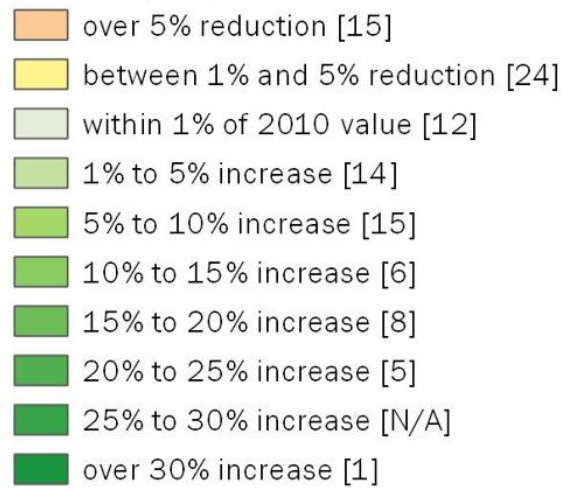




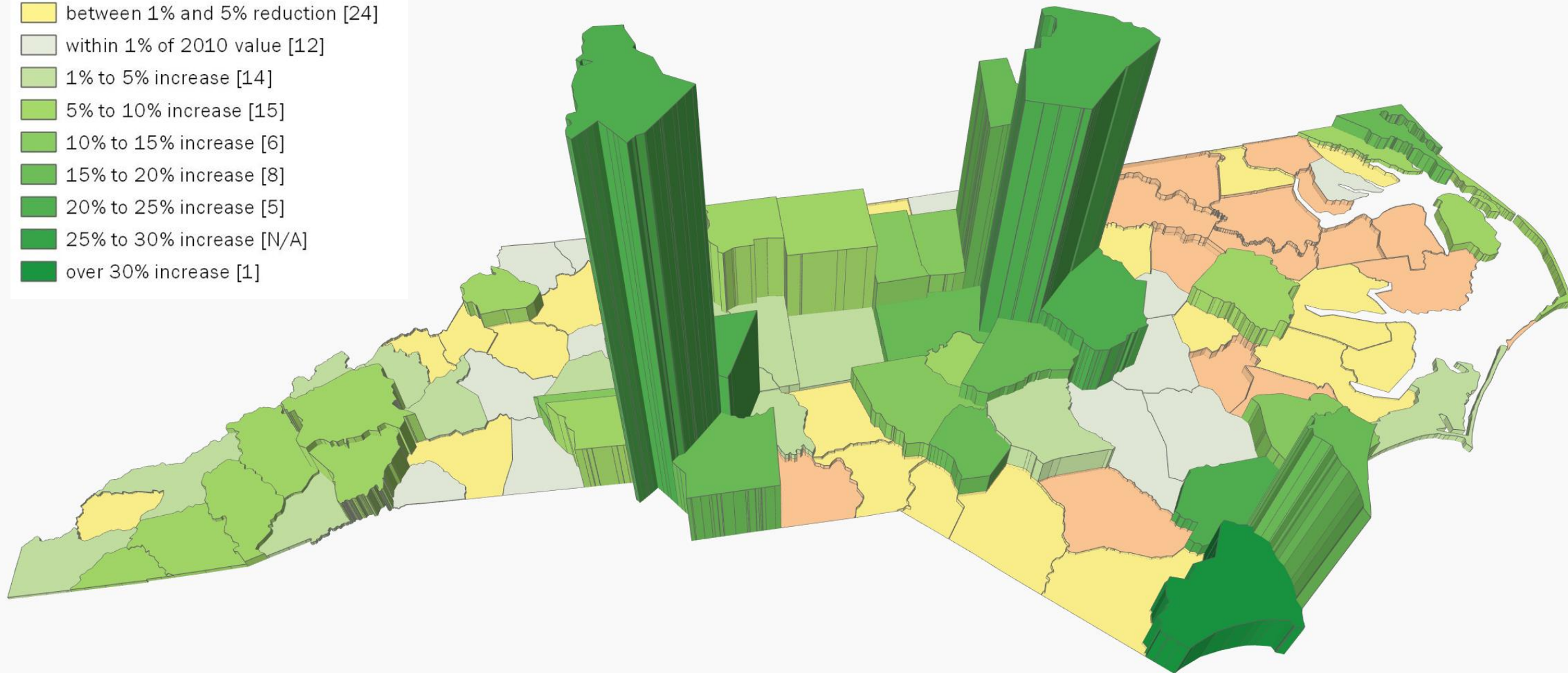
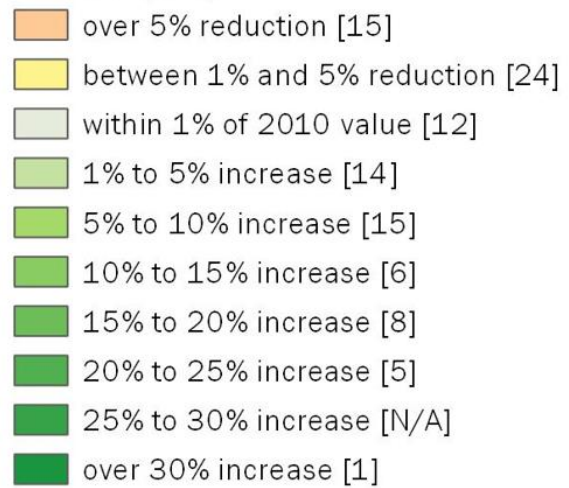
Counties [100]

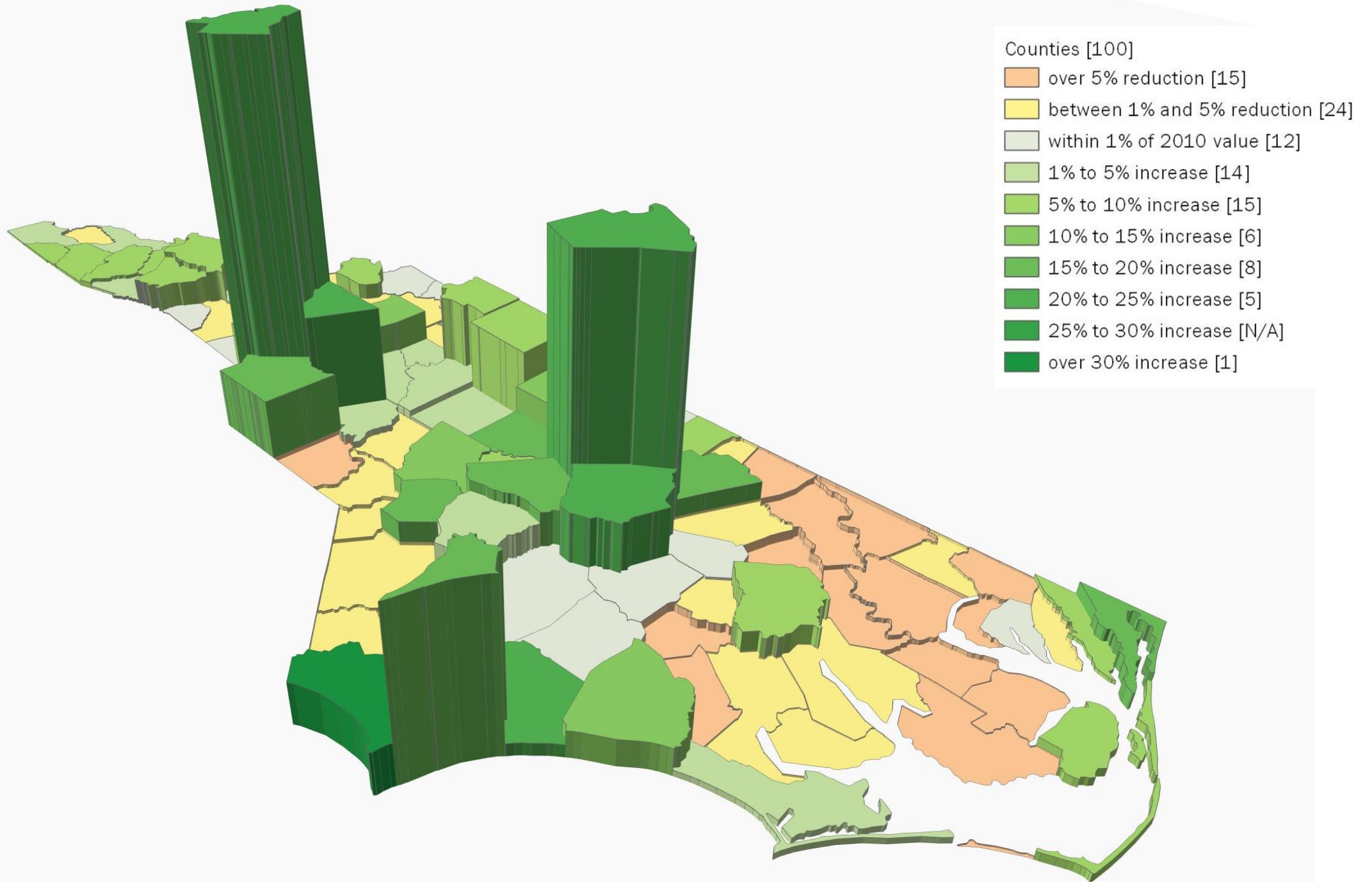


Counties [100]



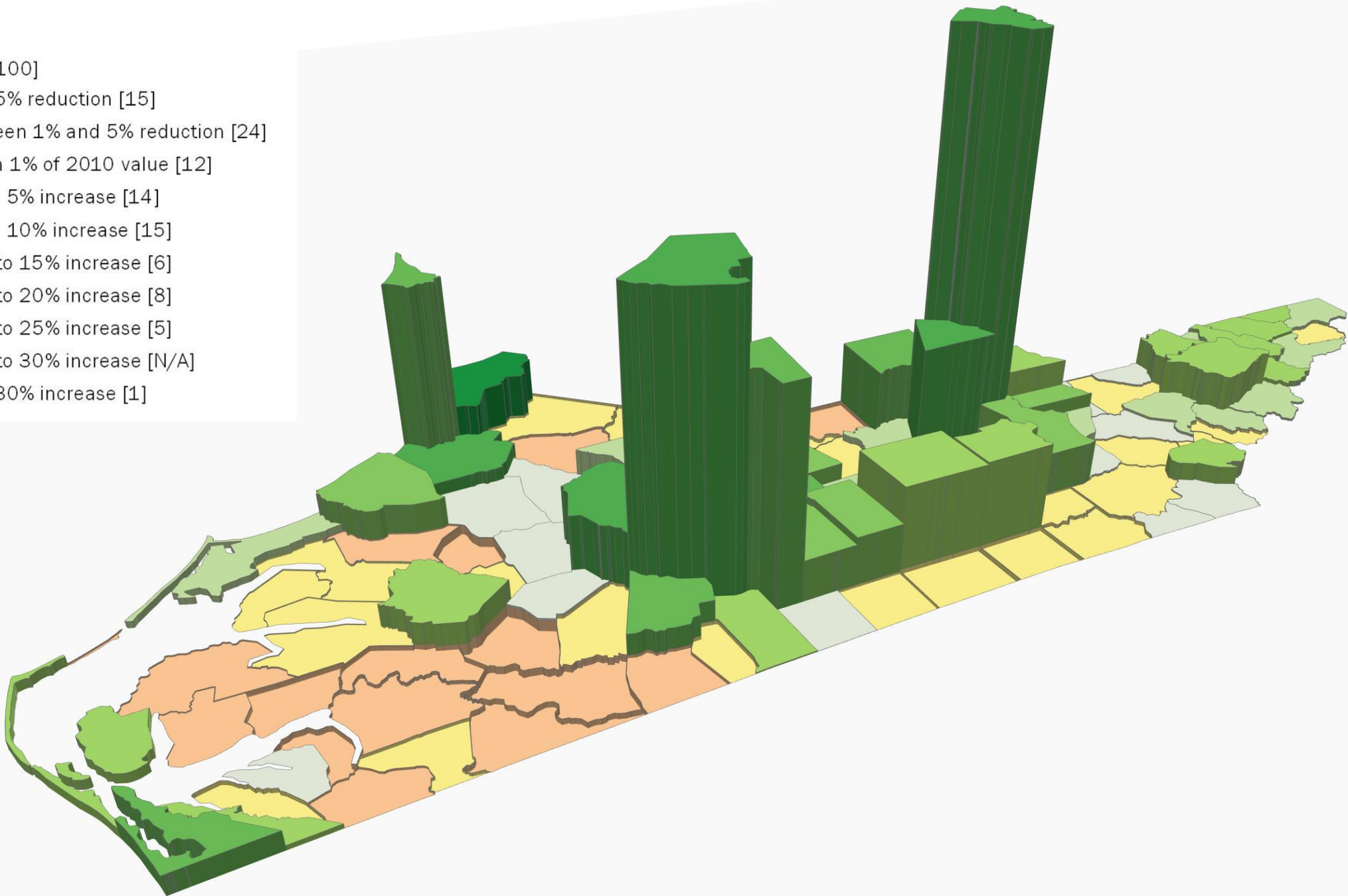
Counties [100]



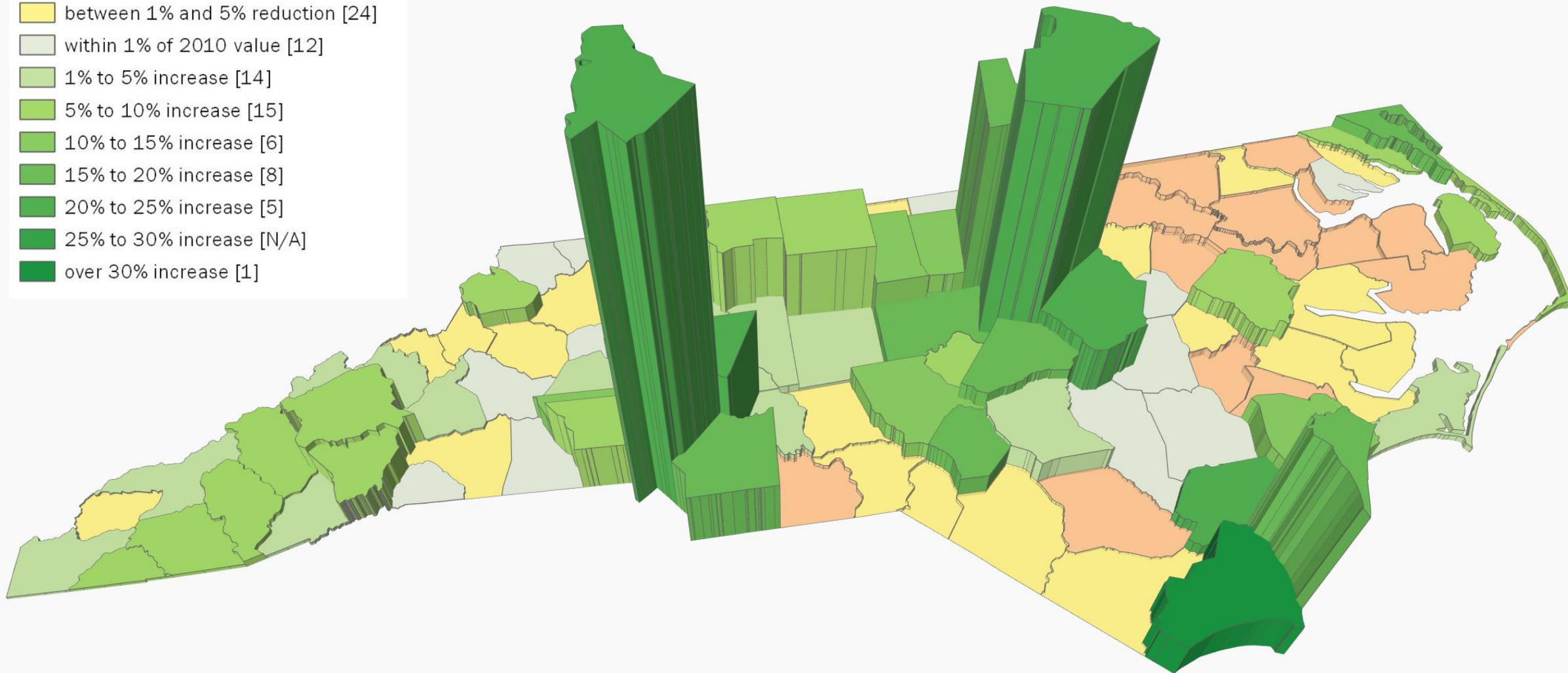
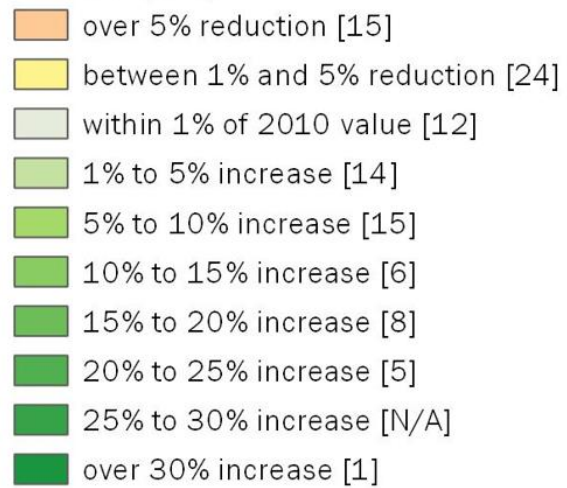


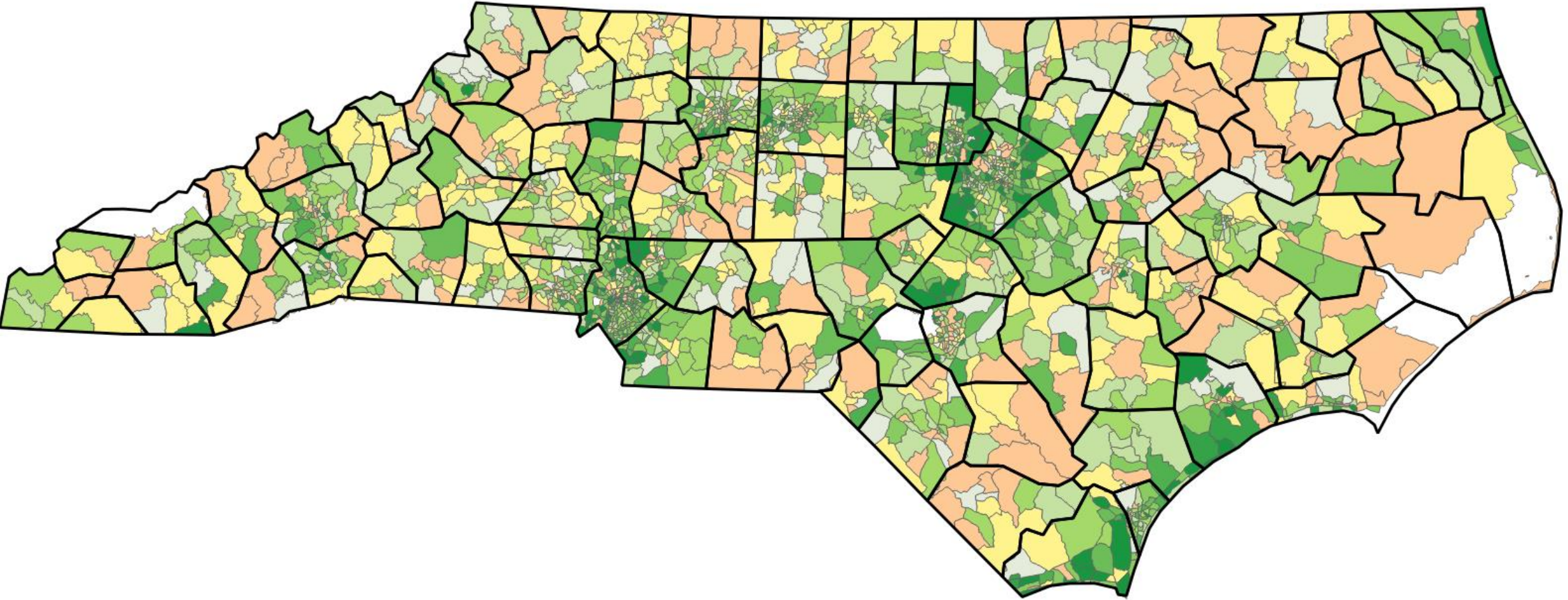
Counties [100]

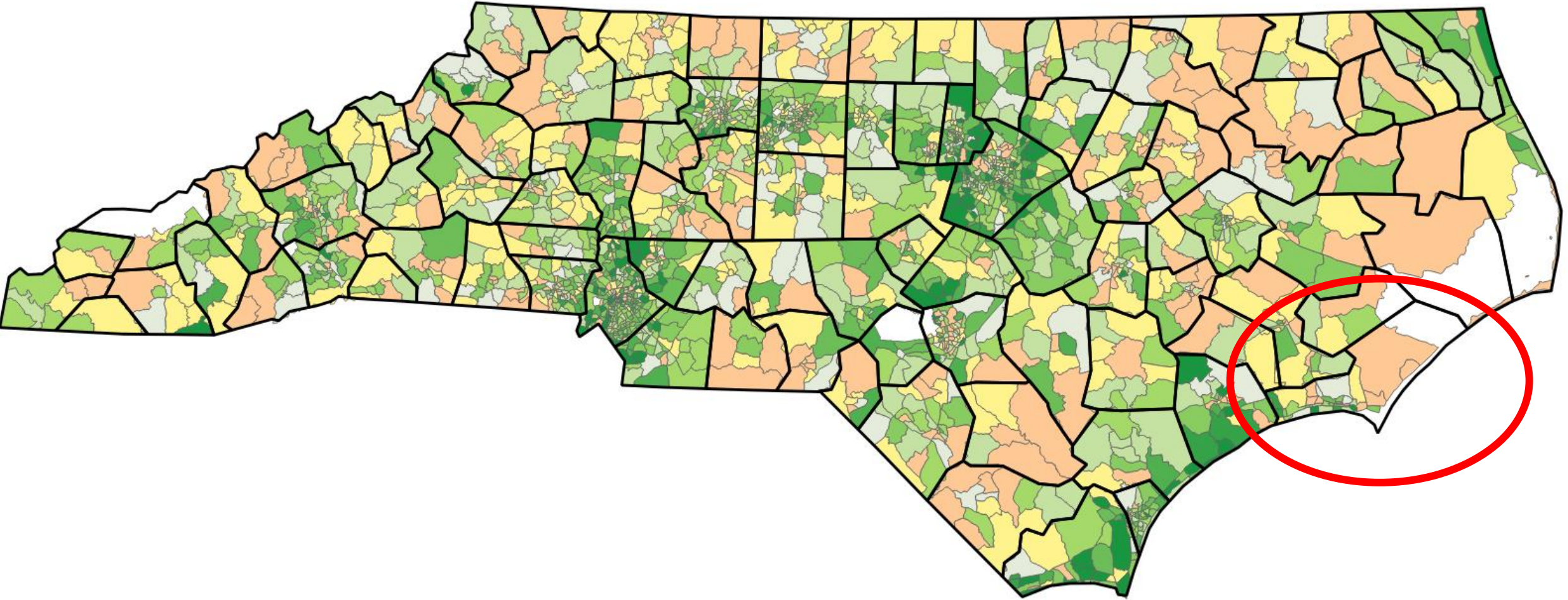
- over 5% reduction [15]
- between 1% and 5% reduction [24]
- within 1% of 2010 value [12]
- 1% to 5% increase [14]
- 5% to 10% increase [15]
- 10% to 15% increase [6]
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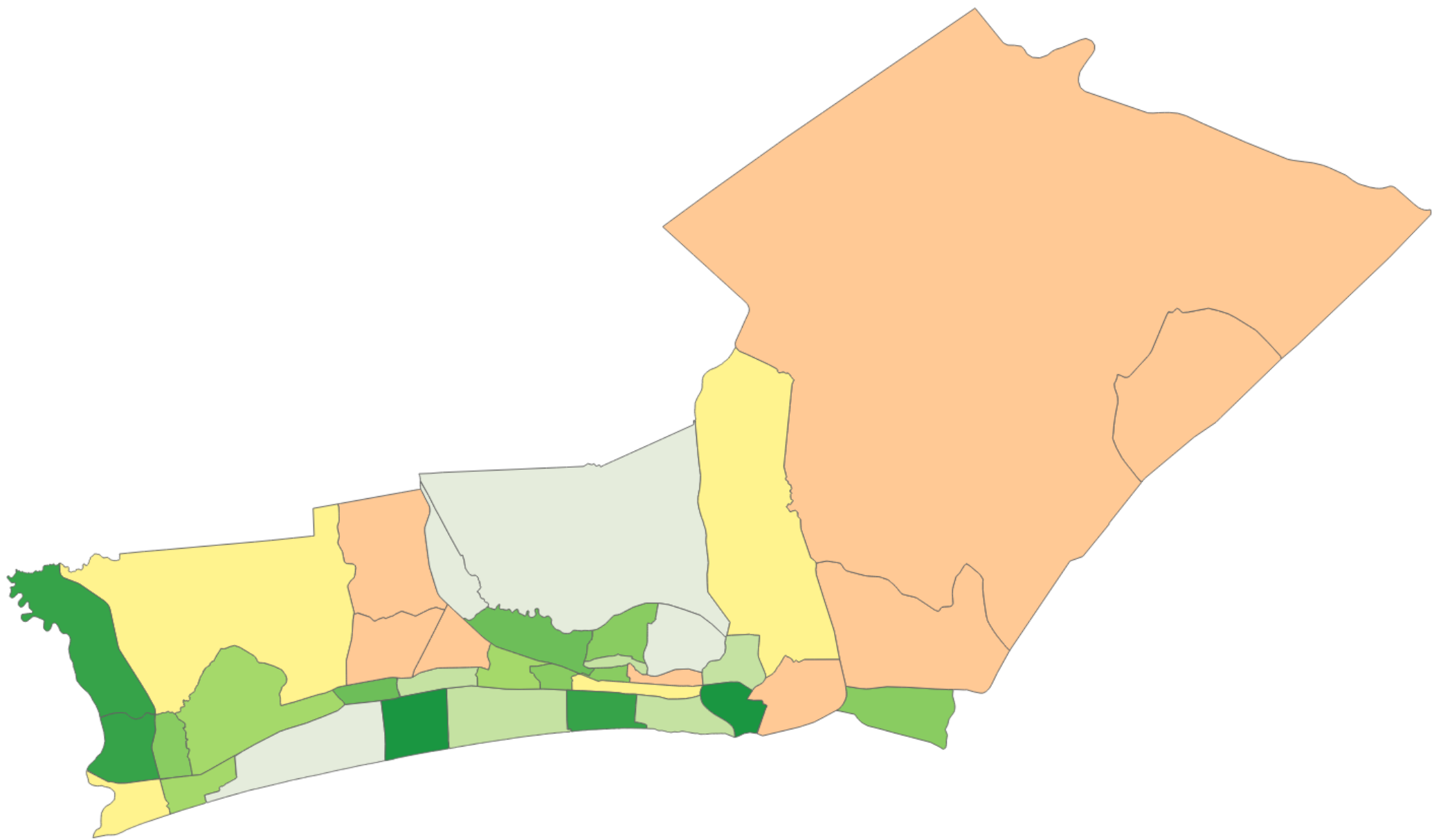


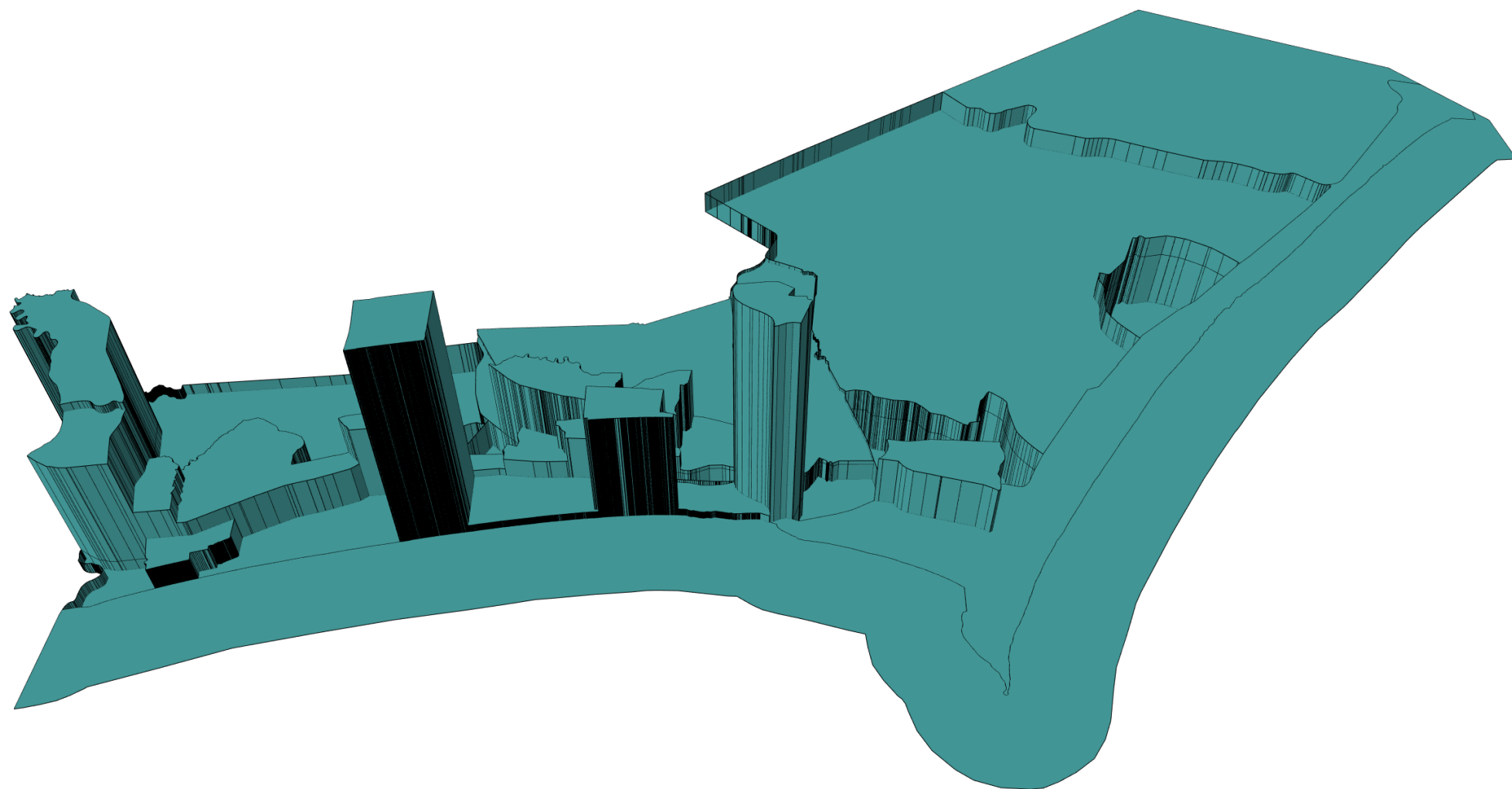
Counties [100]

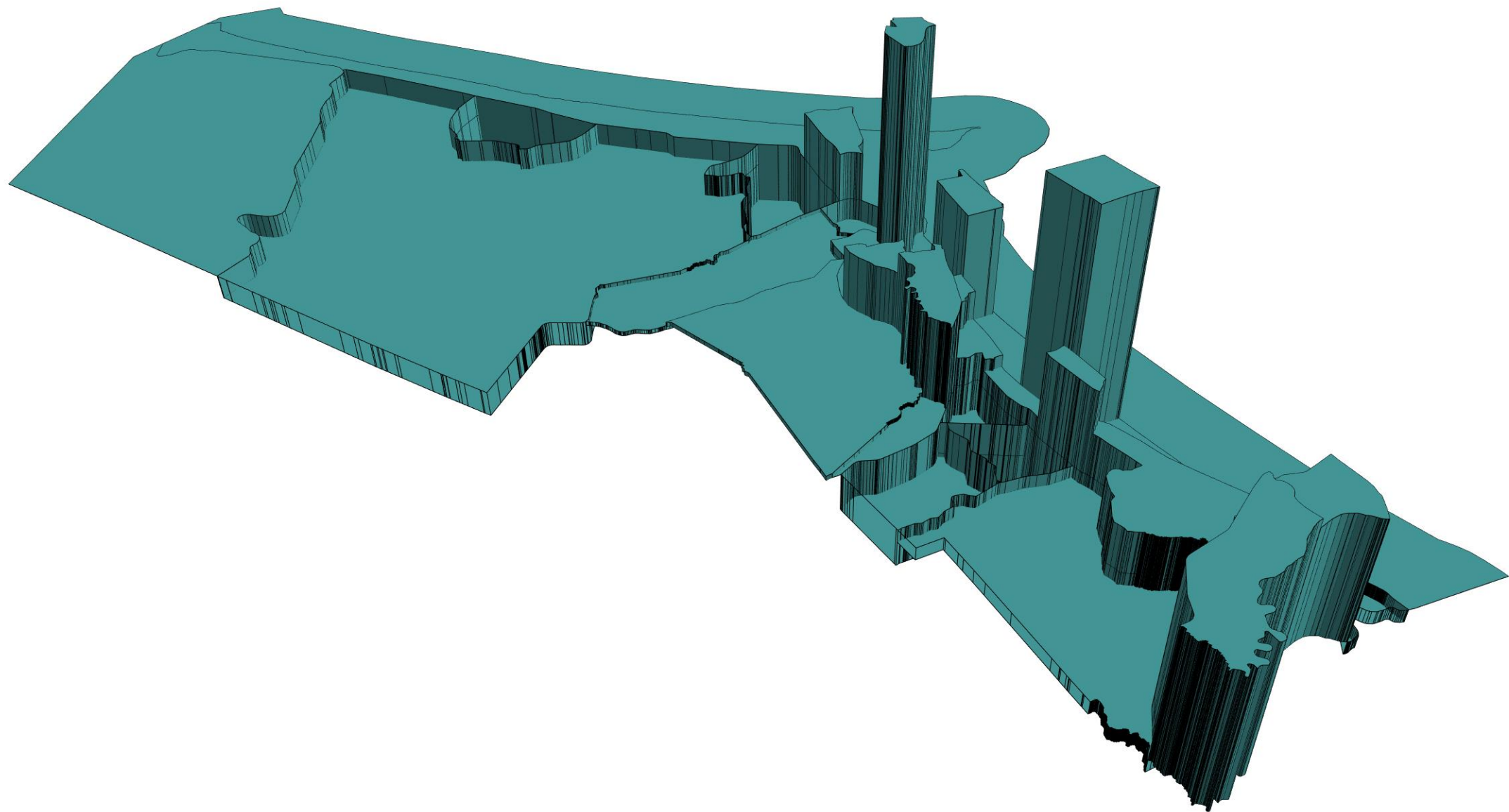




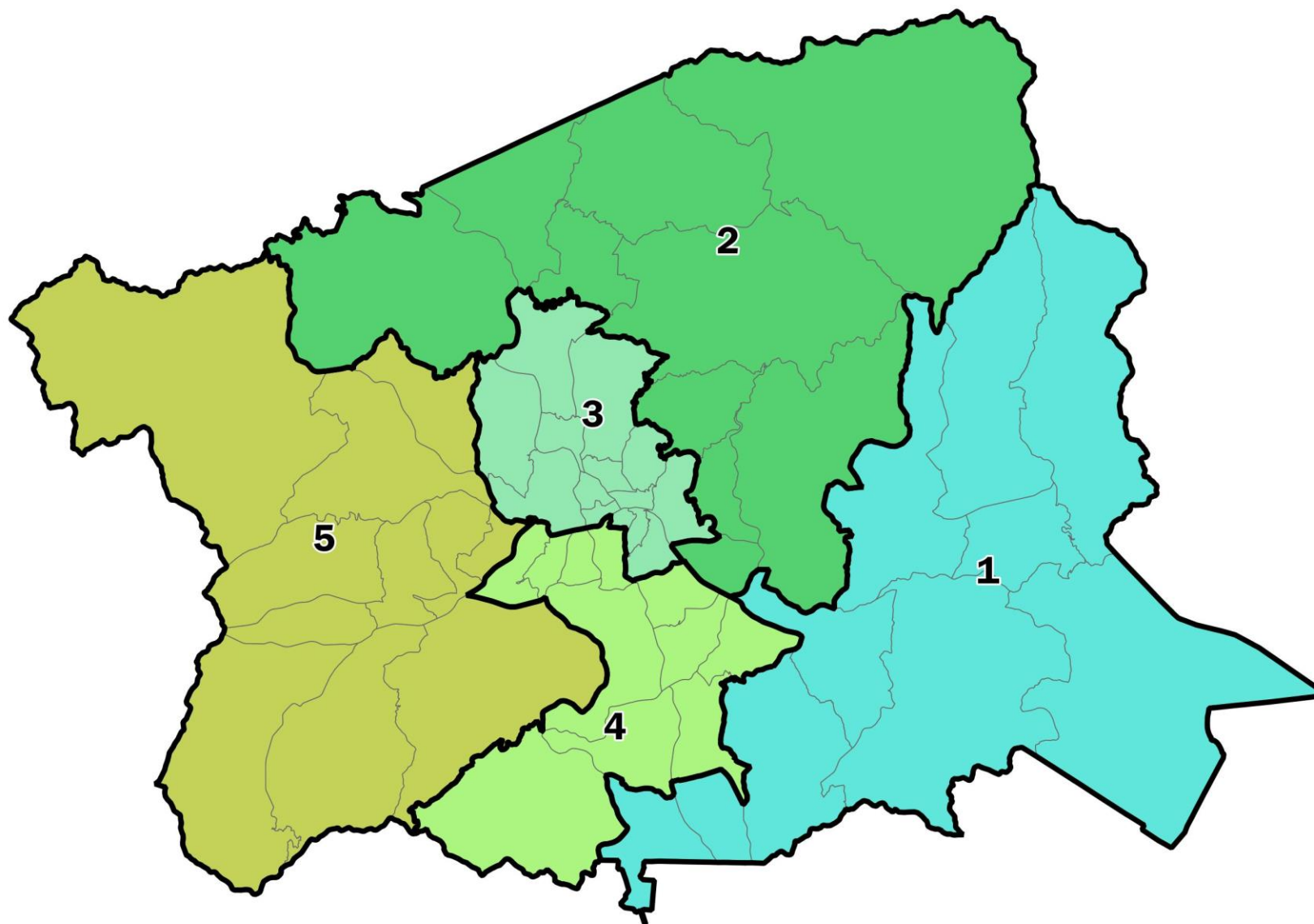


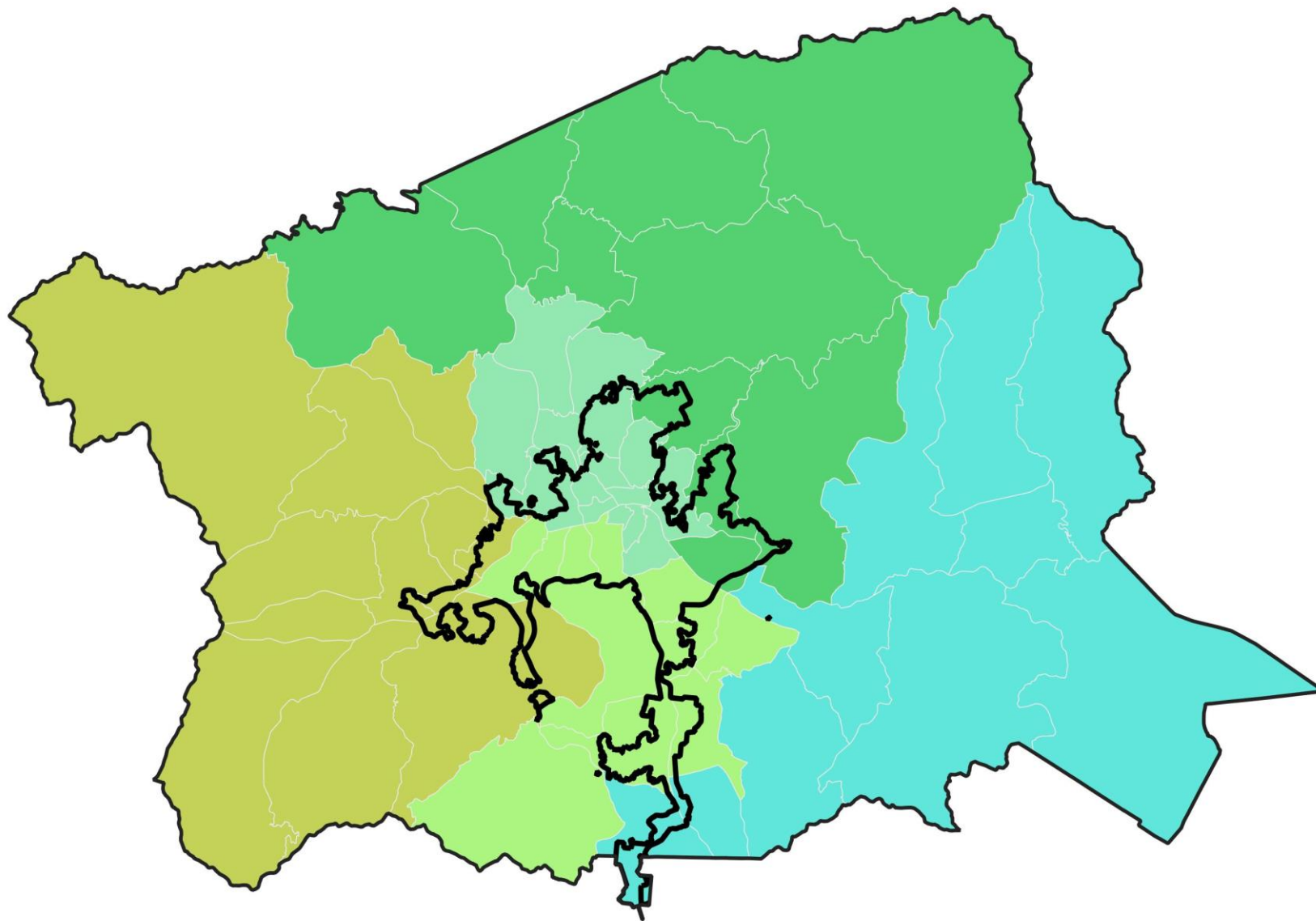


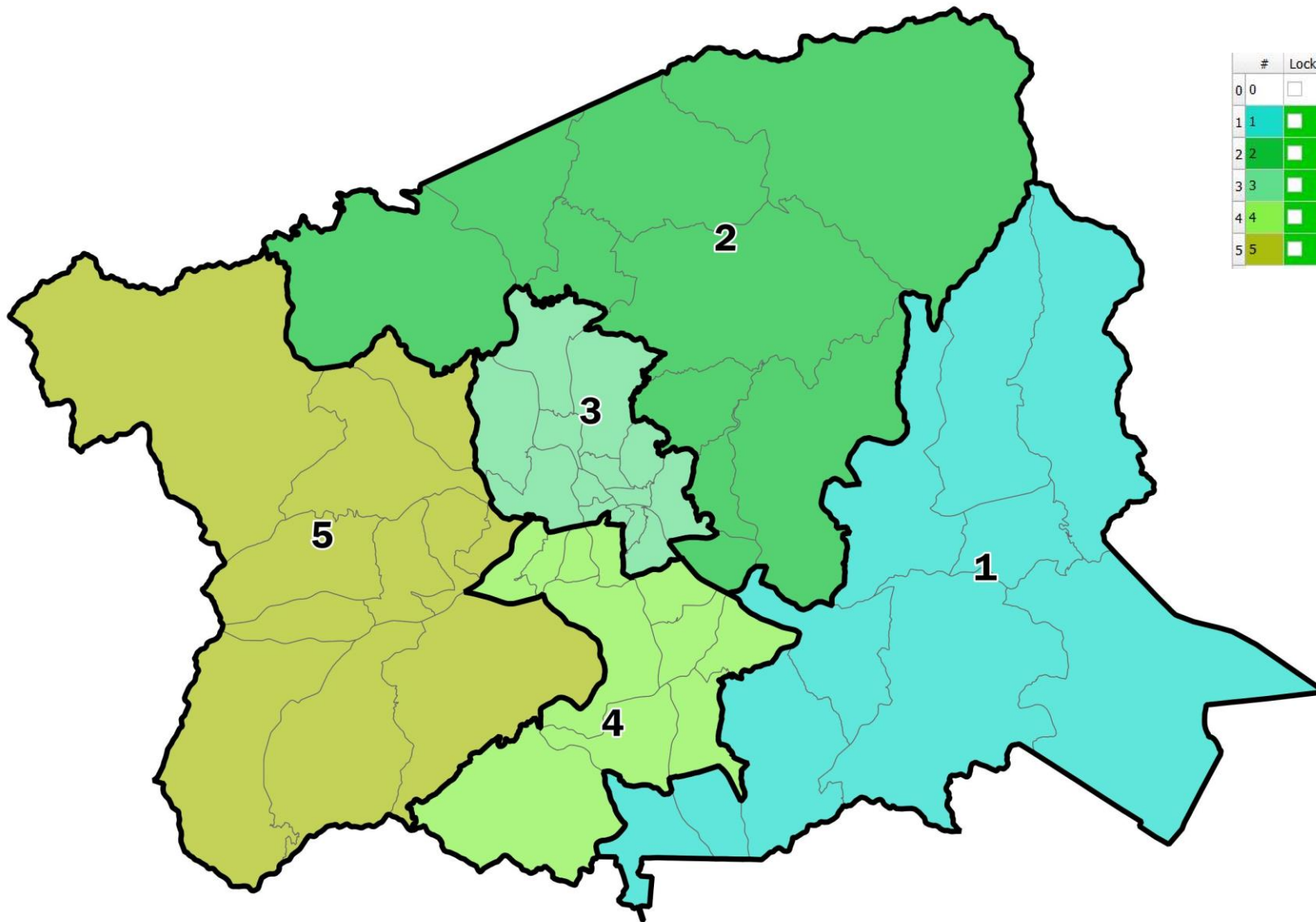




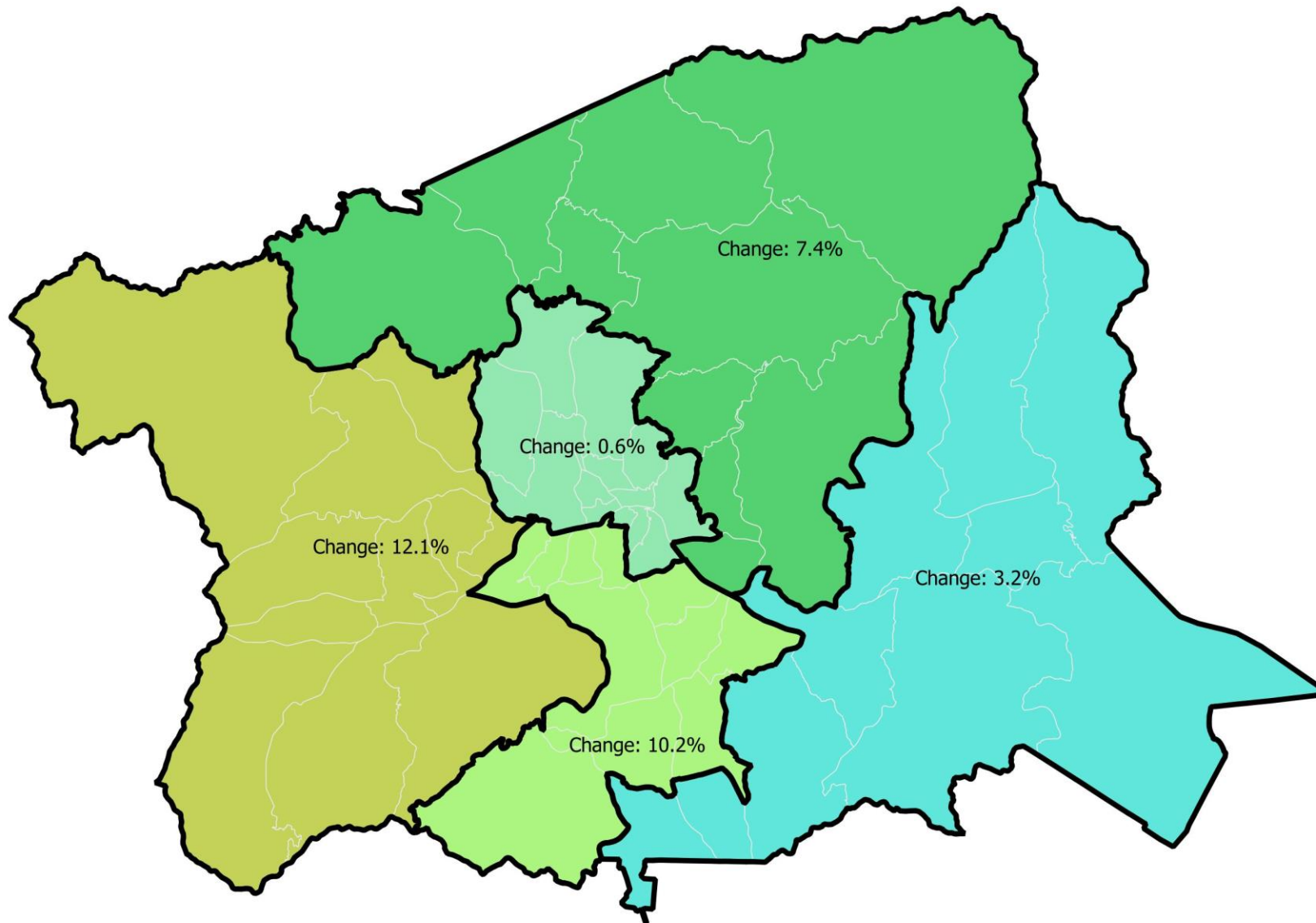


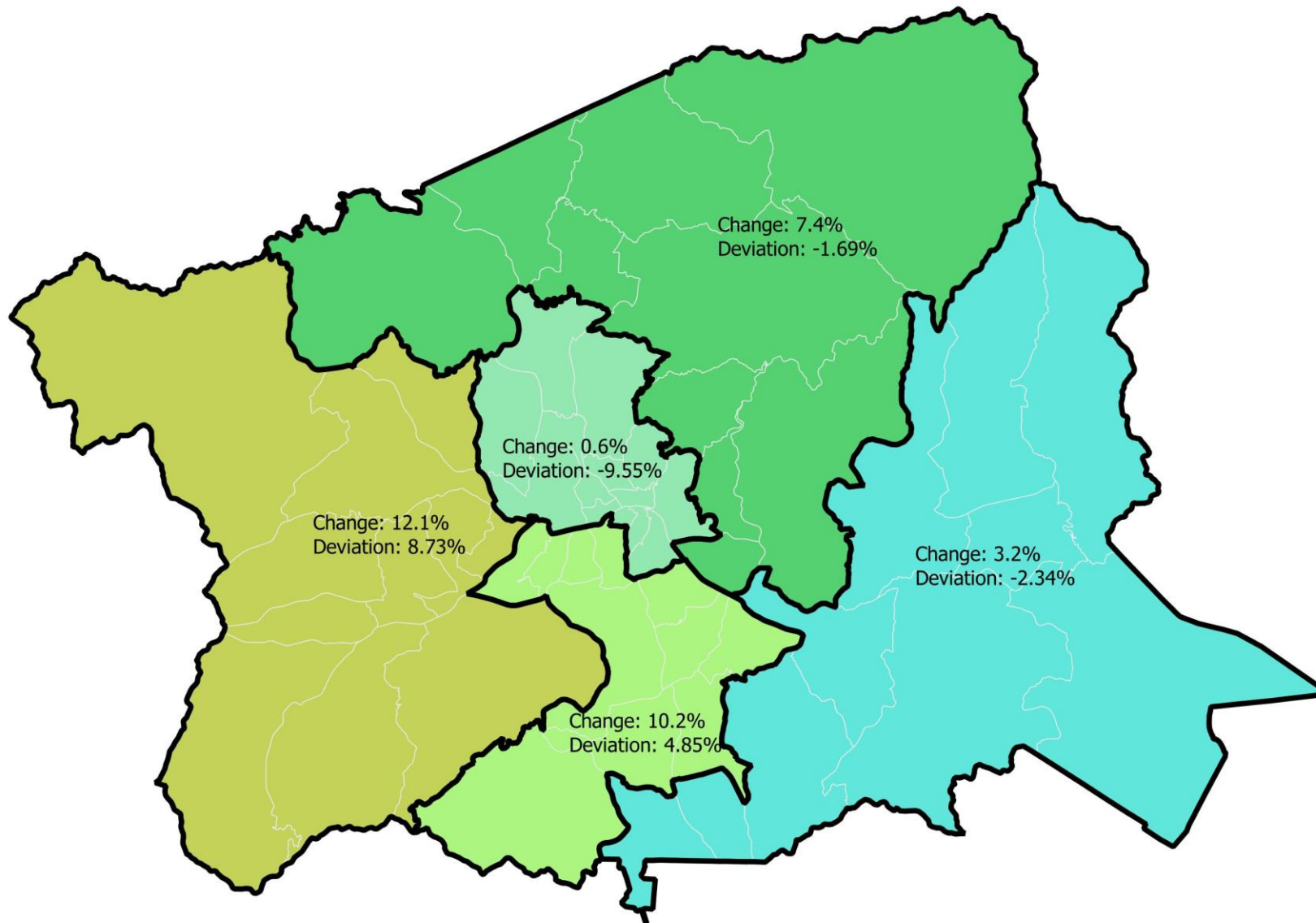


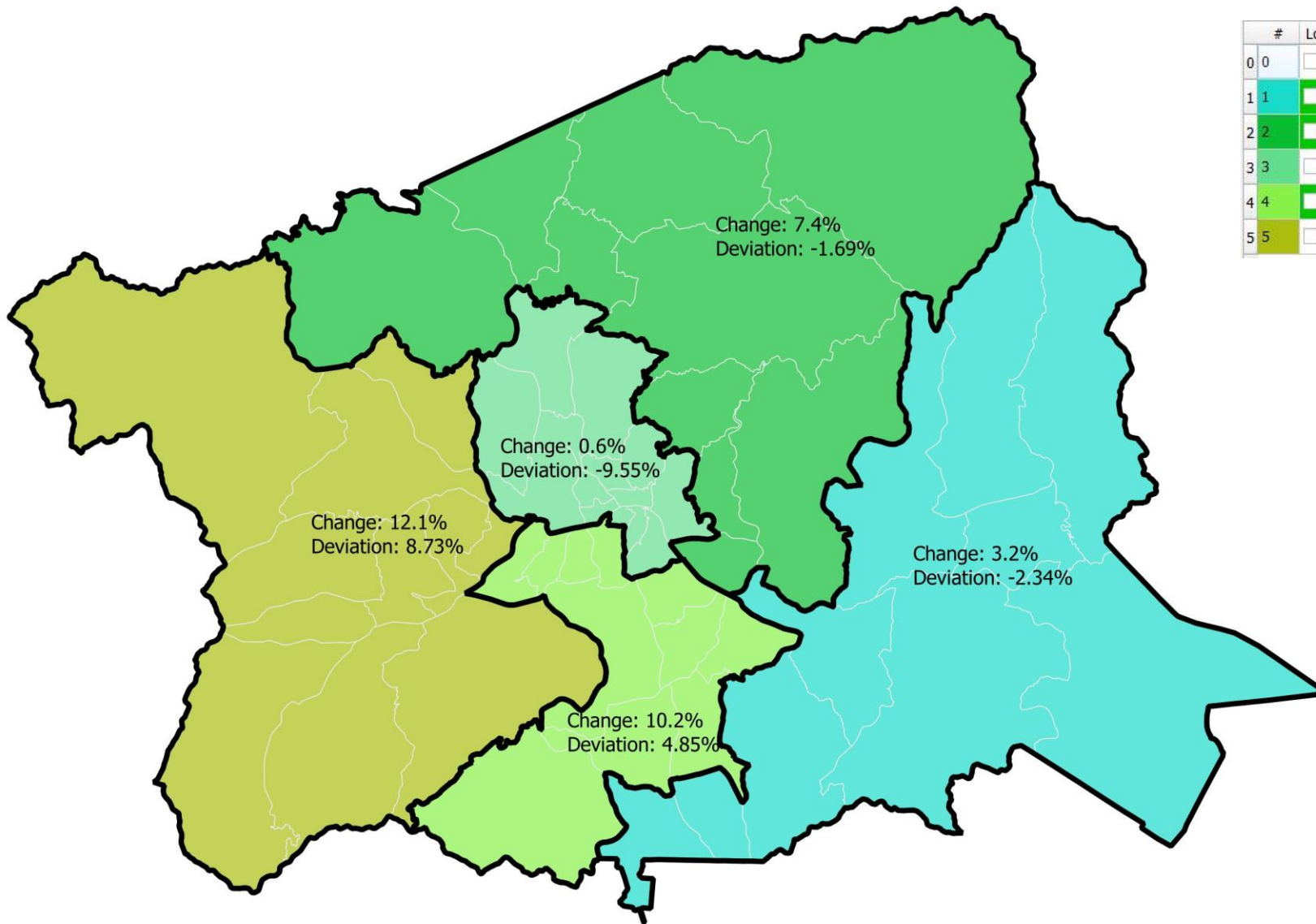




	#	Lock	Population	To Target	Dev%
0	0	<input type="checkbox"/>	0	47663	-100.0%
1	1	<input checked="" type="checkbox"/>	48171	-508	1.07%
2	2	<input checked="" type="checkbox"/>	46582	1081	-2.27%
3	3	<input checked="" type="checkbox"/>	45741	1922	-4.03%
4	4	<input checked="" type="checkbox"/>	48443	-780	1.64%
5	5	<input checked="" type="checkbox"/>	49381	-1718	3.6%







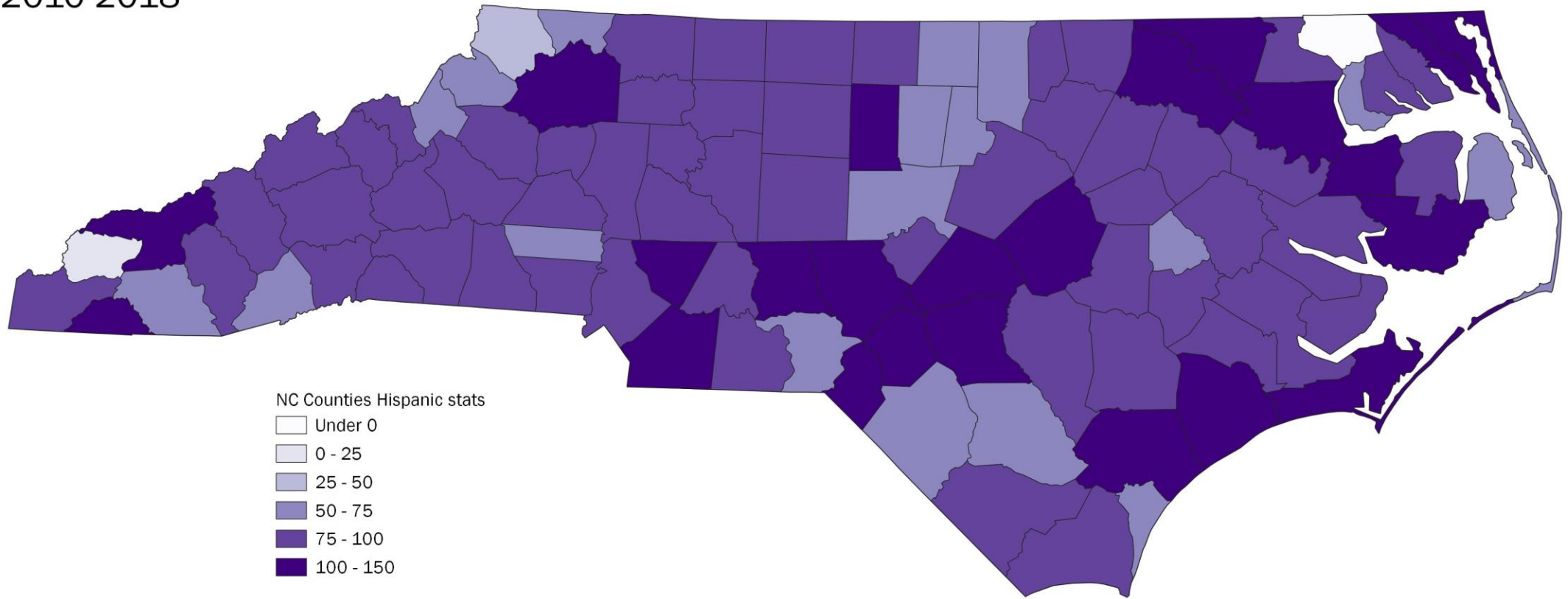
	#	Lock	Population	To Target	Dev%
0	0	<input type="checkbox"/>	0	50894	-100.0%
1	1	<input checked="" type="checkbox"/>	49703	1191	-2.34%
2	2	<input checked="" type="checkbox"/>	50034	860	-1.69%
3	3	<input type="checkbox"/>	46034	4860	-9.55%
4	4	<input checked="" type="checkbox"/>	53365	-2471	4.86%
5	5	<input type="checkbox"/>	55338	-4444	8.73%

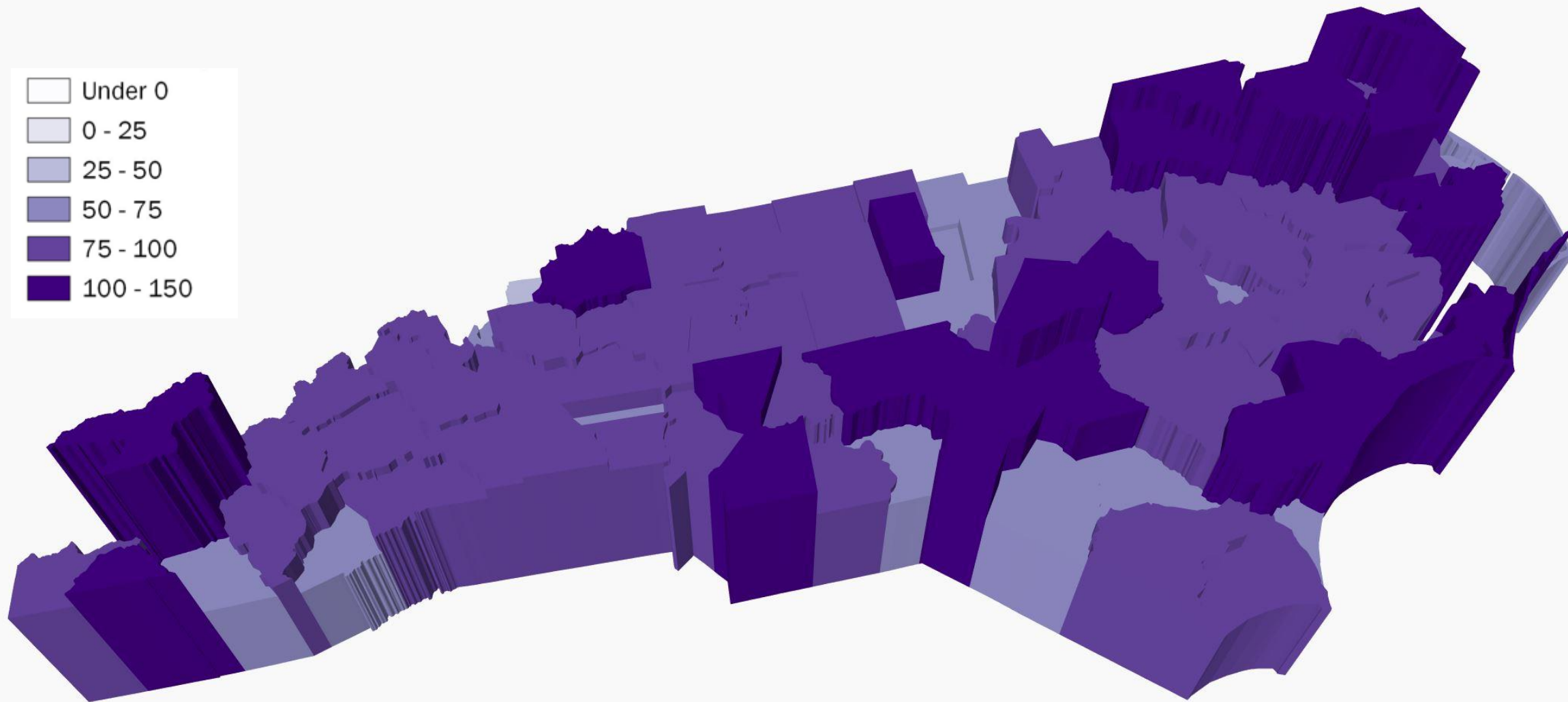
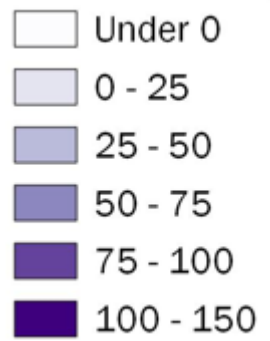
Race and ethnicity

Race and ethnicity

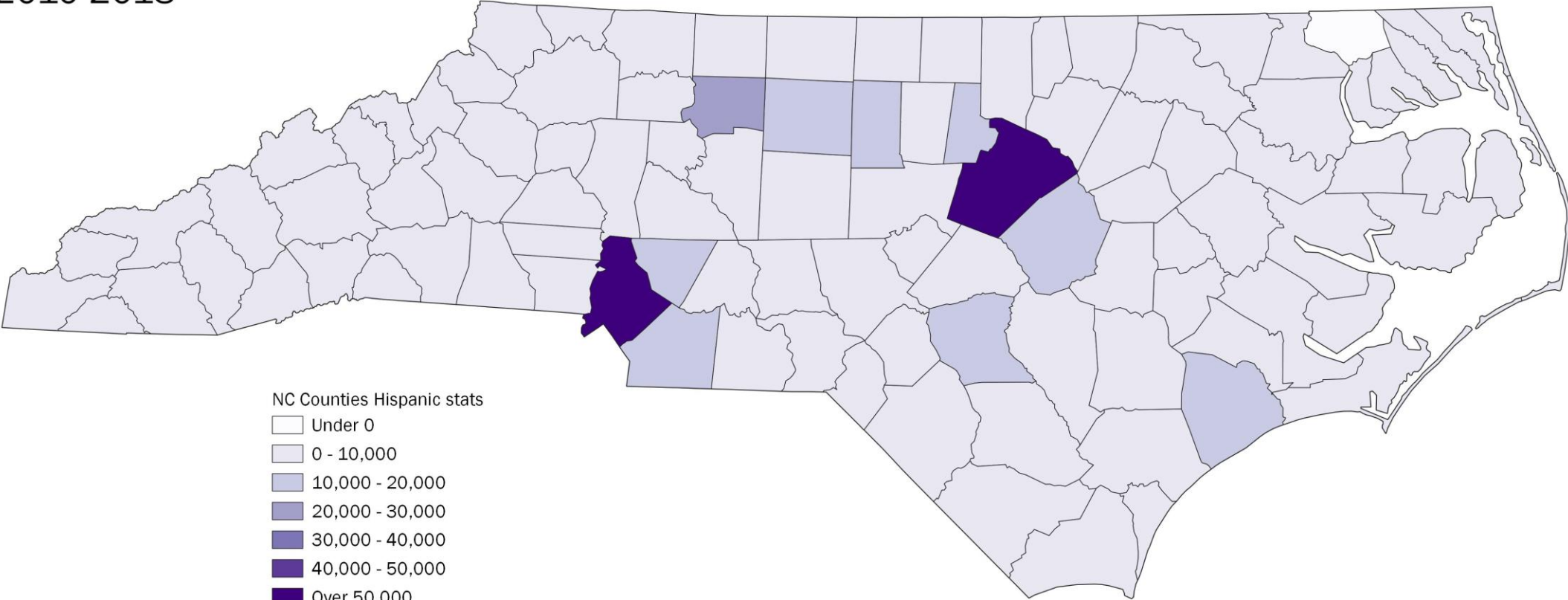
(More specific to counties)

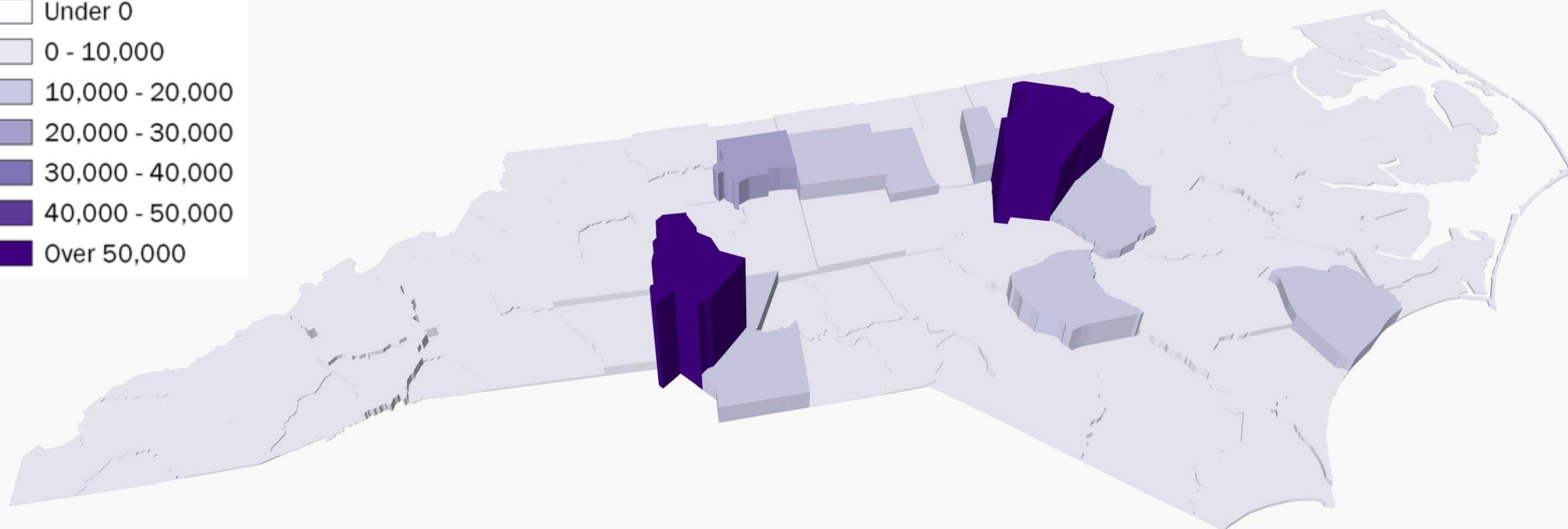
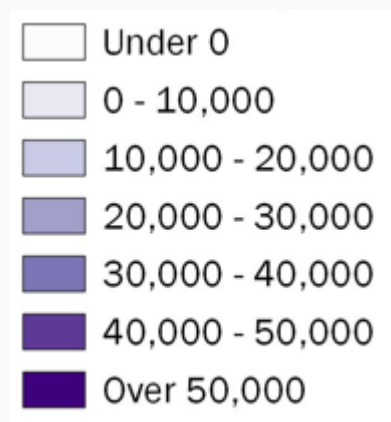
Hispanic or Latinx Population Percent Change
2010-2018

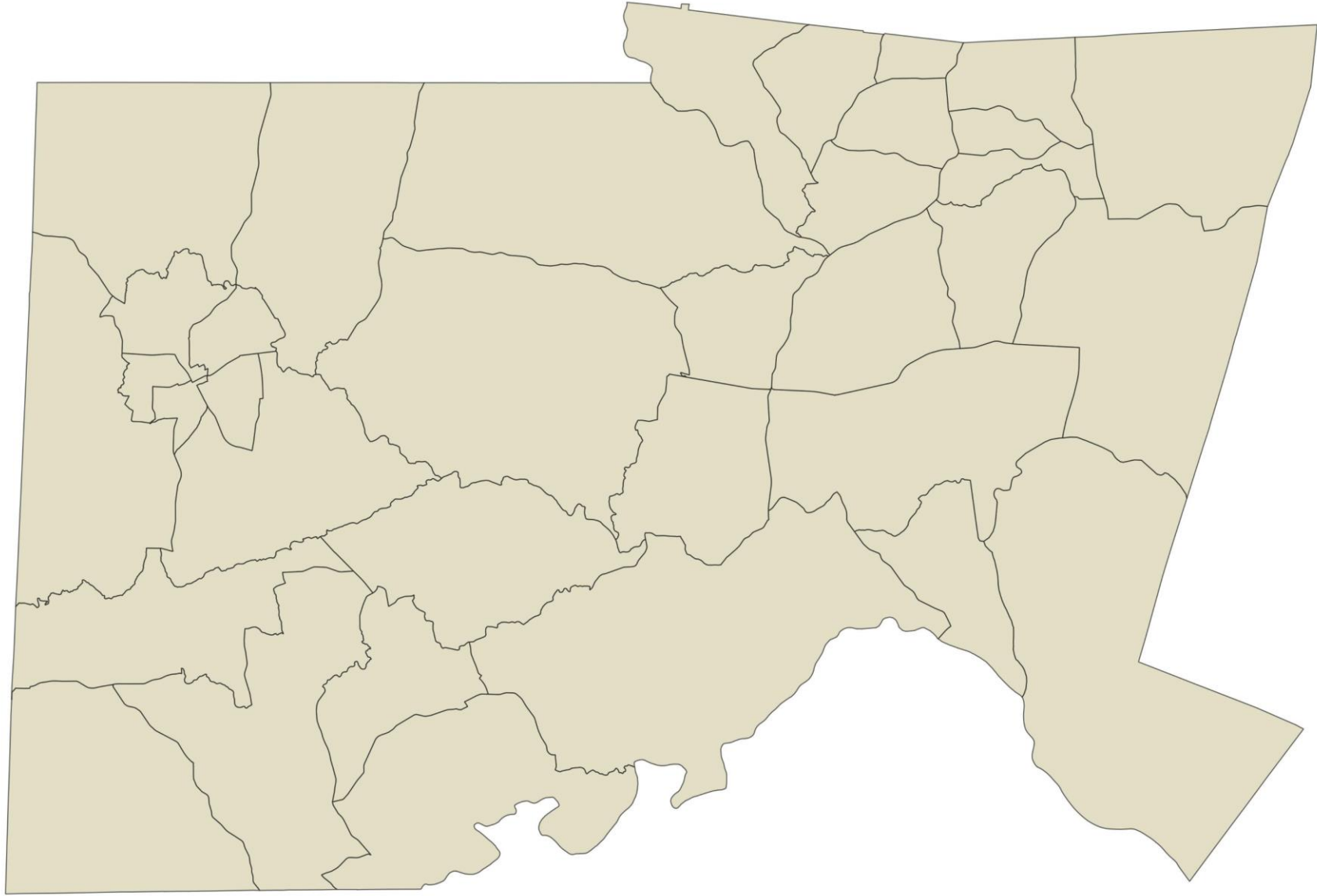


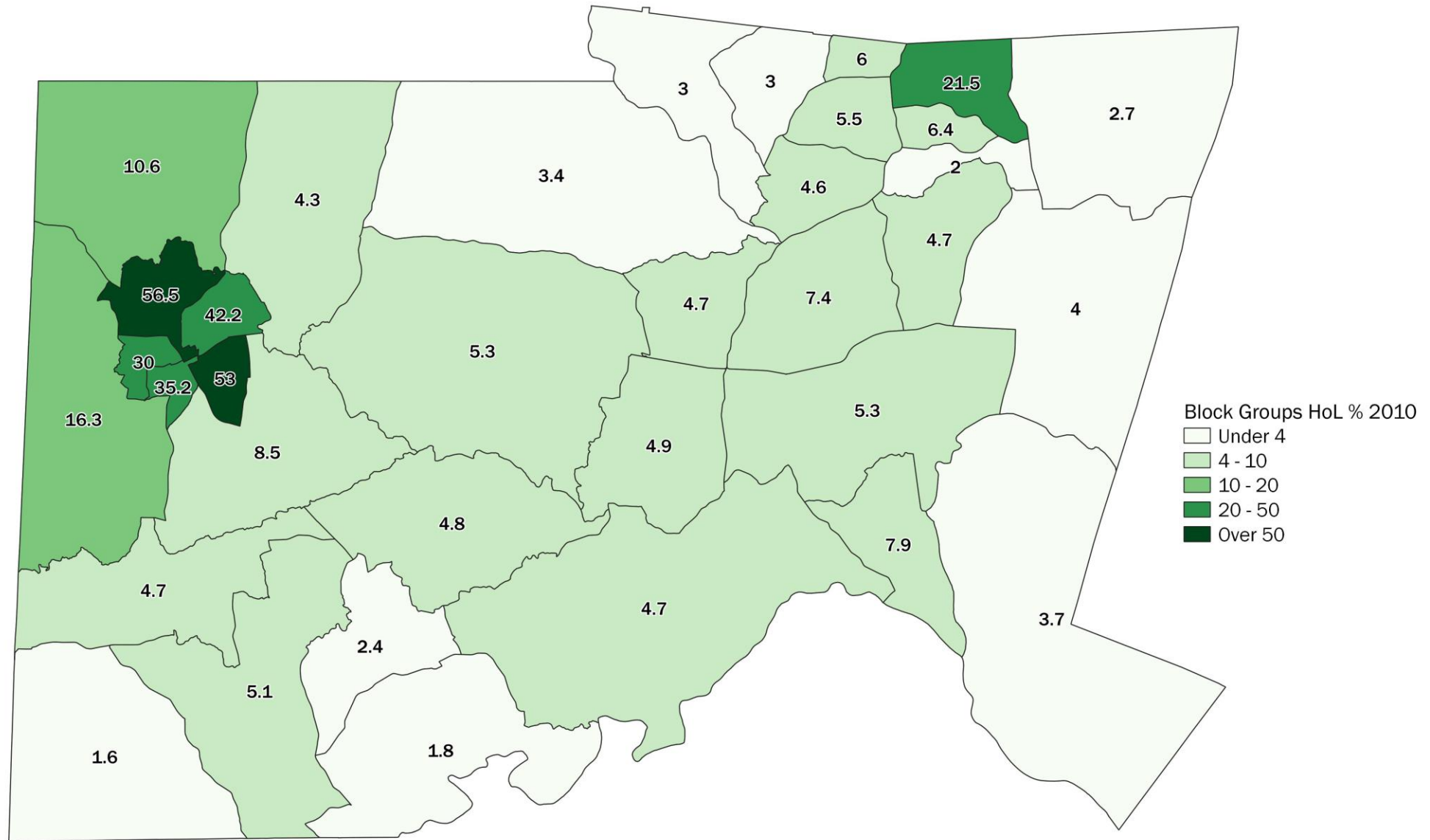


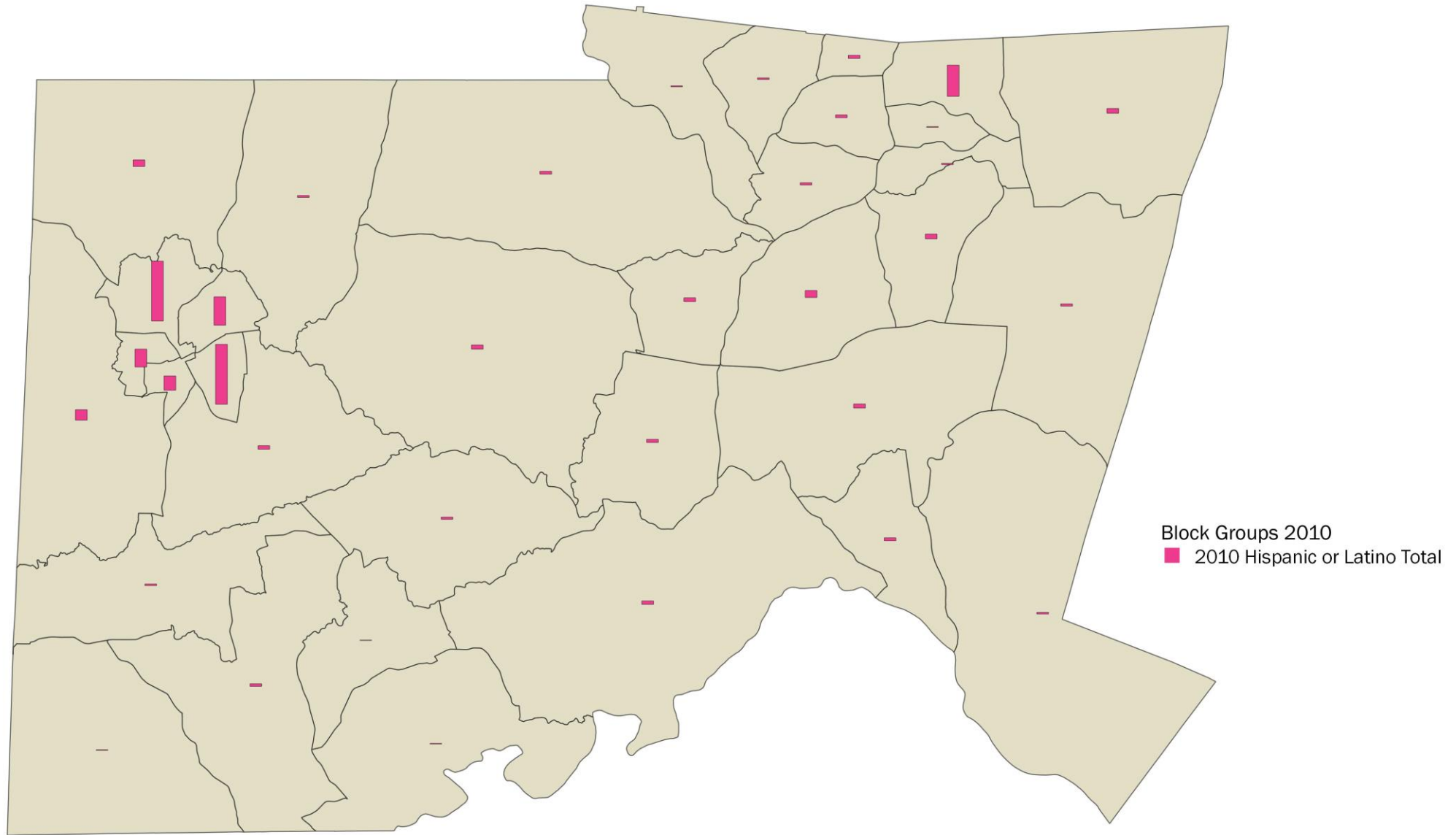
Hispanic or Latinx Population Change
2010-2018

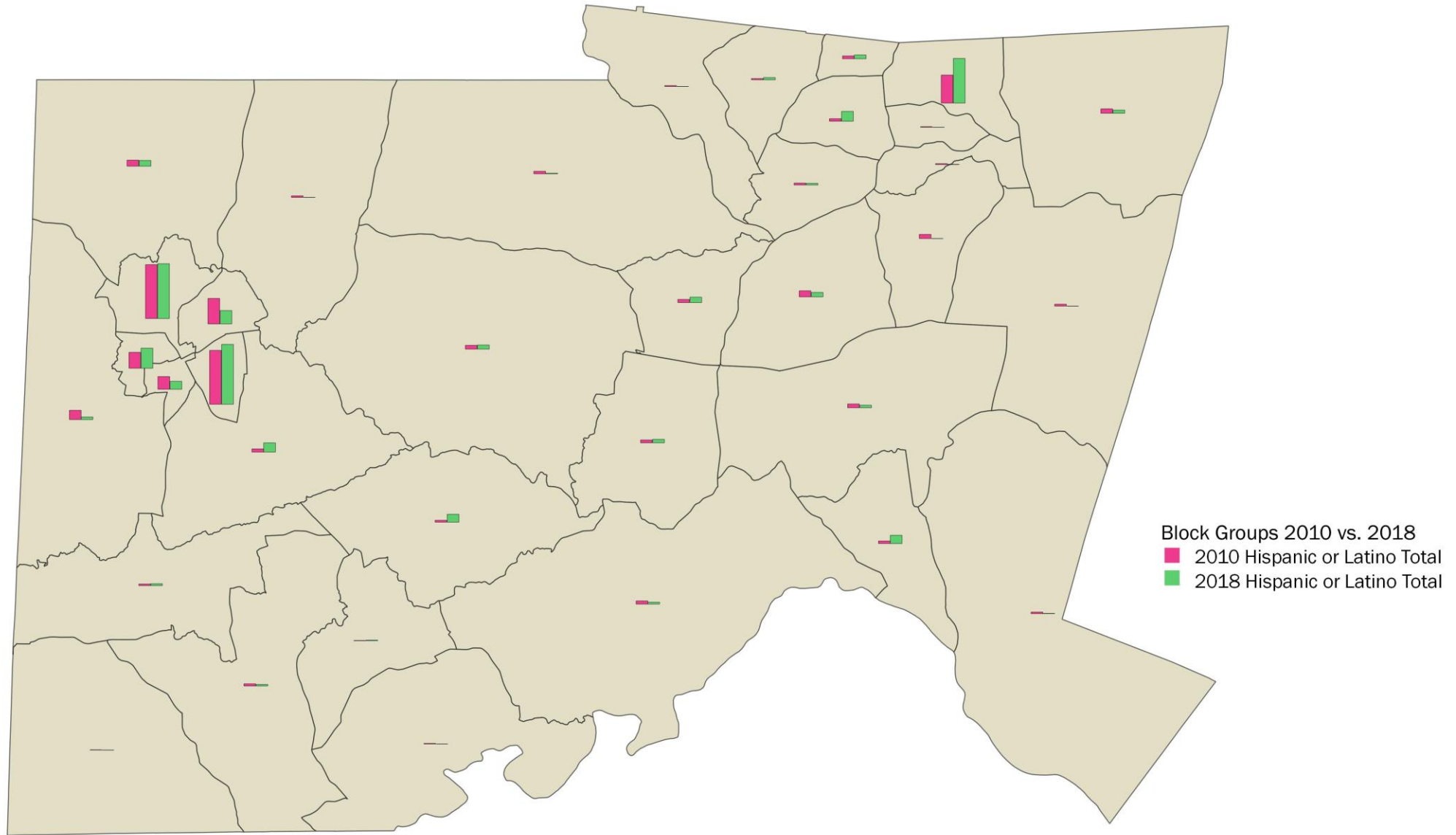












Changes in Geography

Other Boundaries to Consider

(Mostly) Static

- County Boundaries
- Rivers & Other Waterbodies
- Major Roads
- Zip Codes
- Etc.

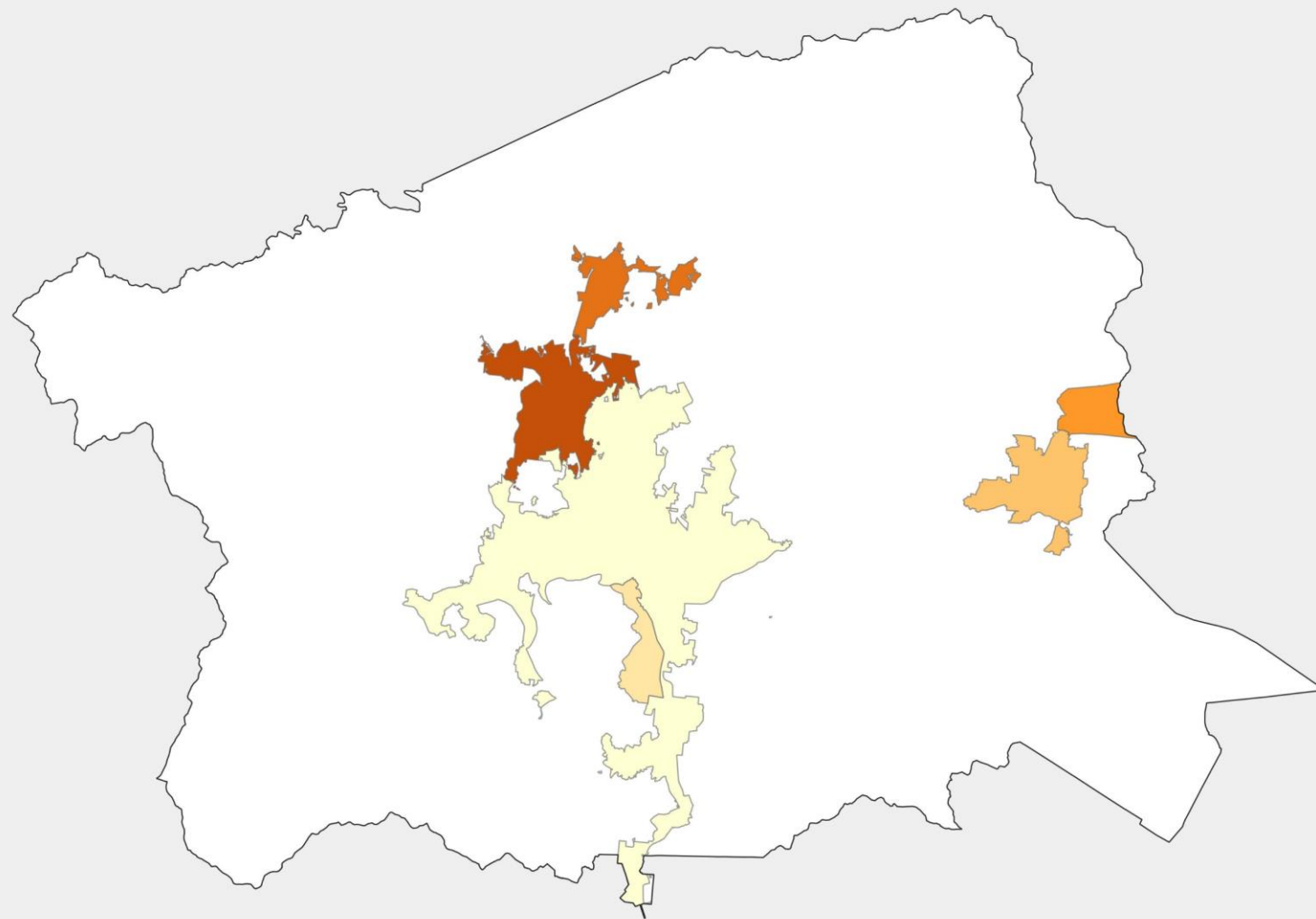
More Dynamic

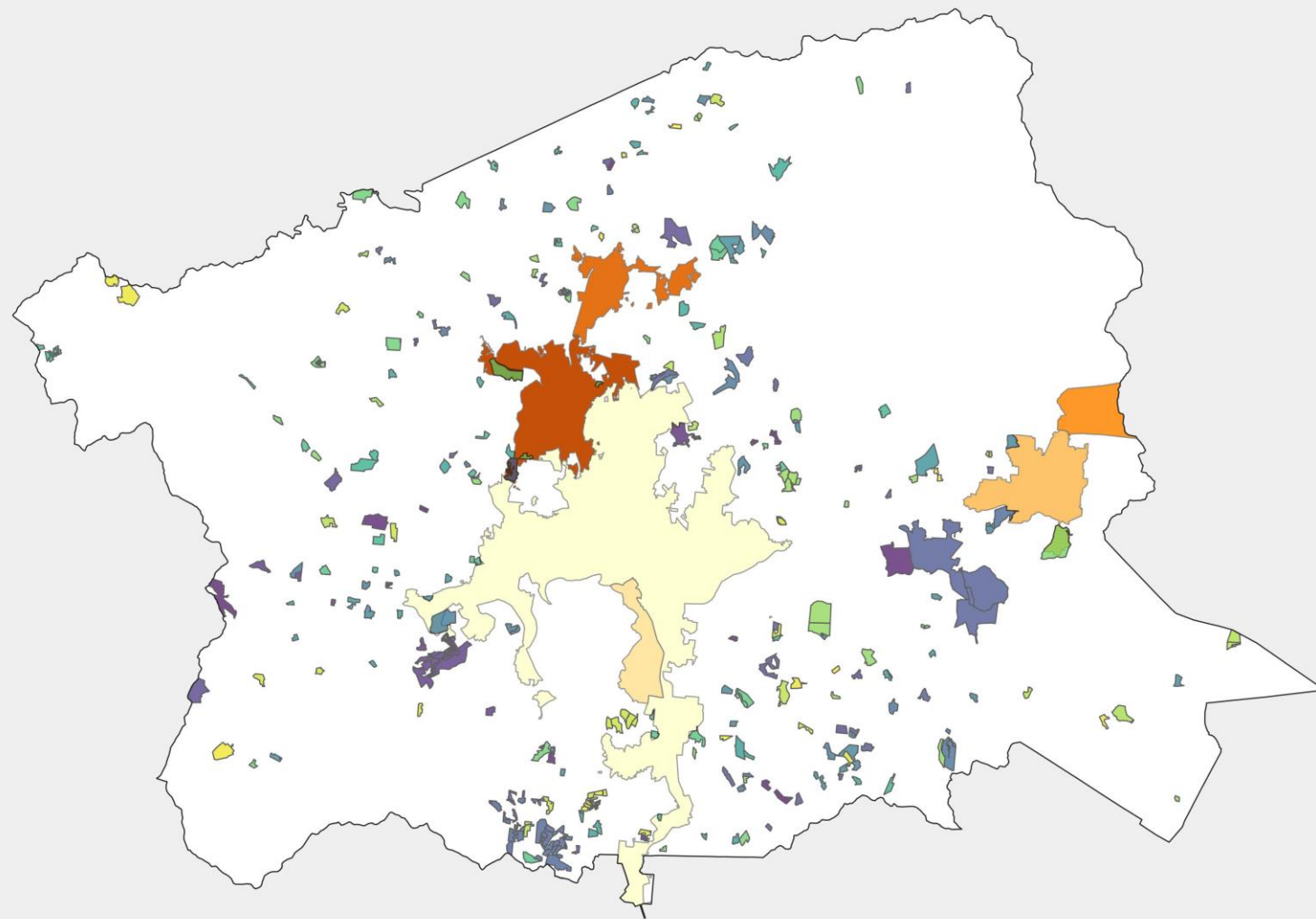
- Municipalities
- Election Precincts
- Neighborhoods
- Service Delivery Areas
- Communities of Interest
- Etc.

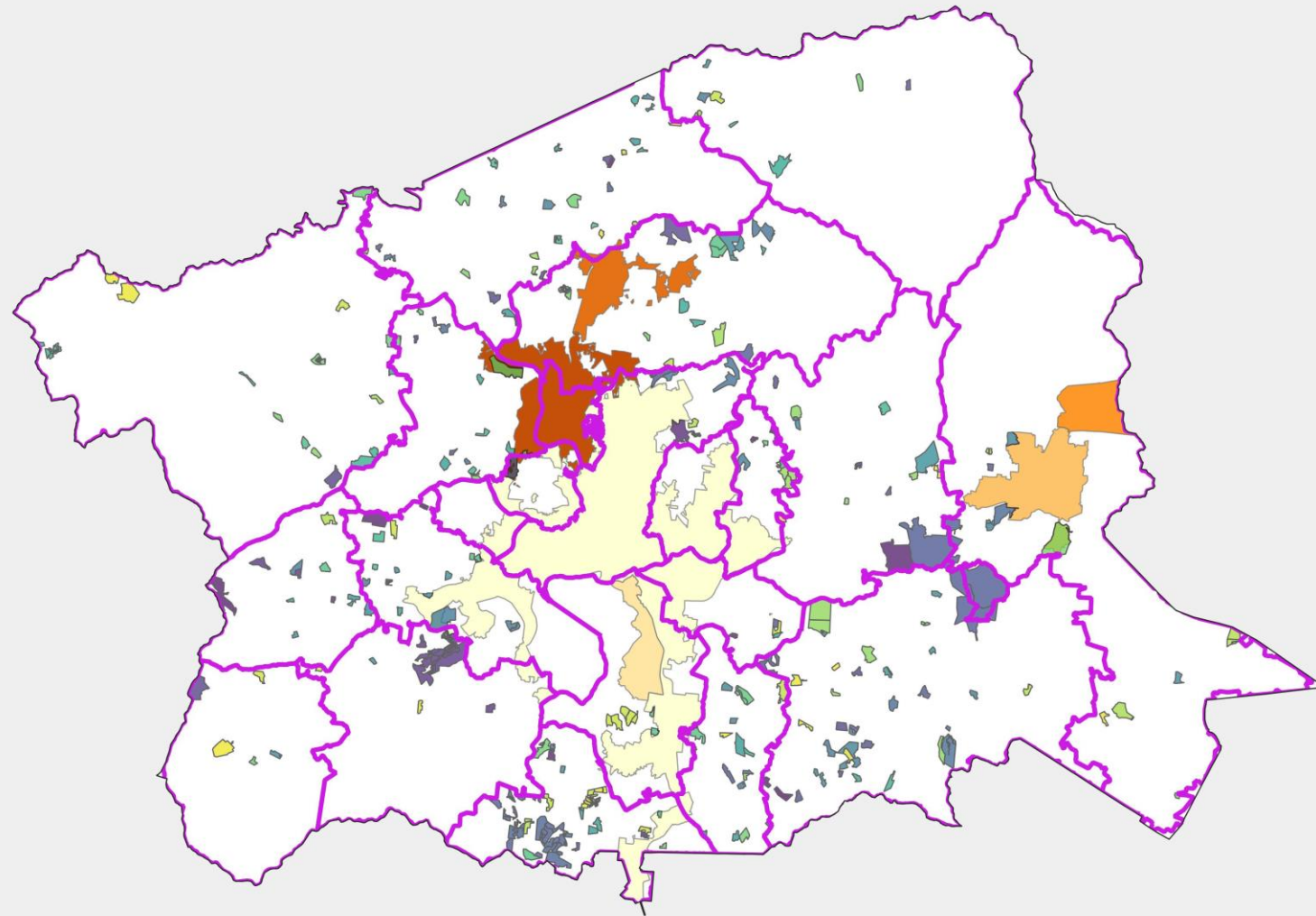


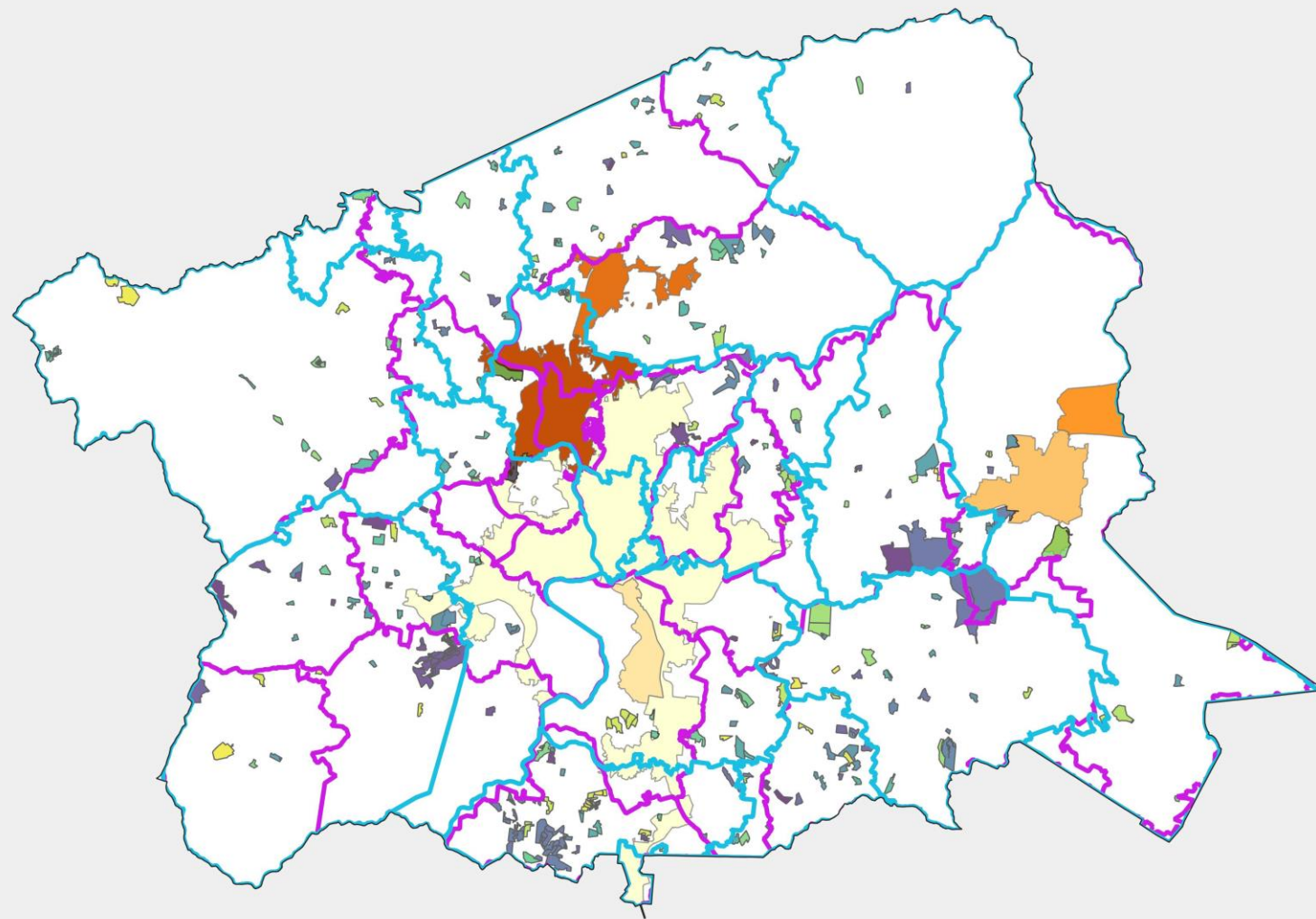


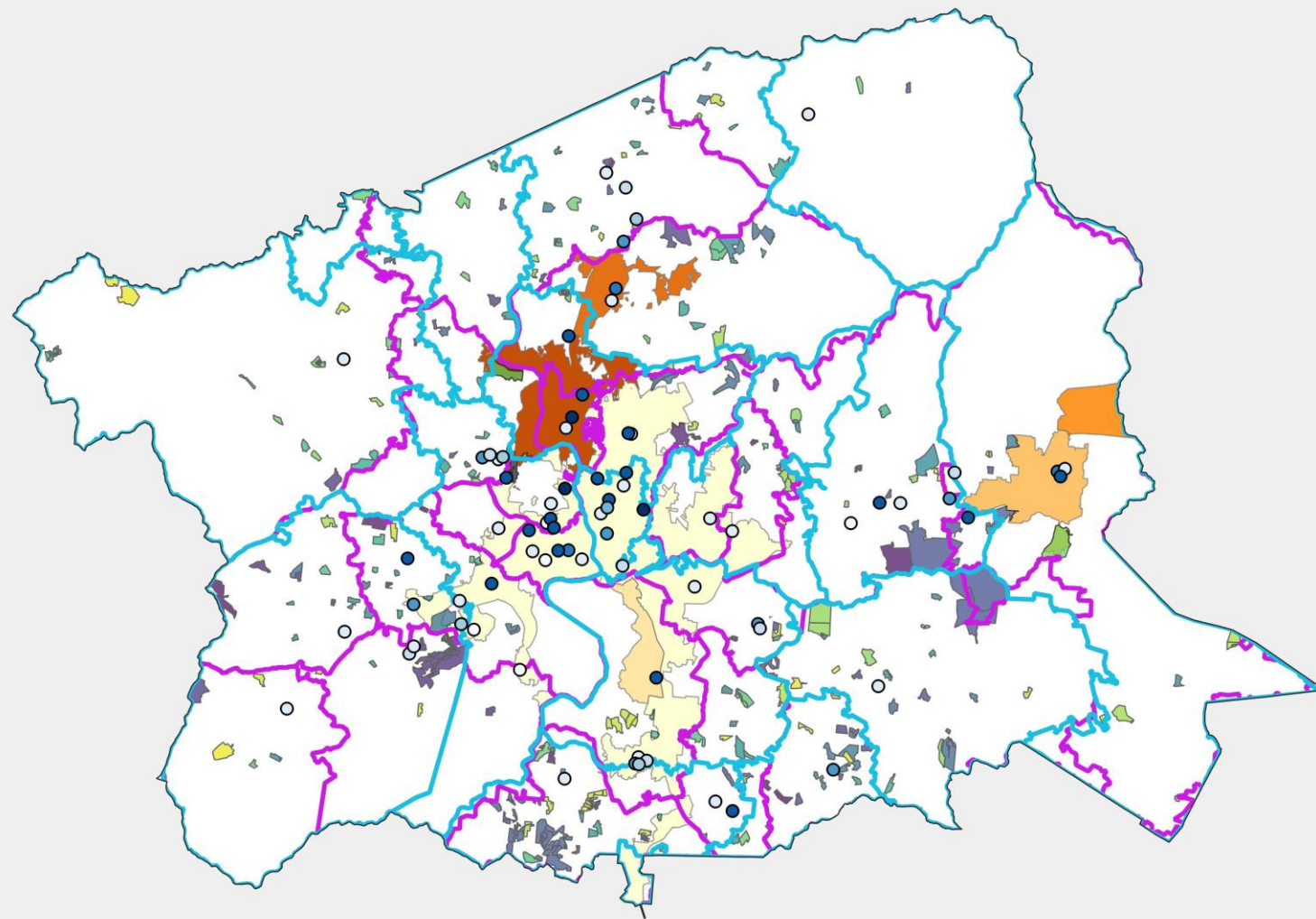












Changes in Redistricting Tools

Redistricting Software

Desktop Plan-Making	Browser-Based Plan-Making	Utilities, Etc.
Caliper/Maptitude	Esri Redistricting (Online Solution)	Princeton U. Group
GityGate GIS/autoBound	DistrictBuilder (Azavea)	Duke U. Group
ZillionInfo/iRedistrict	DRA 2020 (Dave's Redistricting App)	Tufts/MIT Group
Esri ArcGIS Business Analyst	Districtr (MGGG)	PlanScore.org
QGIS + Redistricting Plugin	Maptitude Online Redistricting	Harvard U. (Data)
Auto-Redistrict	(Proprietary State Tools)	U. of Florida (Data)
ArcBridge DISTRICTSolv		
(Proprietary State Tools)		

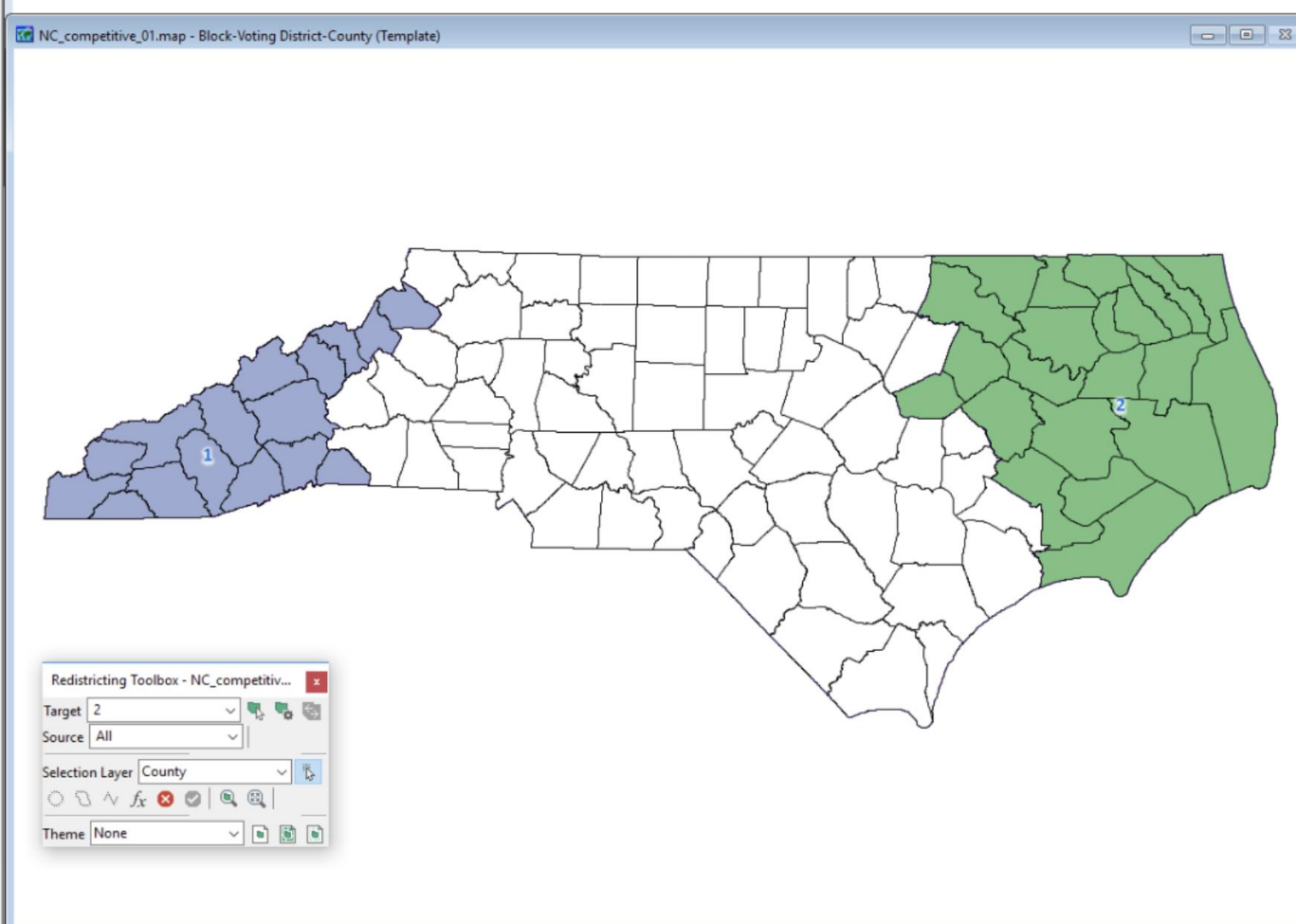


Display Manager

- Districts
 - Theme: District Status
 - Theme: District
 - Other
 - 1
 - 2
- Water Area
- Streets
- Census Place
- Census Block
- Voting District
- Landmark Point
- Landmark Area
- County Subdivision
- Pipeline/Power Line
- Railroad
- River
- State
- TIGER/Line Segment
- Census Tract
- Census Block Group
- County

Dataview1 - Districts in Plan (2); Maximum (13)

District	Population	Deviation	% Deviation	PL10AA_TOT	PL10VA_TOT	EL10G_USS_D	% EL10G_USS_D	EL10G_USS_R	% EL10G_USS_R	EL10G_USS_L	% EL10G_USS_L	EL10G_USS_W	% EL10G_USS_W	EL10G_USS_TOT	EL12G_PR_D	% EL12G_PR_D	EL12G_PR_R
2	856053	122,554	16.71%	856053	664337	114459	45.46%	133103	52.86%	4101	1.63%	133	0.05%	251796	204784	50.14%	199997
1	715797	-17,702	-2.41%	715797	576762	100436	41.24%	136228	55.94%	6731	2.76%	131	0.05%	243526	159252	44.4%	192916
	7963633	7,230,134	985.7%	7963633	6012749	926805	42.96%	1184751	54.92%	44722	2.07%	999	0.05%	2157277	1807257	48.51%	1874440



Redistricting Toolbox - NC_competitiv...

Target: 2

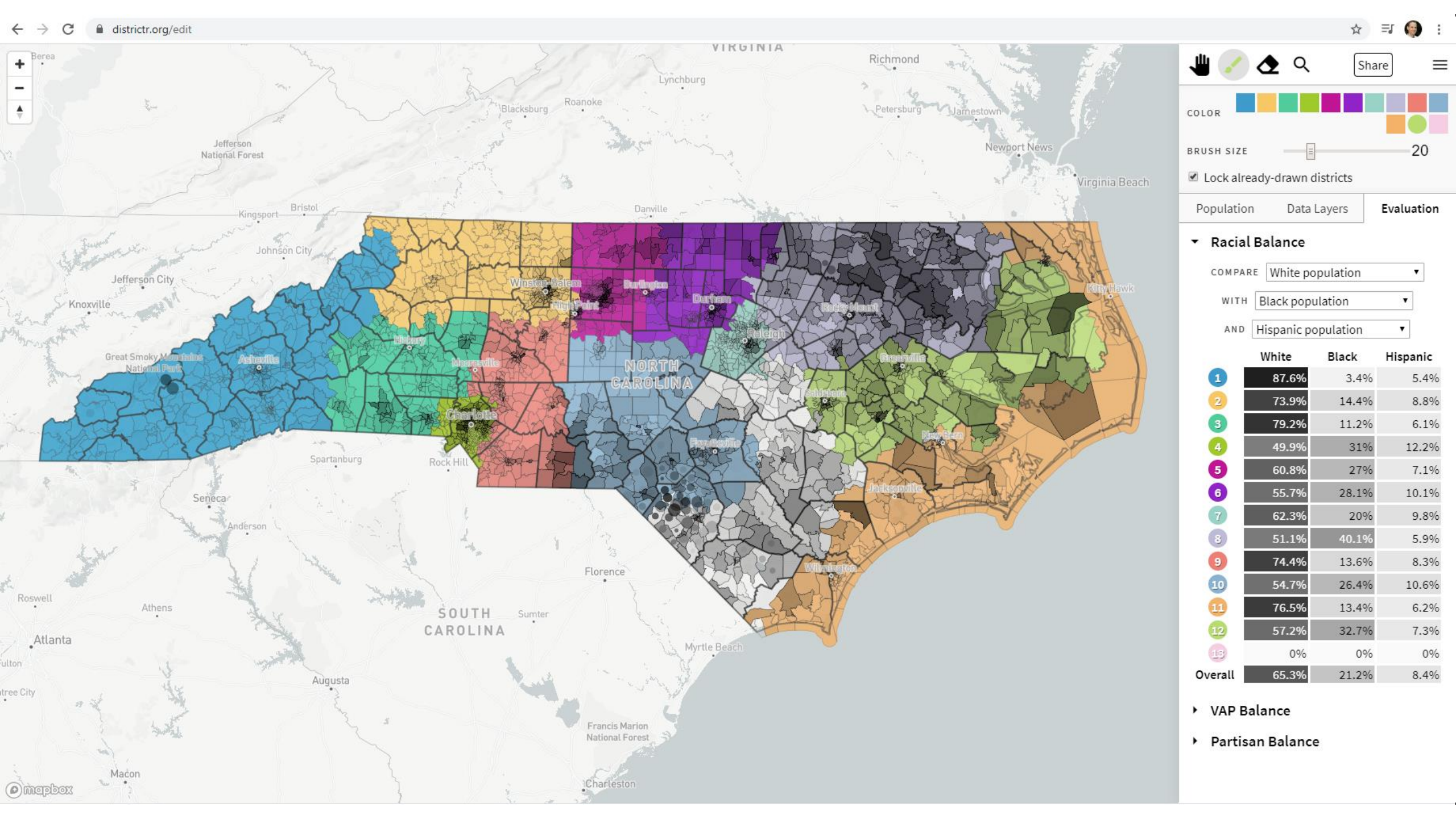
Source: All

Selection Layer: County

Theme: None

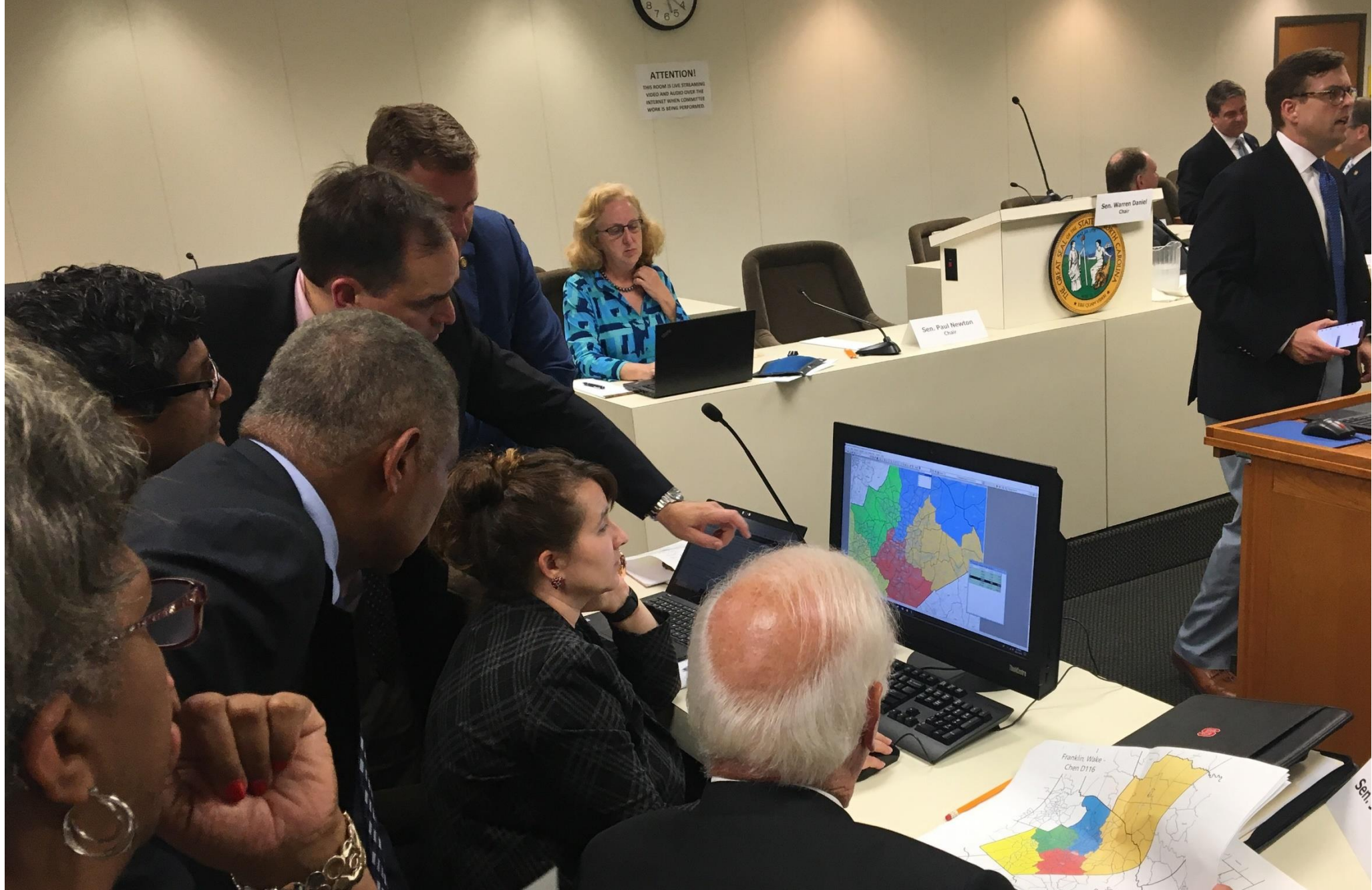
Dataview2 - Pending Changes (None)

District	2
[% EL16G_PR_R]	50.76%
EL16G_PR_D	189,175
[Change - EL16G_PR_D]	0
[% EL16G_PR_D]	46.28%
EL16G_PR_L	8,822
[Change - EL16G_PR_L]	0
[% EL16G_PR_L]	2.16%
EL16G_PR_W	3,277
[Change - EL16G_PR_W]	0
[% EL16G_PR_W]	0.8%
EL16G_PR_TOT	408,752
[Change - EL16G_PR_TOT]	0
EL16G_USS_R	207,579
[Change - EL16G_USS_R]	0
[% EL16G_USS_R]	51.44%
EL16G_USS_D	184,412
[Change - EL16G_USS_D]	0
[% EL16G_USS_D]	45.7%
EL16G_USS_L	11,510
[Change - EL16G_USS_L]	0
[% EL16G_USS_L]	2.85%
EL16G_USS_TOT	403,501
[Change - EL16G_USS_TOT]	0
EL16G_GV_D	191,957
[Change - EL16G_GV_D]	0
[% EL16G_GV_D]	47.36%
EL16G_GV_R	207,197
[Change - EL16G_GV_R]	0
[% EL16G_GV_R]	51.12%
EL16G_GV_L	6,190
[Change - EL16G_GV_L]	0
[% EL16G_GV_L]	1.53%
EL16G_GV_TOT	405,344
[Change - EL16G_GV_TOT]	0
EL16G_LG_R	203,618
[Change - EL16G_LG_R]	0
[% EL16G_LG_R]	51.14%
EL16G_LG_D	185,679



Changes in Public Involvement





2019 Senate Redistricting - Computer 1 - 9/11/...

3:20:21 / 11:00:47

YouTube

2019 Senate Redistricting - Computer 2 - 9/11/...

Measures of Compactness Report
 Measures: Compactness (Ratio)

Measure	Ratio	Ratio	Ratio
Ratio	0.00	0.00	0.00
Ratio	0.00	0.00	0.00
Ratio	0.00	0.00	0.00
Ratio	0.00	0.00	0.00
Ratio	0.00	0.00	0.00

Pop. Report

Measure	Population	Population	Population
Population	1,000,000	1,000,000	1,000,000
Population	1,000,000	1,000,000	1,000,000
Population	1,000,000	1,000,000	1,000,000
Population	1,000,000	1,000,000	1,000,000
Population	1,000,000	1,000,000	1,000,000

6:58:20 / 11:09:27

YouTube

2019 Senate Redistricting - Computer 3 - 9/11/...

Play (k)

6:16:18 / 11:09:25

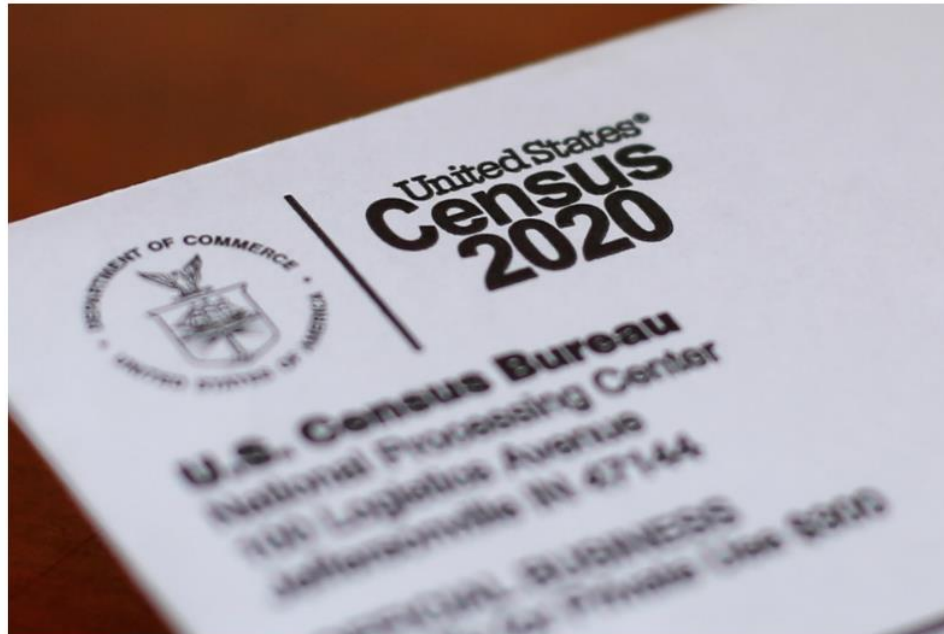
YouTube

Changes to the Census

2020 ELECTIONS

Census Bureau will finish count earlier than expected, deliver data to Trump

The bureau's director says it "continues its work on meeting the requirements" of the president's request to exclude undocumented immigrants.



A 2020 census letter is shown. | Paul Sancya/AP Photo

By STEVEN SHEPARD
08/03/2020 11:14 PM EDT



The Census Bureau said late on Monday that it would finish collecting data for the decennial count next month and work to deliver population tallies to President Donald Trump that meet his constitutionally questionable order to

Like many aspects of public- and private-sector organizations, the coronavirus outbreak has roiled the Census Bureau's operations. In April, the bureau [asked Congress](#) to delay the requirement to submit apportionment data until the end of April 2021. But since then — as Trump's poll numbers have faltered — the administration has pushed to meet its original deadlines.

At a hearing last week before the Democratic-controlled House Oversight and Government Reform Committee, Dillingham repeatedly declined to say whether the bureau stood by its original request for an extension.

The House has already approved a provision extending the deadline. But the Republican coronavirus relief proposal in the Senate, on which the chamber has not acted, did not include an extension.

<https://www.politico.com/news/2020/08/03/census-bureau-data-trump-391146>

Providing
accurate data



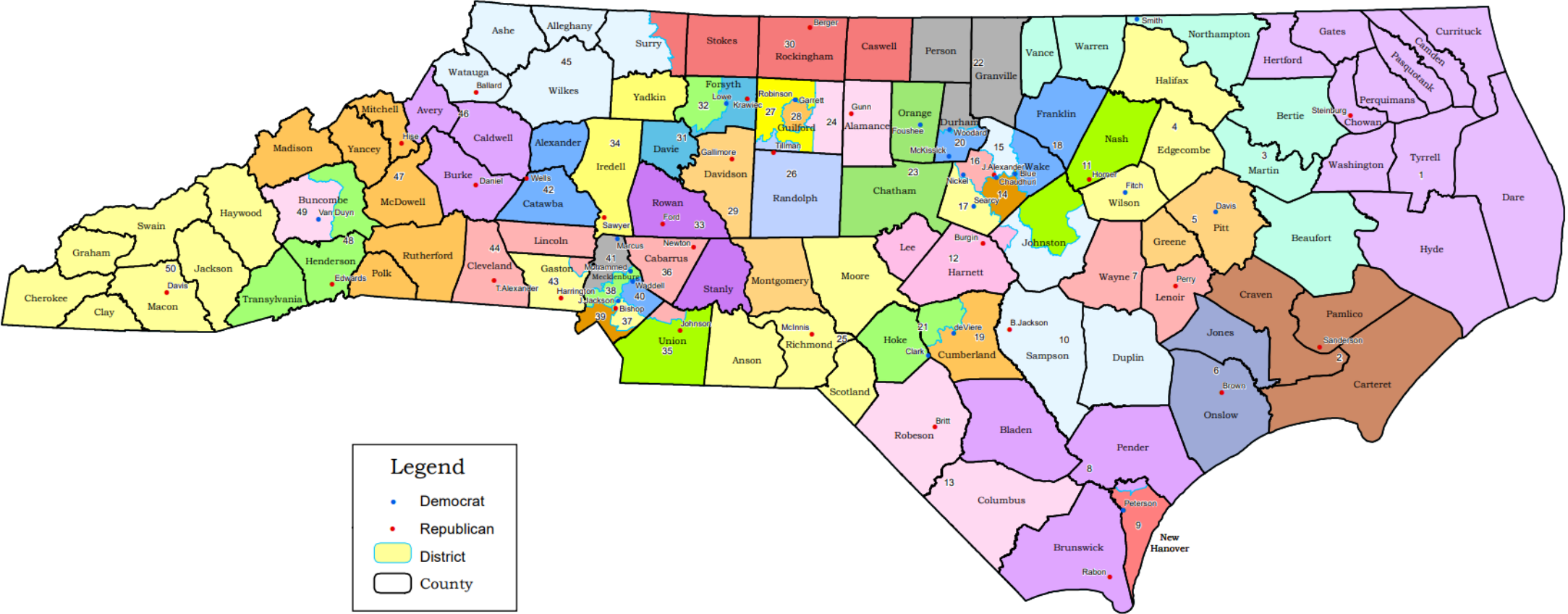
Safeguarding
individual privacy

Data	Quality	Bnae	Kegouqe
Dada	Qualitg	Vrkk	Jzcfdy
Data	Qaality	Dncb	PrhvBln
Dzte	Qvality	Dncb	Prtnavy
Dfha	Quapyti	Tgta	Ppijacy
Tgta	Qucjity	Dfha	Pnjvico
Dncb	Qhulitn	Dzhe	Njivaci
Ntue	Quevdto	Dzte	Privacy
Vrkk	Zuhnvyry	Dada	Privacg
Bnaq	Denorbe	Data	Privacy

County-grouping at the state level

(If time allows)

2019 Senate Consensus Nonpartisan Map



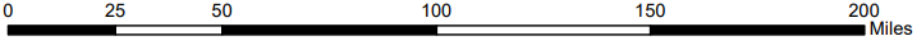
Legend

Democrat

Republican

District

County



The Stephenson grouping process

Moving on to *four-county* groupings, we find just three, including the westernmost and easternmost areas of the state. These twelve counties will have just four representatives between them, since the north-central cluster will have two districts, while the bookends will each have one.

Questions?

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- Blake Esselstyn
828-338-8528
blake@mapfigure.com
- For more info about LRS:
www.ncredistrict.org/lrs