

GEORGIA LAND COVER IMAGE ATLAS

Volume v: Land Cover 2019 and Community Vulnerability



Georgia Land Cover Image Atlas Volume V: Land Cover 2019 and Community Vulnerability

Jeong Seong Allison Allgood



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DISCLAIMER: The accuracy of the maps that are presented in this document is dependent on the source data acquired from the U.S. Geological Survey (https://www.usgs.gov), U.S. Census Bureau (https://census.gov), Georgia GIS Data Clearinghouse (https://data.georgiaspatial.org/), the Federal Emergency Management Agency (https://hazards.fema.gov/nri/), and Census Reporter (https://censusReporter.org). For the source data accuracy information, refer to their websites.

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Preface

Founded in 2003, the GeorgiaView Consortium is a member of the AmericaView Consortium, a nationally coordinated network of academic, agency, non-profit, and industry partners and cooperators that share the vision of promoting and supporting the use of remote sensing data and technology within each state. GeorgiaView's vision is to develop a collaborative geospatial user community in the state of Georgia, within which remote sensing datasets are practical sources for education, applications and research. GeorgiaView members have significantly impacted the State of Georgia through education, remote sensing and geospatial data sharing, research projects, and outreach efforts. GeorgiaView's mission will continue to prepare the future workforce for the dynamic geospatial technology fields by supporting K-12 STEM (science, technology, engineering and math) education, by addressing regional environmental challenges, and by developing collaborative outreach efforts.

This atlas is one of GeorgiaView's outreach activities. The theme of this atlas is the land cover and natural hazards. Many people underestimate the extensive change of land cover in their living environment. Even if many online platforms provide land cover or land cover change information, they are not reached to the public easily because of, mostly, technical limits. As a way of helping people's environmental awareness and decision making, intuitively and informatively, GeorgiaView develops image atlas series using community boundaries in Georgia such as 159 counties, 14 congressional districts, and 12 regional commissions. Landsat imagery, administrative boundaries, and the National

Land Cover Database (NLCD) are important datasets that are used in this atlas. Road network datasets are also used as a reference for relative locations of geographical units such as counties. To map the threat of natural hazards, the National Risk Index rates, available from Federal Emergency Management Agency (FEMA), were used.

This atlas will appeal to various decision makers who use geographical boundaries at local and state governments. It may also be used for civilizing K-12 students about their communities, land cover changes, and environmental awareness.

Jeong Seong, Ph.D. Director of GeorgiaView Consortium University of West Georgia, Carrollton, GA

Acknowledgments

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I thank the UWG Department of Natural Sciences for various administrative supports and the UWG Office of Research and Sponsored Projects for their award management services.

Finally, special thanks to the continuing support of AmericaView, Inc. for GeorgiaView activities.



http://www.AmericaView.org

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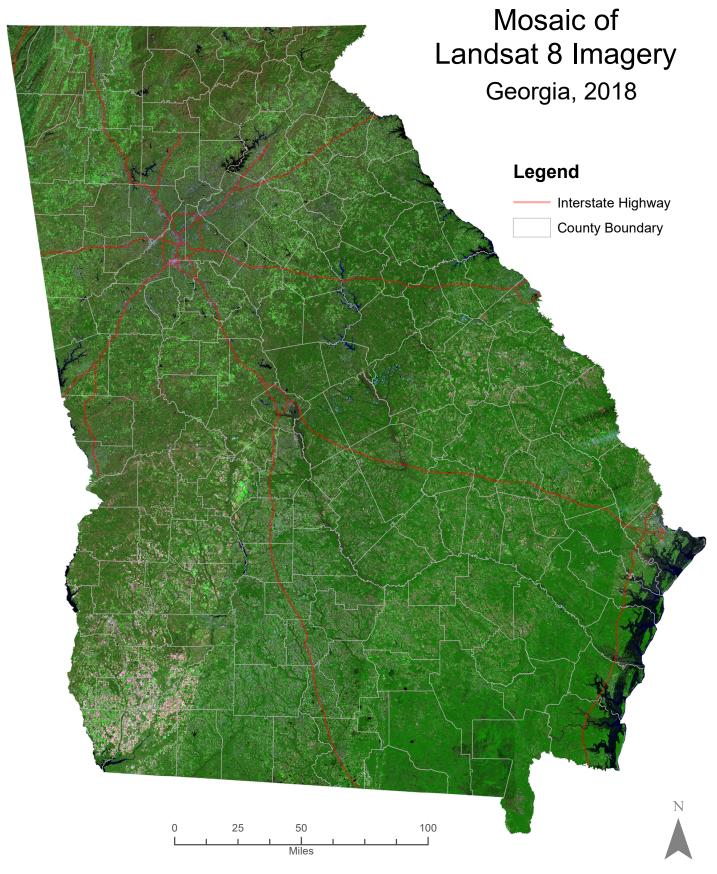
LAND COVER & NATIONAL RISK INDEX

"The National Risk Index illustrates the United States communities most at risk for 18 hazard types: Avalanche, Coastal Flooding, Cold Wave, Drought, Earthquake, Hail, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Riverine Flooding, Strong Wind, Tornado, Tsunami, Volcanic Activity, Wildfire, and Winter Weather. It was designed and built by FEMA in close collaboration with various stakeholders and partners in academia; local, state, and federal governments; and private industry. The Risk Index leverages available source data for natural hazard and community risk factors to develop a baseline relative risk measurement for each United States county and Census tract. The National Risk Index is intended to help users better understand the natural hazard risk of their communities."

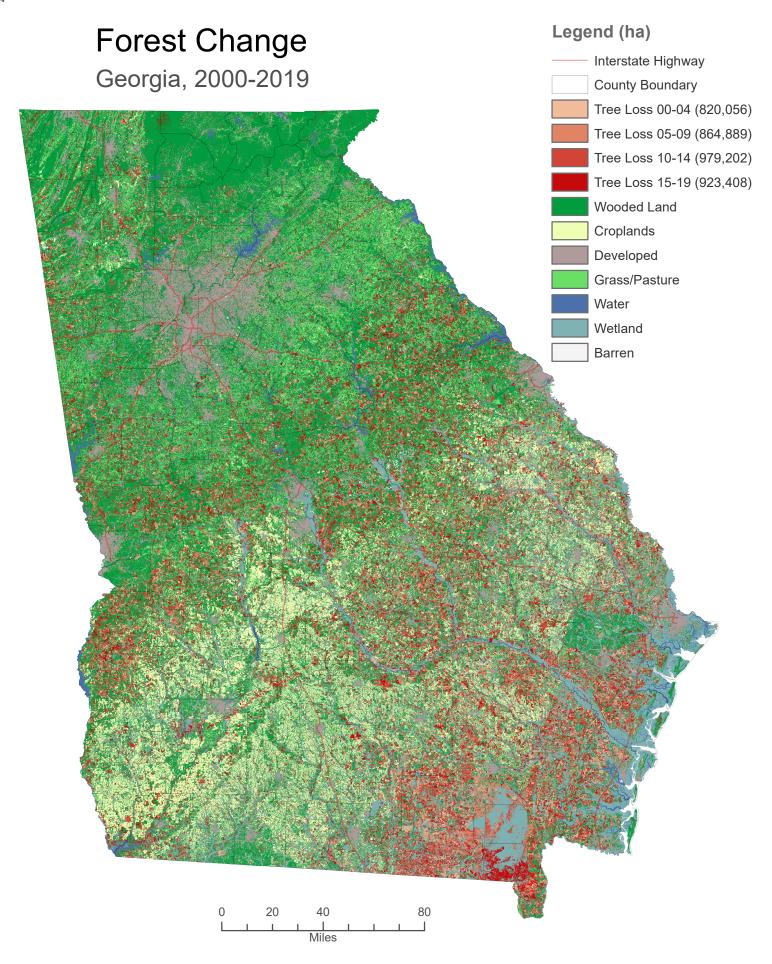
(FEMA, 2023, https://hazards.fema.gov/nri/frequently-asked-questions#what-is-the-national-risk-index-nri)

Global Land cover has been monitored with satellite remote sensing imagery. Particularly, the Landsat satellites have imaged the Earth since 1972. The joint NASA/USGS program provides the longest continuous space-based record of Earth's land in existence. Every day, Landsat satellites provide essential information to help land managers and policy makers make wise decisions about our resources and our environment. As of May 2023, the Landsat 9 satellite collects images using multiple sensors onboard. Landsat imagery can be downloaded free of charge from the USGS website (https://www.usgs.gov).

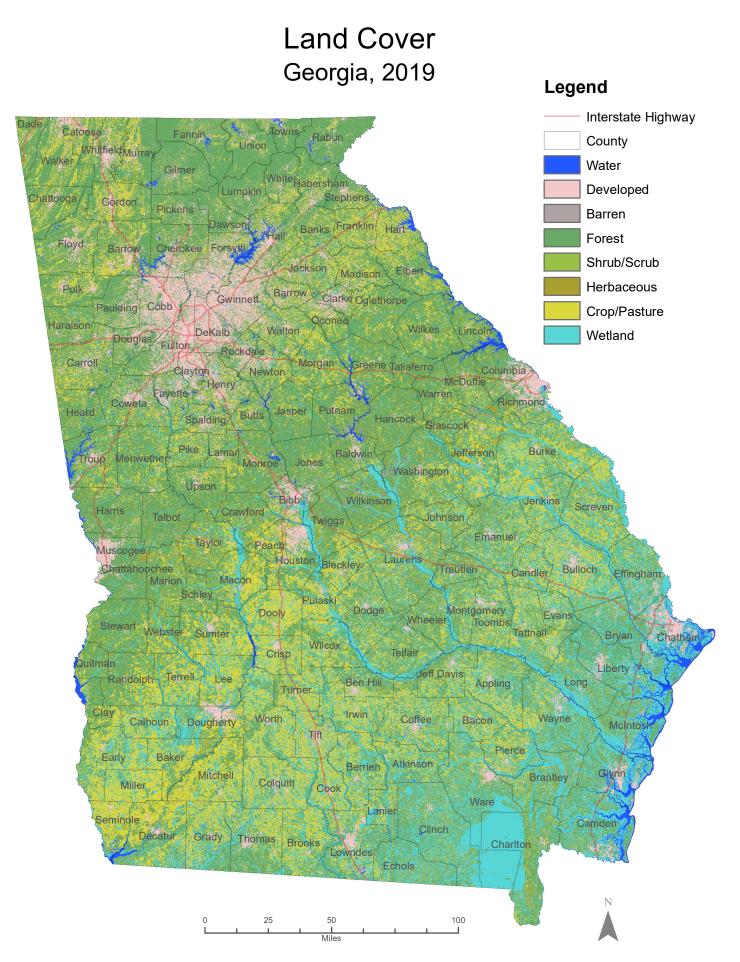
The USGS has been at the core of land cover and land use research and applications since the late 1960's. Under the geography banner within the survey, it is arguably the largest operational land cover agency in the world today. Land cover has historically been part of USGS's research heritage and has been significantly influential in the science of mapping land cover and land use.



Map projection: Georgia Statewide Lambert Projection Source Data from the U.S. Geological Survey and the U.S. Census Bureau

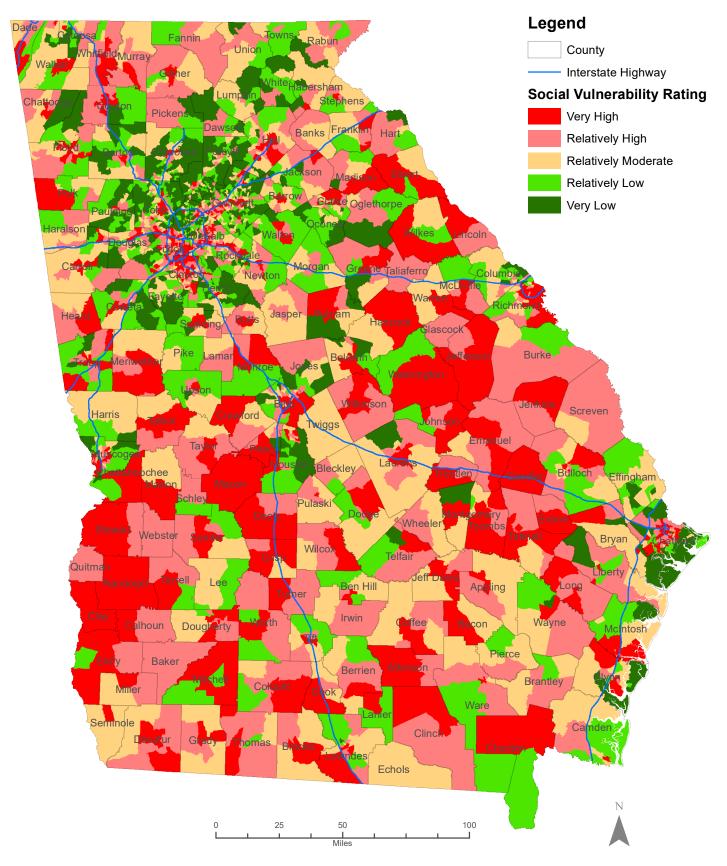


Map projection: Georgia Statewide Lambert Projection. Source Data from USGS, USDA, and U.S. Census Bureau.



Map projection: Georgia Statewide Lambert Projection Source Data from the U.S. Geological Survey and the U.S. Census Bureau

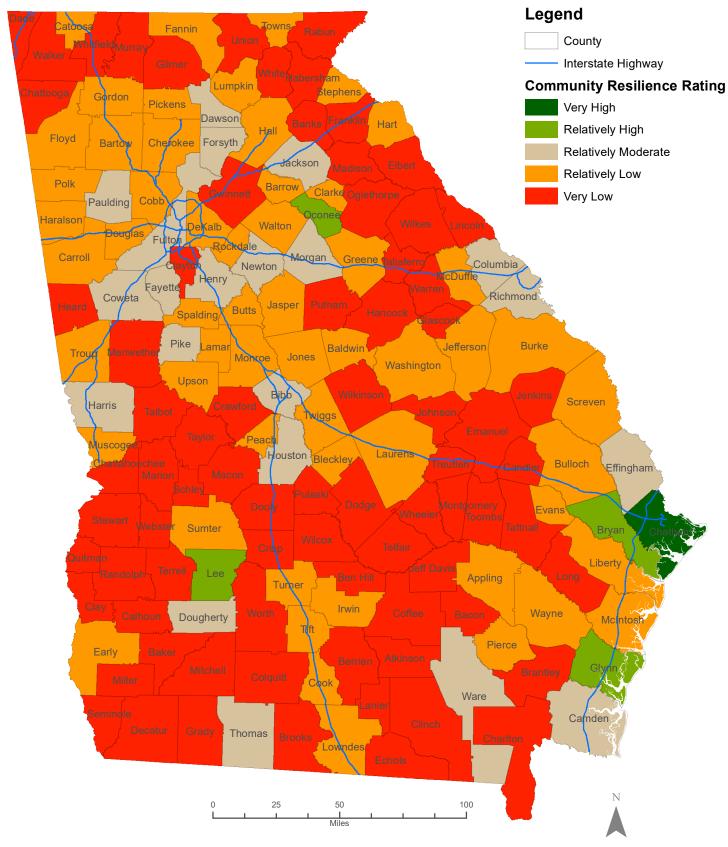
Social Vulnerability Georgia, 2020



Map projection: Georgia Statewide Lambert Projection

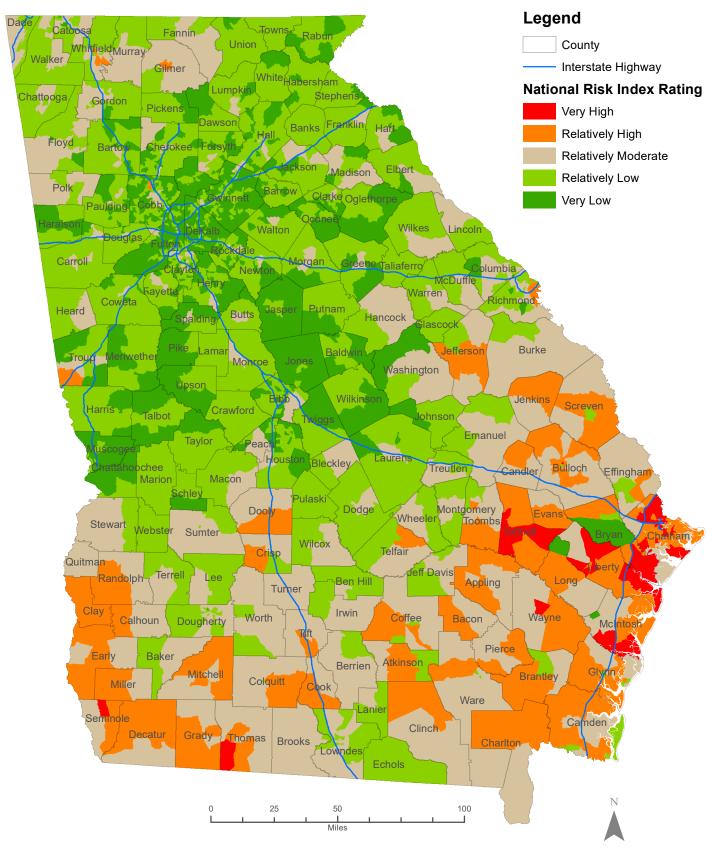
Source Data from the U.S. Geological Survey, Federal Emergency Management Agency, and the U.S. Census Bureau

Community Resilience Georgia, 2020



Map projection: Georgia Statewide Lambert Projection Source Data from the U.S. Geological Survey, Federal Emergency Management Agency, the U.S. Census Bureau, and the Hazards Vulnerability & Resilience Institute (HVRI) at University of South Carolina.

National Risk Index Georgia, 2020



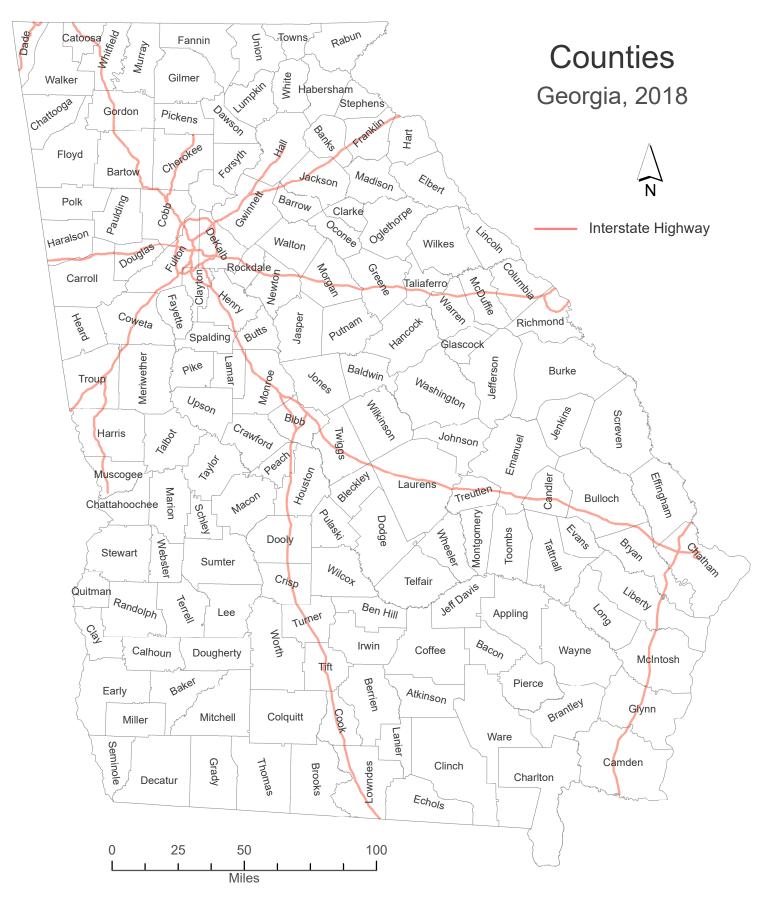
Map projection: Georgia Statewide Lambert Projection Source Data from the U.S. Geological Survey, Federal Emergency Management Agency, the U.S. Census Bureau, and the Hazards Vulnerability & Resilience Institute (HVRI) at University of South Carolina.



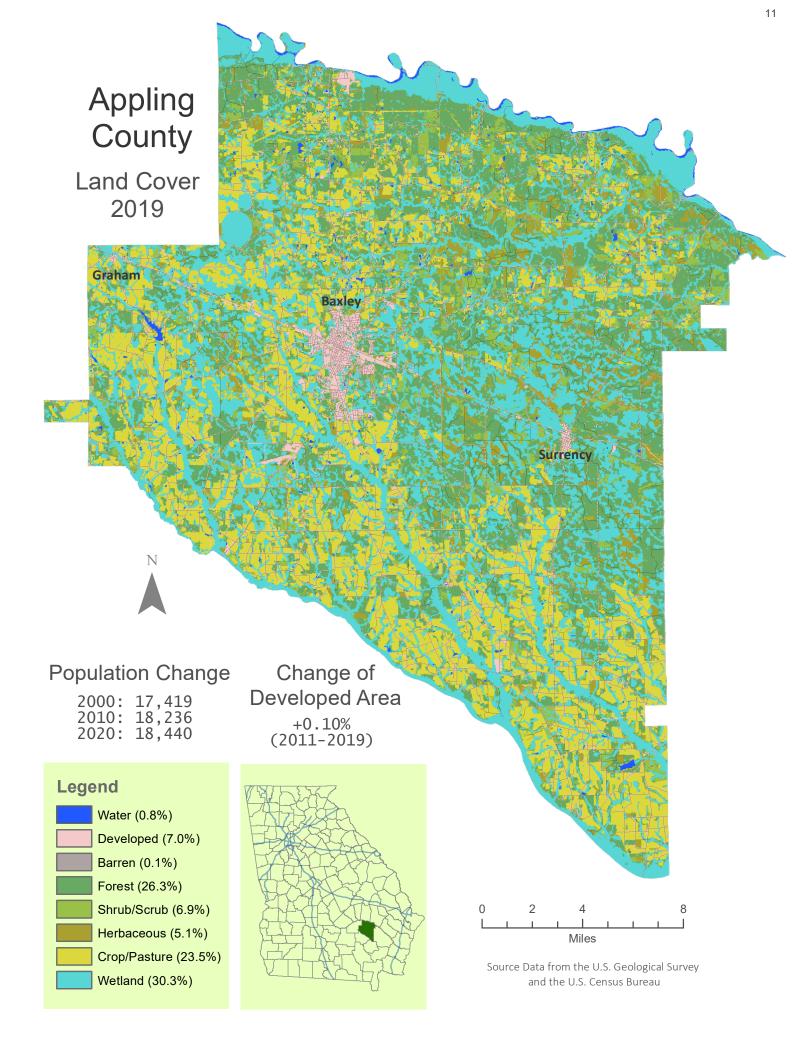
LAND COVER BY COUNTIES

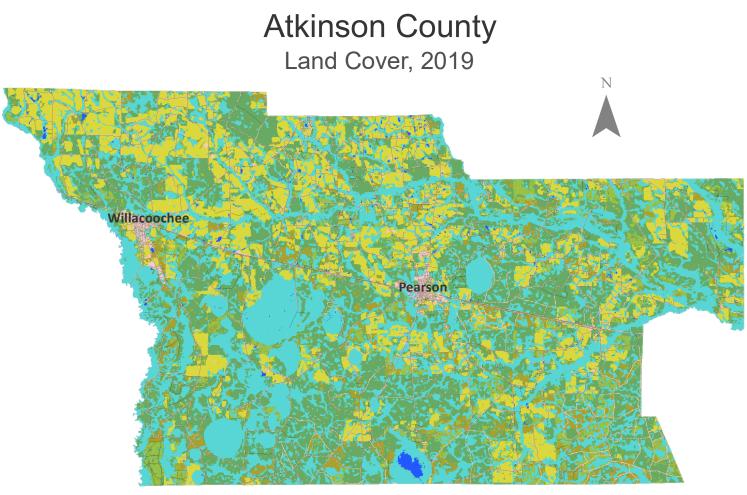
Refer to the following table for each county map page. Georgia counties are mapped in the next page.

County	Page	County	Page	County	Page	County	Page	County	Page
Appling	11	Cobb	43	Grady	75	Madison	107	Sumter	139
Atkinson	12	Coffee	44	Greene	76	Marion	108	Talbot	140
Bacon	13	Colquitt	45	Gwinnett	77	Meriwether	109	Taliaferro	141
Baker	14	Columbia	46	Habersham	78	Miller	110	Tattnall	142
Baldwin	15	Cook	47	Hall	79	Mitchell	111	Taylor	143
Banks	16	Coweta	48	Hancock	80	Monroe	112	Telfair	144
Barrow	17	Crawford	49	Haralson	81	Montgomery	113	Terrell	145
Bartow	18	Crisp	50	Harris	82	Morgan	114	Thomas	146
Ben Hill	19	Dade	51	Hart	83	Murray	115	Tift	147
Berrien	20	Dawson	52	Heard	84	Muscogee	116	Toombs	148
Bibb	21	Decatur	53	Henry	85	Newton	117	Towns	149
Bleckley	22	DeKalb	54	Houston	86	Oconee	118	Treutlen	150
Brantley	23	Dodge	55	Irwin	87	Oglethorpe	119	Troup	151
Brooks	24	Dooly	56	Jackson	88	Paulding	120	Turner	152
Bryan	25	Dougherty	57	Jasper	89	Peach	121	Twiggs	153
Bulloch	26	Douglas	58	Jeff Davis	90	Pickens	122	Union	154
Burke	27	Early	59	Jefferson	91	Pierce	123	Upson	155
Butts	28	Echols	60	Jenkins	92	Pike	124	Walker	156
Calhoun	29	Effingham	61	Johnson	93	Polk	125	Walton	157
Camden	30	Elbert	62	Jones	94	Pulaski	126	Ware	158
Candler	31	Emanuel	63	Lamar	95	Putnam	127	Warren	159
Carroll	32	Evans	64	Lanier	96	Quitman	128	Washington	160
Catoosa	33	Fannin	65	Laurens	97	Rabun	129	Wayne	161
Charlton	34	Fayette	66	Lee	98	Randolph	130	Webster	162
Chatham	35	Floyd	67	Liberty	99	Richmond	131	Wheeler	163
Chattahoochee	36	Forsyth	68	Lincoln	100	Rockdale	132	White	164
Chattooga	37	Franklin	69	Long	101	Schley	133	Whitfield	165
Cherokee	38	Fulton	70	Lowndes	102	Screven	134	Wilcox	166
Clarke	39	Gilmer	71	Lumpkin	103	Seminole	135	Wilkes	167
Clay	40	Glascock	72	McDuffie	104	Spalding	136	Wilkinson	168
Clayton	41	Glynn	73	McIntosh	105	Stephens	137	Worth	169
Clinch	42	Gordon	74	Macon	106	Stewart	138		



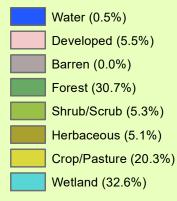
Map projection: Georgia Statewide Lambert Projection. Source Data from USGS, USDA, and U.S. Census Bureau.









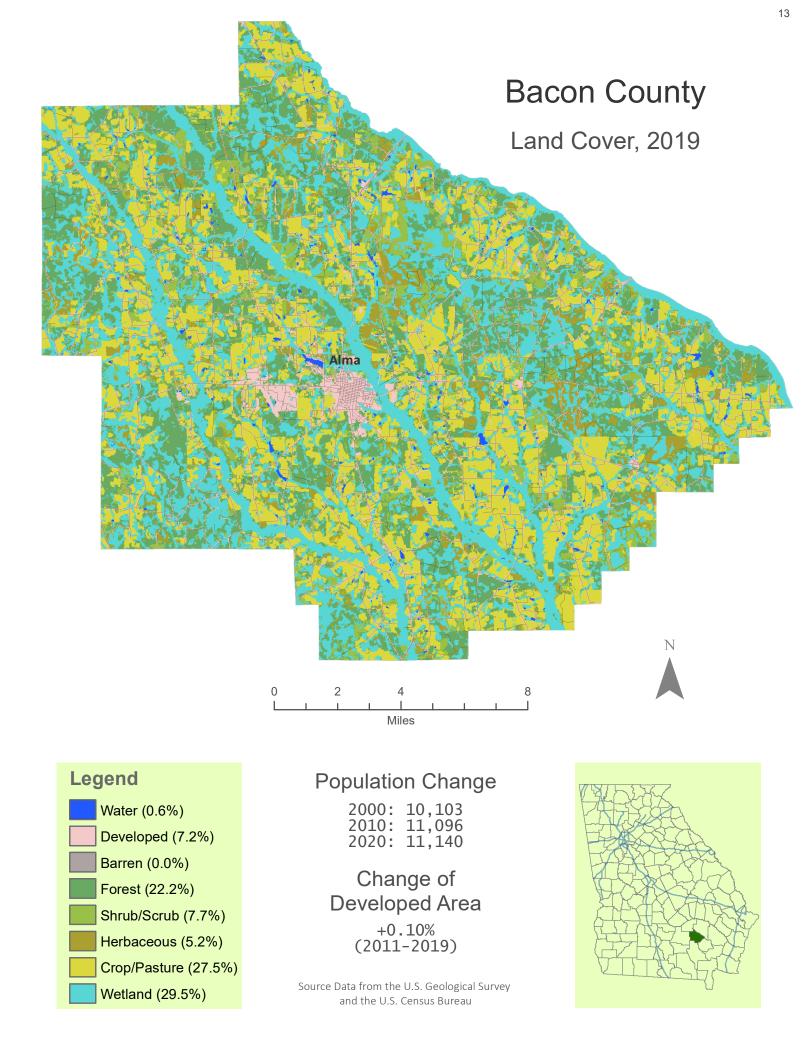


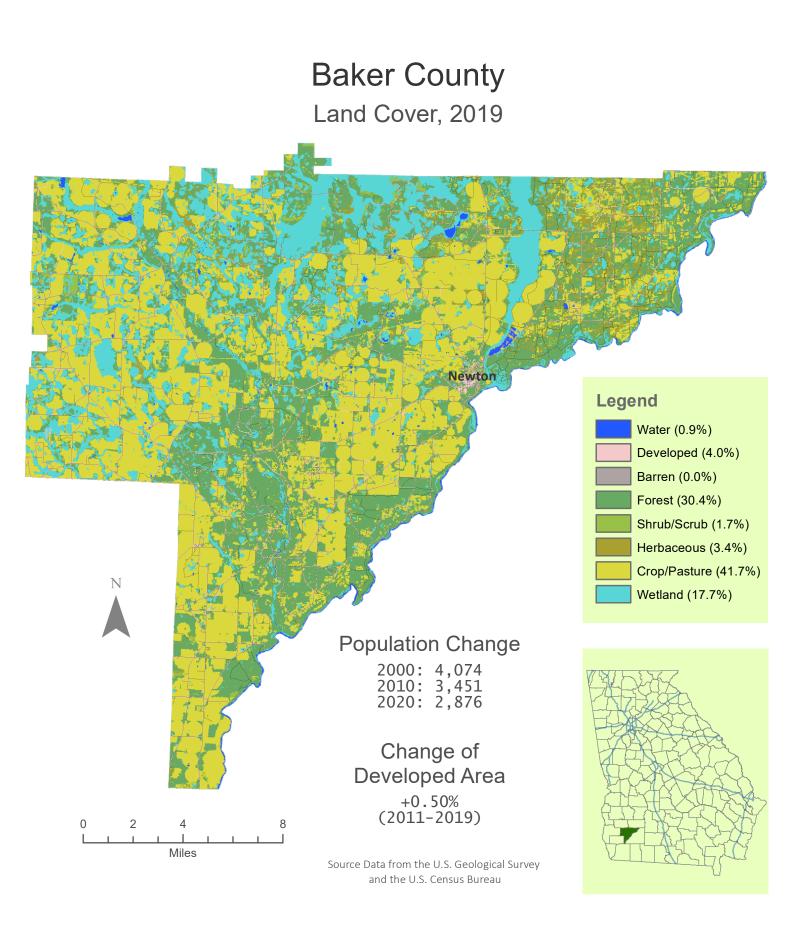
Population Change

2000: 7,609 2010: 8,375 2020: 8,286

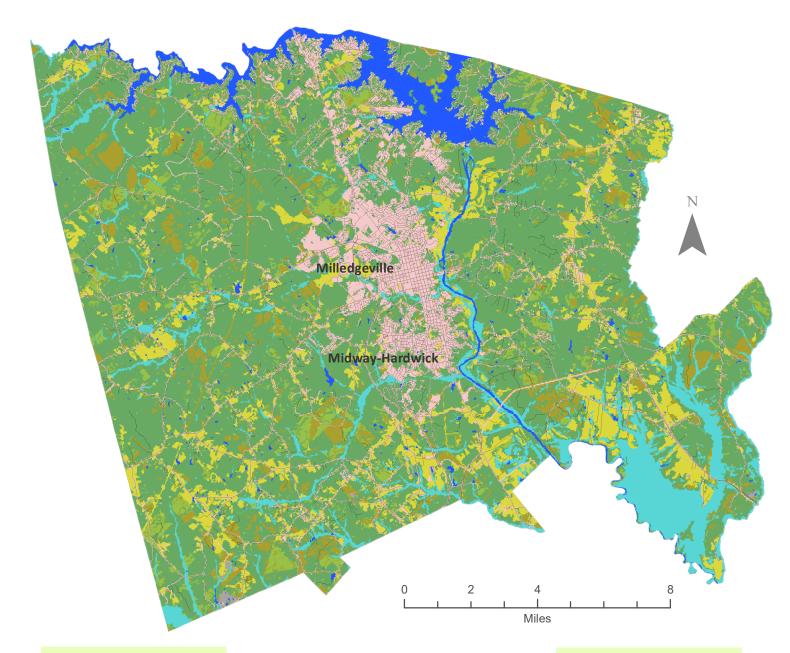
Change of Developed Area 0.00% (2011-2019)







Land Cover, 2019



Legend

V
C
E
F
S
F
C
V

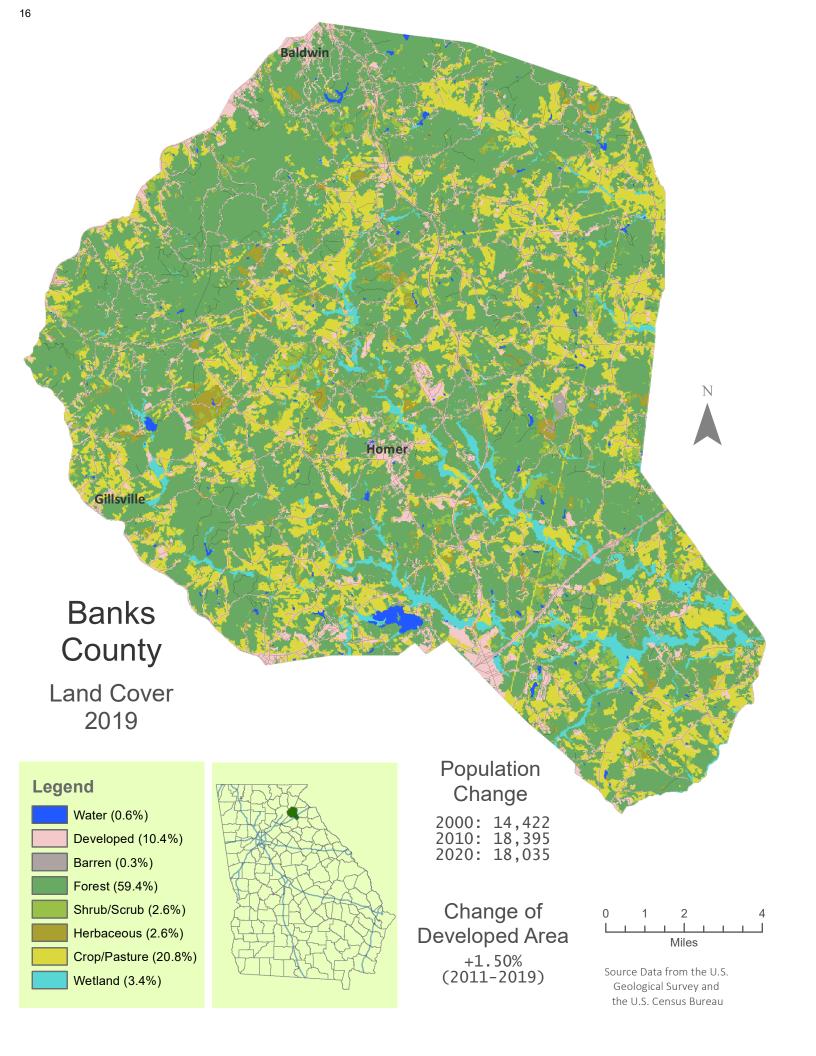
Water (3.9%) Developed (11.3%) Barren (0.3%) Forest (56.1%) Shrub/Scrub (4.5%) Herbaceous (6.9%) Crop/Pasture (9.8%) Wetland (7.3%)

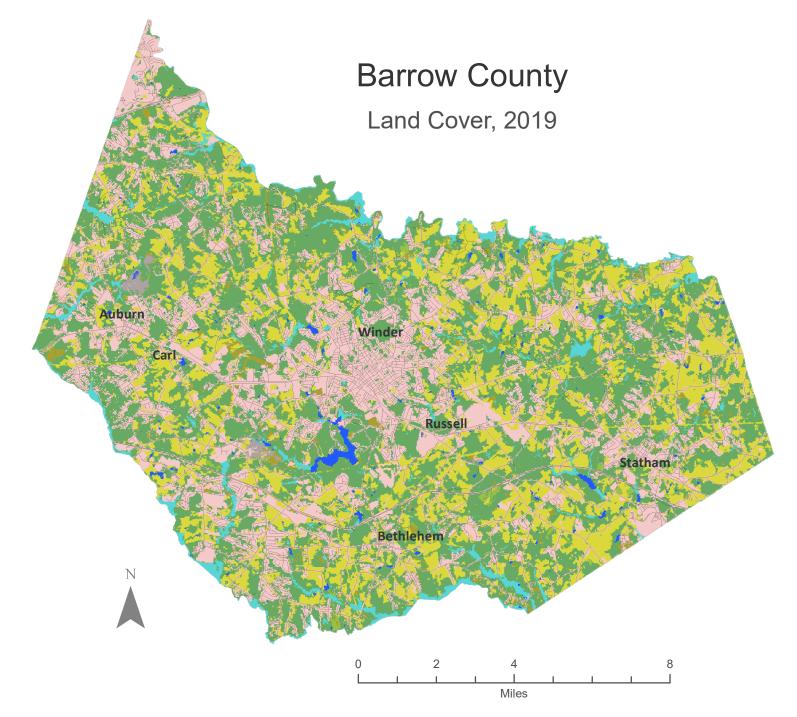
Population Change

2000: 44,700 2010: 45,720 2020: 43,799

Change of Developed Area +01.20% (2001-2011)







Legend

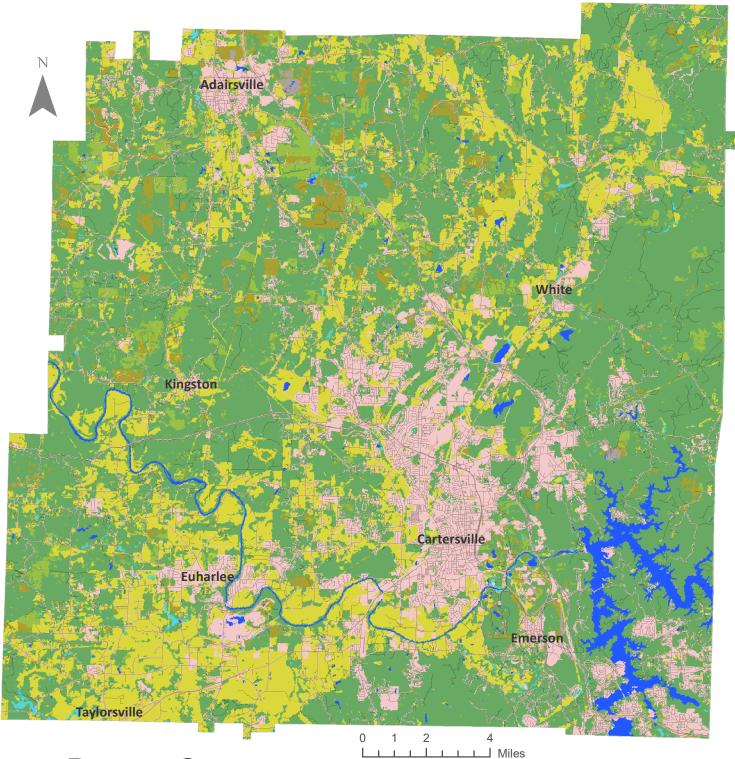
-	
	Water (0.8%)
	Developed (28.9%)
	Barren (0.5%)
	Forest (40.3%)
	Shrub/Scrub (0.7%)
	Herbaceous (1.7%)
	Crop/Pasture (23.9%)
	Wetland (3.3%)

Population Change

2000: 46,144 2010: 69,367 2020: 83,505

Change of Developed Area +2.80% (2011-2019)





Bartow County

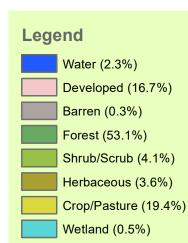
Land Cover, 2019

Population Change

2000: 76,019 2010: 100,157 2020: 108,901

Change of Developed Area +0.70% (2011-2019)

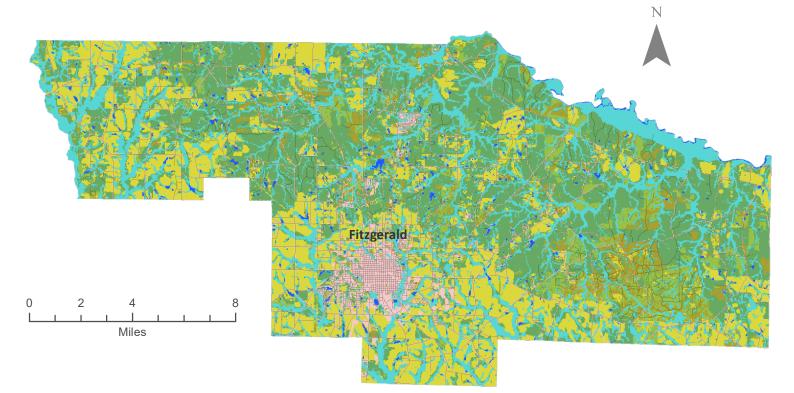


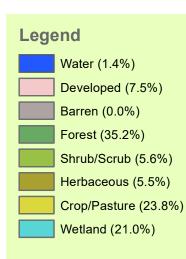




Ben Hill County

Land Cover, 2019



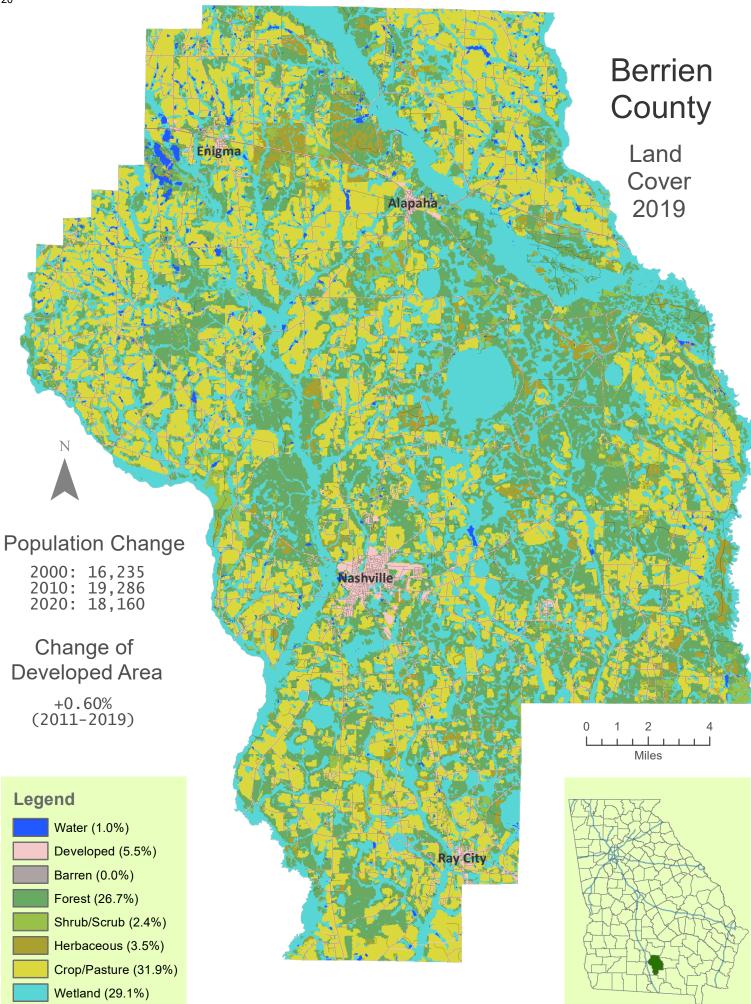


Population Change

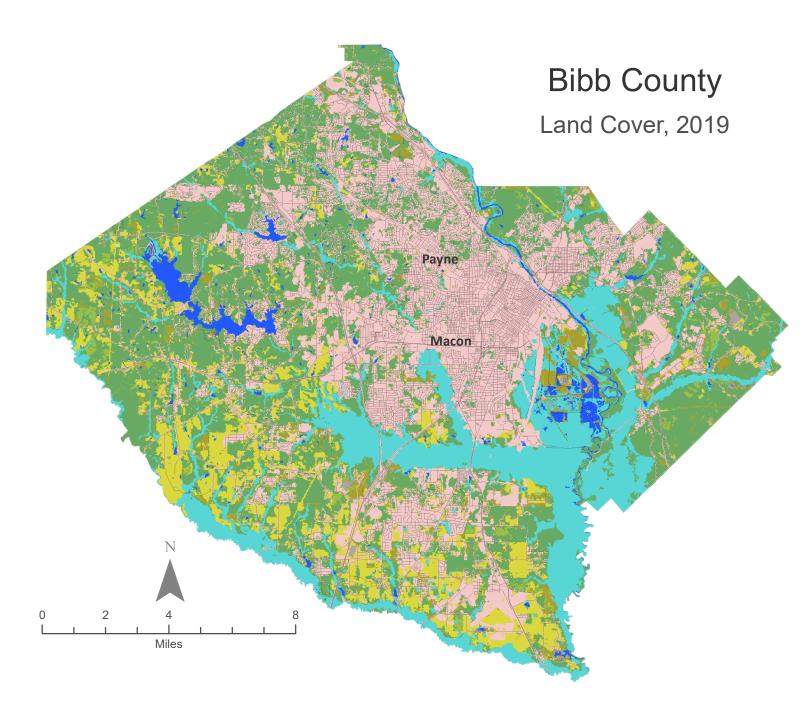
2000: 17,484 2010: 17,634 2020: 17,194

Change of Developed Area +0.00% (2011-2019)

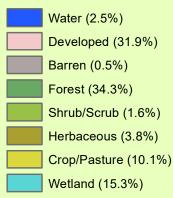




Source Data from the U.S. Geological Survey and the U.S. Census Bureau



Legend

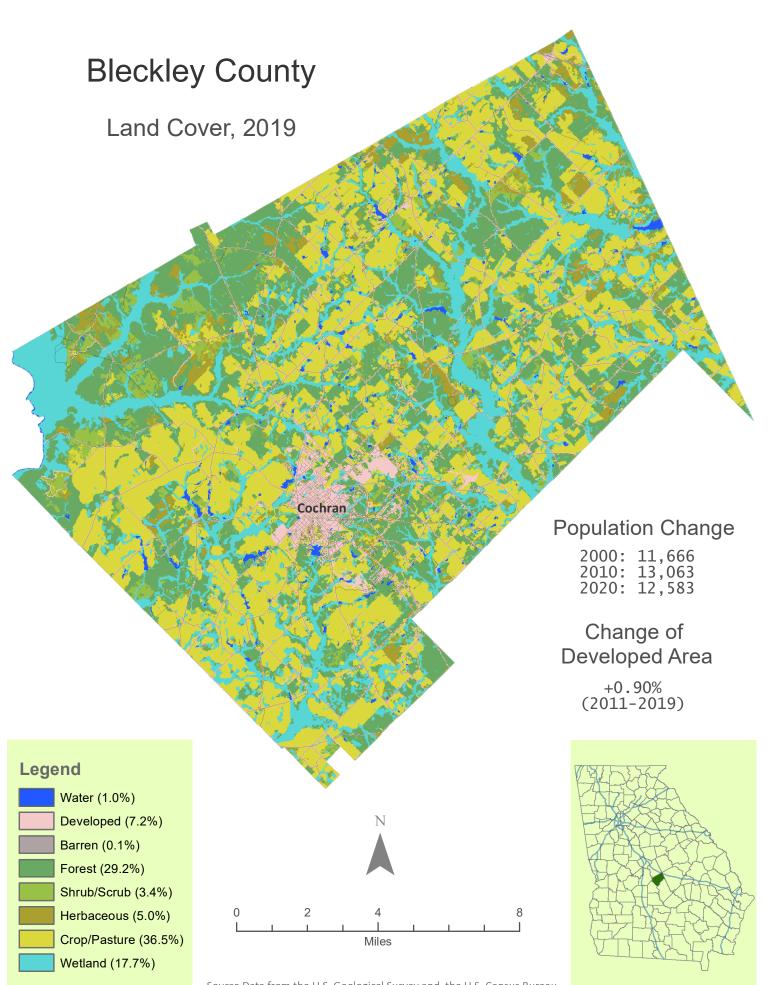


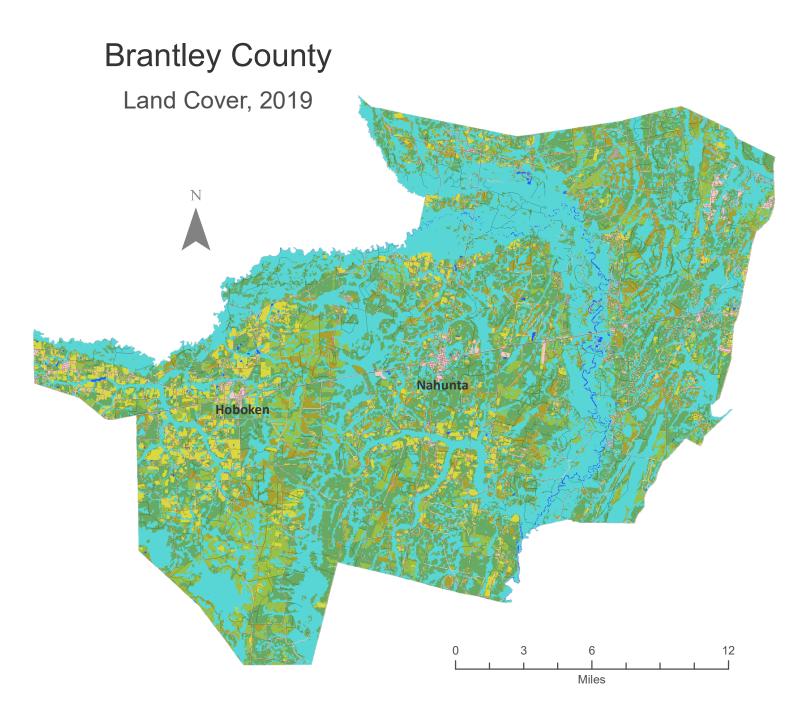
Population Change

2000: 153,887 2010: 155,547 2020: 157,346

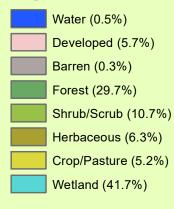
Change of Developed Area +1.50% (2011-2019)







Legend

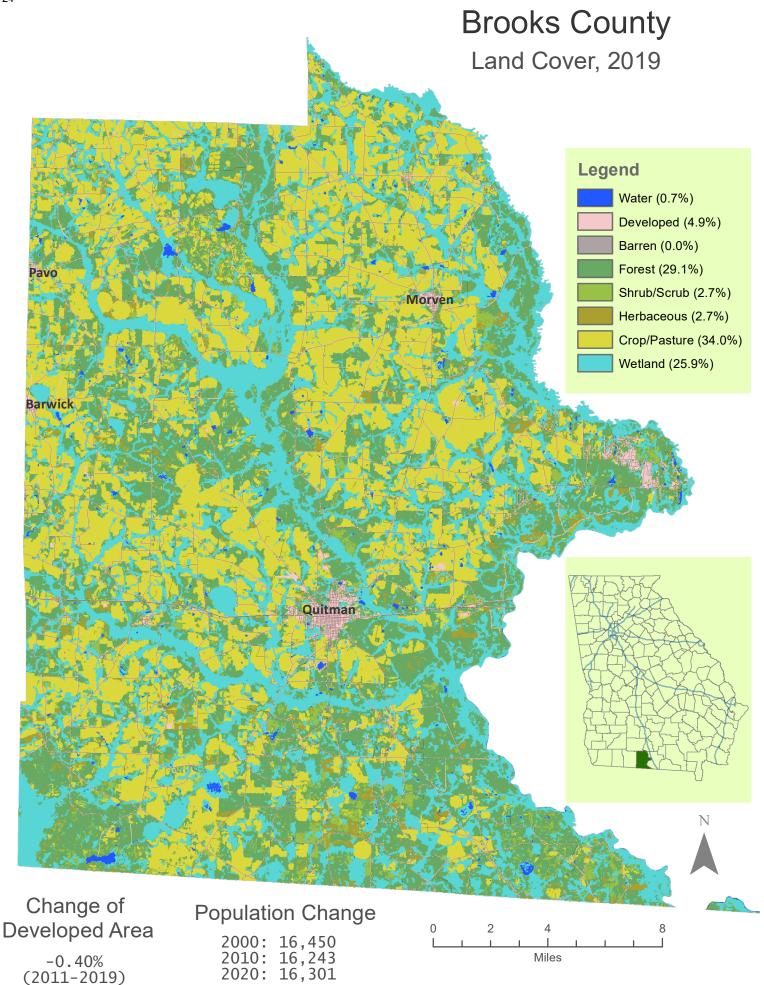


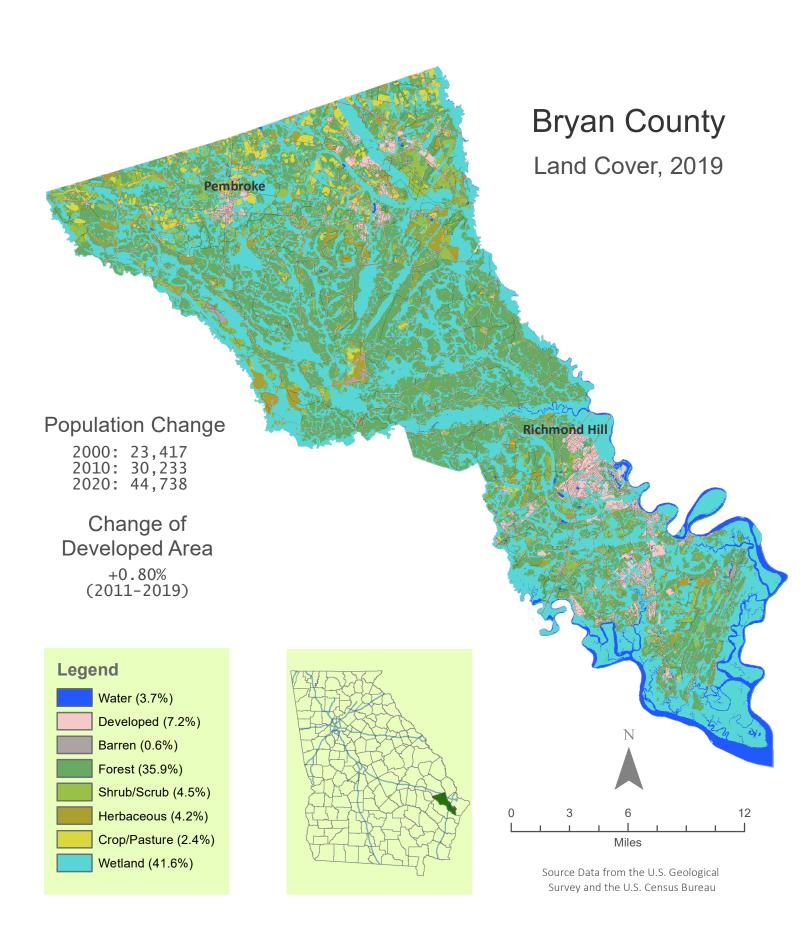
Population Change

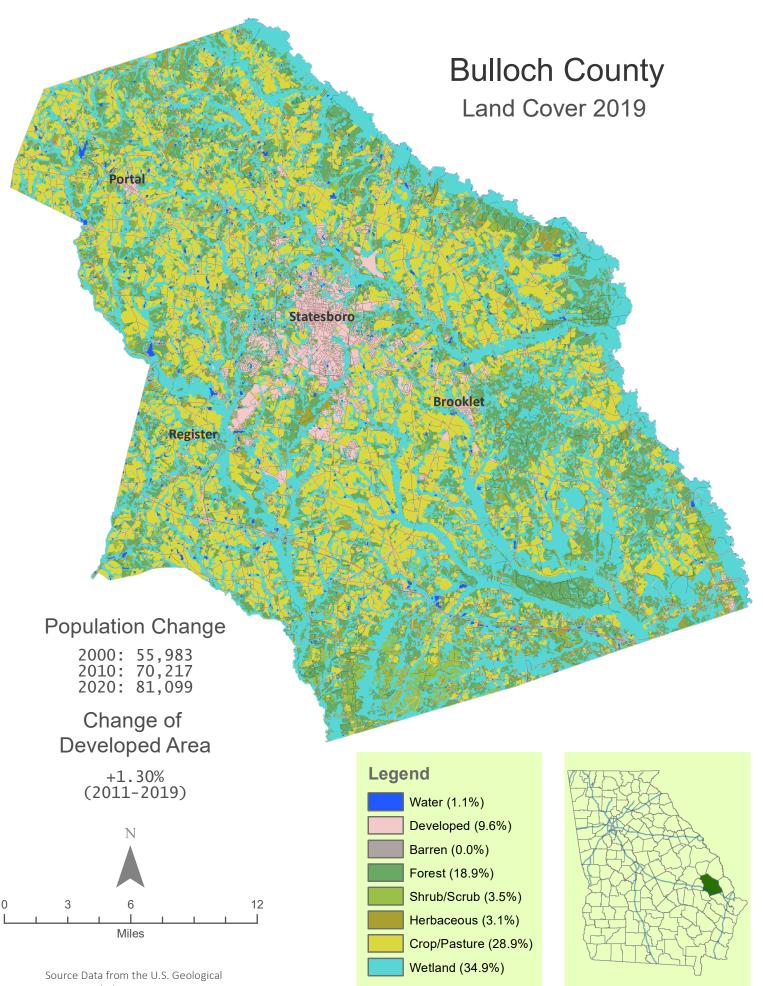
2000: 14,629 2010: 18,411 2020: 18,021

Change of Developed Area -0.10% (2011-2019)

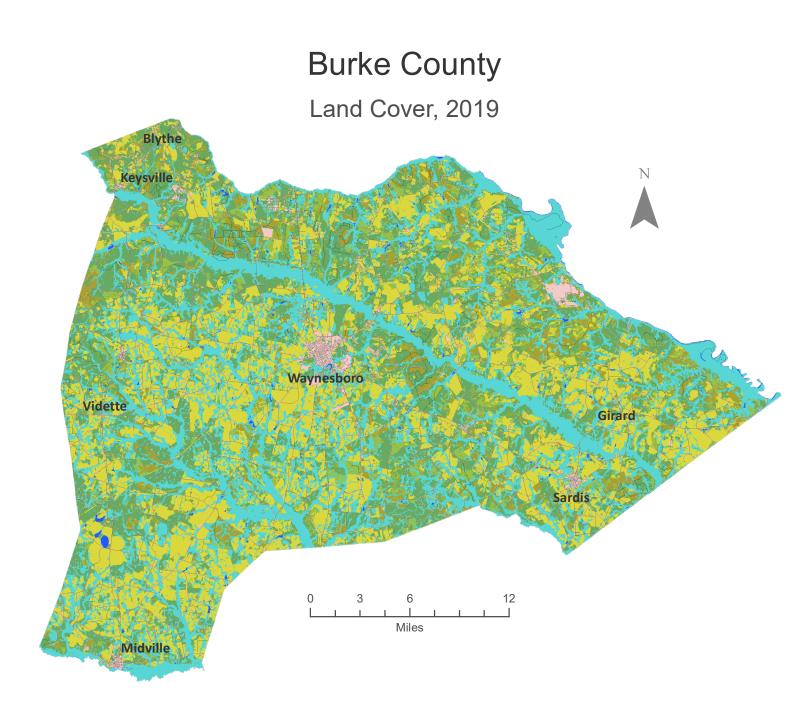




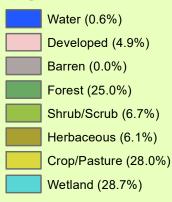




Survey and the U.S. Census Bureau



Legend

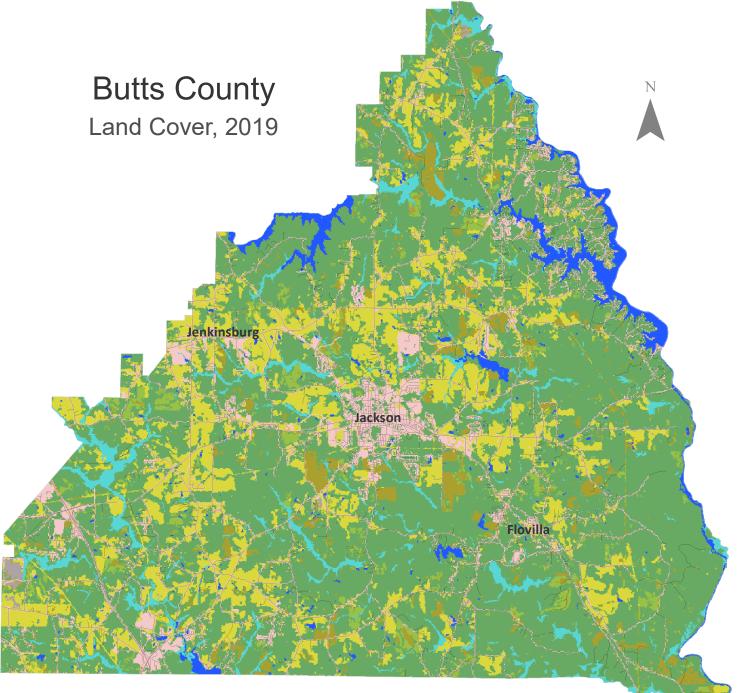


Population Change

2000: 22,243 2010: 23,316 2020: 25,496

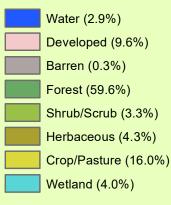
Change of Developed Area -1.20% (2011-2019)





0 2 4 8 _____ Miles

Legend



Population Change

2000: 19,522 2010: 23,655 2020: 25,434

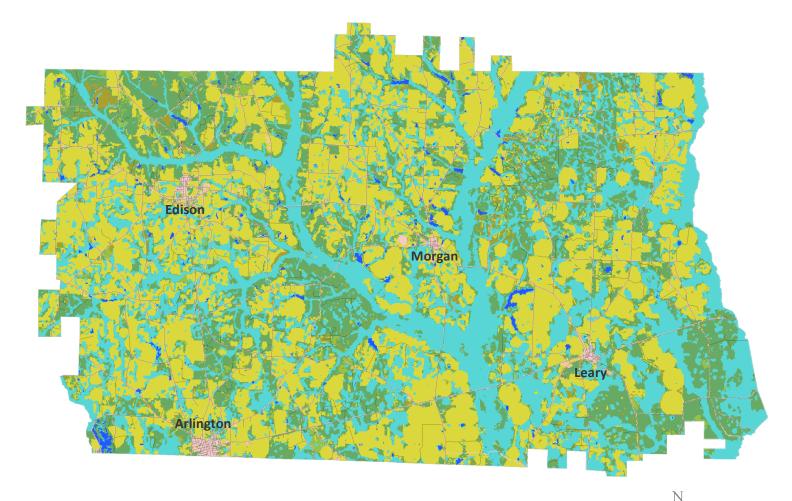
Change of Developed Area

+2.10% (2011-2019)



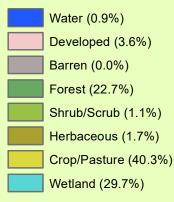
Calhoun County

Land Cover, 2019





Legend

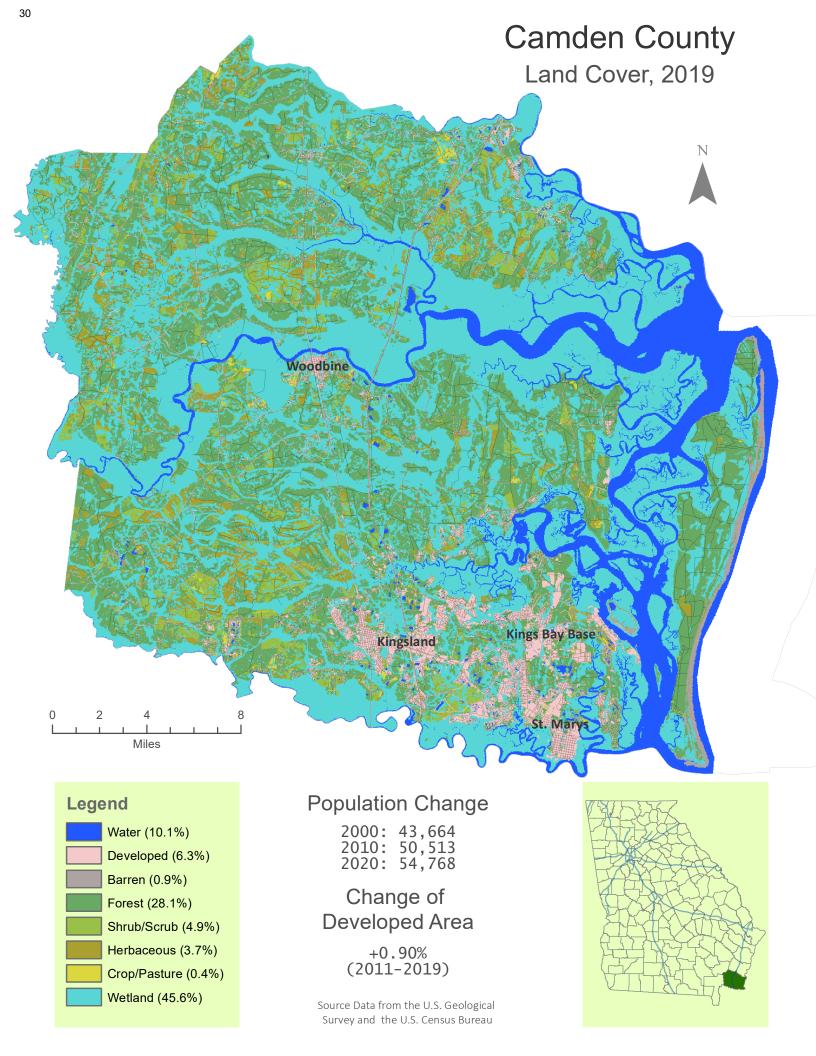


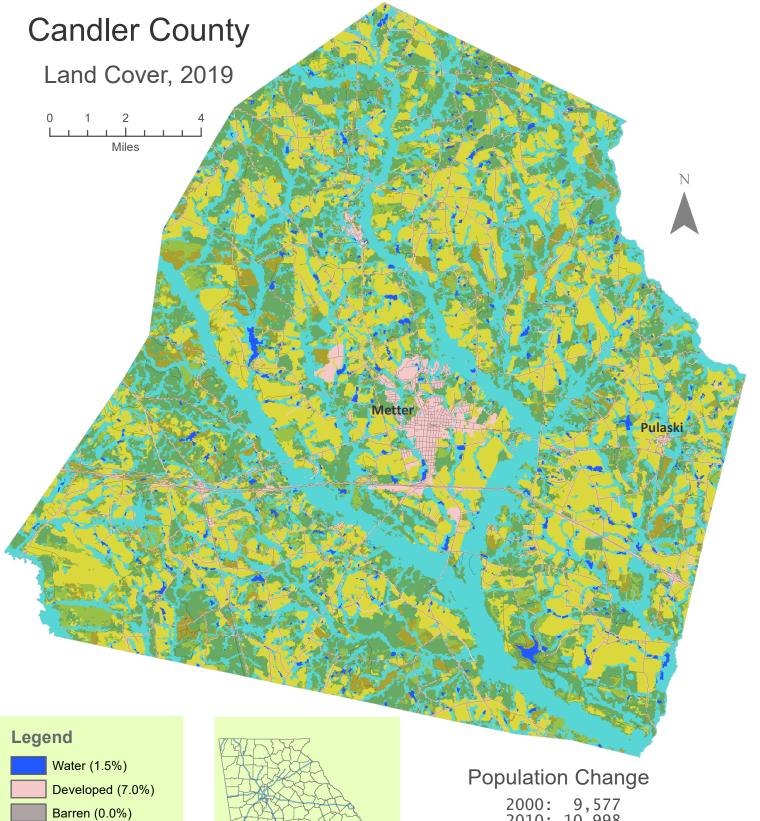
Population Change

2000: 6,320 2010: 6,694 2020: 5,573

Change of Developed Area +0.00% (2011-2019)







Forest (22.7%)

Shrub/Scrub (5.6%)

Herbaceous (4.0%)

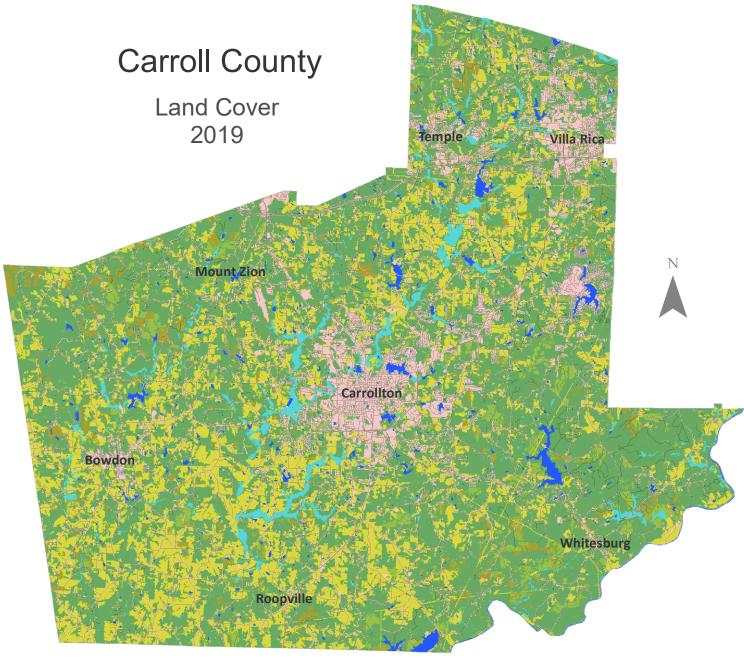
Wetland (29.6%)

Crop/Pasture (29.6%)

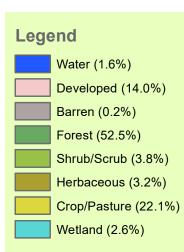
2000: 9,577 2010: 10,998 2020: 10,981

31

Change of Developed Area +0.03% (2011-2019)







Population Change

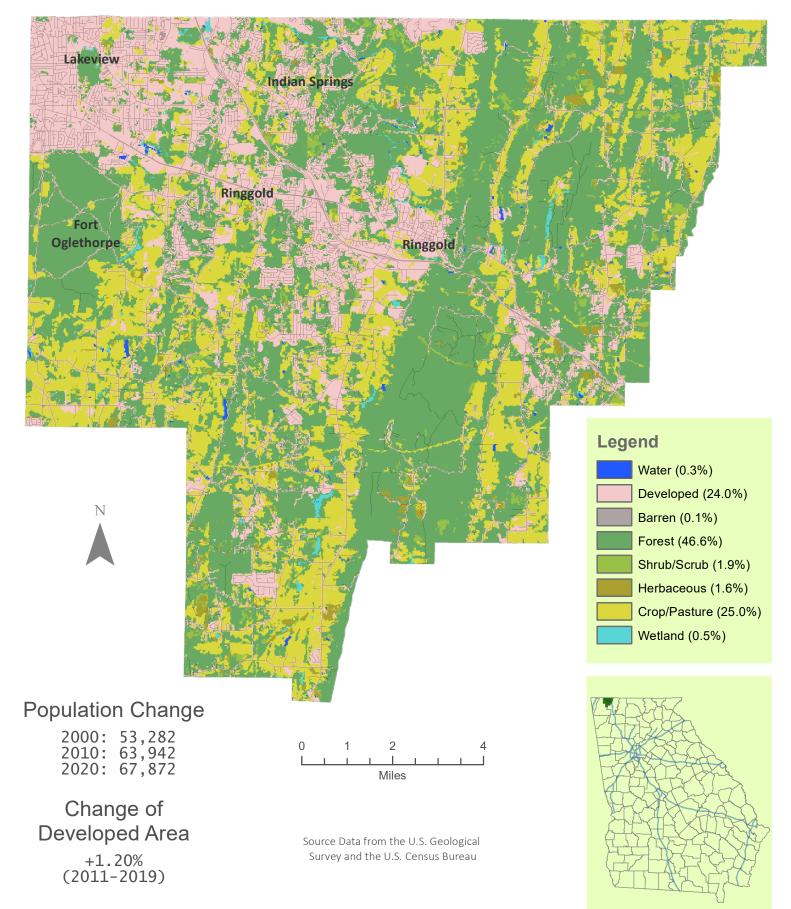
2000:	87,268
2010:	110,527
2020:	119,148

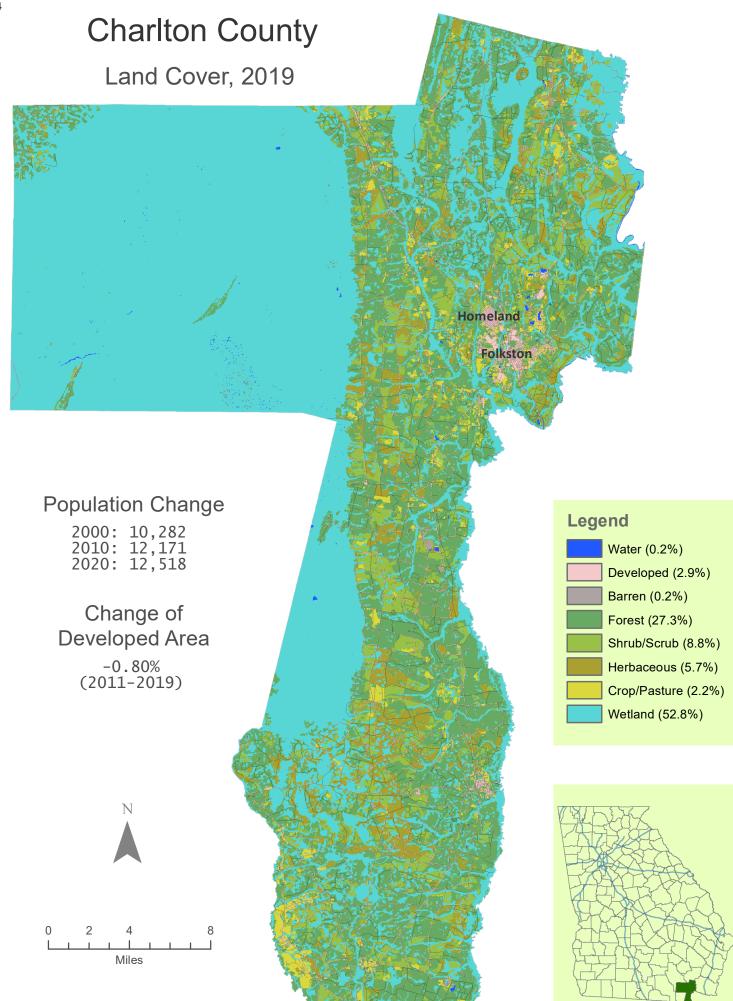
Change of Developed Area +2.00% (2011-2019)

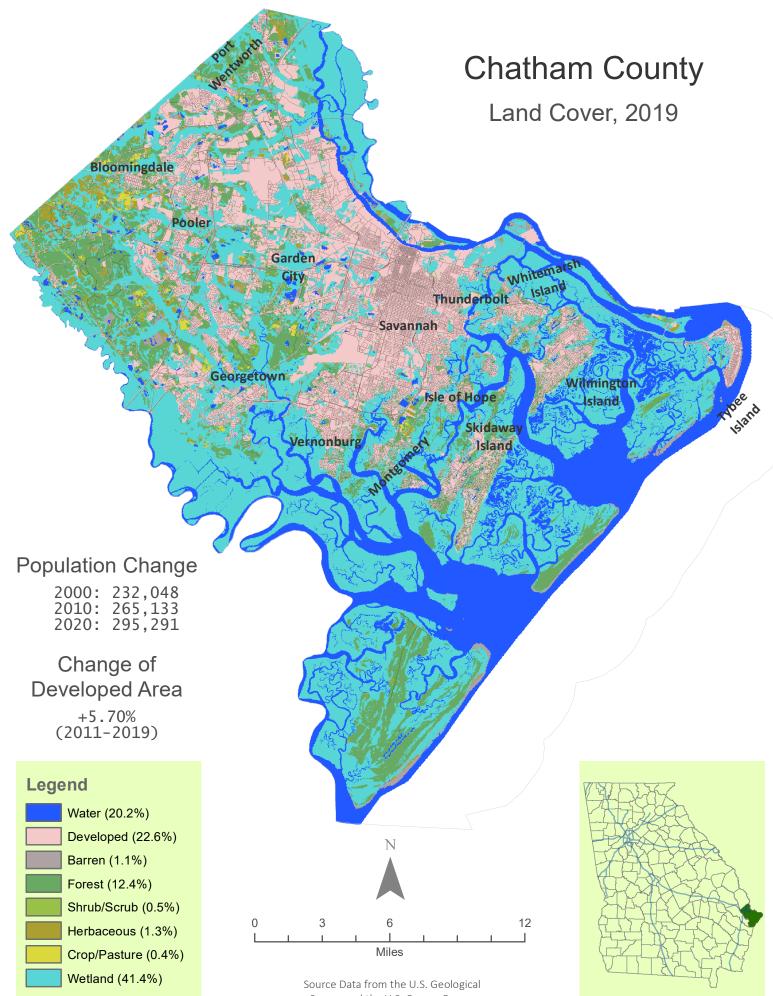


Catoosa County

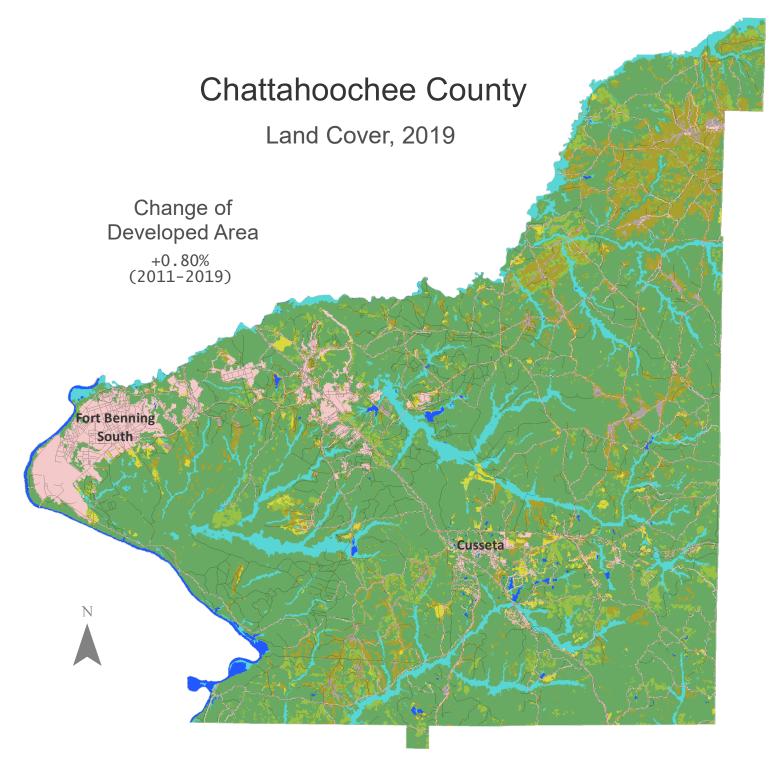
Land Cover, 2019

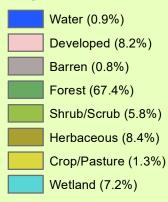


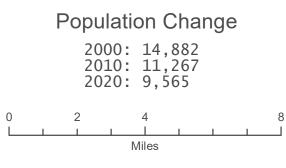




Survey and the U.S. Census Bureau



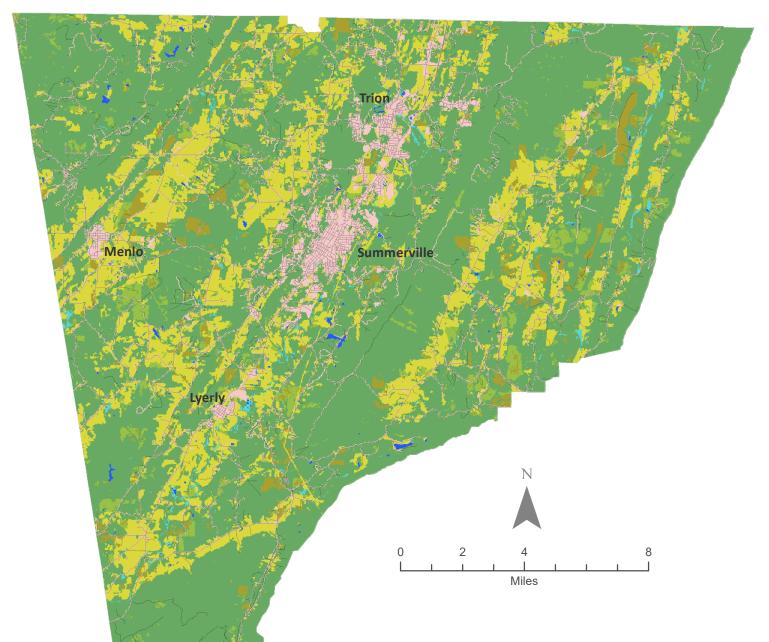






Chattooga County

Land Cover, 2019



Legend

Water (0.3%)
Developed (8.0%)
Barren (0.1%)
Forest (65.1%)
Shrub/Scrub (4.0%)
Herbaceous (3.2%)
Crop/Pasture (18.8%)
Wetland (0.5%)

Population Change 2000: 25,470

2000: 25,470 2010: 26,015 2020: 24,965

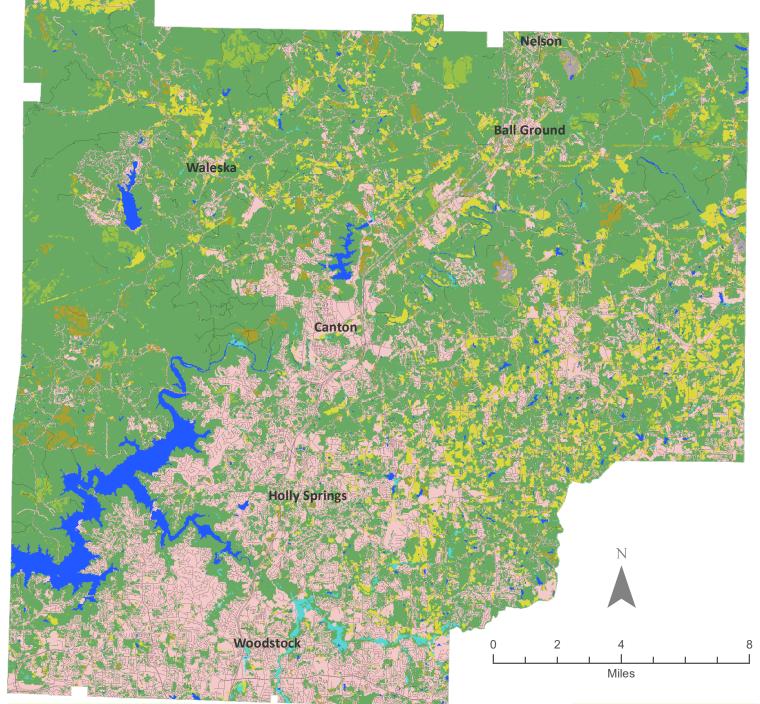
Change of Developed Area +0.40%

+0.40% (2011-2019)



Cherokee County

Land Cover, 2019



Legend

Water (2.7%)
Developed (2
Barren (0.4%)
Forest (59.3%
Shrub/Scrub (
Herbaceous (
Crop/Pasture
Wetland (0.6%

/eloped (25.4%) ren (0.4%) est (59.3%) ub/Scrub (2.0%) baceous (2.3%)

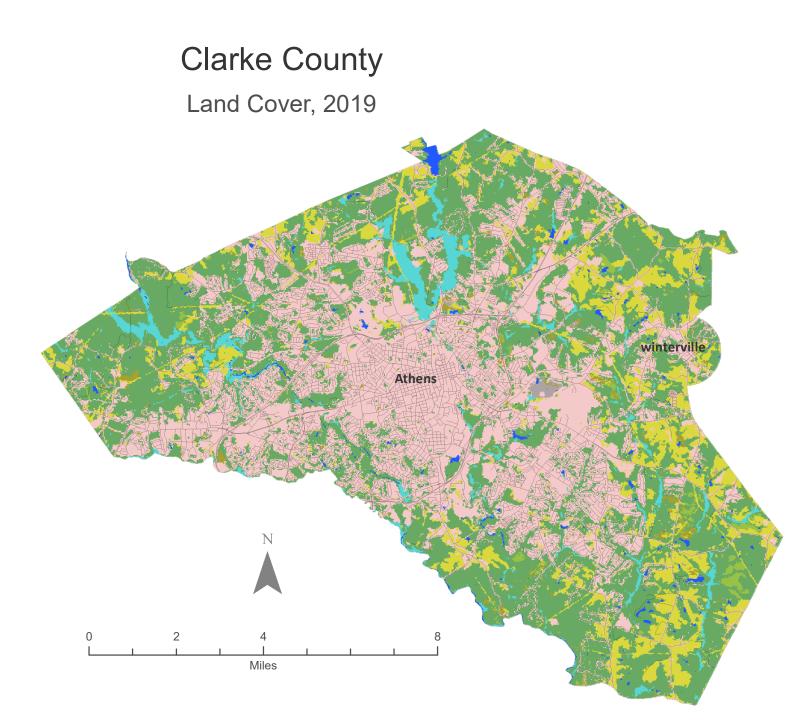
p/Pasture (7.3%) tland (0.6%)

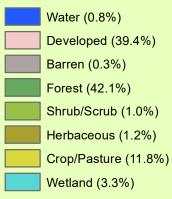
Population Change

2000: 141,903 2010: 214,346 2020: 266,620

Change of **Developed** Area +1.90% (2011 - 2019)







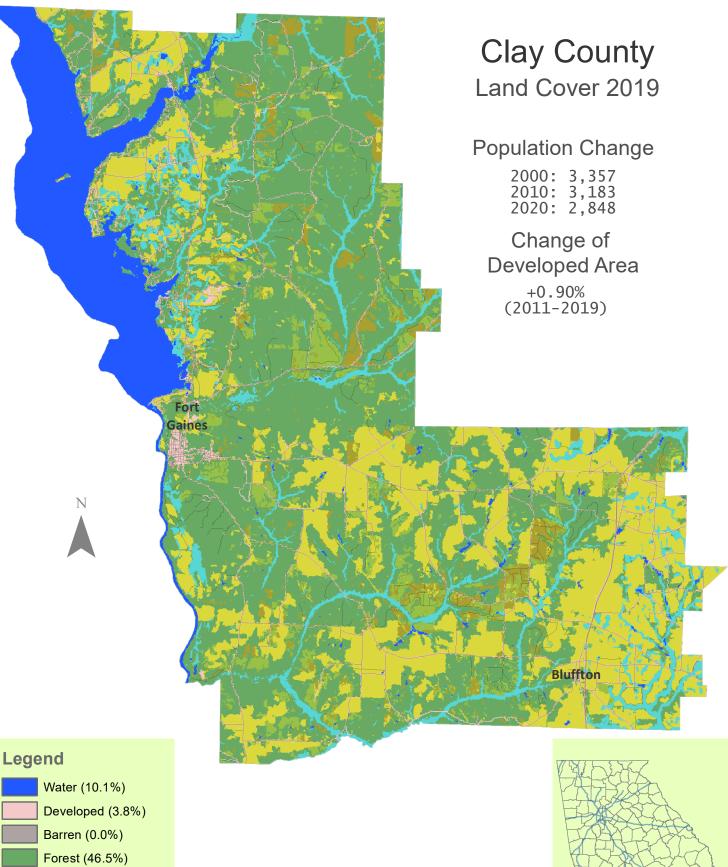
Population Change

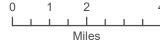
101,489
116,714
128,671

Change of Developed Area

+0.30% (2011-2019)





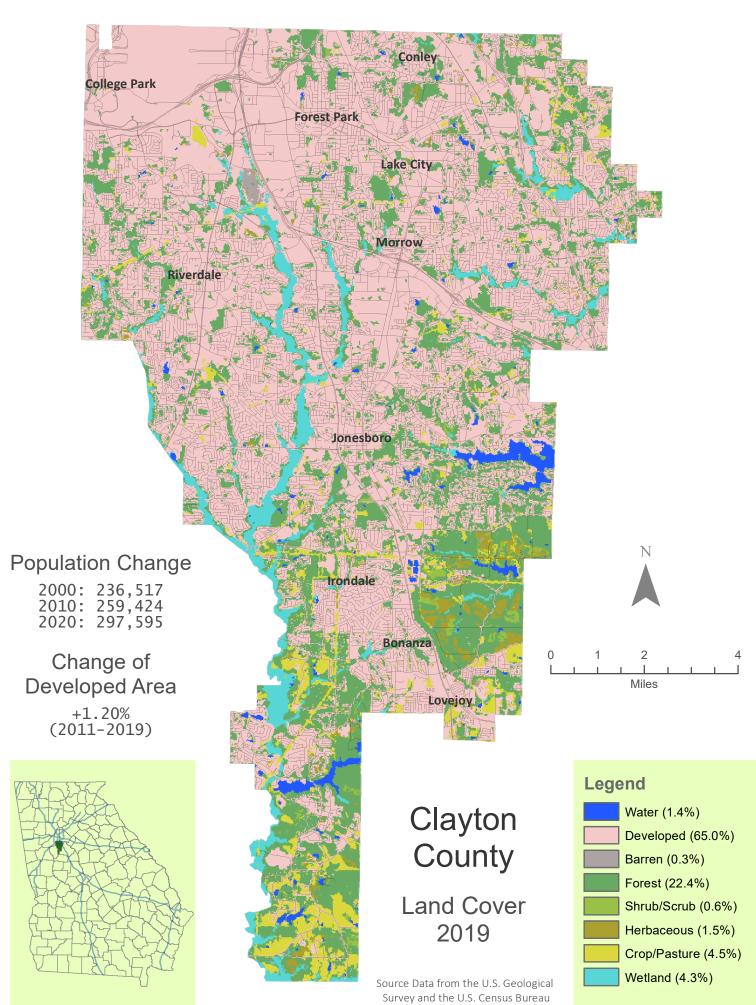


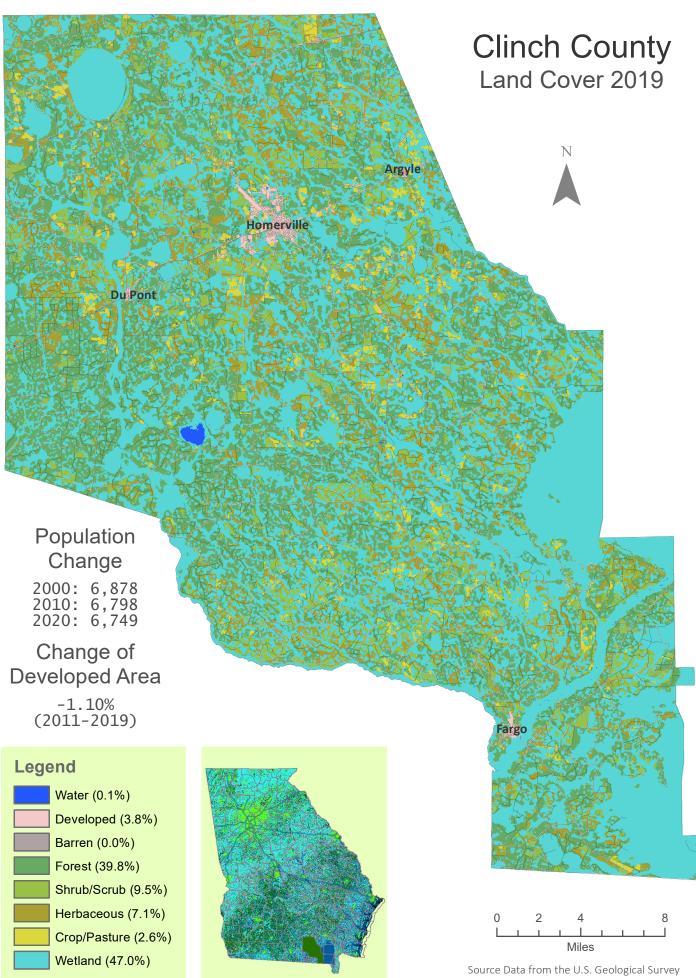
Shrub/Scrub (5.4%)

Herbaceous (4.0%) Crop/Pasture (23.2%)

Wetland (6.9%)



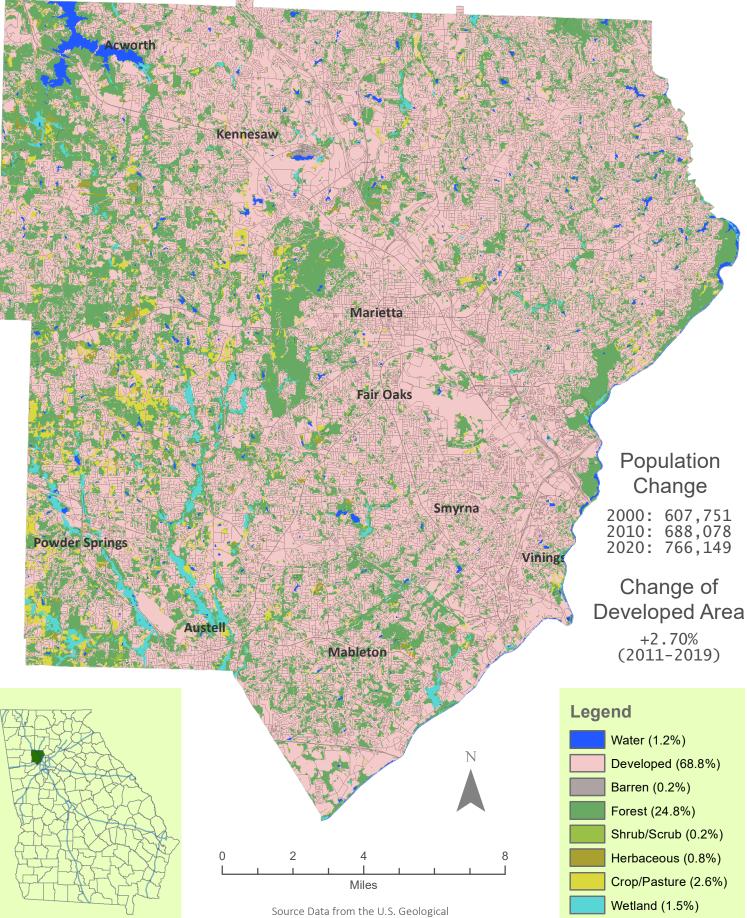




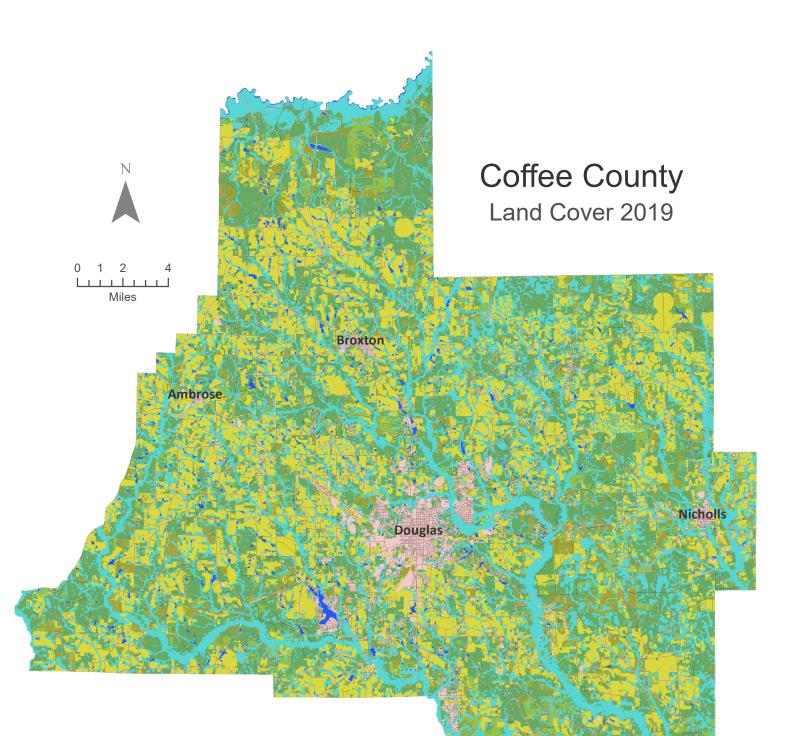
42

ource Data from the U.S. Geological Surve and the U.S. Census Bureau

Cobb County Land Cover, 2019

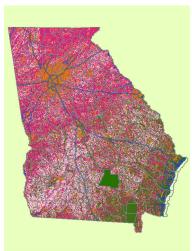


Survey and the U.S. Census Bureau





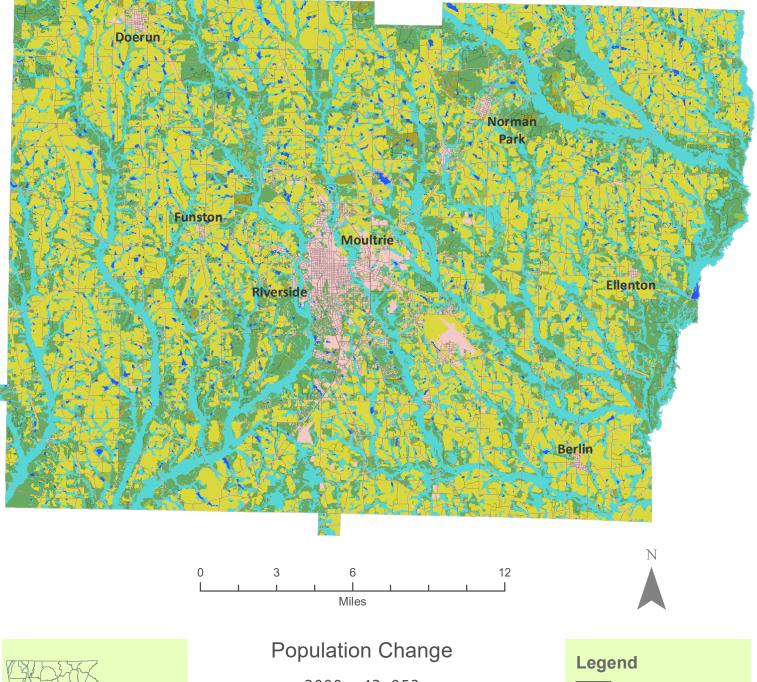
Water (1.4%) Developed (8.0%) Barren (0.0%) Forest (29.3%) Shrub/Scrub (4.0%) Herbaceous (4.6%) Crop/Pasture (28.7%) Wetland (23.9%)



Population Change

2000: 37,413 2010: 42,356 2020: 43,092

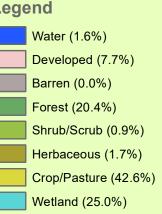
Change of Developed Area +1.80% (2011-2019)

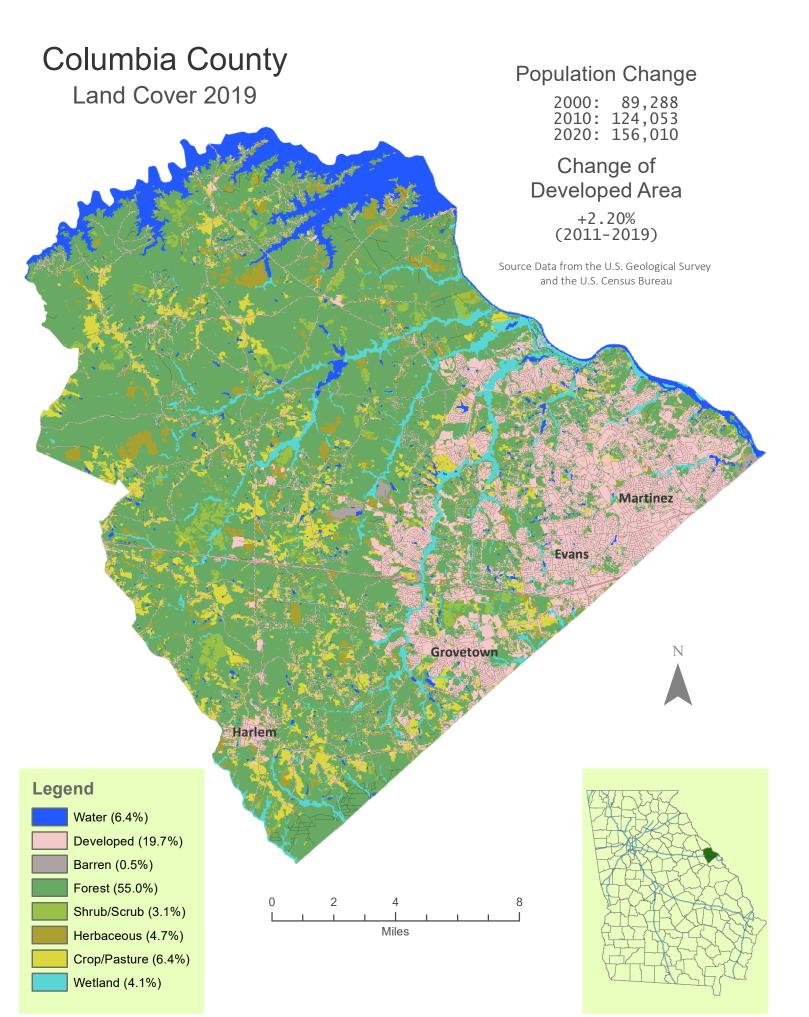


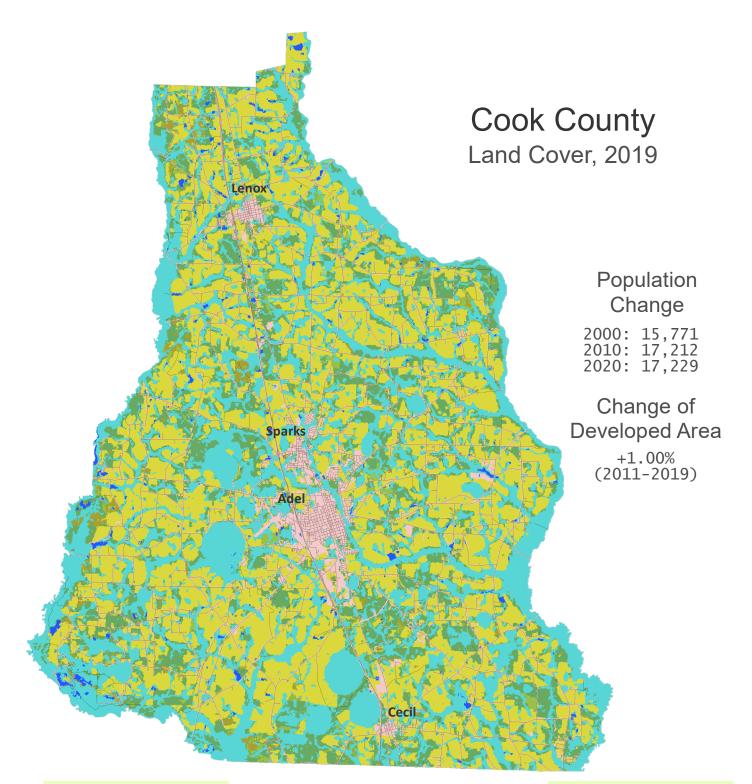
2000: 42,053 2010: 45,498 2020: 45,898

Change of Developed Area

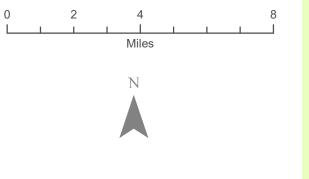
> +0.90% (2011-2019)

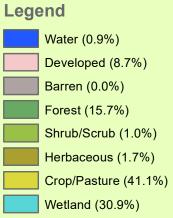




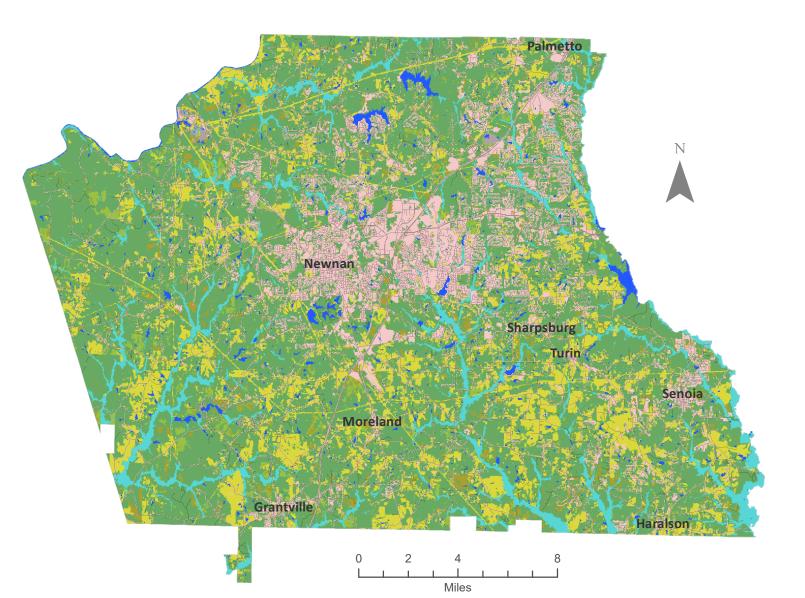




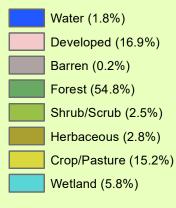








L	eg	e	nd
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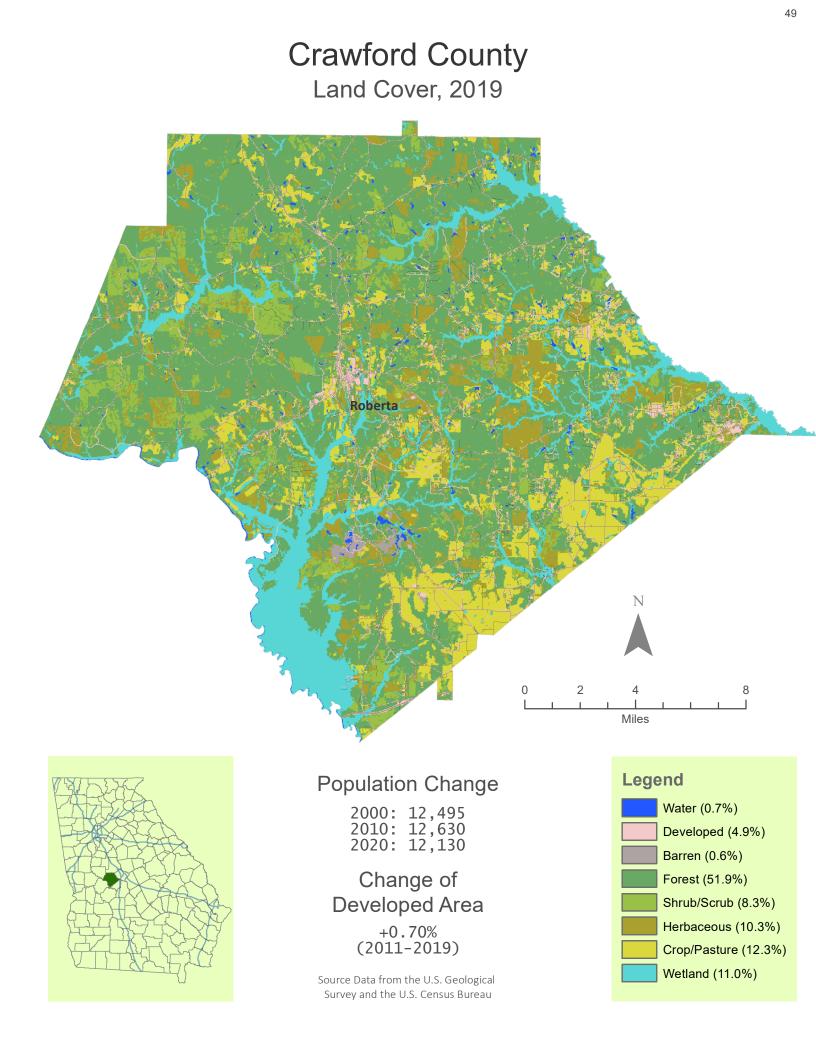


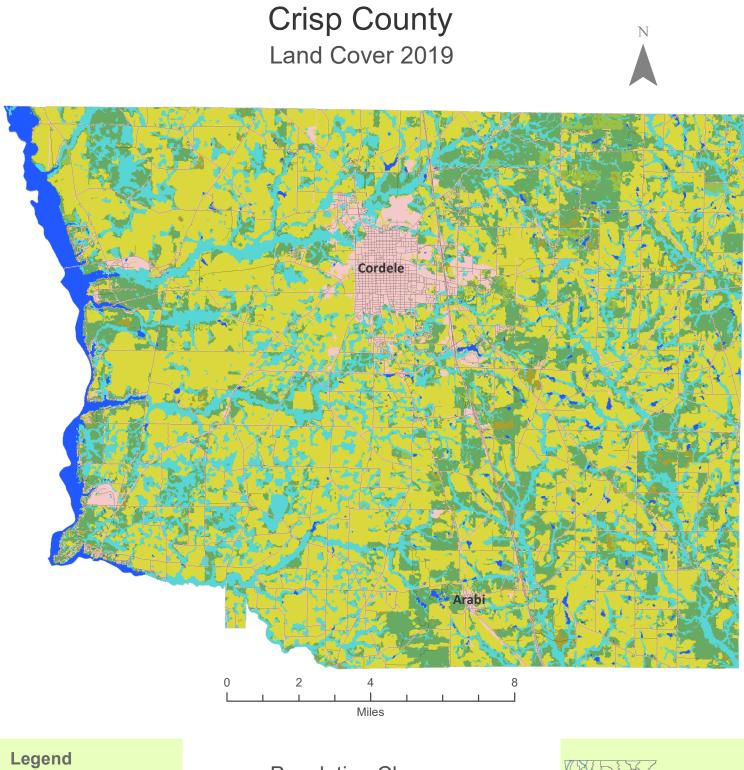
Population Change

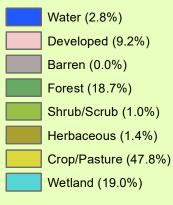
2000: 89,215 2010: 127,317 2020: 146,158

Change of Developed Area

> +2.60% (2011-2019)







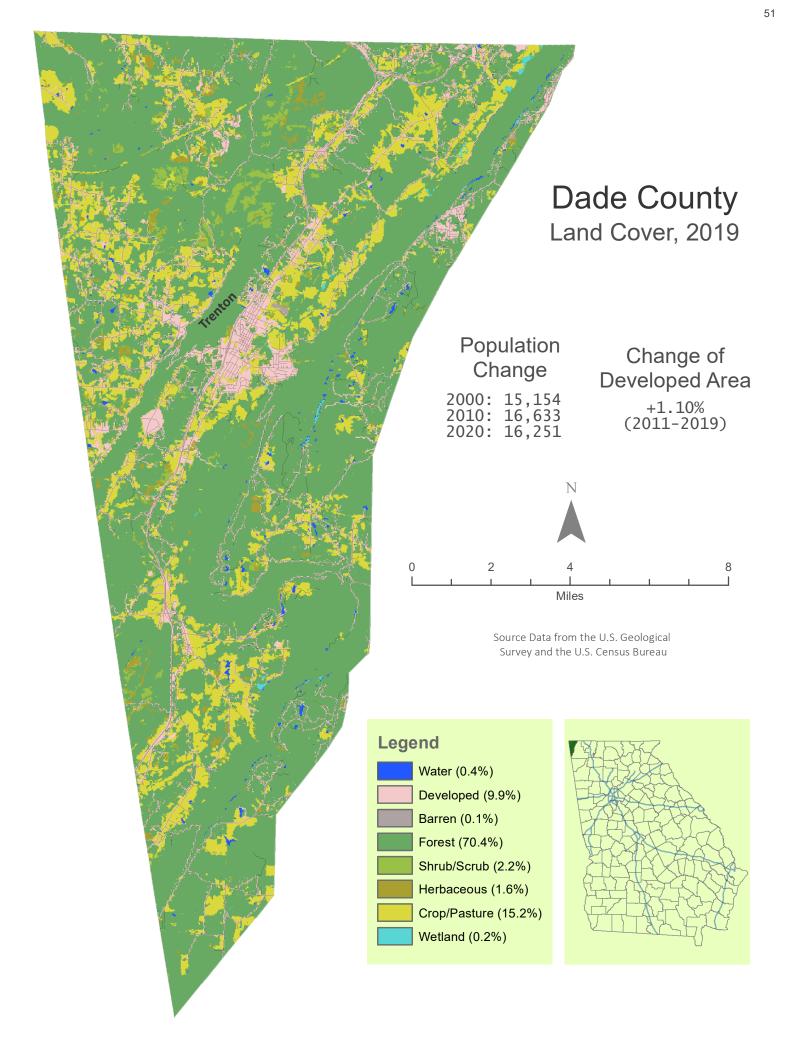
Population Change

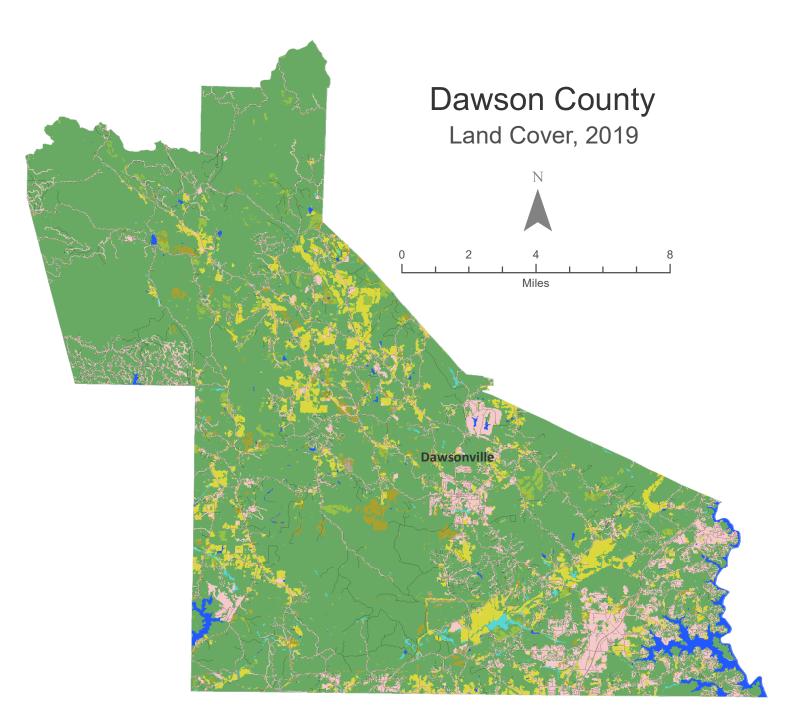
2000: 21,996 2010: 23,439 2020: 20,128

Change of Developed Area

+0.30% (2011-2019)







Water (1.4%)
Developed (11.4%)
Barren (0.2%)
Forest (76.0%)
Shrub/Scrub (1.9%)
Herbaceous (1.8%)
Crop/Pasture (6.8%)
Wetland (0.5%)

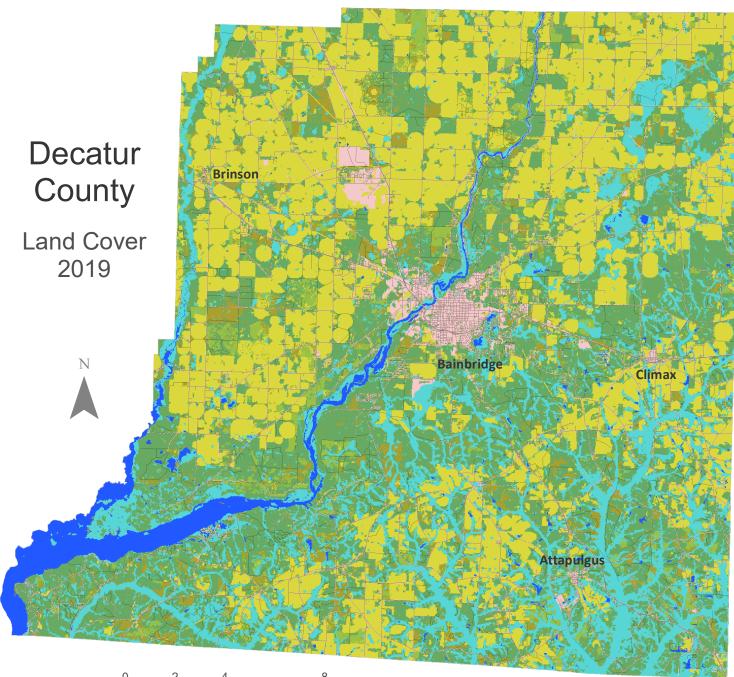
Population Change

2000:	15,999
2010:	22,330
2020:	26,798

Change of Developed Area

> +1.70% (2011-2019)







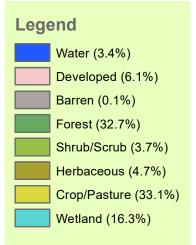


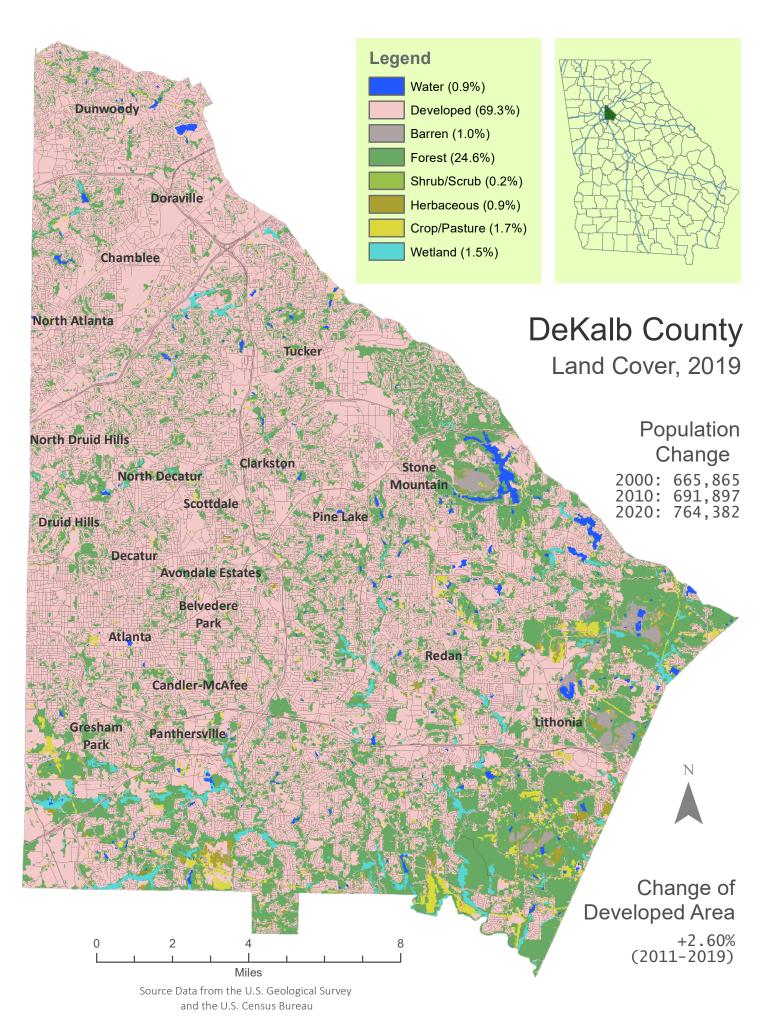
Population Change

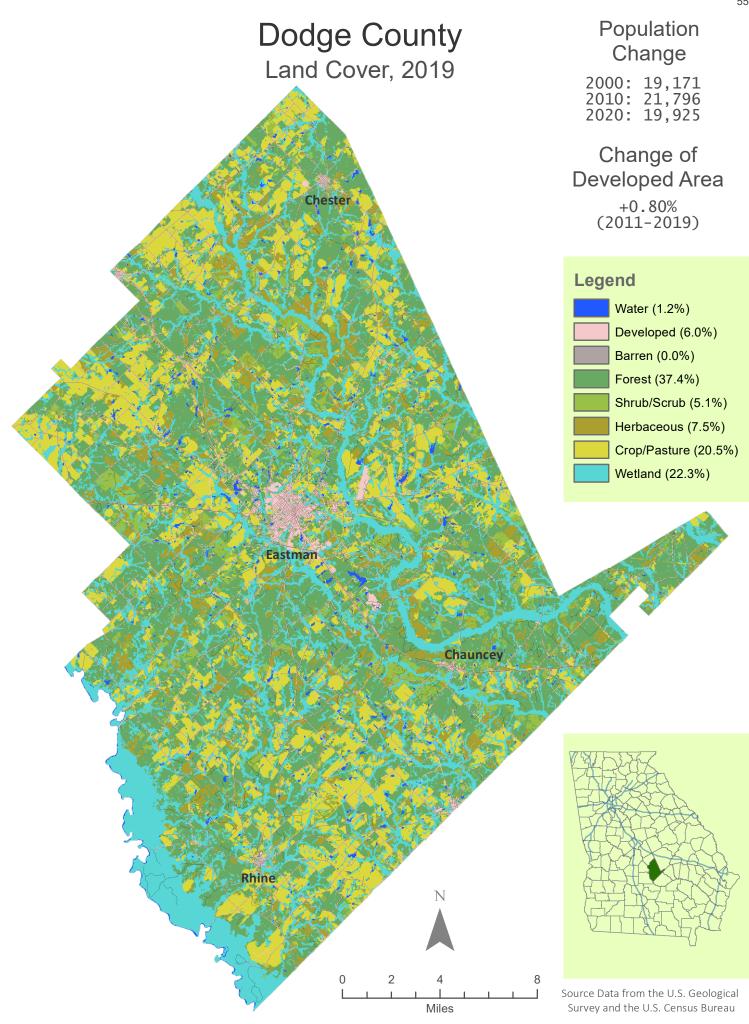
2000: 28,240 2010: 27,842 2020: 29,367

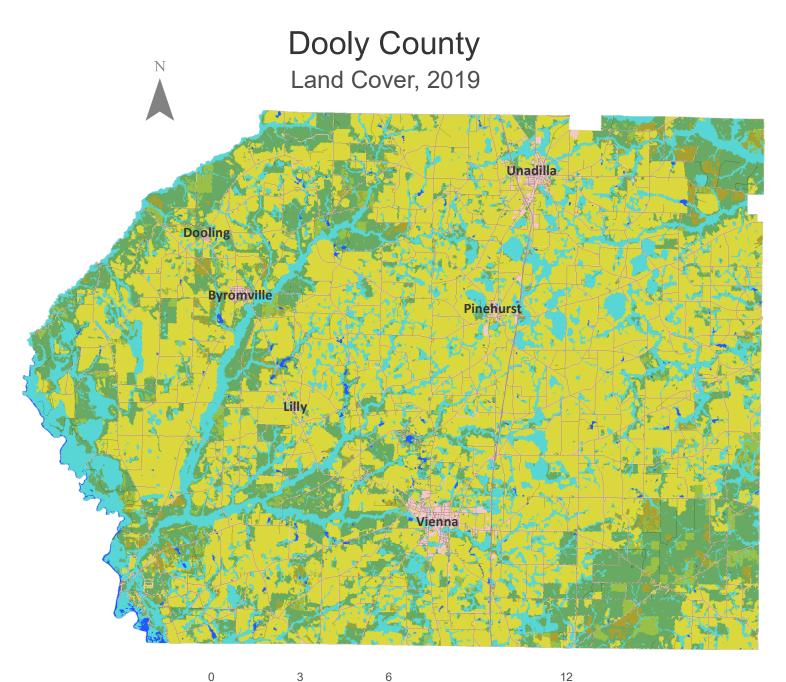
Change of Developed Area

+0.60% (2011-2019)









3 6 12 _____ Miles

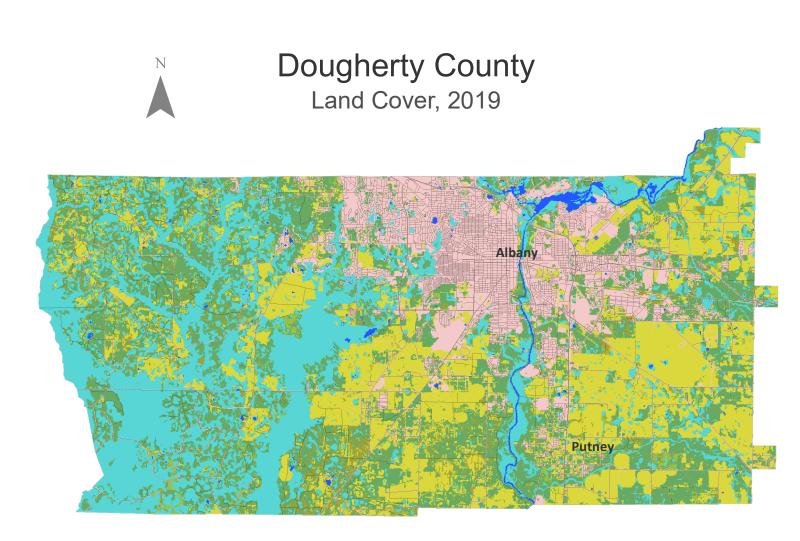
Legend		
	Water (0.6%)	
	Developed (6.0%)	
	Barren (0.0%)	
	Forest (19.8%)	
	Shrub/Scrub (2.2%)	
	Herbaceous (2.2%)	
	Crop/Pasture (51.5%	
	Wetland (17.7%)	

Population Change

2000: 11,525 2010: 14,918 2020: 11,208

Change of Developed Area +0.70% (2011-2019)







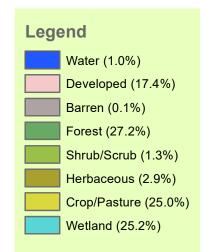


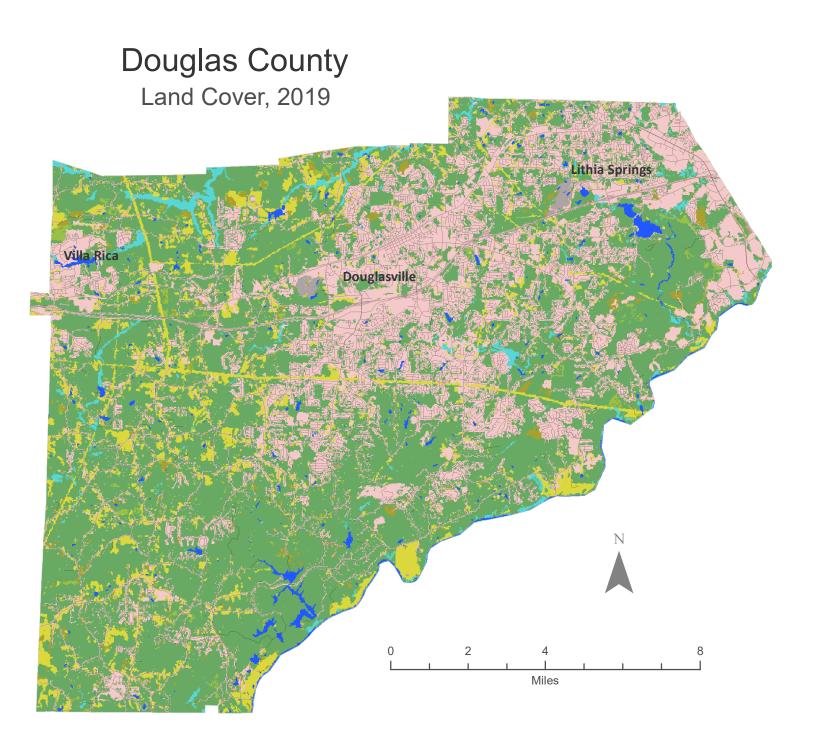
Population Change

2000: 96,065 2010: 94,565 2020: 85,790

Change of Developed Area

> +0.40% (2011-2019)





L	e	g	e	n	d
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Water (1.4%)
Developed (30.8%)
Barren (0.4%)
Forest (54.9%)
Shrub/Scrub (1.1%)
Herbaceous (1.6%)
Crop/Pasture (8.2%)
Wetland (1.7%)

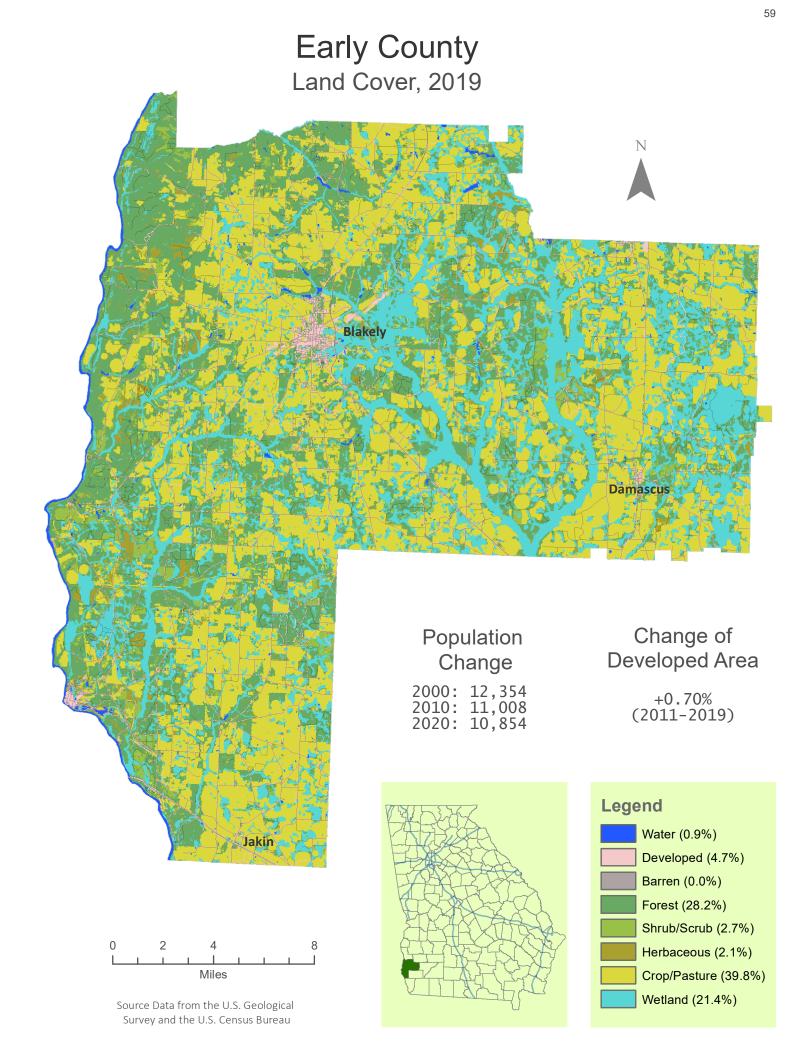
Population Change

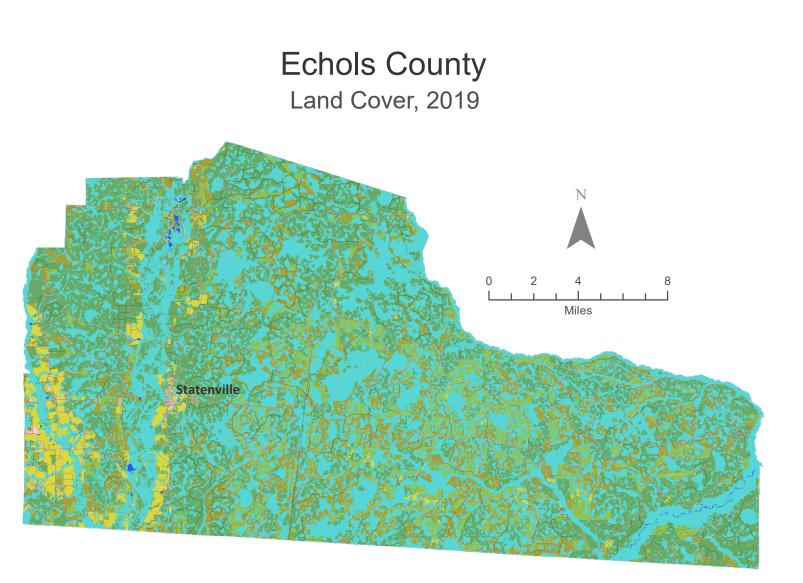
2000: 92,174 2010: 132,403 2020: 144,237

Change of Developed Area

+1.90% (2011-2019)







Water (0.2%)
Developed (3.3%)
Barren (0.0%)
Forest (31.5%)
Shrub/Scrub (8.4%)
Herbaceous (9.5%)
Crop/Pasture (3.4%)
Wetland (43.7%)

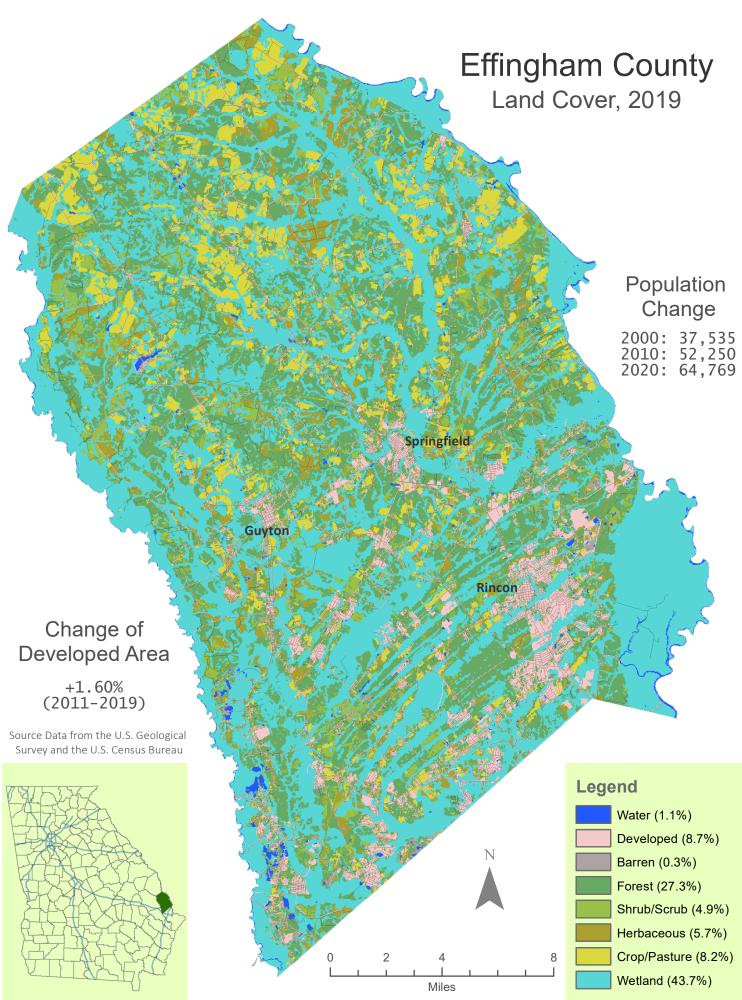
Population Change

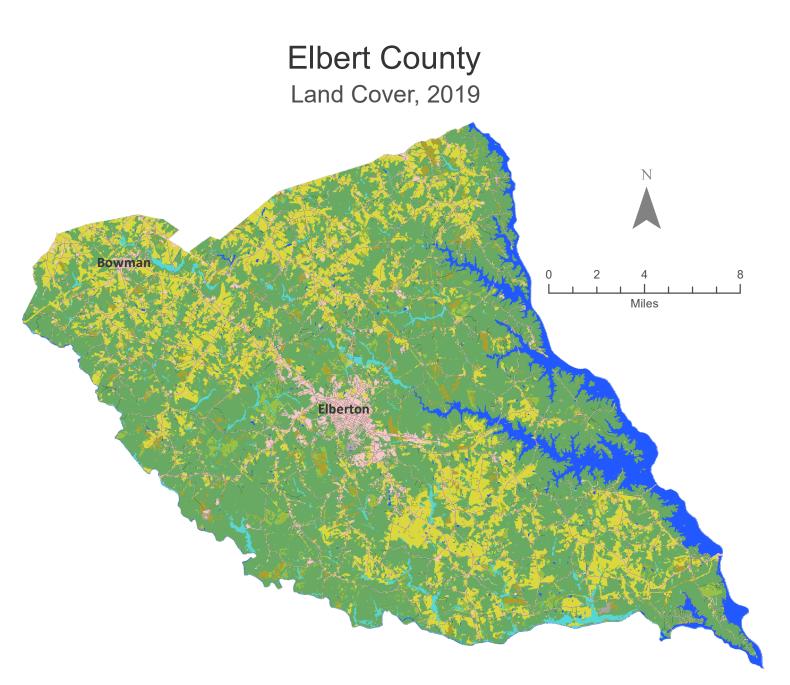
2000: 3,754 2010: 4,034 2020: 3,697

Change of Developed Area

-0.50% (2011-2019)







Water (6.1%)
Developed (7.5%)
Barren (0.5%)
Forest (58.6%)
Shrub/Scrub (3.1%)
Herbaceous (3.1%)
Crop/Pasture (19.2%)
Wetland (2.0%)

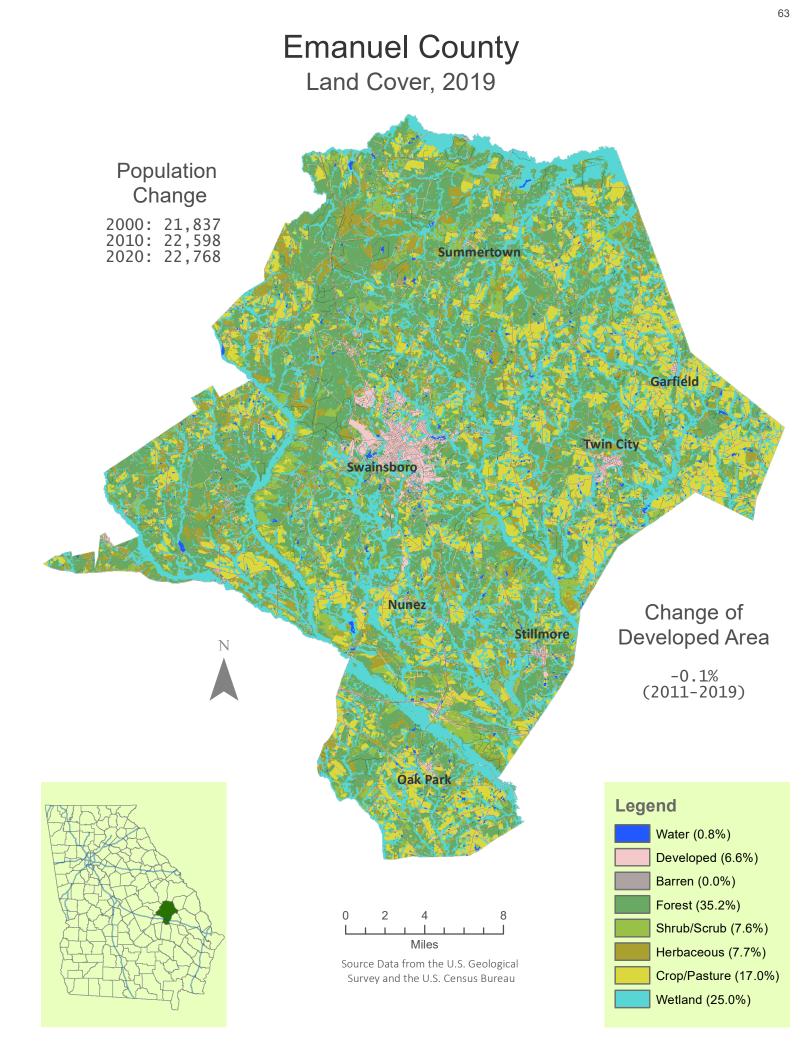
Population Change

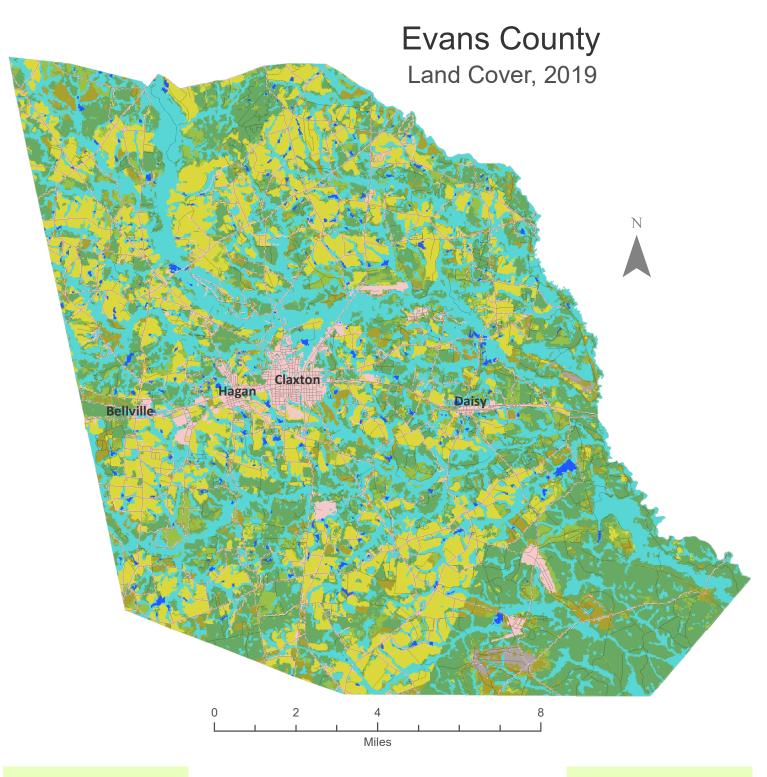
2000:	20,511
2010:	20,166
2020:	19,637

Change of Developed Area

> -0.10% (2011-2019)







Water (1.0%)
Developed (8.1%)
Barren (0.3%)
Forest (27.8%)
Shrub/Scrub (6.1%)
Herbaceous (5.0%)
Crop/Pasture (21.2%)
Wetland (30.3%)

Population Change

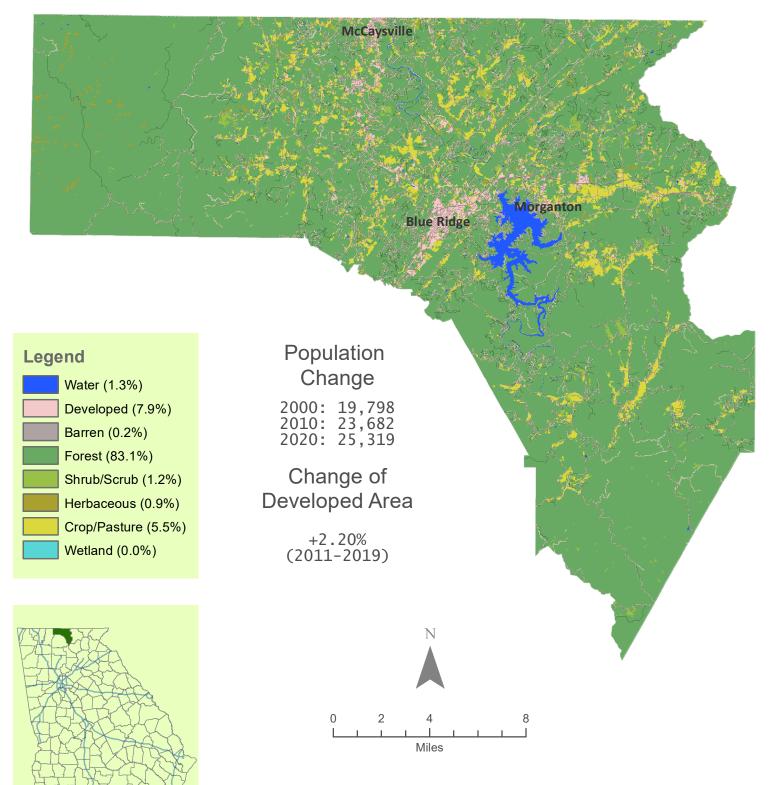
2000: 10,495 2010: 11,000 2020: 10,774

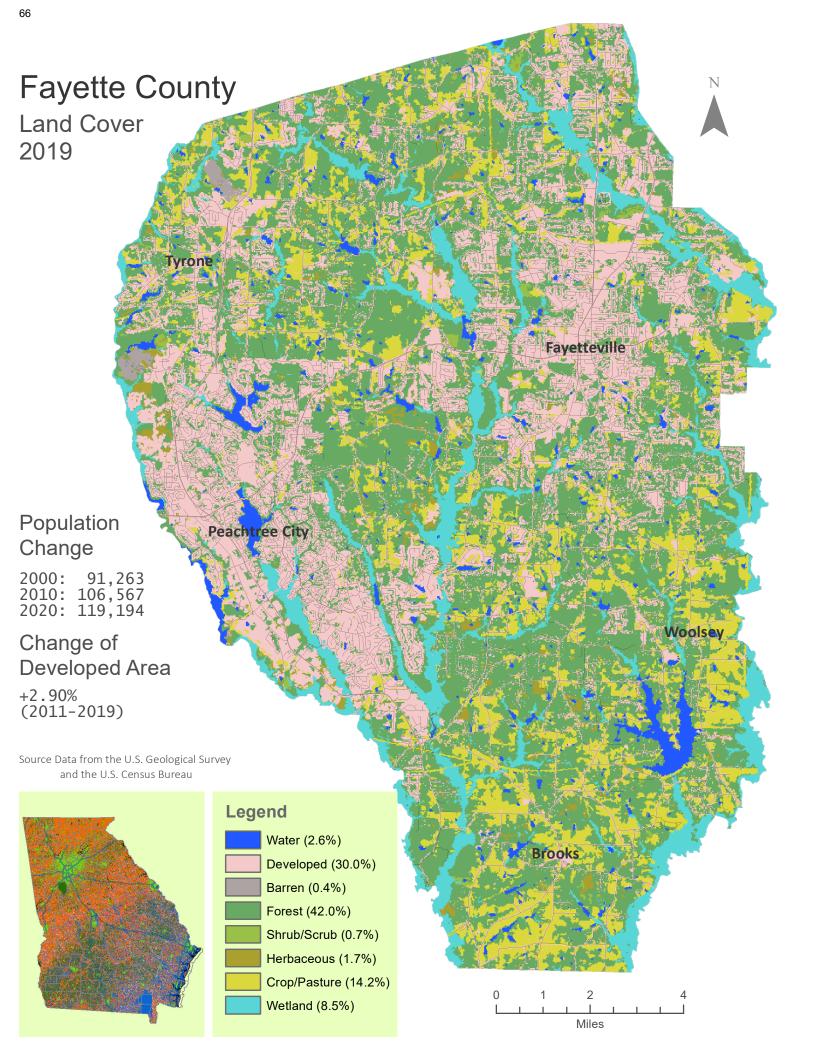
Change of Developed Area

-1.00% (2011-2019)

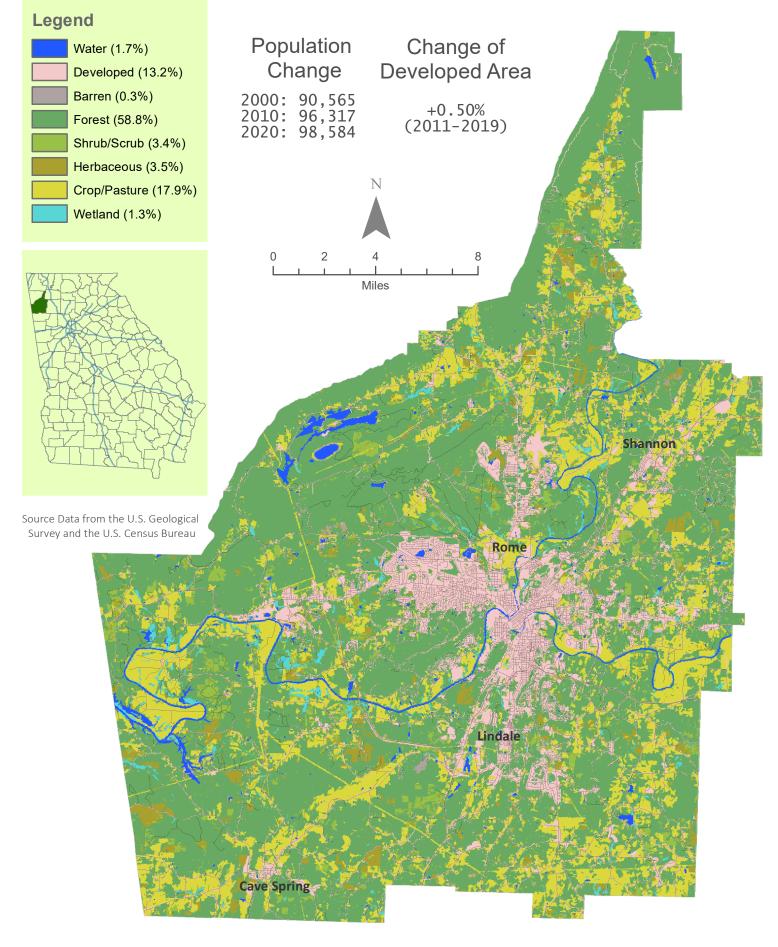


Fannin County Land Cover, 2019

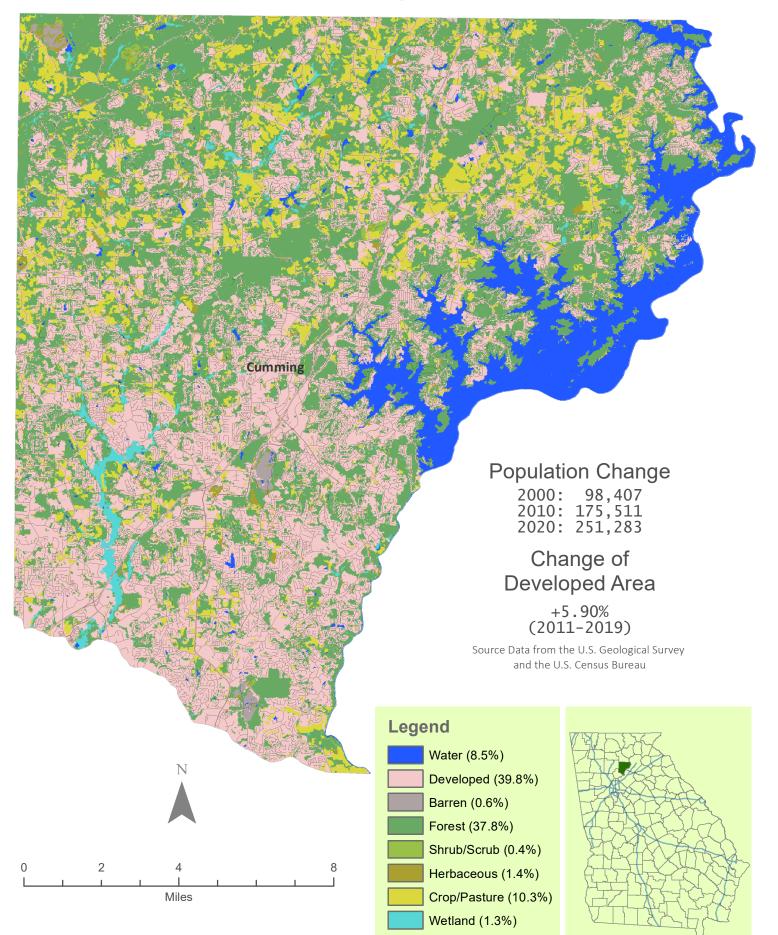


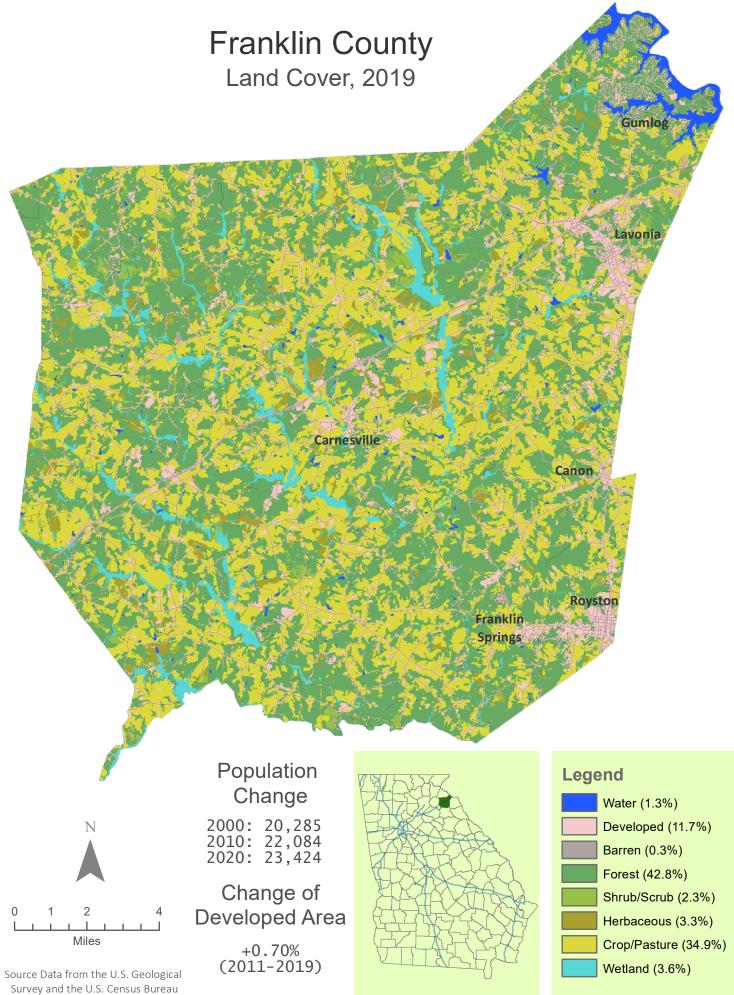


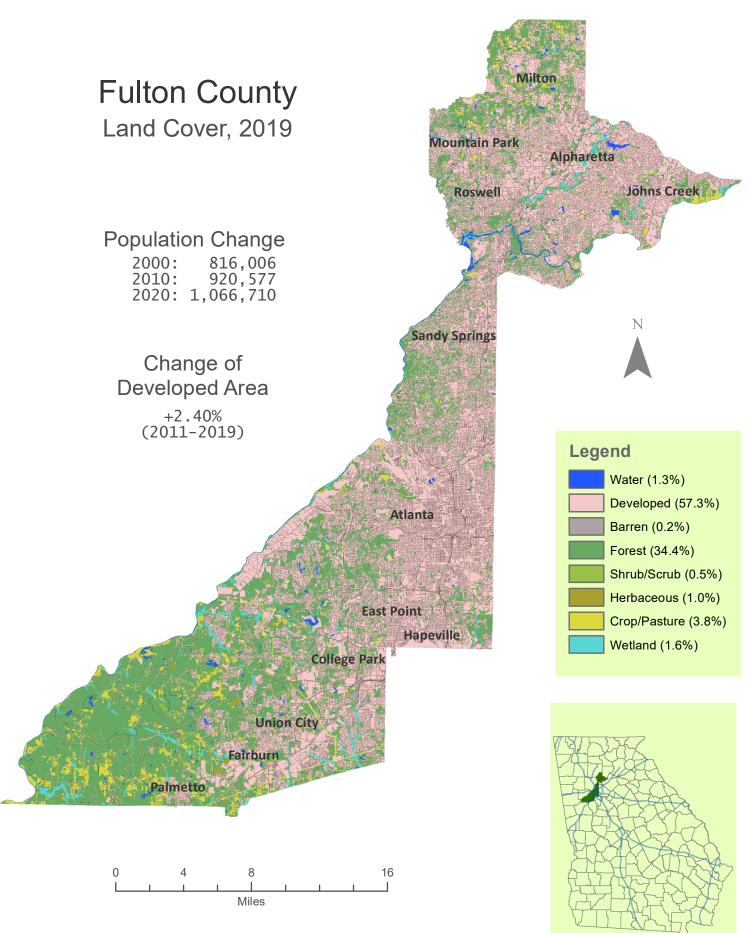
Floyd County Land Cover, 2019



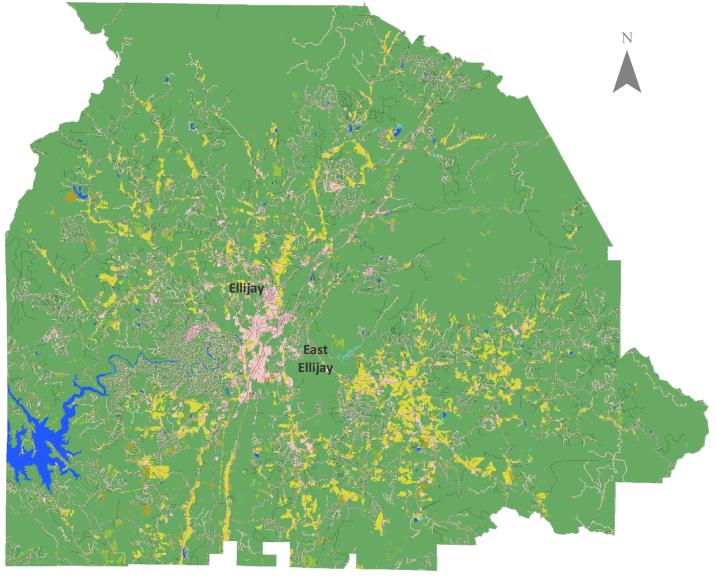
Forsyth County Land Cover, 2019







Gilmer County Land Cover, 2019





Population Change

2000: 23,456 2010: 28,292 2020: 31,353

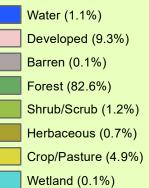
Change of Developed Area

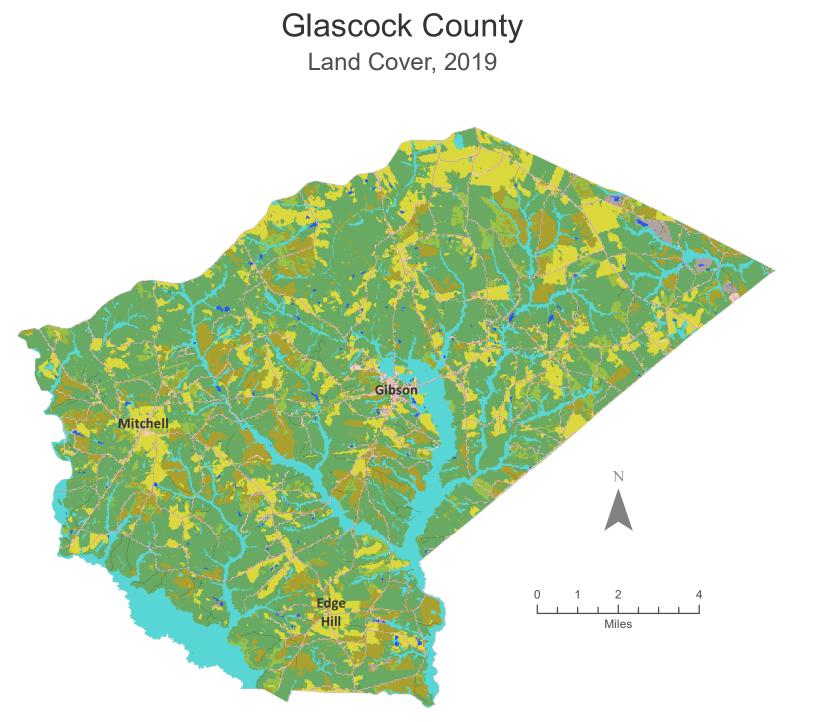
> +2.80% (2011-2019)

Source Data from the U.S. Geological Survey and the U.S. Census Bureau



Legend Wate





Water (0.4%)
Developed (5.2%)
Barren (0.4%)
Forest (52.6%)
Shrub/Scrub (4.9%)
Herbaceous (11.1%)
Crop/Pasture (13.5%)
Wetland (12.1%)

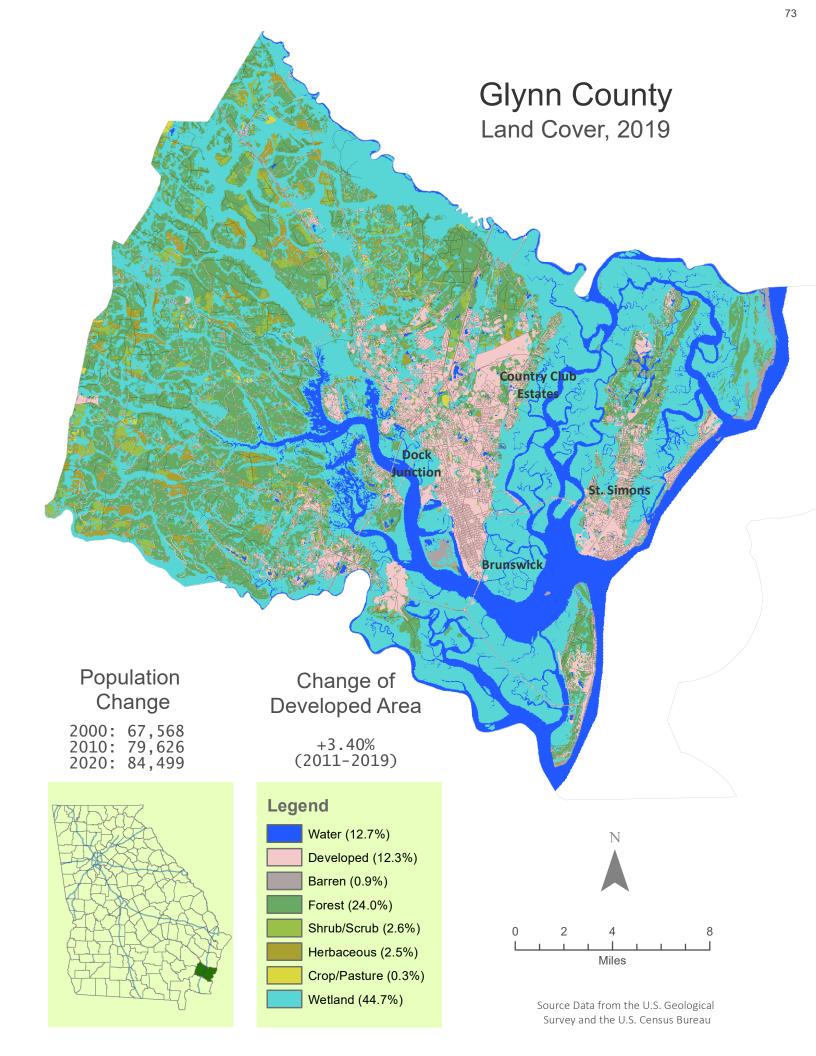
Population Change

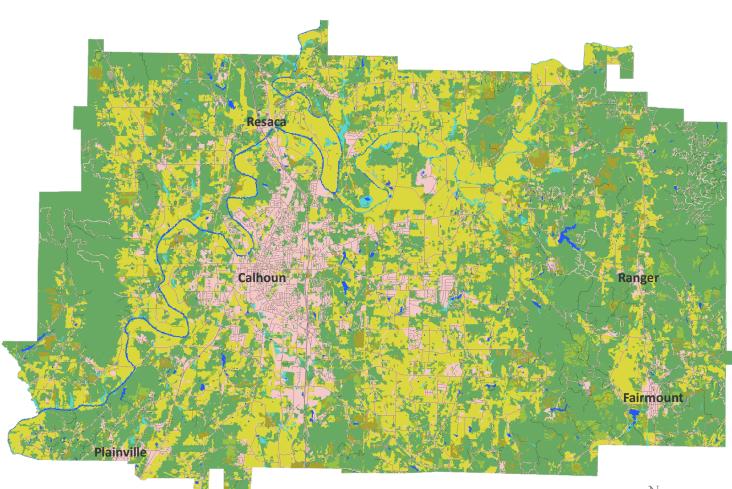
2000: 2,556 2010: 3,082 2020: 2,884

Change of Developed Area

> -1.30% (2011-2019)







Gordon County

Land Cover, 2019



N

Legend

Water (1.0%)
Developed (13.9%)
Barren (0.2%)
Forest (48.2%)
Shrub/Scrub (3.7%)
Herbaceous (3.4%)
Crop/Pasture (28.6%)
Wetland (1.1%)

Population Change

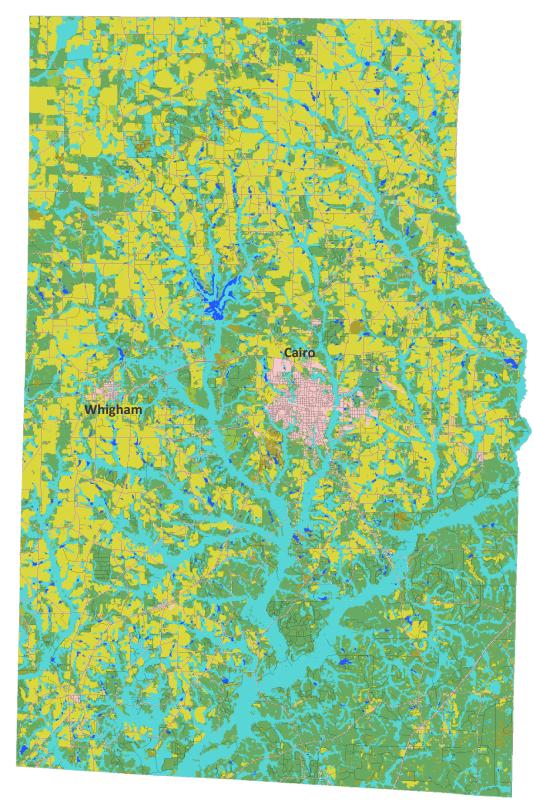
2000: 44,104 2010: 55,186 2020: 57,544

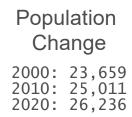
Change of Developed Area

+0.20% (2011-2019)



Grady County Land Cover, 2019

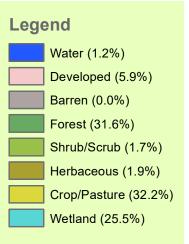




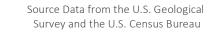
Change of Developed Area

> +0.50% (2011-2019)





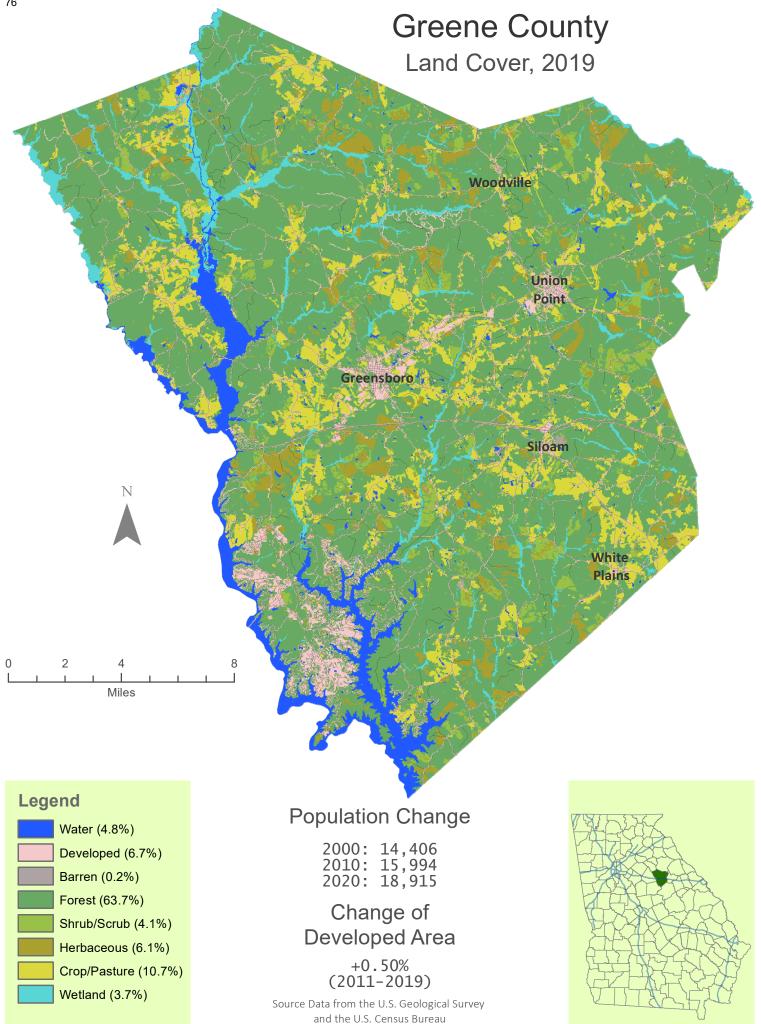


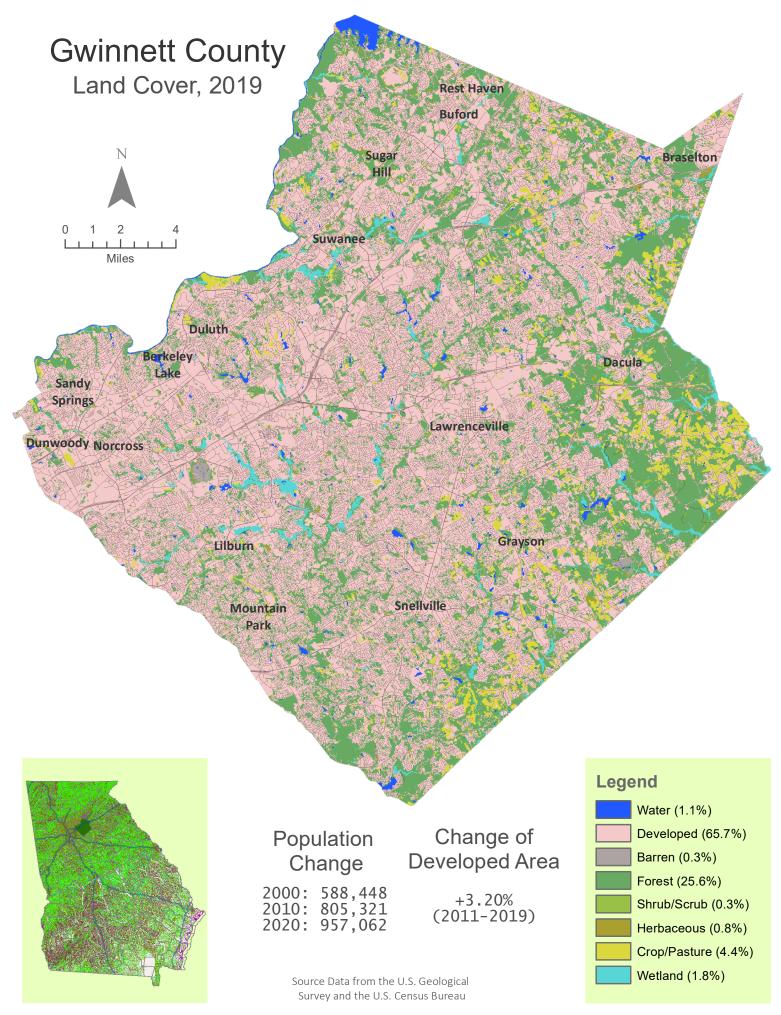


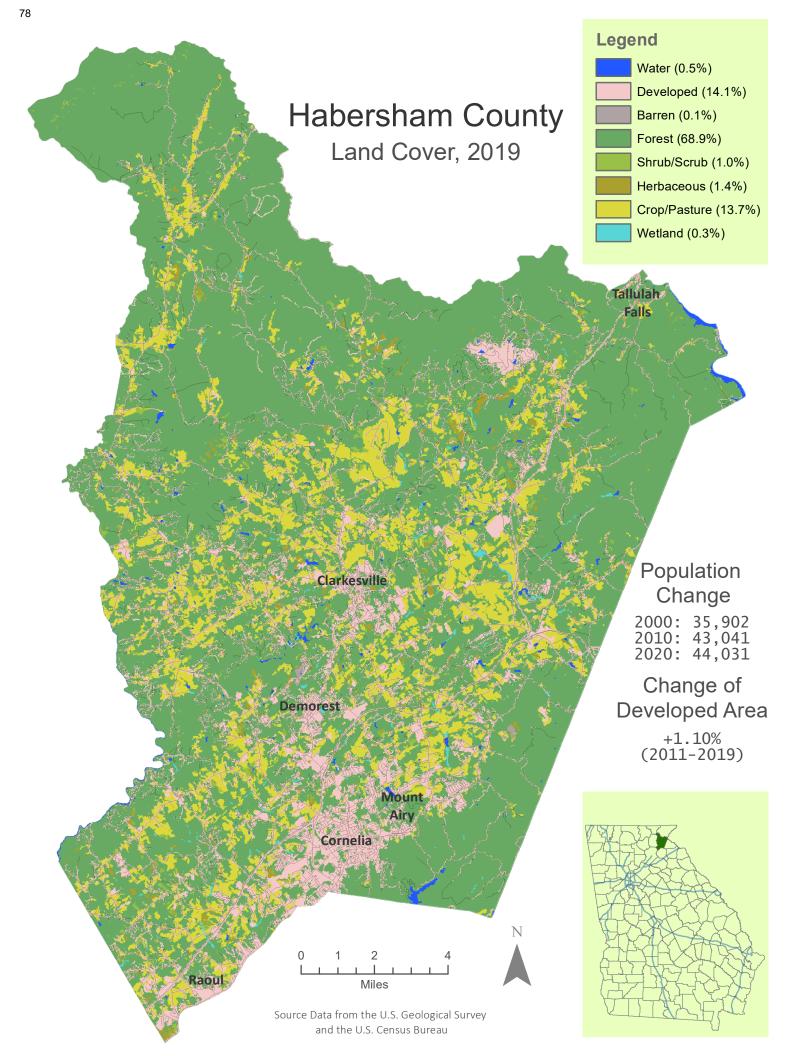
2

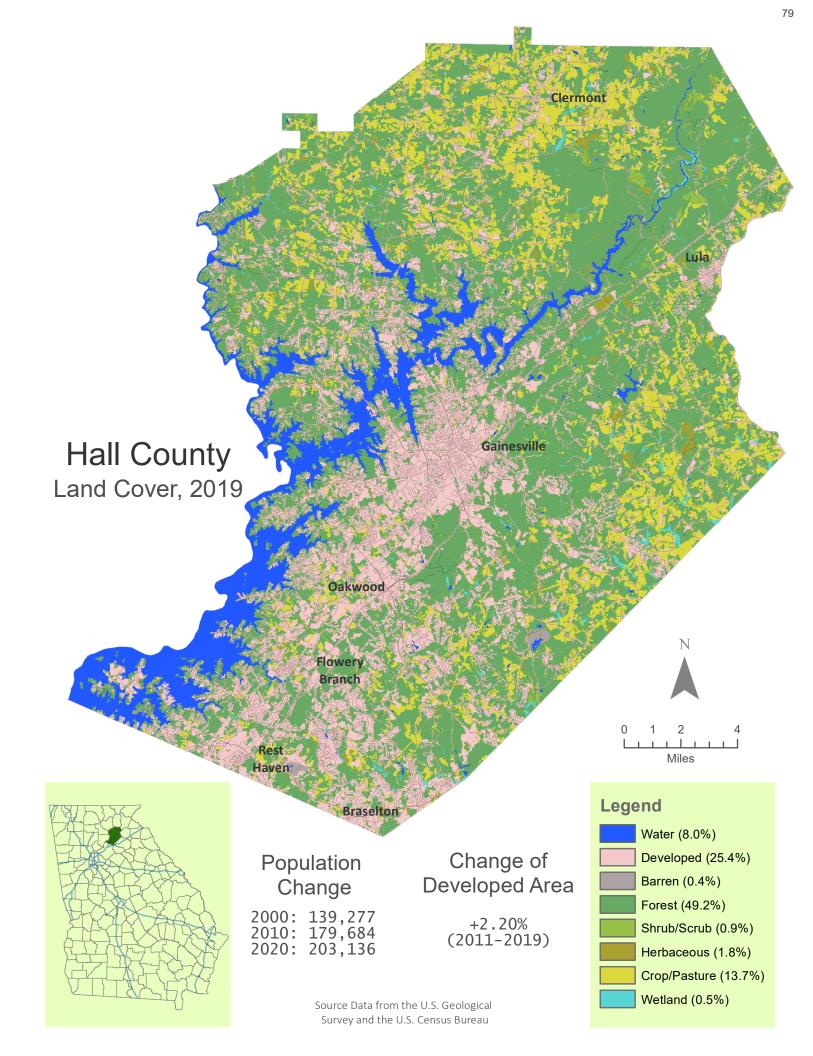
Miles

0











Land Cover, 2019

Legend

Water (1.4%)
Developed (4.5%)
Barren (0.2%)
Forest (67.4%)
Shrub/Scrub (7.1%)
Herbaceous (9.7%)
Crop/Pasture (5.3%)
Wetland (4.3%)

Population Change

Sparta

2000:	10	,076
2010:	9	,429
2020:	8	,735

Change of Developed Area +0.30% (2011-2019)

Source Data from the U.S. Geological Survey and the U.S. Census Bureau



8

N

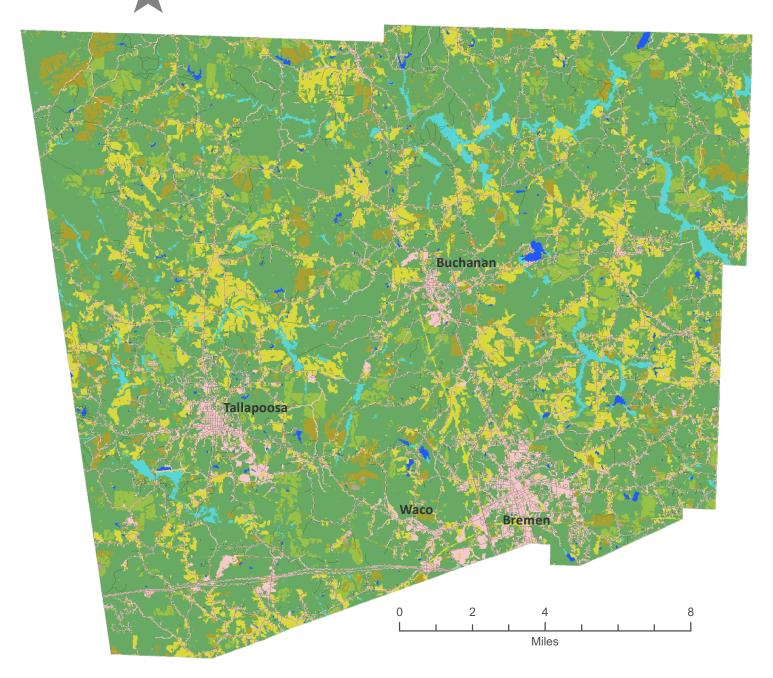
Miles

2

0



Haralson County Land Cover, 2019



Population Change

2000: 25,690 2010: 28,780 2020: 29,919

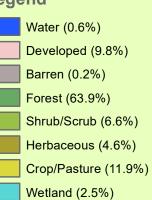
Change of Developed Area

+1.70% (2011-2019)

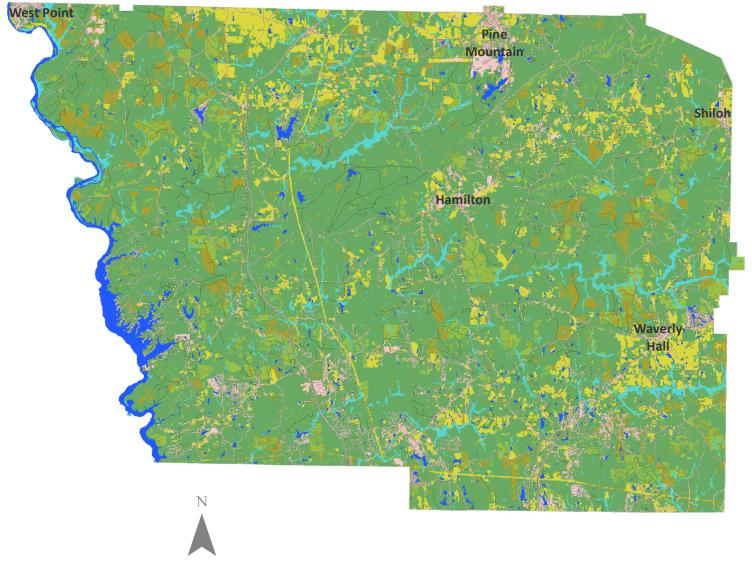
Source Data from the U.S. Geological Survey and the U.S. Census Bureau



Legend



Harris County Land Cover, 2019





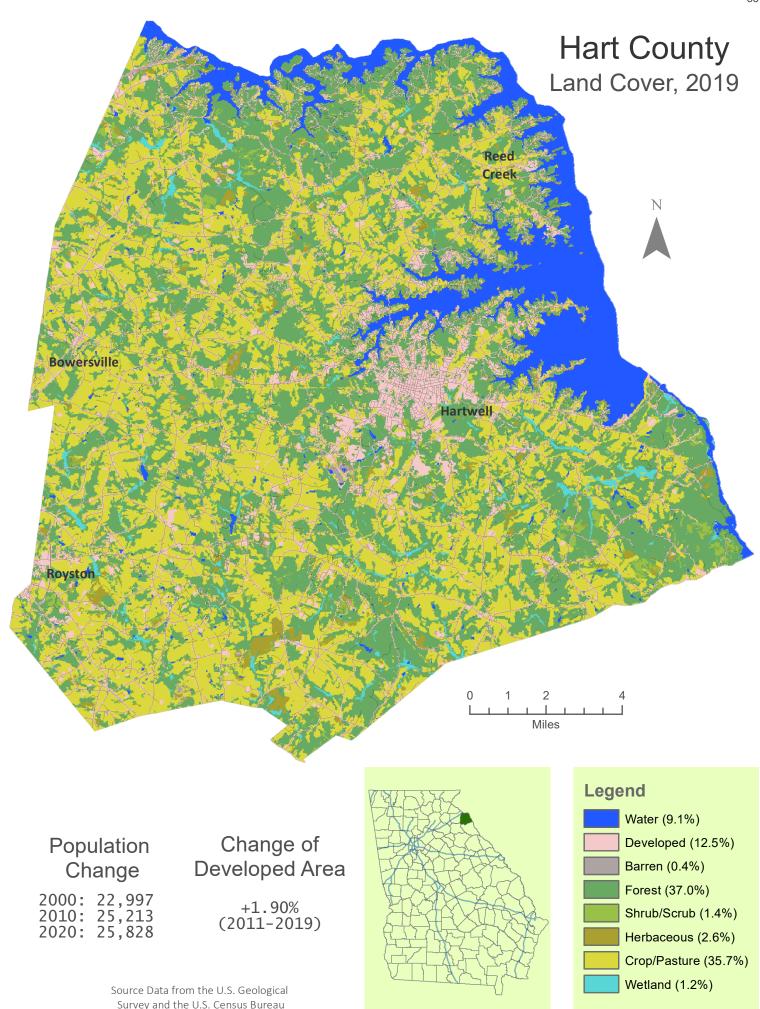


Water (2.5%)
Developed (6.6%)
Barren (0.1%)
Forest (67.5%)
Shrub/Scrub (5.7%)
Herbaceous (5.8%)
Crop/Pasture (8.1%)
Wetland (3.6%)

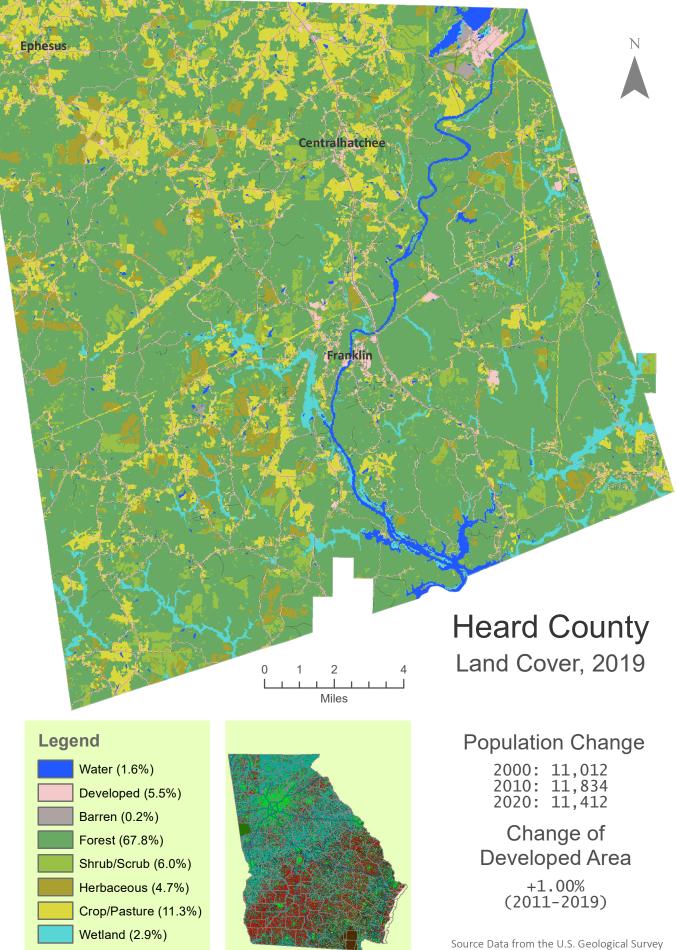
Population Change

2000:	23,695
2010:	32,024
2020:	34,668

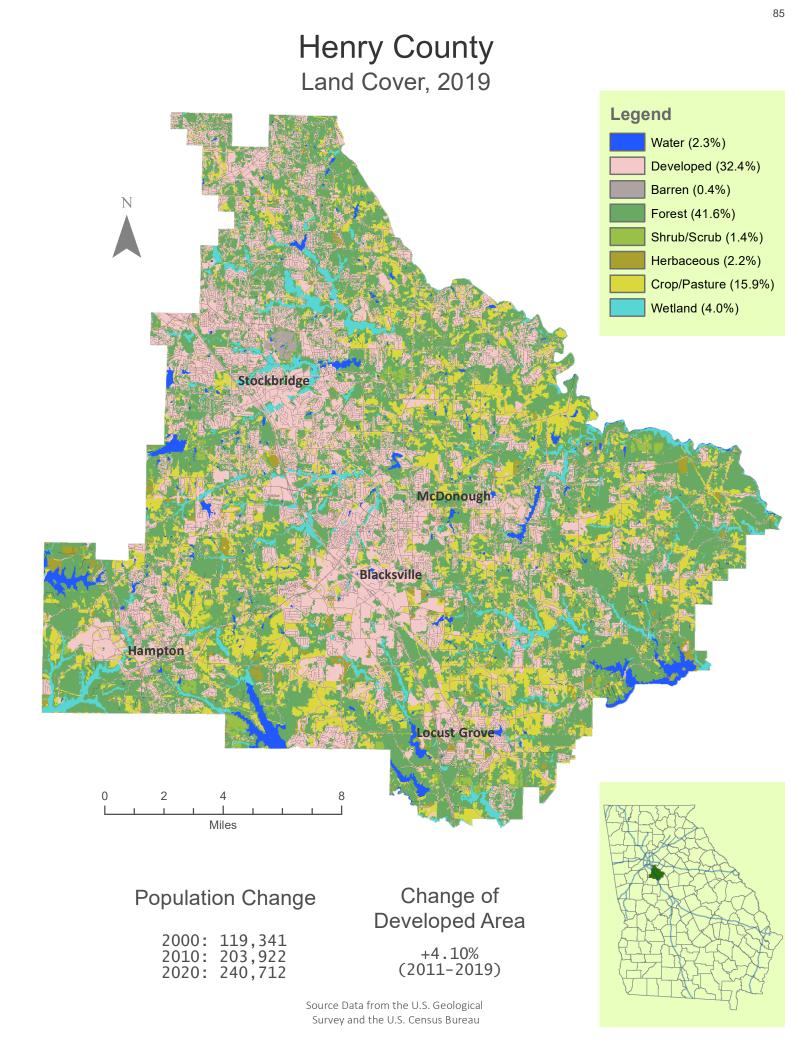
Change of Developed Area +0.20% (2011-2019)

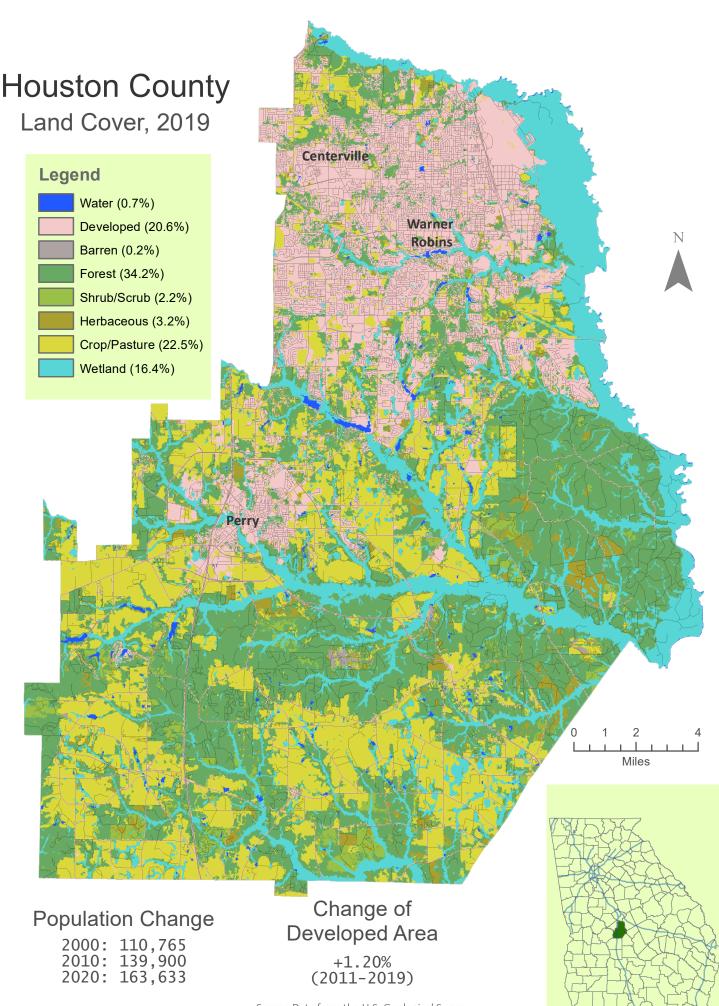


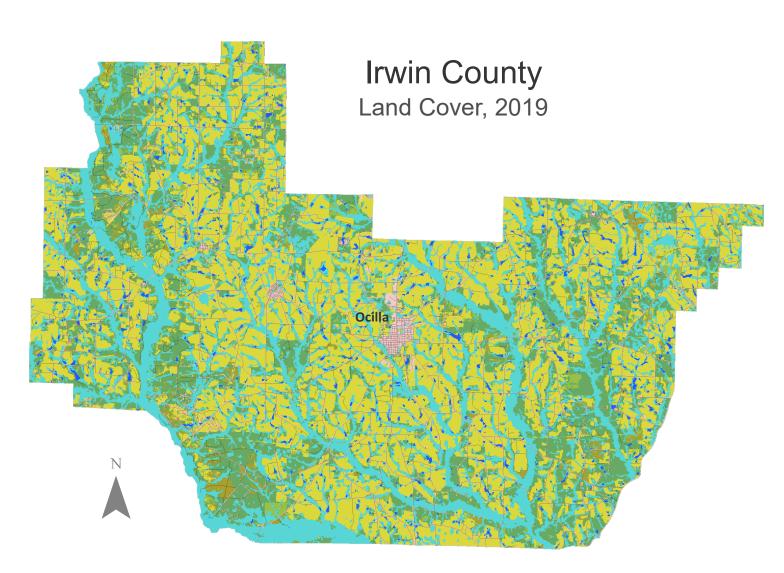
Survey and the U.S. Census Bureau



and the U.S. Census Bureau









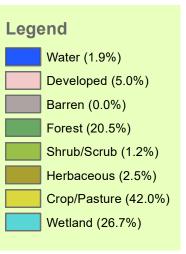
Population Change 2000: 9,931

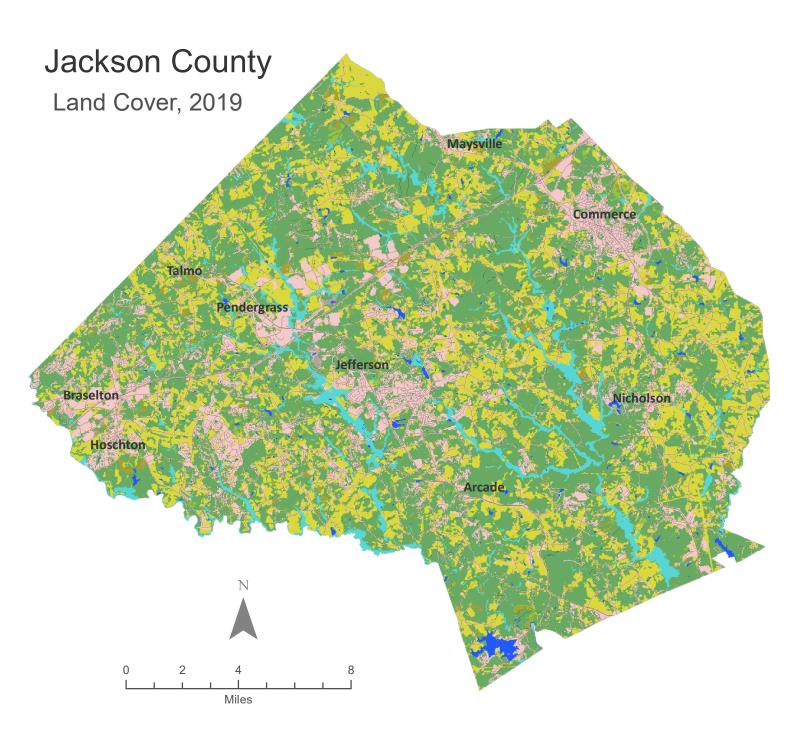
2000: 9,931 2010: 9,538 2020: 9,666



+0.00% (2011-2019)







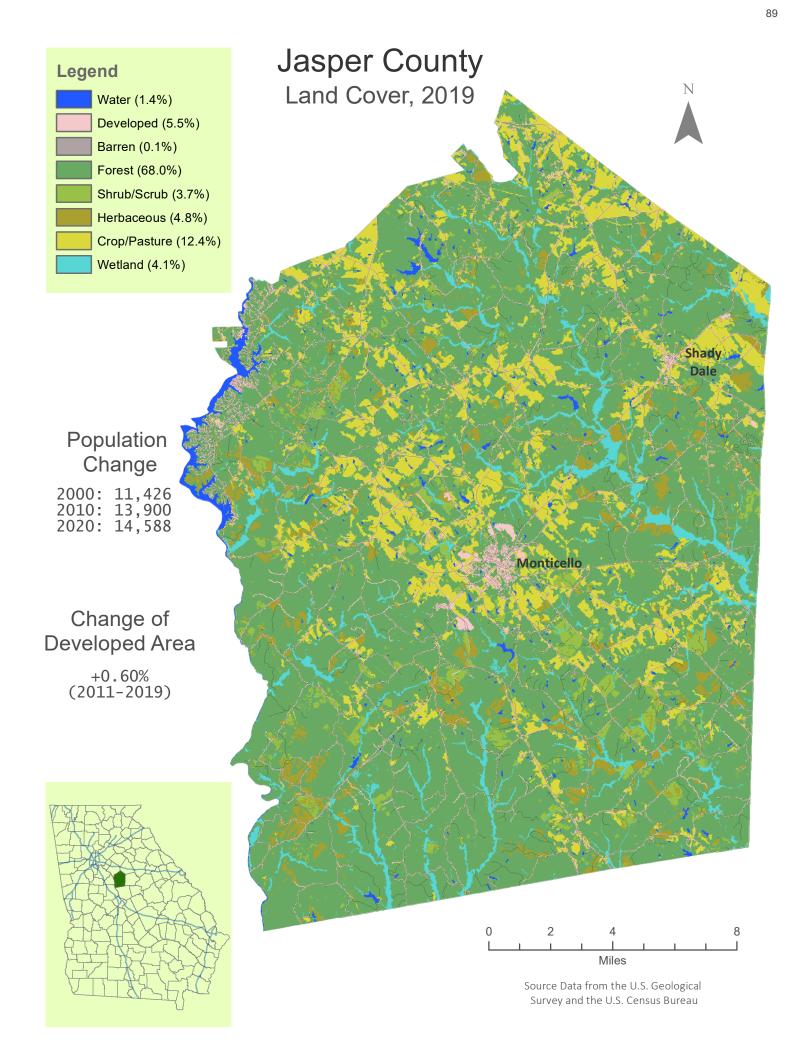
Water (0.9%)
Developed (18.1%)
Barren (0.2%)
Forest (47.9%)
Shrub/Scrub (1.1%)
Herbaceous (2.0%)
Crop/Pasture (25.1%
Wetland (4.7%)

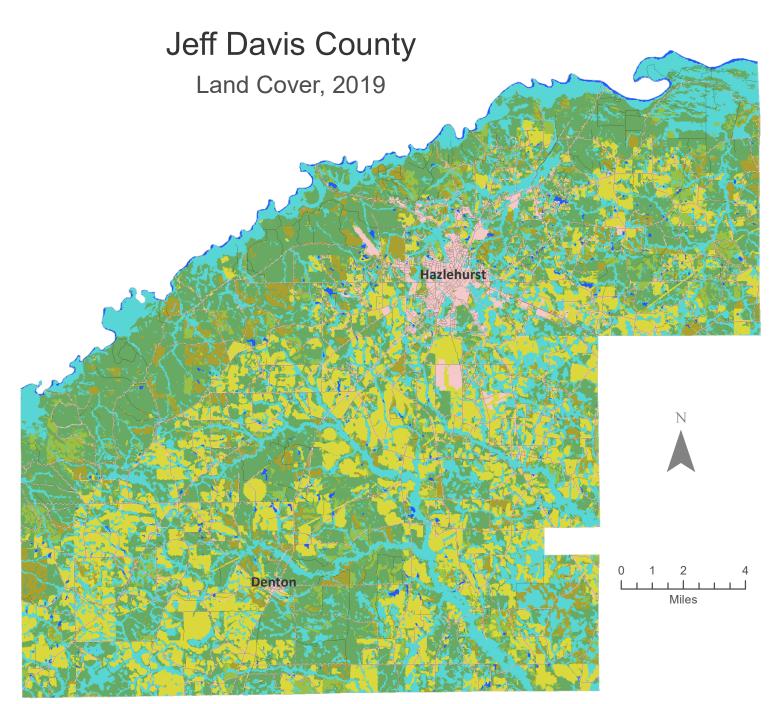
Population Change

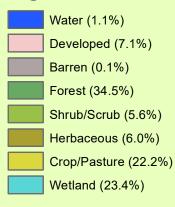
2000: 41,589 2010: 60,485 2020: 75,907

Change of Developed Area

+1.70% (2011-2019)





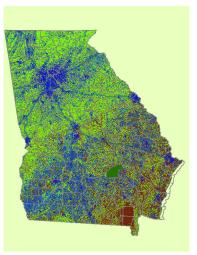


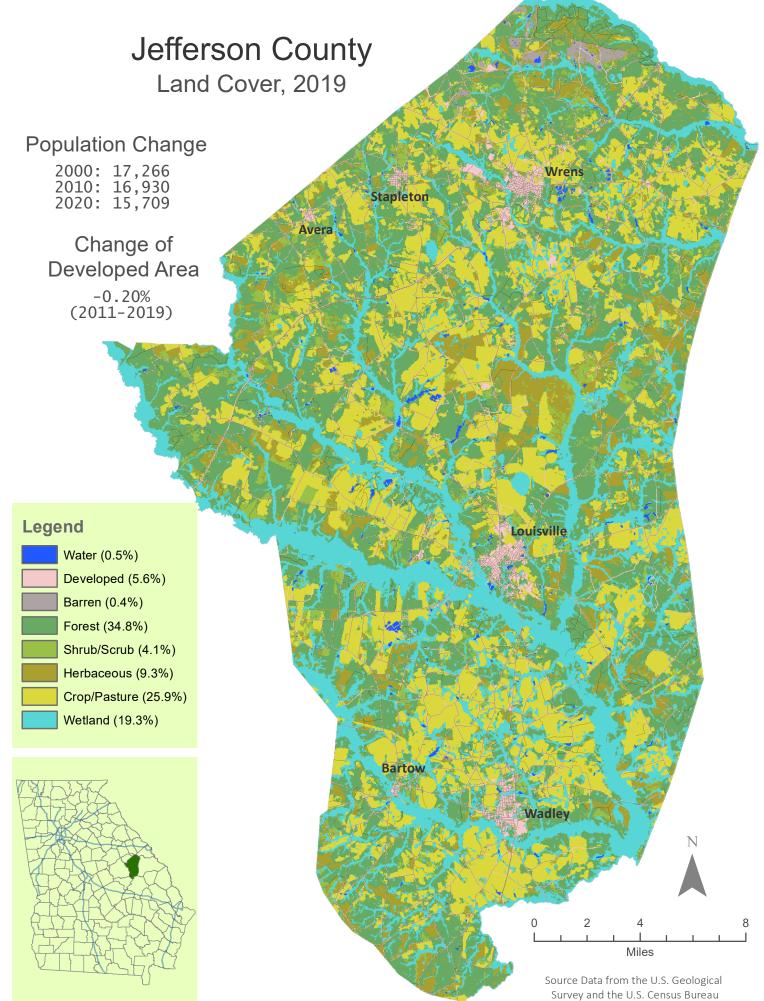
Population Change

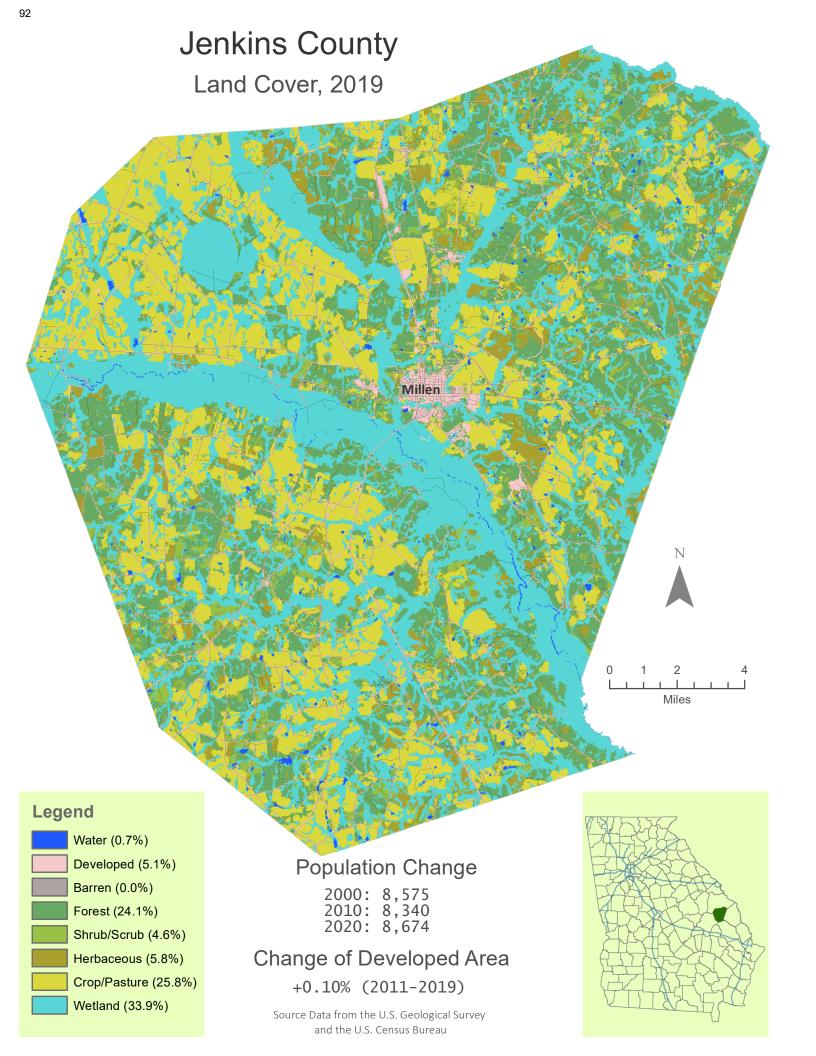
2000: 12,684 2010: 15,068 2020: 14,779

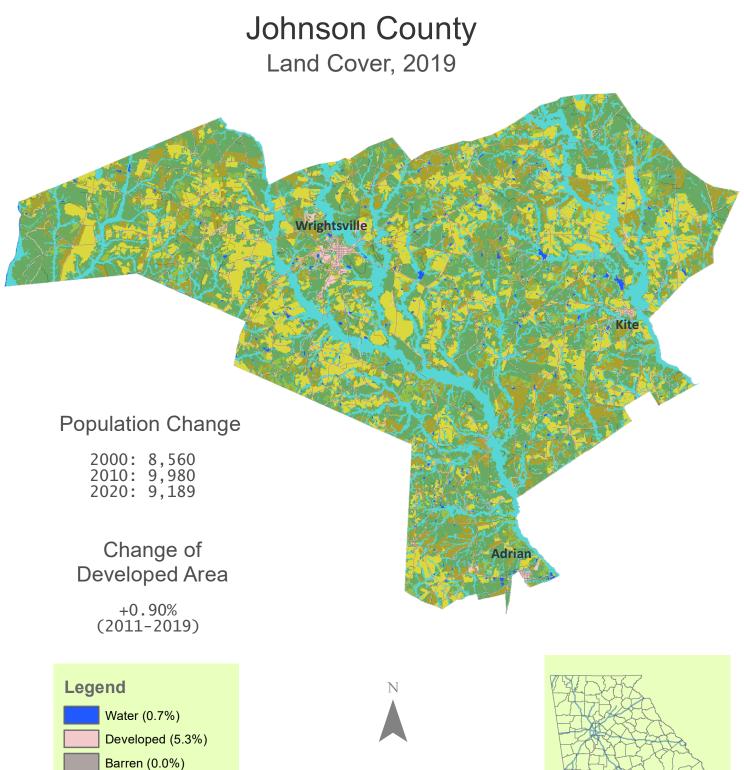
Change of Developed Area

> +0.70% (2011-2019)









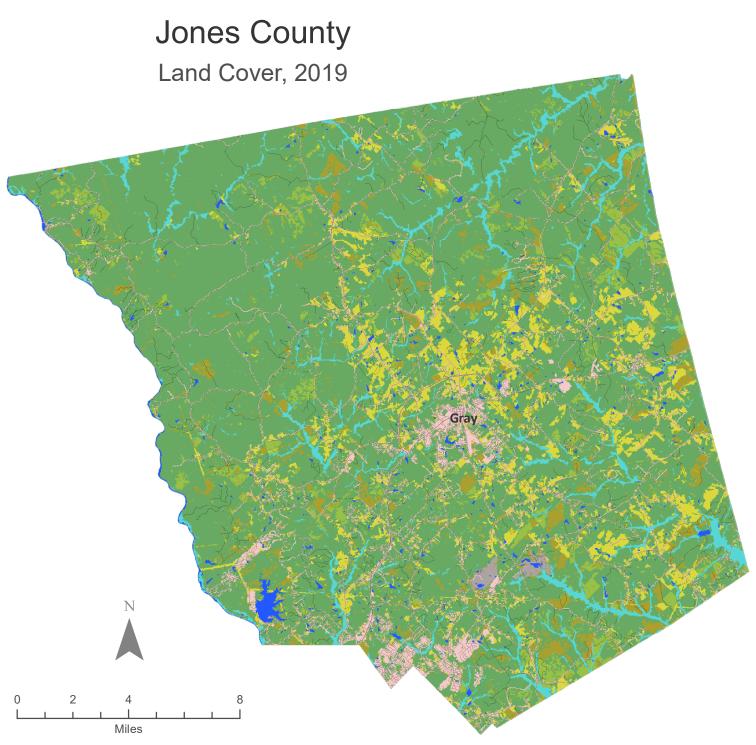


Forest (36.6%)

Shrub/Scrub (4.9%) Herbaceous (13.2%) Crop/Pasture (19.3%)

Wetland (20.0%)







Water (1.1%)
Developed (6.4%)
Barren (0.4%)
Forest (70.3%)
Shrub/Scrub (4.6%)
Herbaceous (5.3%)
Crop/Pasture (7.8%)
Wetland (4.1%)

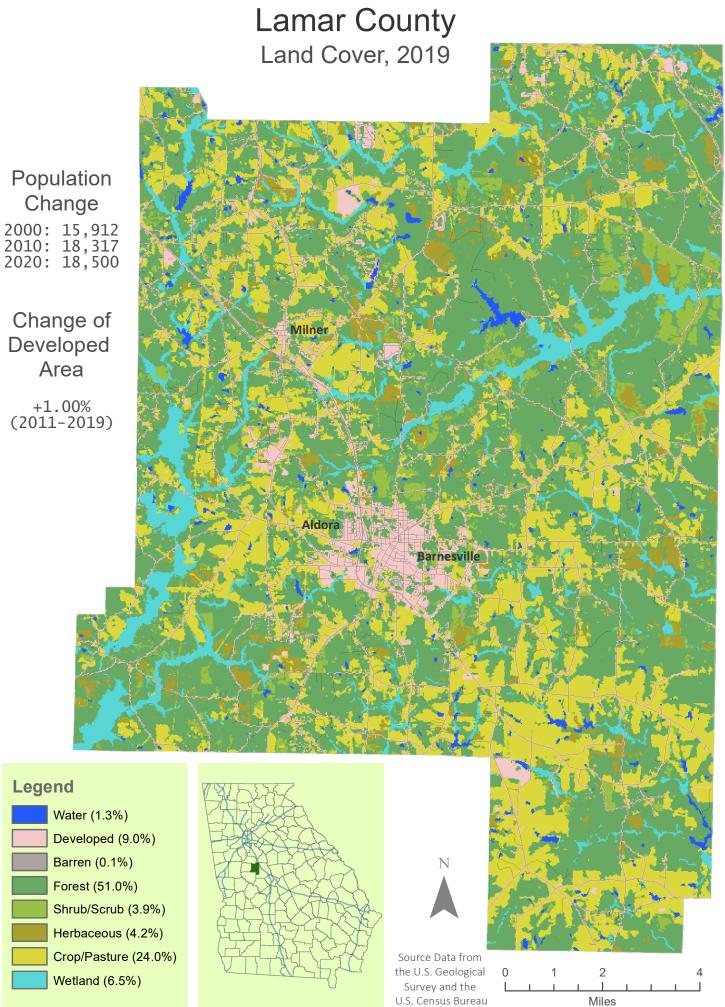
Population Change

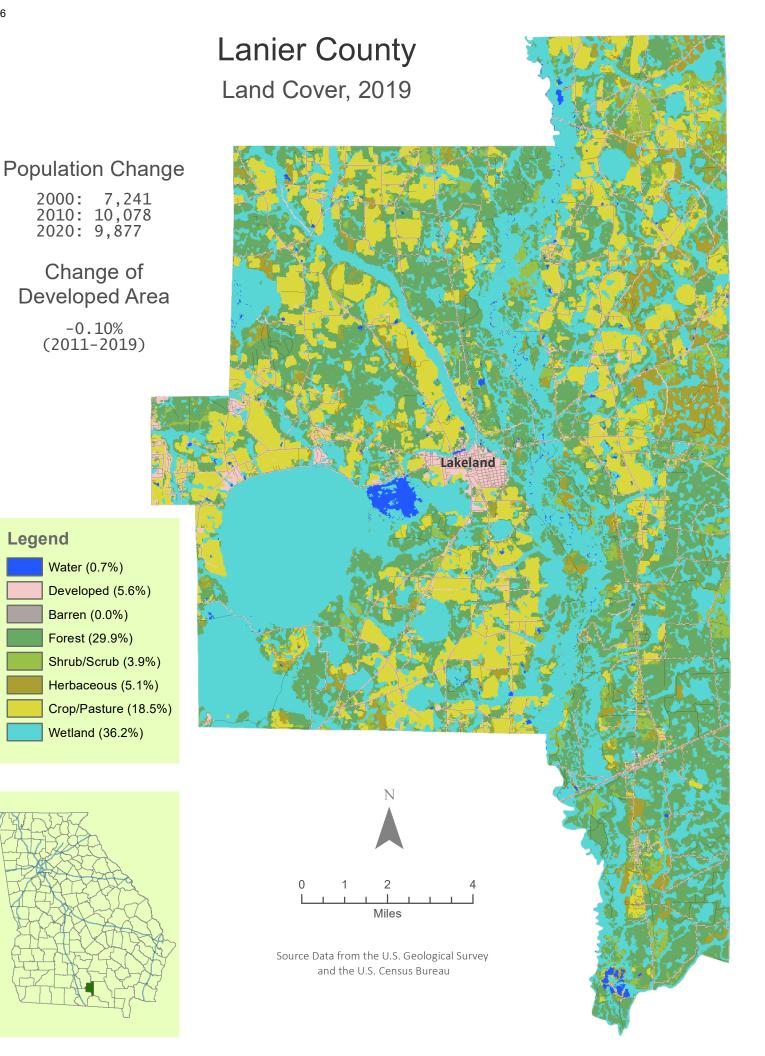
2000: 23,639 2010: 28,669 2020: 28,347

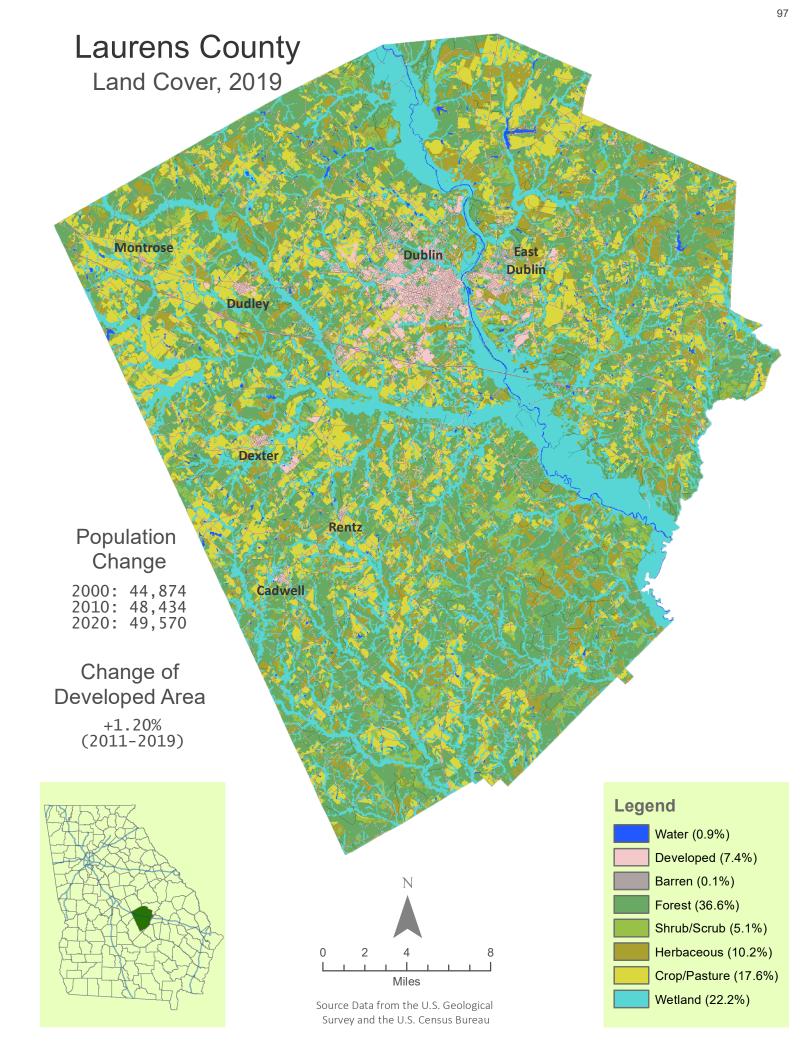
Change of Developed Area

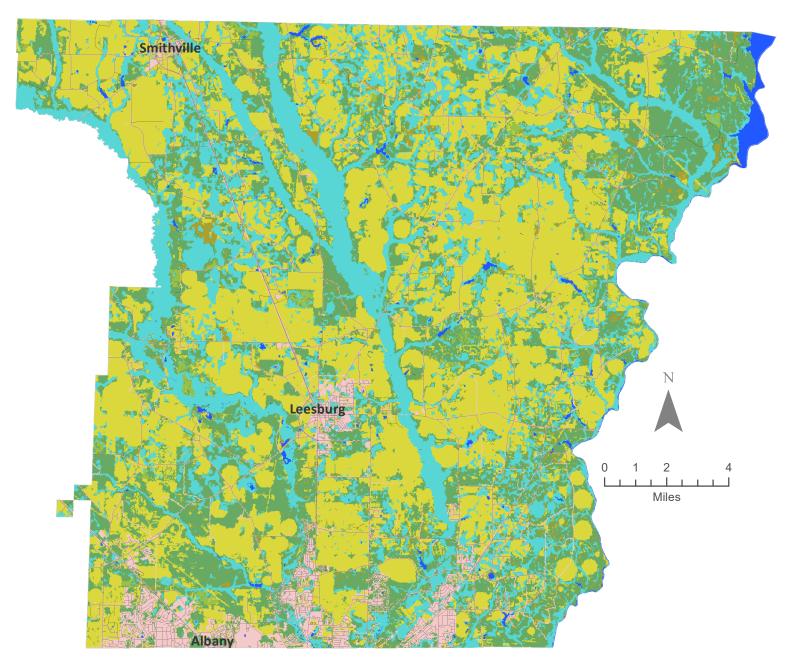
> +0.40% (2011-2019)











Water (1.1%)
Developed (6.8%)
Barren (0.0%)
Forest (25.1%)
Shrub/Scrub (1.1%)
Herbaceous (2.0%)
Crop/Pasture (41.5%)
Wetland (22.3%)

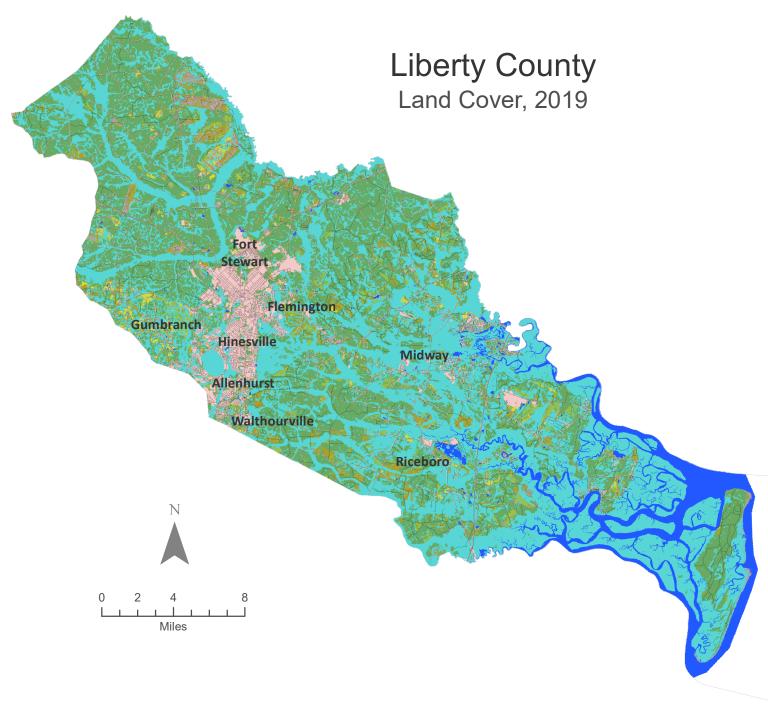
Population Change

2000:	24,757
2010:	28,289
2020:	33,163

Change of Developed Area

-0.10% (2011-2019)





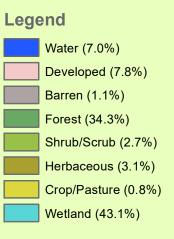


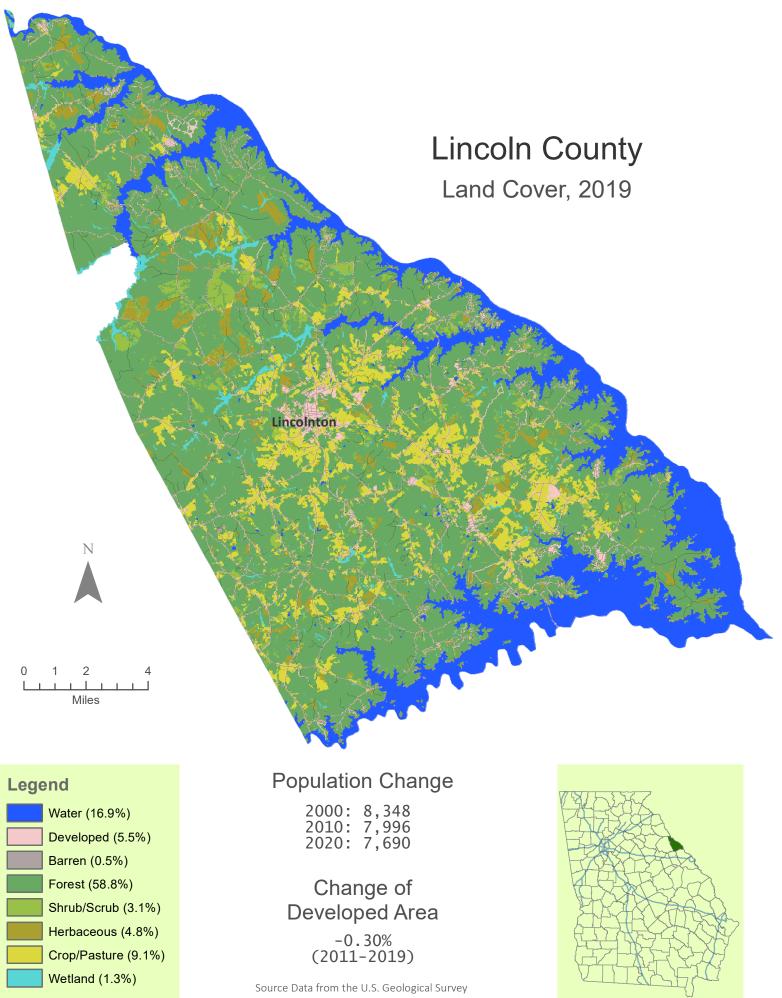
Population Change

2000: 61,610 2010: 63,453 2020: 65,256

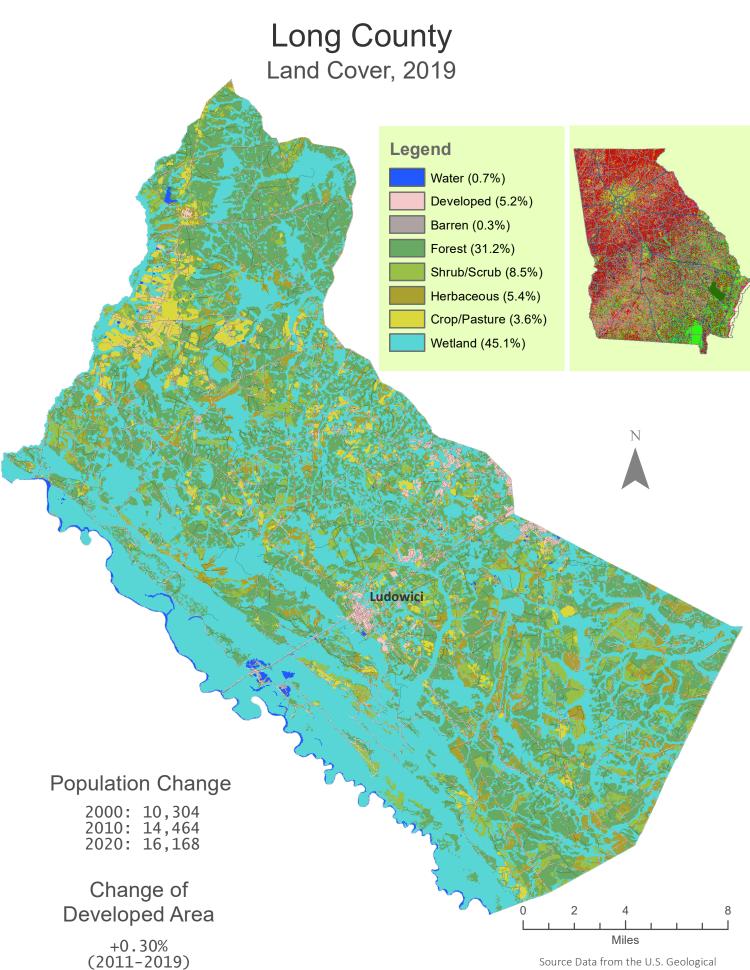
Change of Developed Area

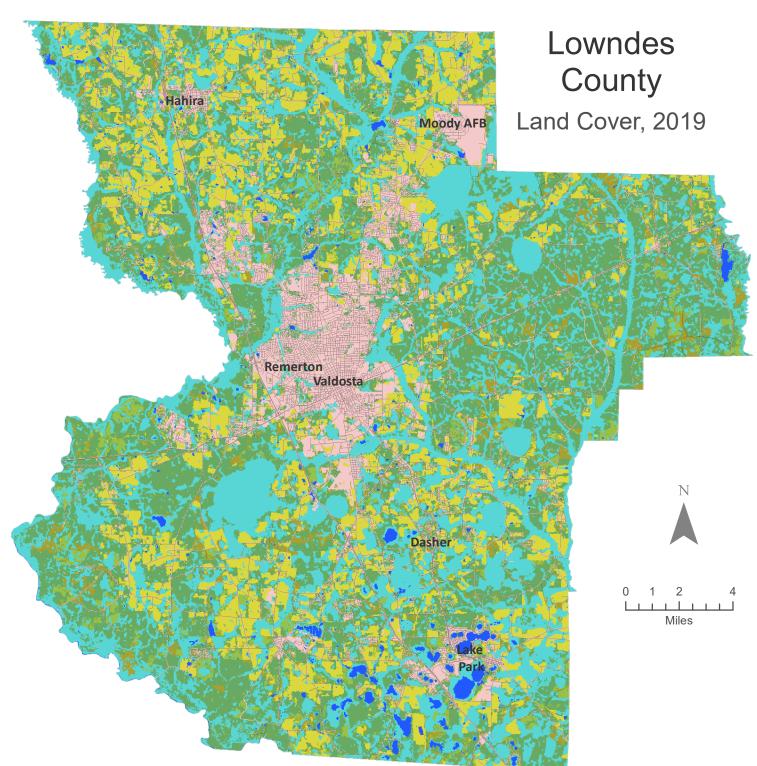
+0.80% (2011-2019)

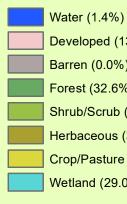


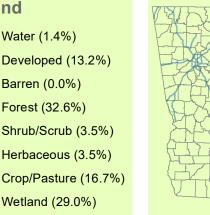


and the U.S. Census Bureau







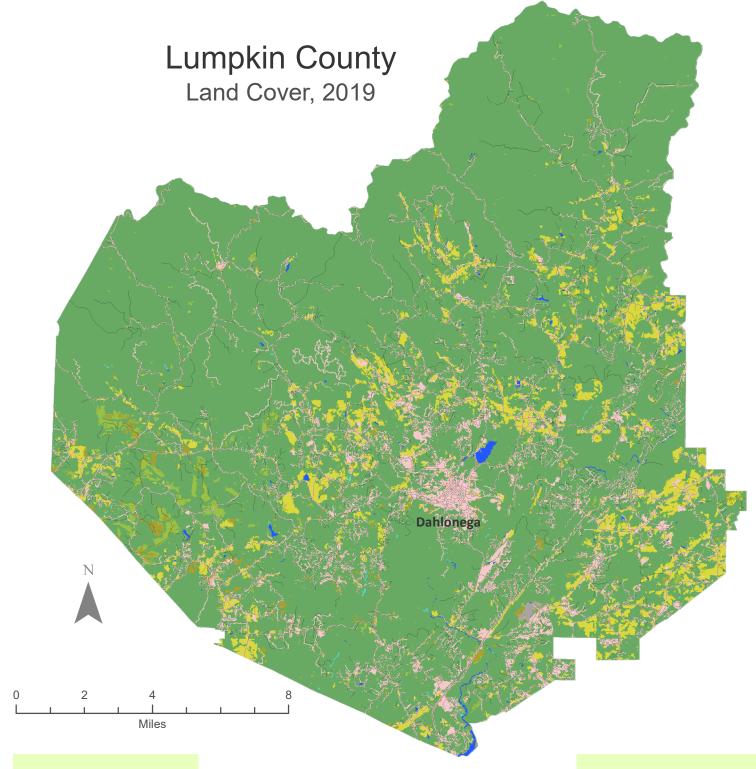


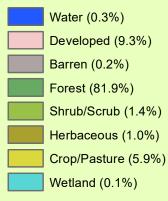


Population Change

2000: 92,115 2010: 109,233 2020: 118,251

Change of **Developed** Area +1.00% (2011 - 2019)



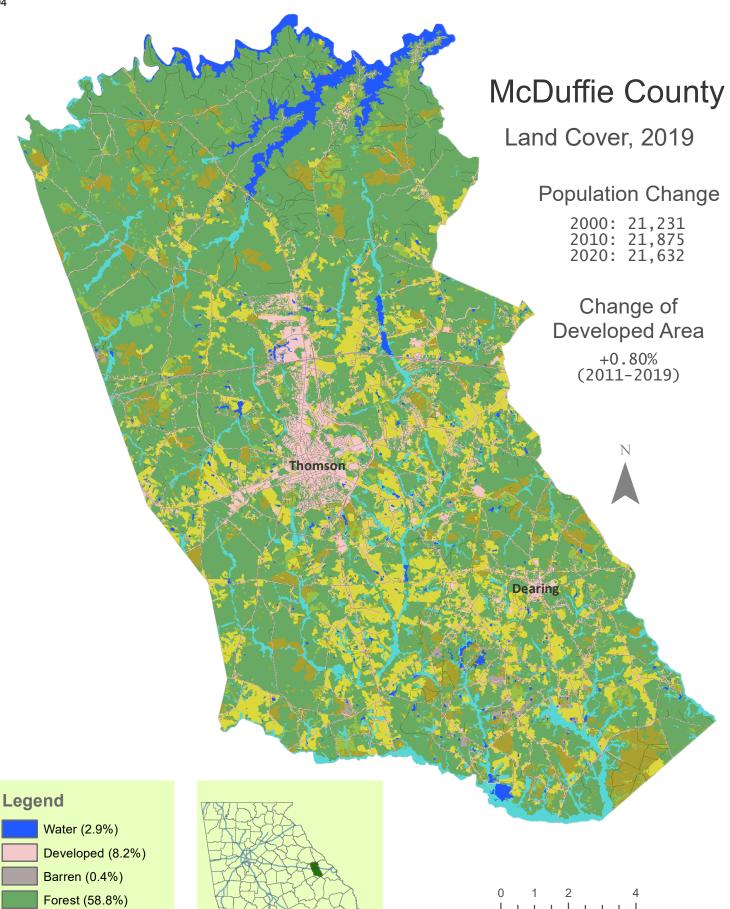


Population Change

2000: 21,016 2010: 29,966 2020: 33,488

Change of Developed Area +1.90% (2011-2019)





Source Data from the U.S. Geological Survey and the U.S. Census Bureau

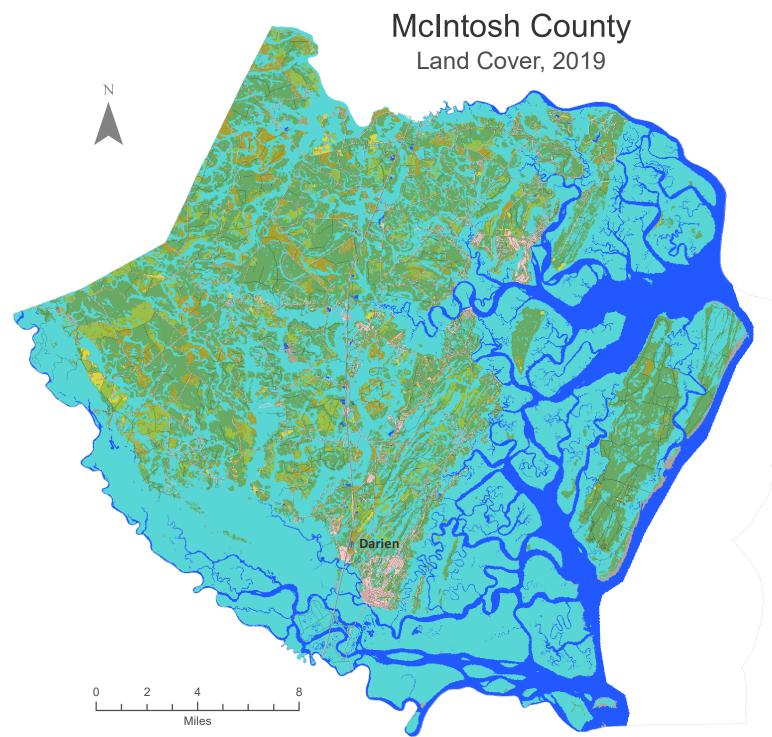
Miles

Shrub/Scrub (3.3%)

Herbaceous (7.4%)

Wetland (5.3%)

Crop/Pasture (13.6%)



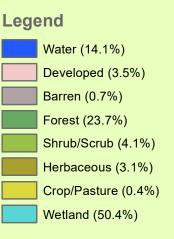


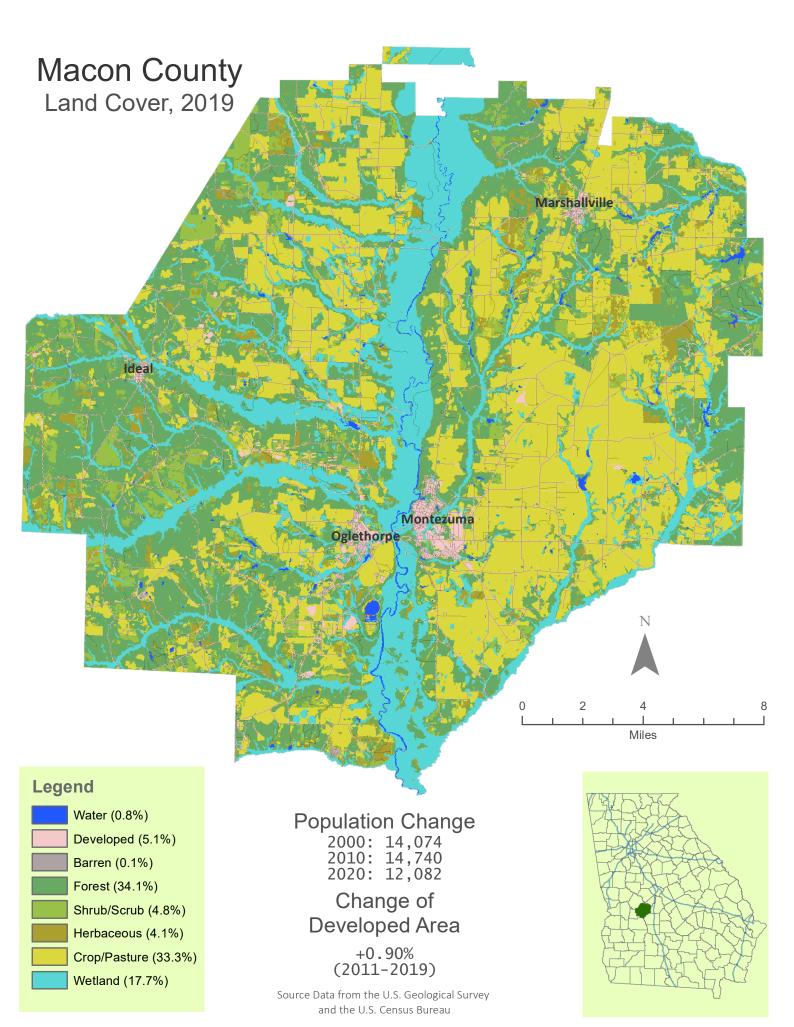
Population Change

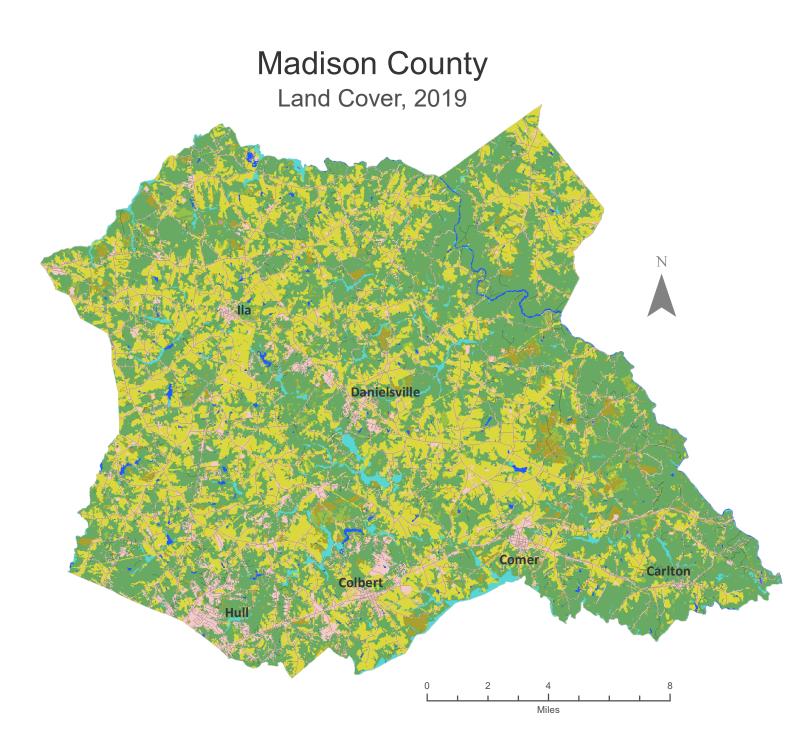
2000: 10,847 2010: 14,333 2020: 10,974

Change of Developed Area

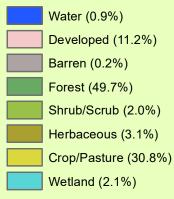
+0.70% (2011-2019)







Le	g	e	n	d
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Population Change

2000: 25,730 2010: 28,120 2020: 30,120

Change of Developed Area +0.80% (2011-2019)

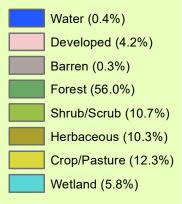


Marion County Land Cover, 2019

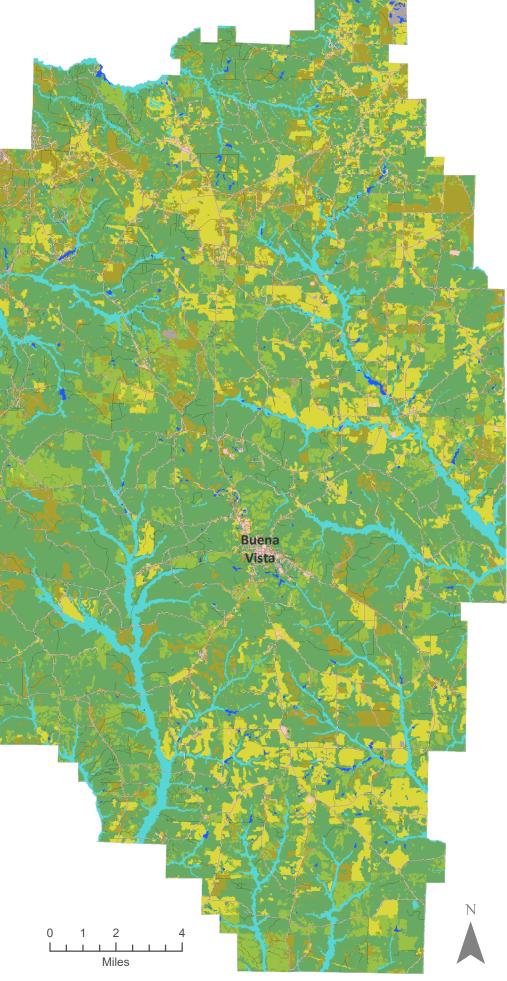
Population Change 2000: 7,144 2010: 8,742 2020: 7,498

Change of Developed Area +1.30% (2011-2019)

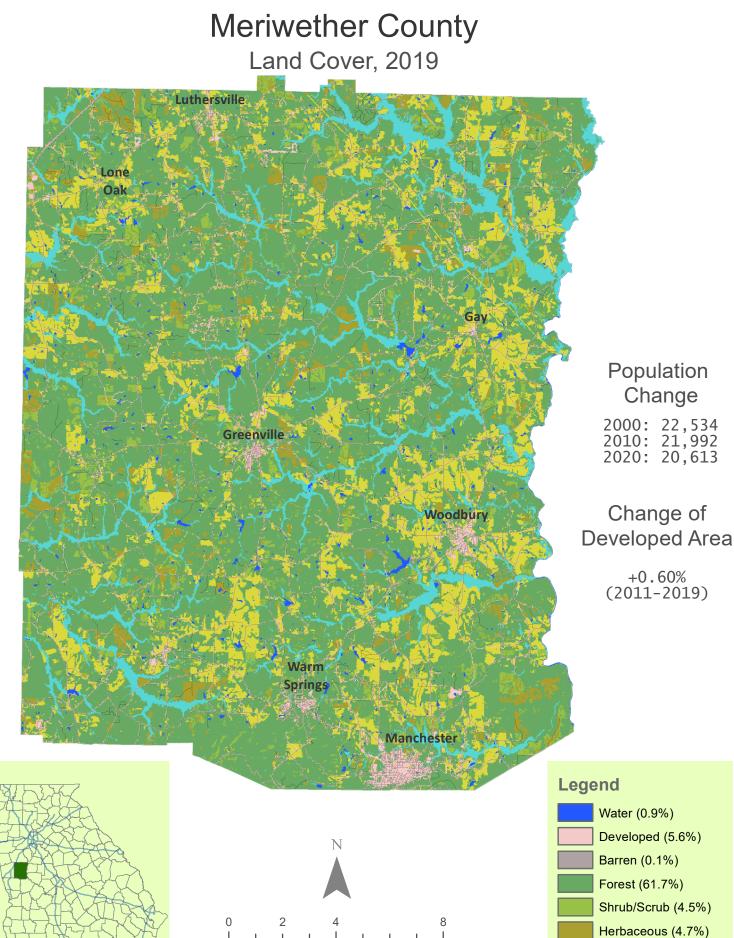
Legend







Source Data from the U.S. Geological Survey and the U.S. Census Bureau



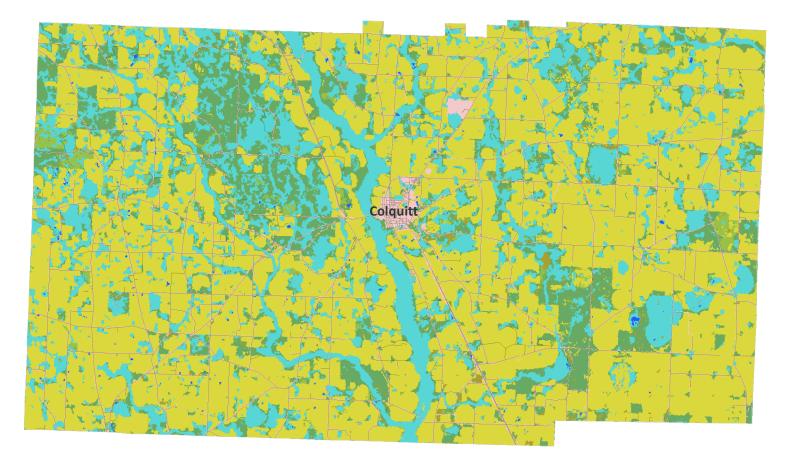
Source Data from the U.S. Geological Survey and the U.S. Census Bureau

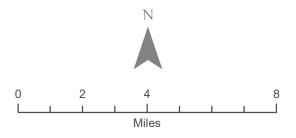
Miles

Crop/Pasture (15.6%)

Wetland (6.9%)

Miller County Land Cover, 2019





Legend

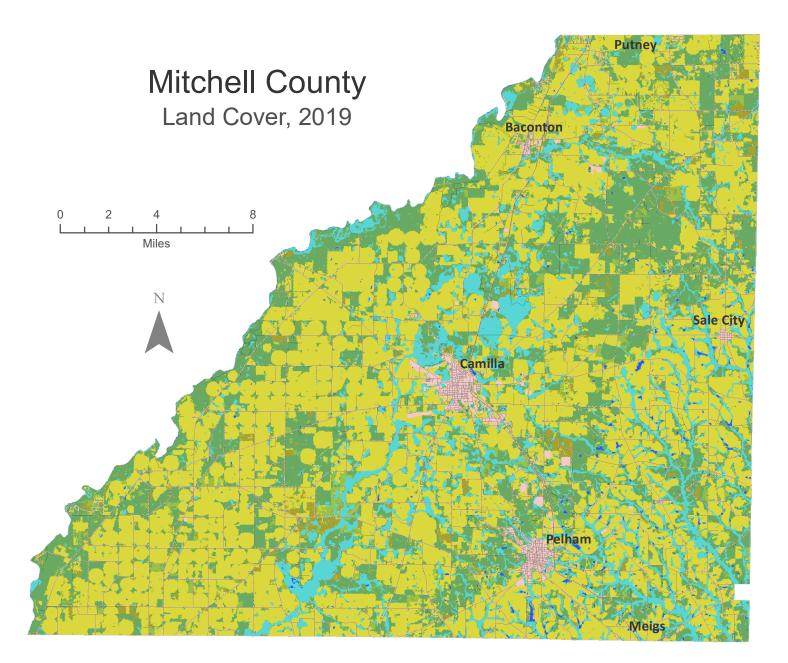
Water (0.2%)
Developed (4.8%)
Barren (0.0%)
Forest (13.5%)
Shrub/Scrub (1.2%)
Herbaceous (1.0%)
Crop/Pasture (59.4%)
Wetland (20.0%)

Population Change

2000: 6,383 2010: 6,125 2020: 6,000

Change of Developed Area

+0.00% (2011-2019)



Water (0.6%)
Developed (5.7%)
Barren (0.0%)
Forest (25.9%)
Shrub/Scrub (1.7%)
Herbaceous (2.5%)
Crop/Pasture (52.3%)
Wetland (11.3%)

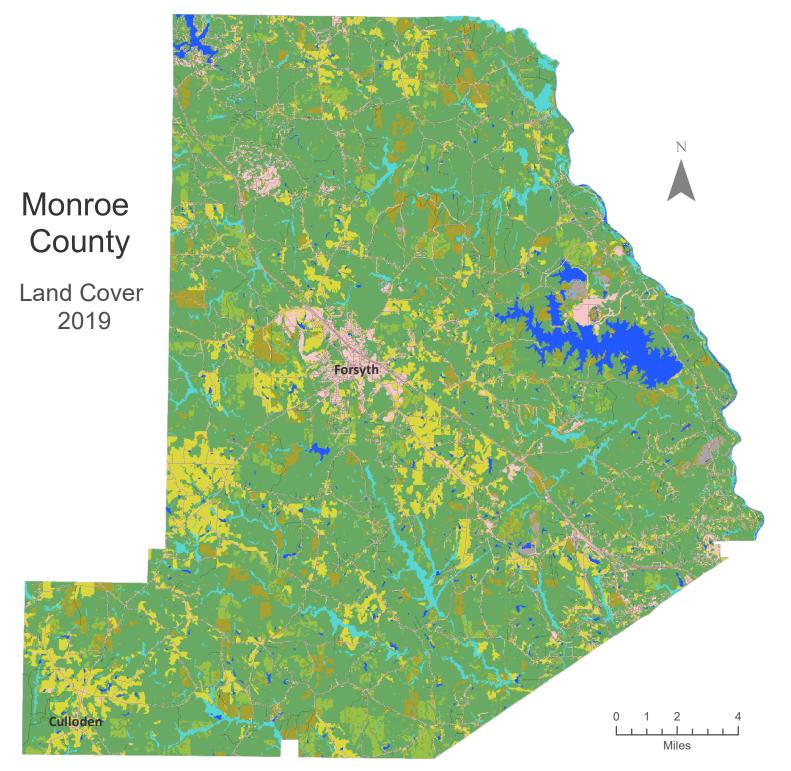
Population Change

2000: 23,932 2010: 23,498 2020: 21,755

Change of Developed Area

> -0.40% (2011-2019)





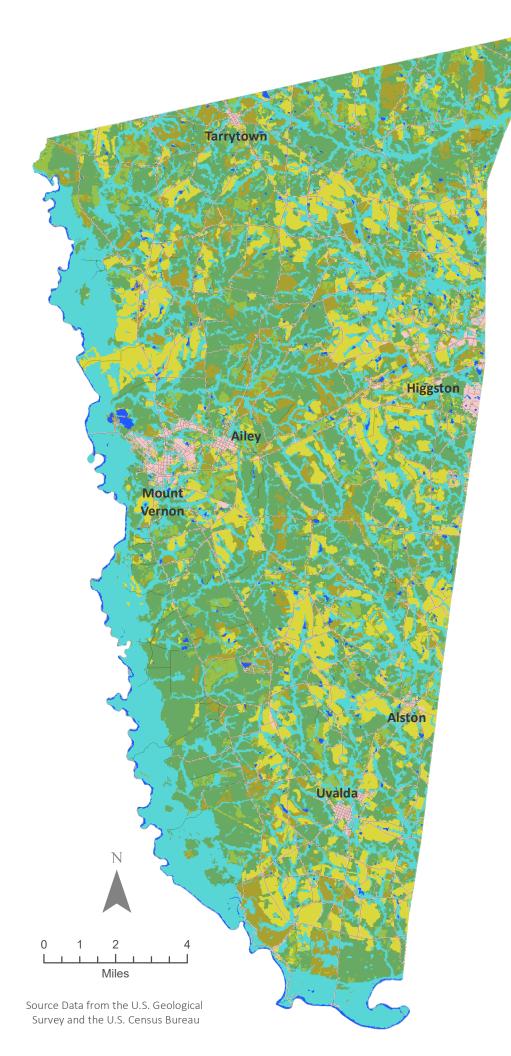
Water (2.5%)
Developed (7.3%)
Barren (0.4%)
Forest (65.5%)
Shrub/Scrub (5.6%)
Herbaceous (6.0%)
Crop/Pasture (9.4%)
Wetland (3.4%)

Population Change

2000: 21,757 2010: 26,424 2020: 27,957

Change of Developed Area +1.30% (2011-2019)





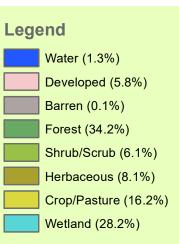
Montgomery County

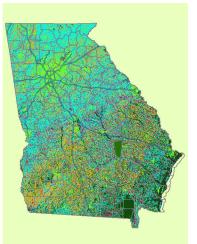
Land Cover, 2019

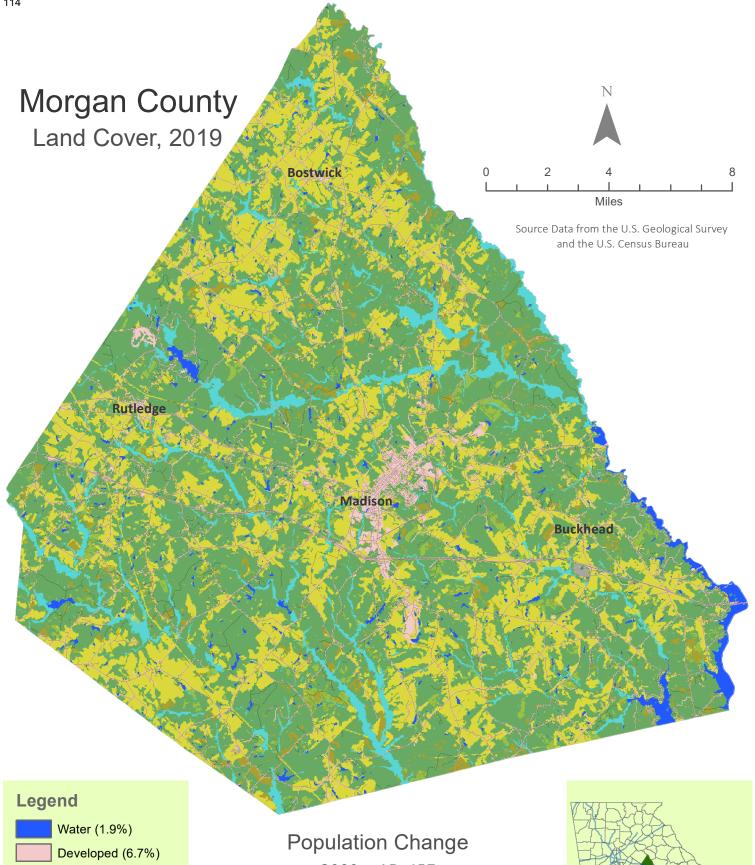
Population Change

2000:	8,270
2010:	9.123
2020:	8,610

Change of Developed Area +0.40% (2011-2019)







2000: 15,457 2010: 17,868 2020: 20,097

Change of **Developed Area**

> +0.50% (2011 - 2019)



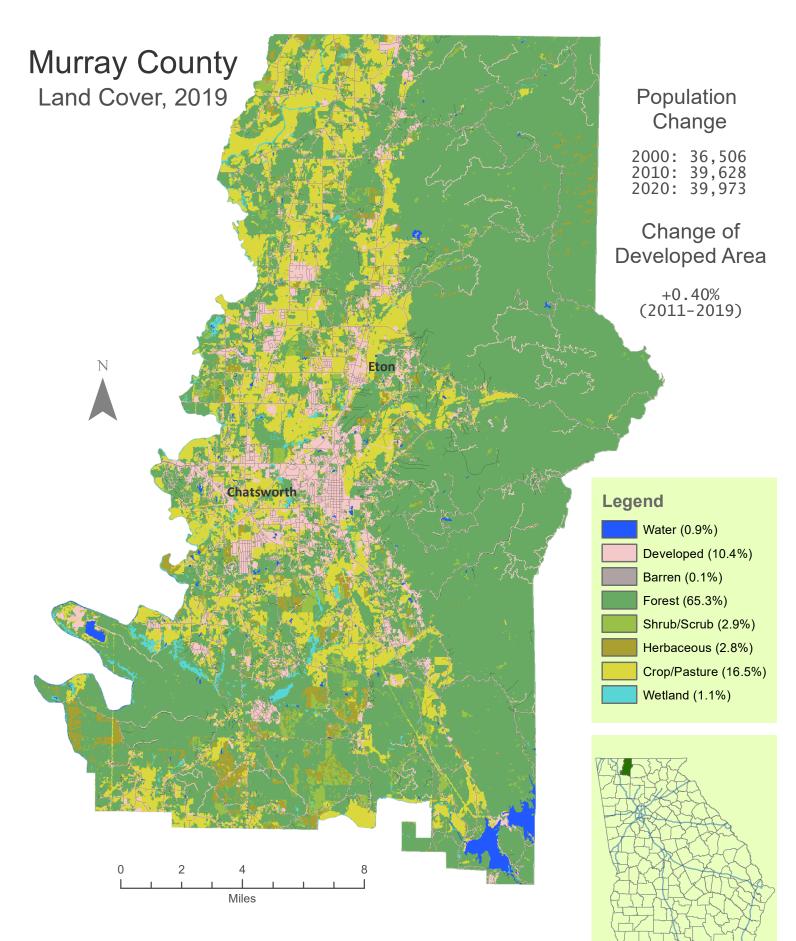
Barren (0.3%) Forest (53.4%)

Shrub/Scrub (2.4%)

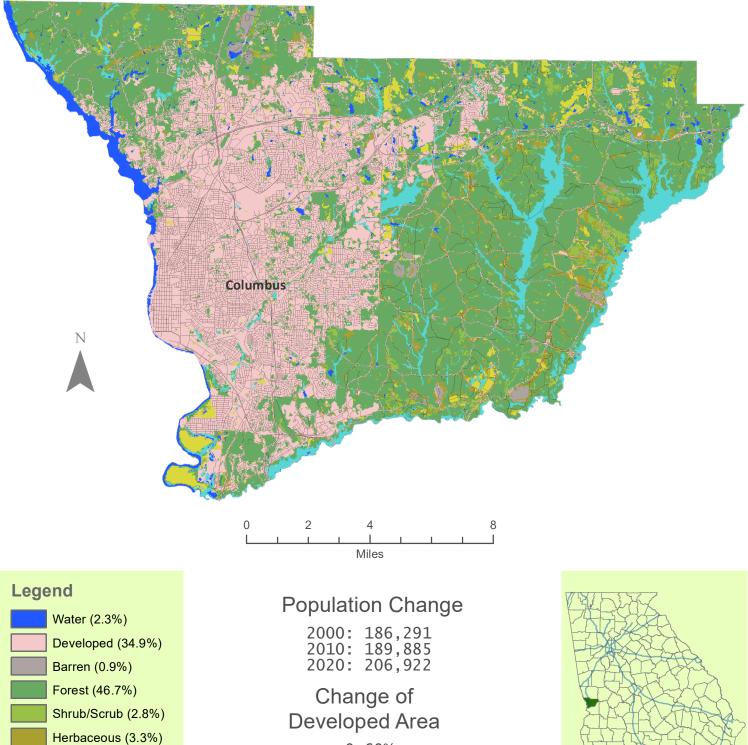
Herbaceous (3.0%)

Wetland (5.2%)

Crop/Pasture (26.9%)

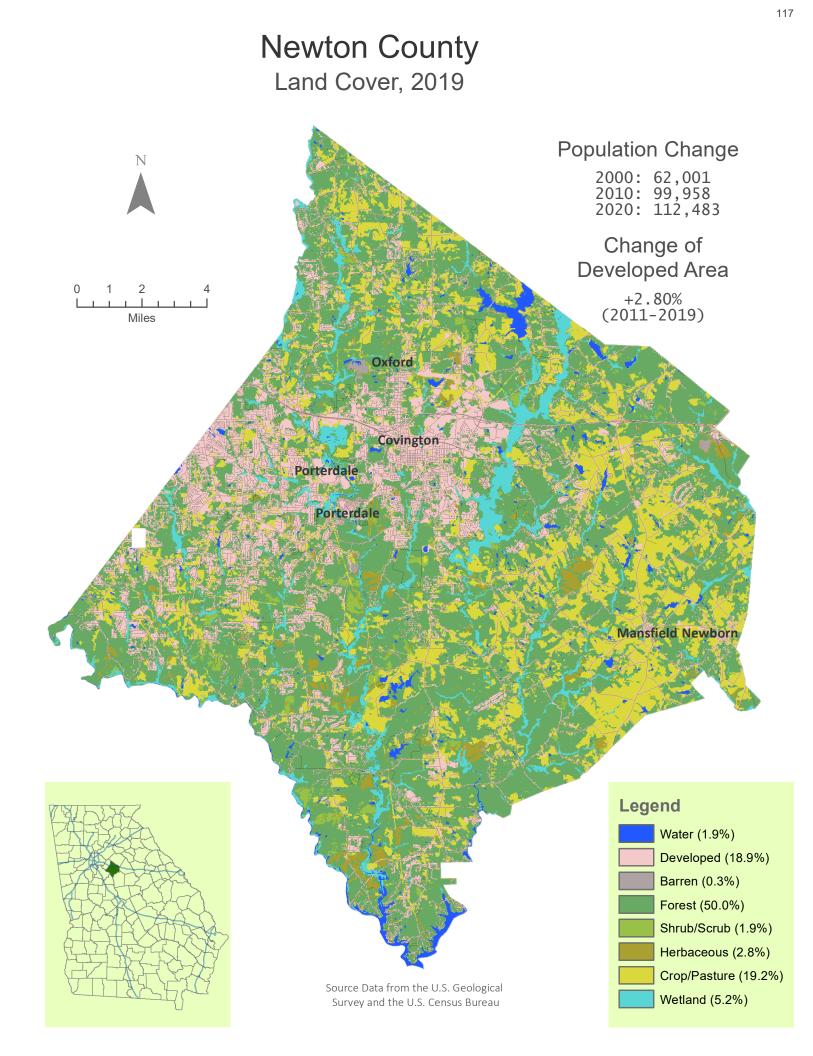


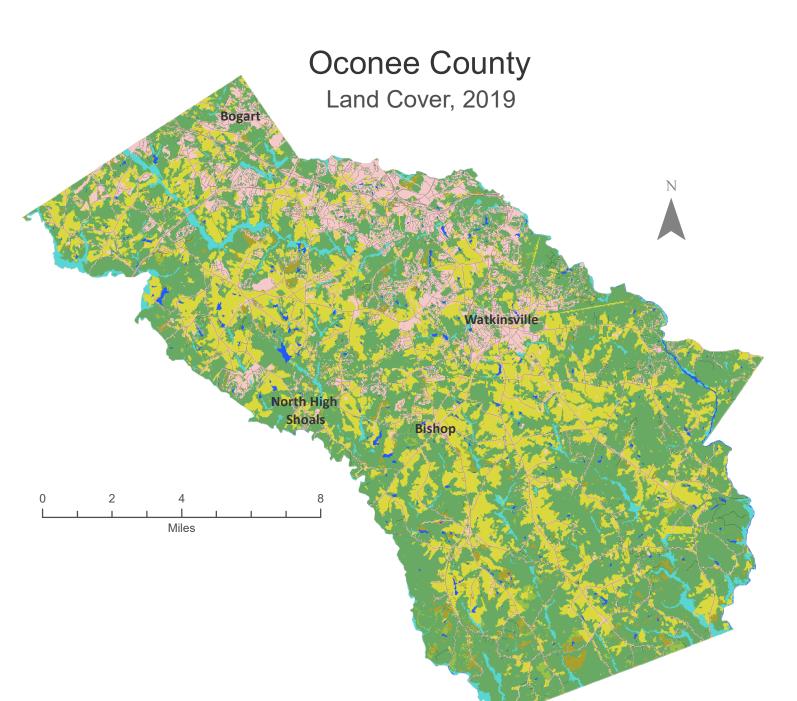
Muscogee County Land Cover, 2019



+0.60% (2011-2019)

Crop/Pasture (3.0%) Wetland (5.9%)





Water (1.0%)
Developed (15.2%)
Barren (0.2%)
Forest (50.8%)
Shrub/Scrub (1.3%)
Herbaceous (2.4%)
Crop/Pasture (25.6%)
Wetland (3.5%)

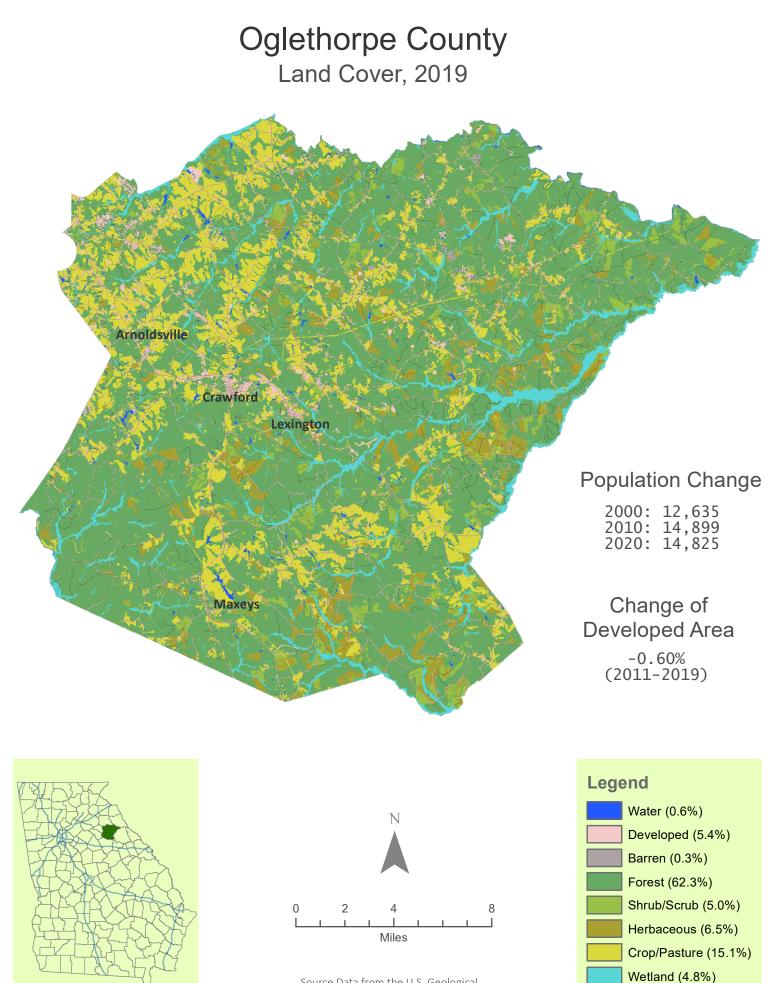
Population Change

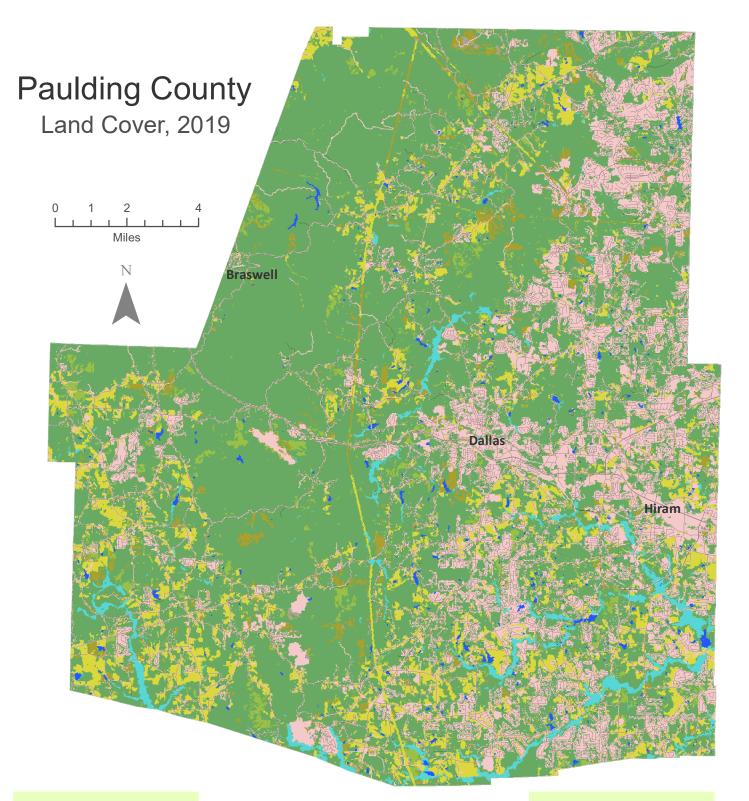
2000: 26,225 2010: 32,808 2020: 41,799

Change of Developed Area

+1.90% (2011-2019)







Water (0.7%)
Developed (21.9
Barren (0.2%)
Forest (61.2%)
Shrub/Scrub (2.
Herbaceous (2.7
Crop/Pasture (9
Wetland (2.2%)

Water (0.7%) Developed (21.9%) Barren (0.2%) orest (61.2%) Shrub/Scrub (2.1%) Herbaceous (2.7%) Crop/Pasture (9.1%)

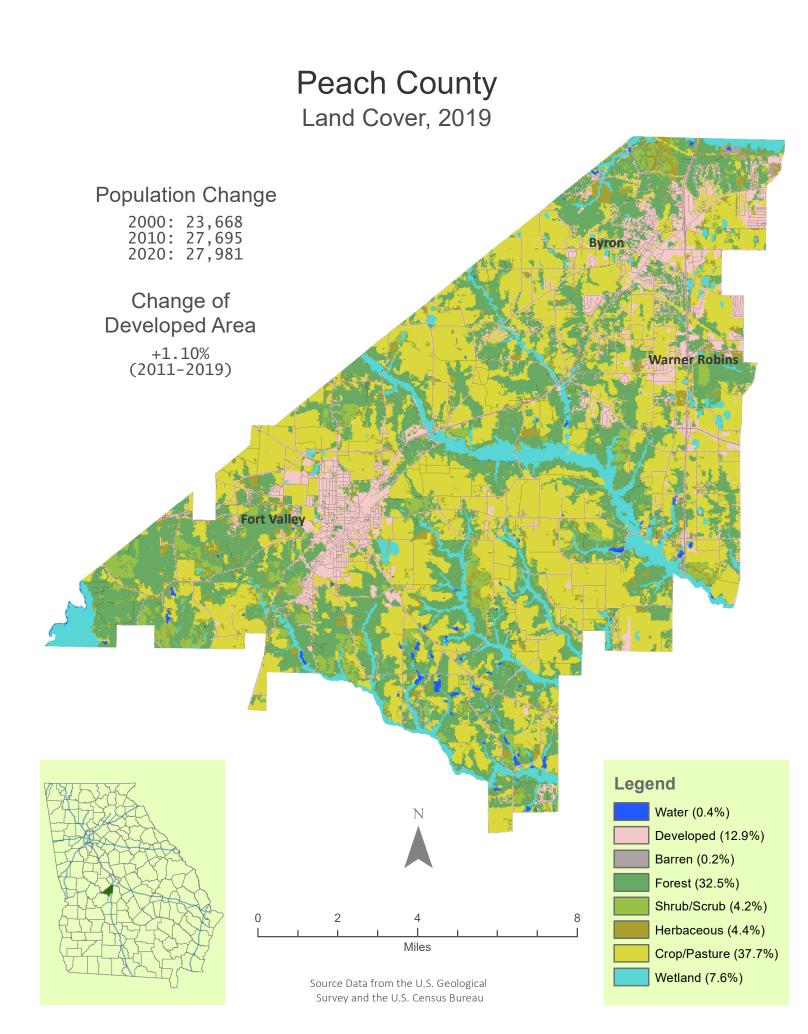
Population Change

2000: 81,678 2010: 142,324 2020: 168,661

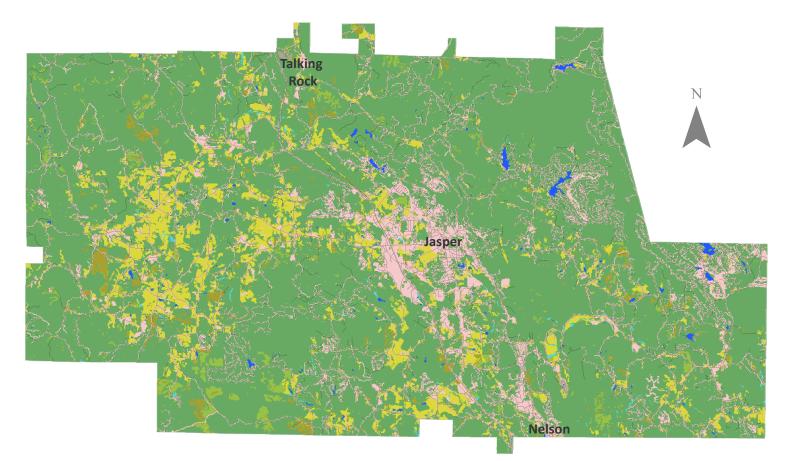
Change of **Developed Area**

+3.30% (2011 - 2019)











Water (0.4%)
Developed (13.3%)
Barren (0.2%)
Forest (73.9%)
Shrub/Scrub (2.3%)
Herbaceous (1.8%)
Crop/Pasture (7.9%)
Wetland (0.2%)

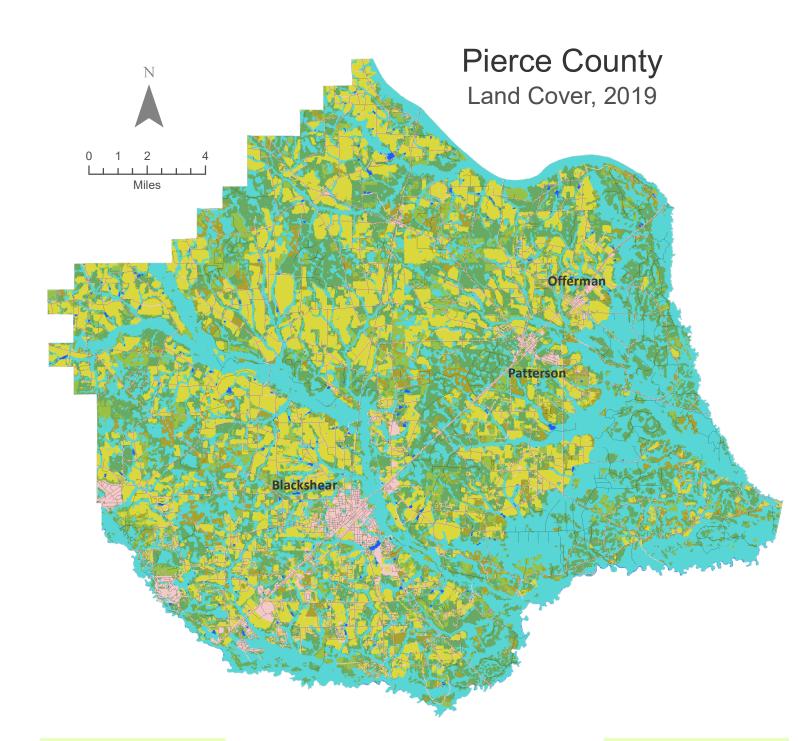
Population Change

2000: 22,983 2010: 29,431 2020: 33,216

Change of Developed Area

+1.80% (2011-2019)





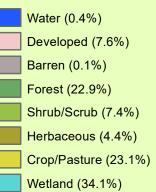


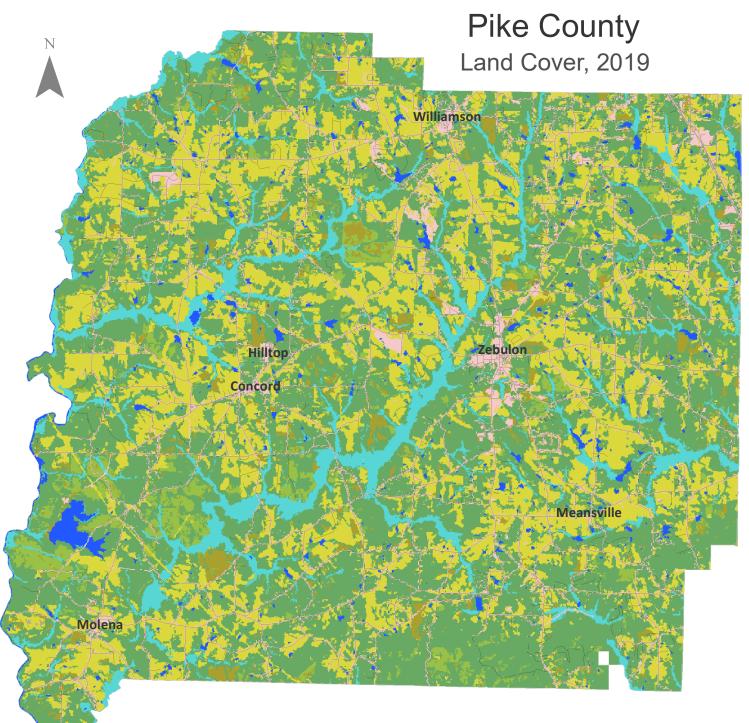
Population Change

2000: 15,636 2010: 18,758 2020: 19,716

Change of Developed Area +1.60% (2011-2019)

Legend







Water (1.8%) Developed (7.5%) Barren (0.1%) Forest (49.2%) Shrub/Scrub (4.0%) Herbaceous (3.0%) Crop/Pasture (27.0%) Wetland (7.5%) 0 1 2 4 L I I I I I I I Miles

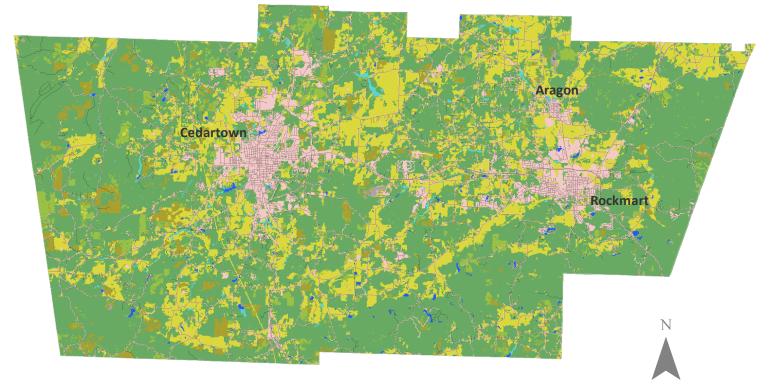
Population Change

2000: 13,688 2010: 17,869 2020: 18,889

Change of Developed Area +1.20% (2011-2019)



Polk County Land Cover, 2019



0	2	4			8
		Miles	;		

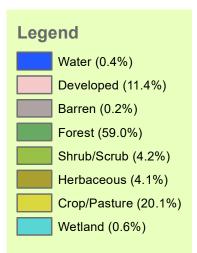


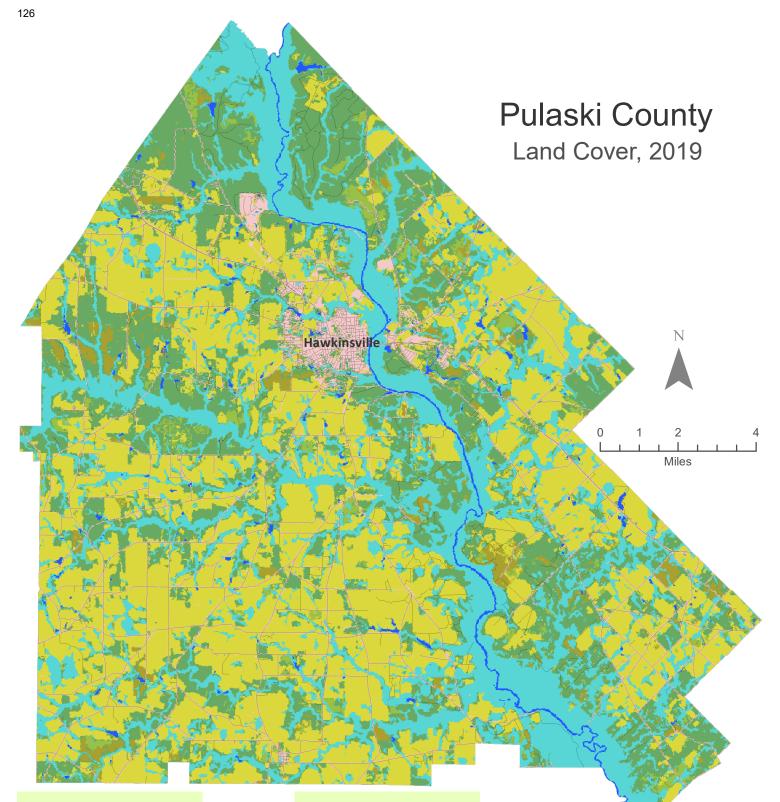
Population Change

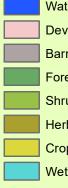
2000: 38,127 2010: 41,475 2020: 42,853

Change of Developed Area

+0.10% (2011-2019)





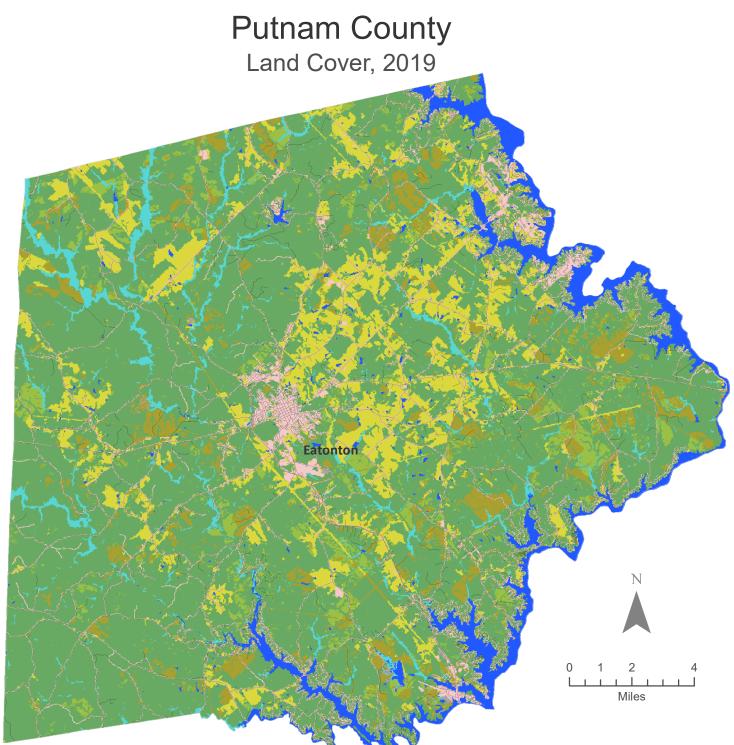






Population Change

2000: 9,588 2010: 12,010 2020: 9,855 Change of Developed Area +0.70% (2011-2019)





Population Change

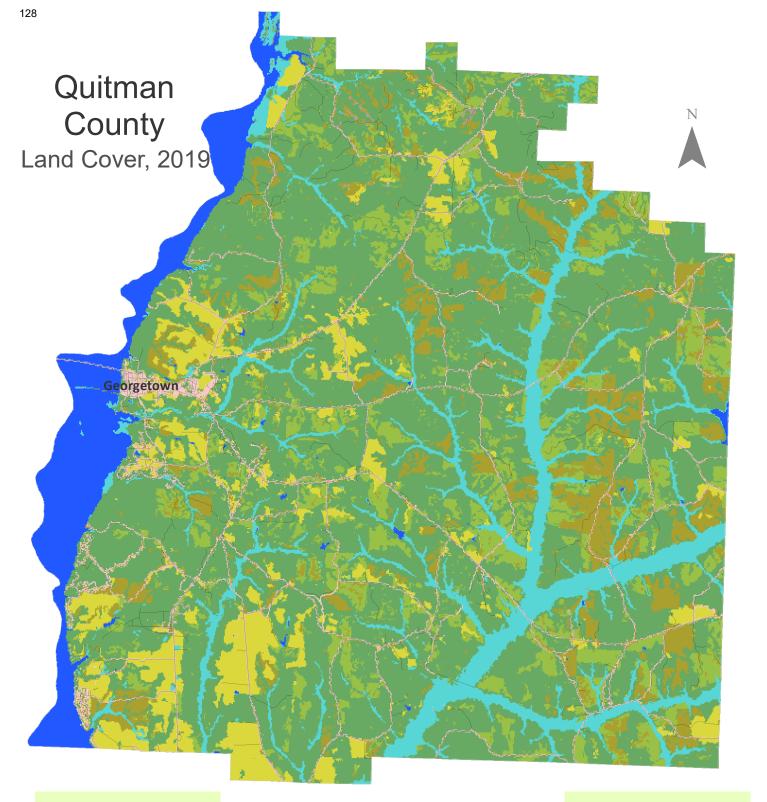
2000: 18,812 2010: 21,218 2020: 22,407

Change of Developed Area

+0.50% (2011-2019)

Source Data from the U.S. Geological Survey and the U.S. Census Bureau

Legend Water (4.9%) Developed (6.7%) Barren (0.3%) Forest (63.2%) Shrub/Scrub (4.4%) Herbaceous (6.6%) Crop/Pasture (11.1%) Wetland (2.9%)





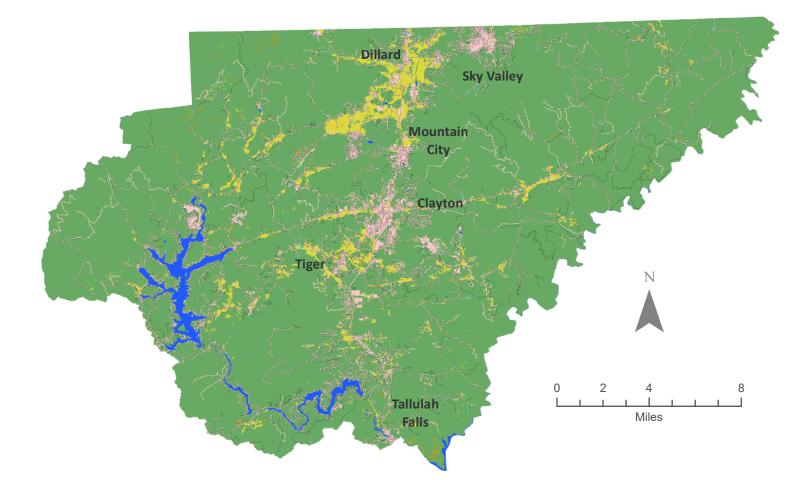
Water (5.8%) Developed (3.5%) Barren (0.1%) Forest (54.4%) Shrub/Scrub (11.5%) Herbaceous (8.6%) Crop/Pasture (7.6%) Wetland (8.6%) 0 1 2 4 <u>IIIIIIIIIII</u> Miles

Population Change

2000: 2,598 2010: 2,598 2020: 2,235

Change of Developed Area +1.10% (2011-2019)





Rabun County

Land Cover, 2019



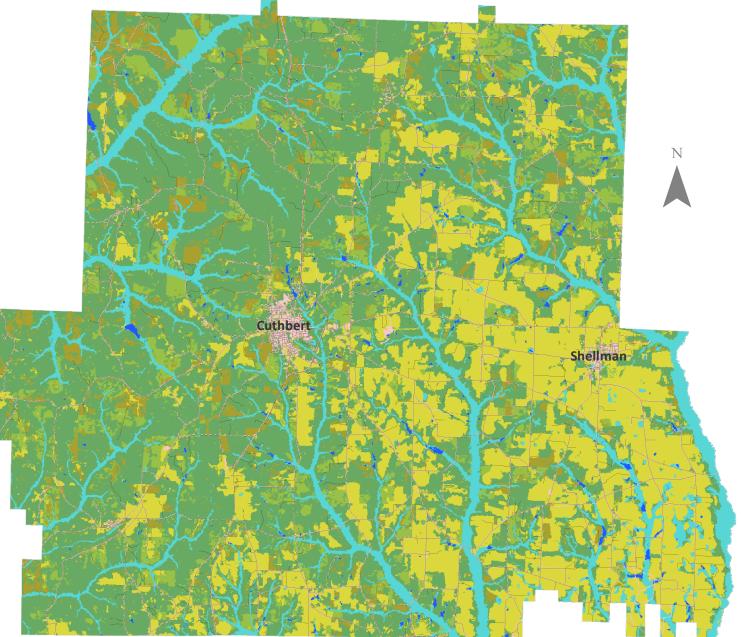
Population Change

2000: 15,050 2010: 16,276 2020: 16,883

Change of Developed Area +1.40% (2011-2019)

Legend		
	Water (1.6%)	
	Developed (8.4%)	
	Barren (0.0%)	
	Forest (85.9%)	
	Shrub/Scrub (0.4%)	
	Herbaceous (0.5%)	
	Crop/Pasture (3.1%)	
	Wetland (0.1%)	

Land Cover, 2019



Legend



Water (0.5%) Developed (3.5%) Barren (0.0%) Forest (48.0%) Shrub/Scrub (8.0%) Herbaceous (5.9%) Crop/Pasture (24.6%) Wetland (9.3%)

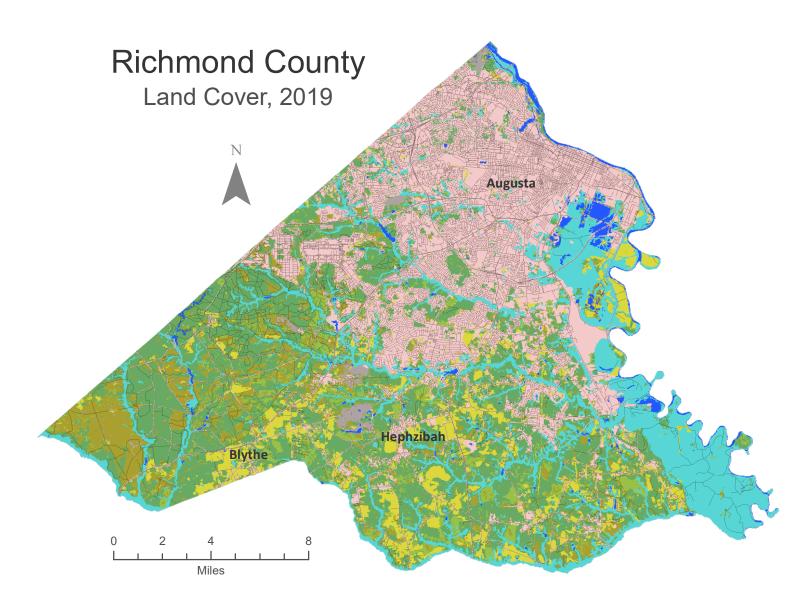


Population Change

2000: 2,598 2010: 2,598 2020: 6,425

Change of Developed Area +1.10% (2011-2019)





Water (1.9%)
Developed (30.8%)
Barren (1.0%)
Forest (29.2%)
Shrub/Scrub (4.7%)
Herbaceous (8.8%)
Crop/Pasture (7.5%)
Wetland (16.0%)

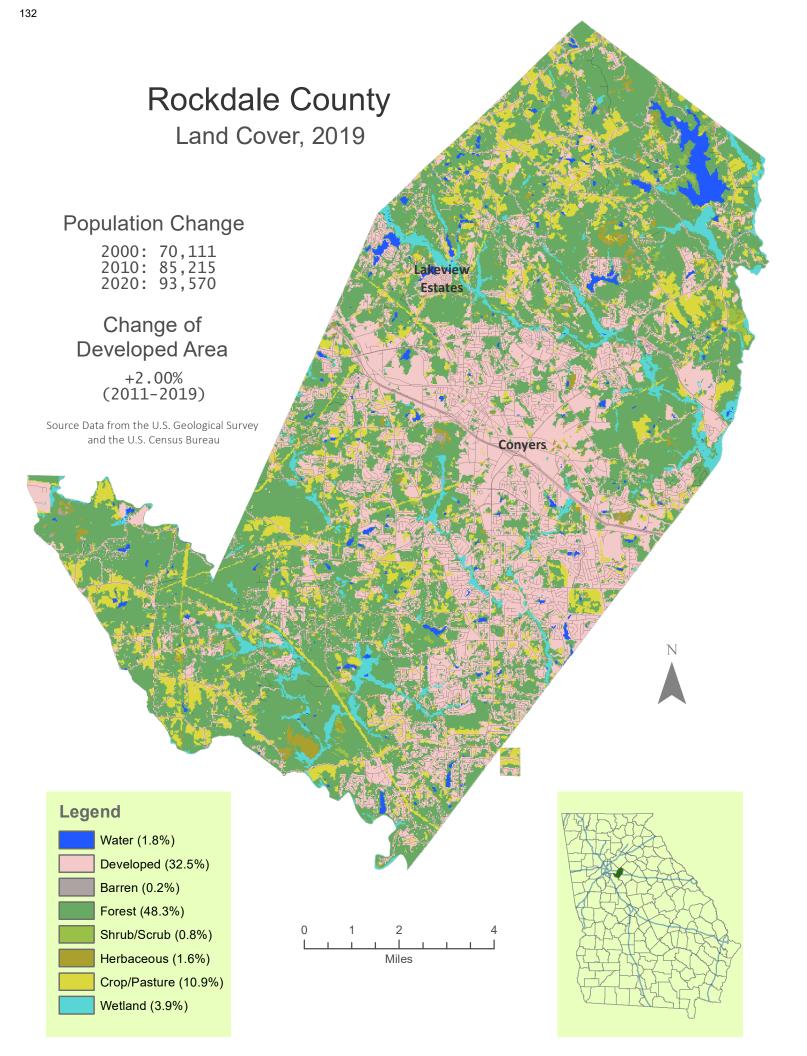
Population Change

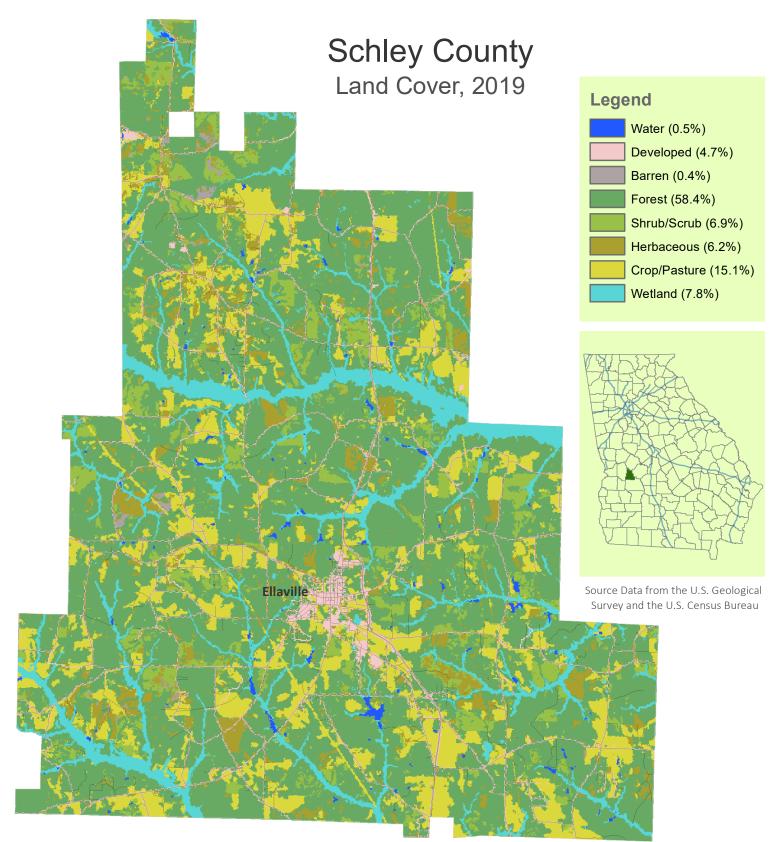
2000: 199,775 2010: 200,549 2020: 206,607

Change of Developed Area

> -0.10% (2011-2019)

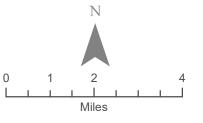


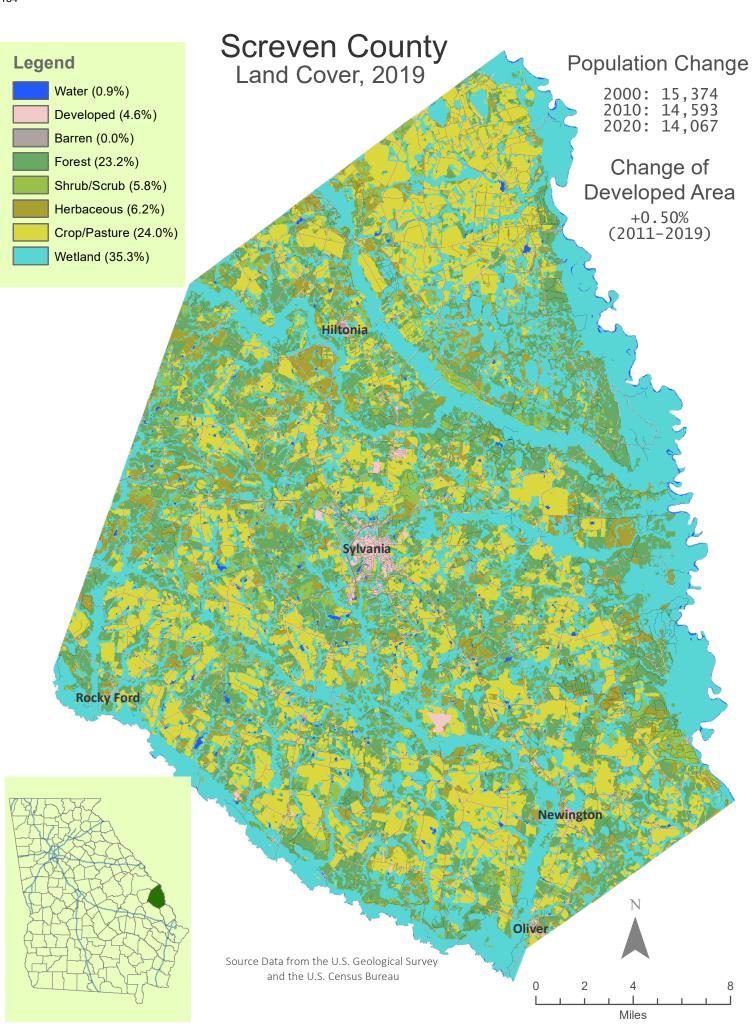




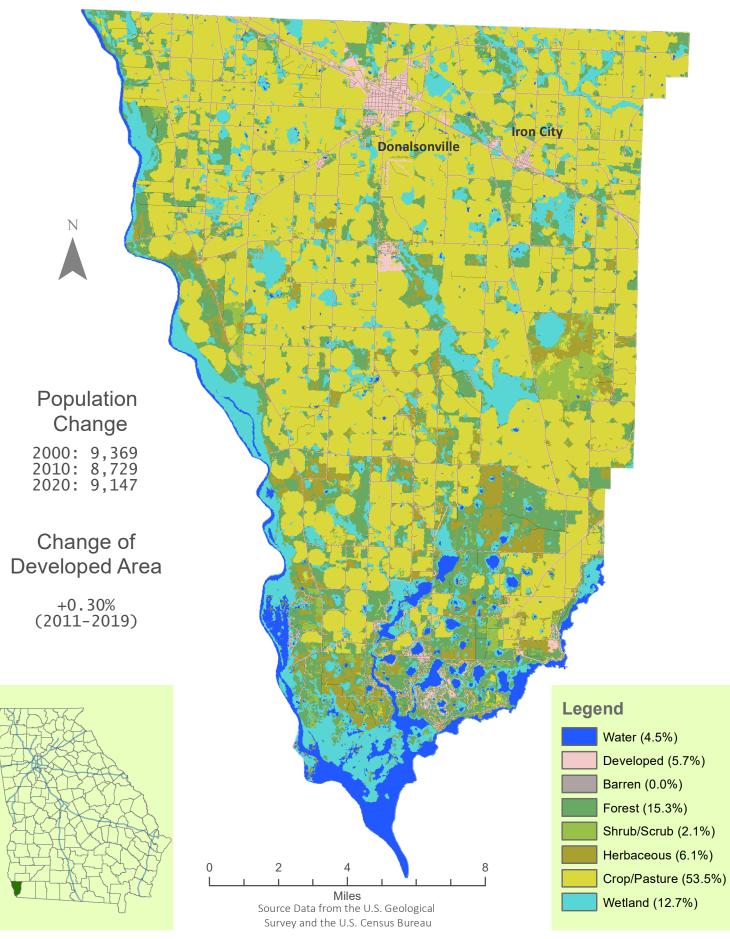
Population Change 2000: 3,766 2010: 5,010 2020: 4,547

Change of Developed Area +0.90% (2011-2019)

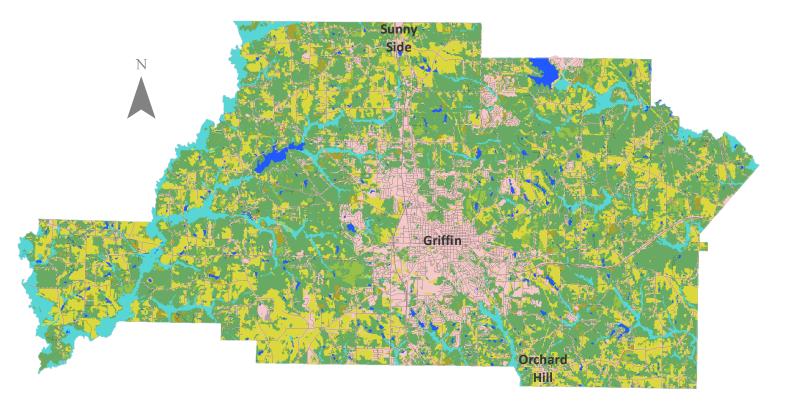




Seminole County Land Cover, 2019



Spalding County Land Cover, 2019





Legend

Water (1.7%)
Developed (18.2%)
Barren (0.1%)
Forest (46.4%)
Shrub/Scrub (2.6%)
Herbaceous (2.1%)
Crop/Pasture (21.6%)
Wetland (7.3%)

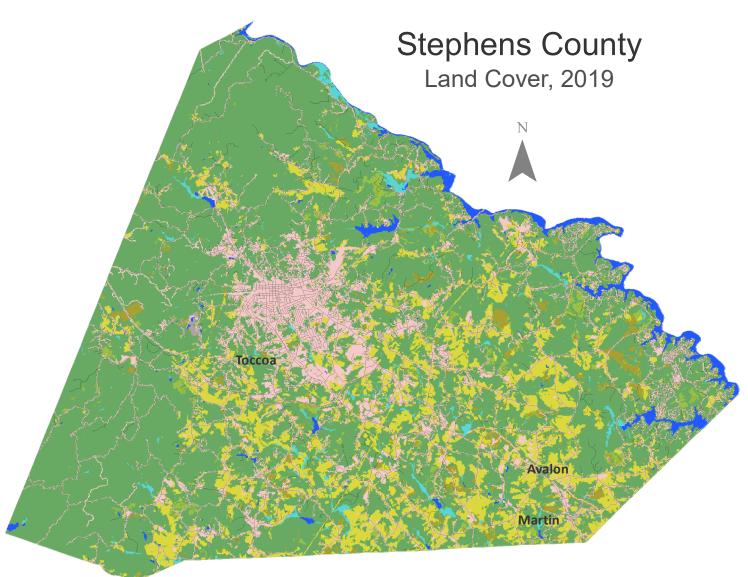
Population Change

2000: 58,417 2010: 64,073 2020: 67,306

Change of Developed Area

+2.30% (2011-2019)







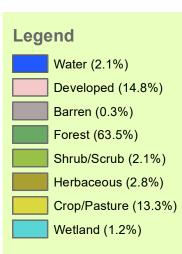


Population Change

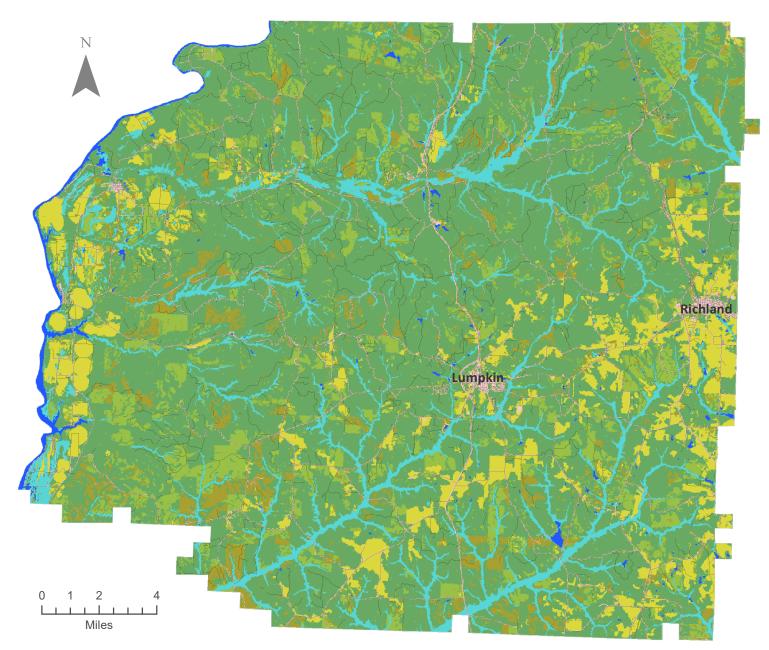
2000: 25,435 2010: 26,175 2020: 26,784

Change of Developed Area

+1.30% (2011-2019)



Stewart County Land Cover, 2019



Legend



Water (0.9%) Developed (2.9%) Barren (0.1%) Forest (64.7%) Shrub/Scrub (10.2%) Herbaceous (5.6%) Crop/Pasture (8.3%) Wetland (7.3%)

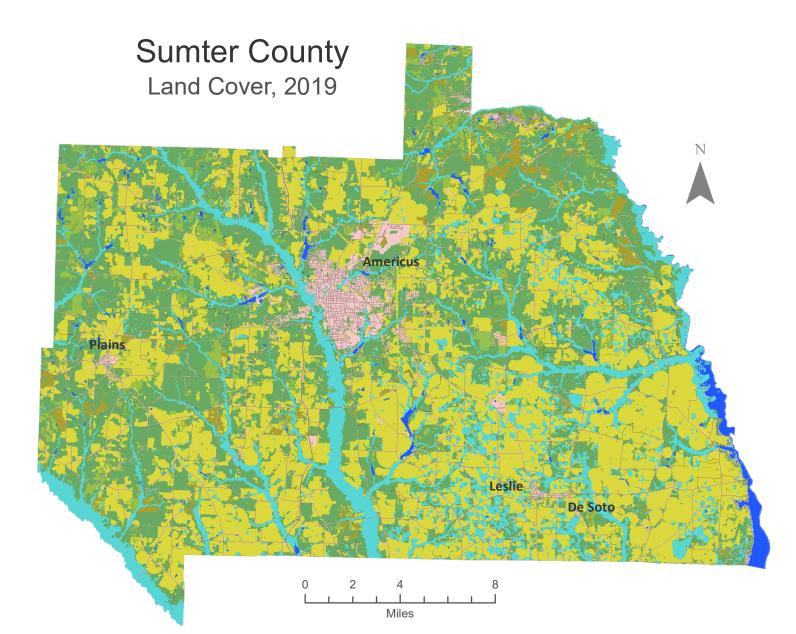
Population Change

2000: 5,252 2010: 6,058 2020: 5,314

Change of Developed Area +0.70%

(2011-2019)





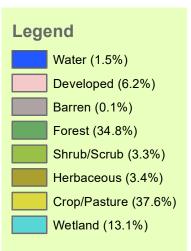


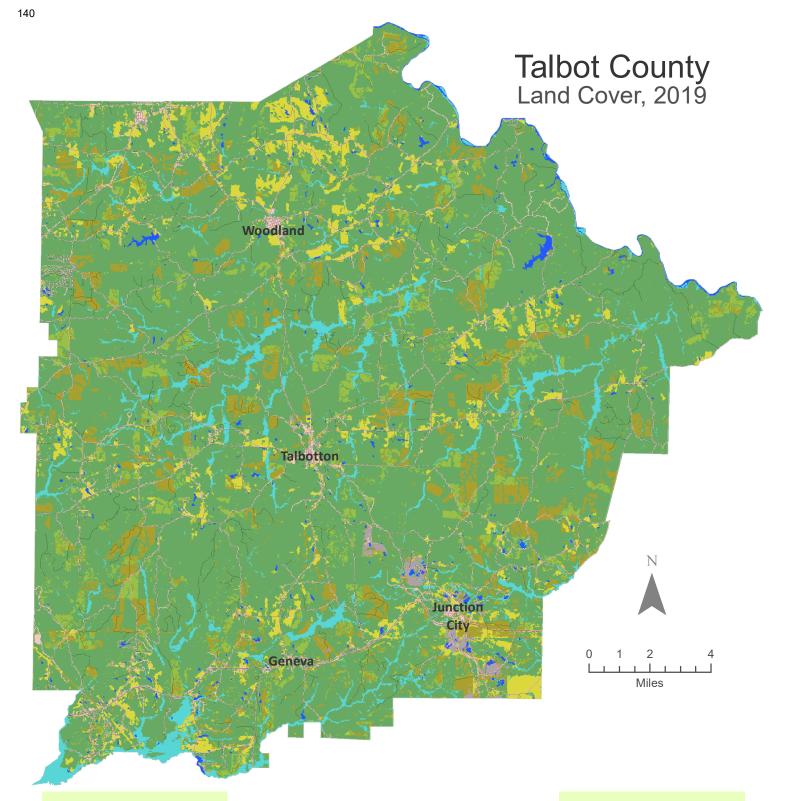
Population Change

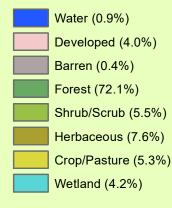
2000: 33,200 2010: 32,819 2020: 29,616

Change of Developed Area

+0.10% (2011-2019)





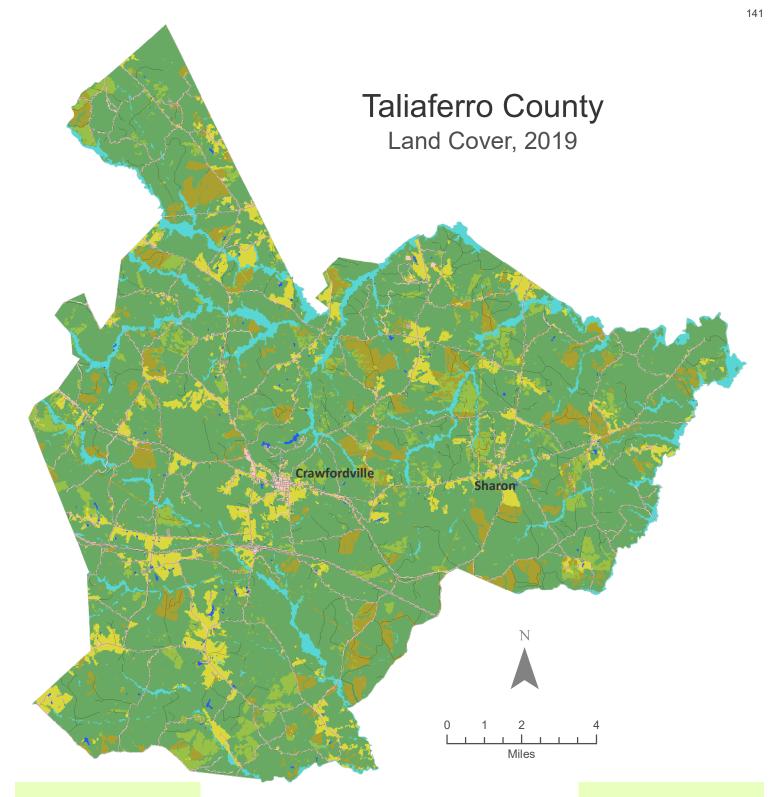


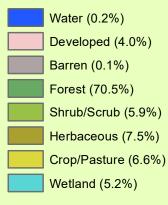
Population Change

2000: 6,498 2010: 6,865 2020: 5,733

Change of Developed Area

+0.20% (2011-2019)





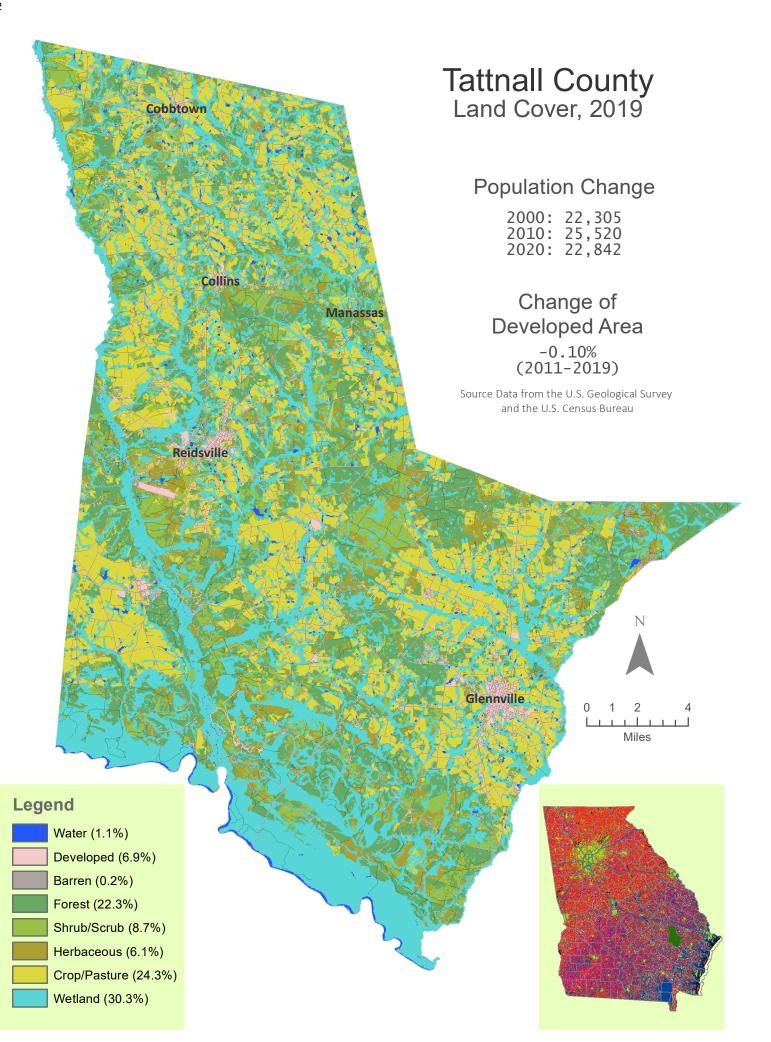
Population Change

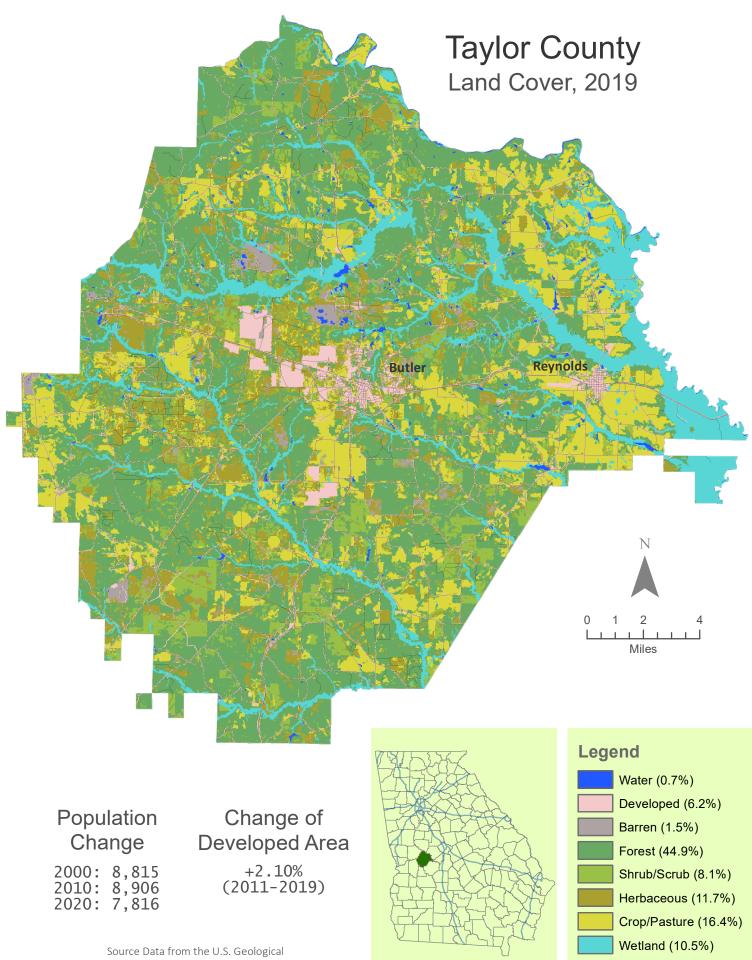
2000: 2,077 2010: 1,717 2020: 1,559

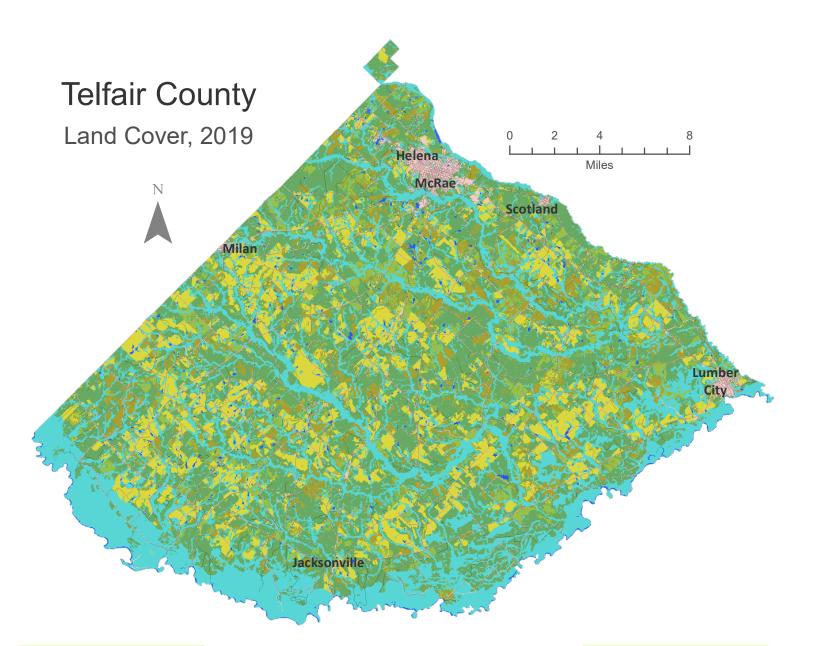
Change of Developed Area -0.40%

(2011-2019)









Water (1.0%)
Developed (4.8%)
Barren (0.0%)
Forest (36.2%)
Shrub/Scrub (6.6%)
Herbaceous (8.0%)
Crop/Pasture (15.2%)
Wetland (28.2%)

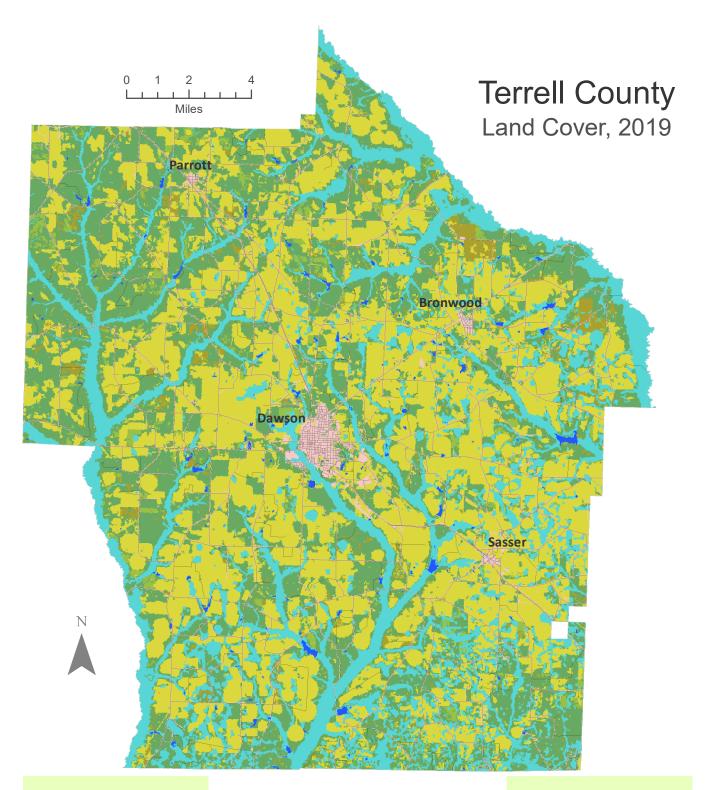
Population Change

2000:	11,794
2010:	16,500
2020:	12,477

Change of Developed Area +0.30%

+0.30% (2011-2019)





Water (0.6%) Developed (4.8%) Barren (0.0%) Forest (31.3%) Shrub/Scrub (2.1%) Herbaceous (2.5%) Crop/Pasture (39.8%)

Wetland (18.9%)

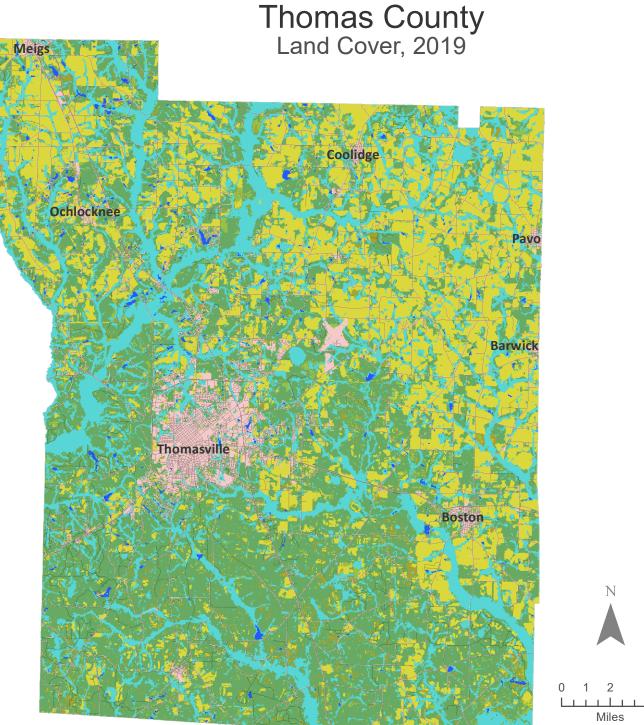
Population Change

2000: 10,970 2010: 9,507 2020: 9,185

Change of Developed Area

+0.70% (2011-2019)







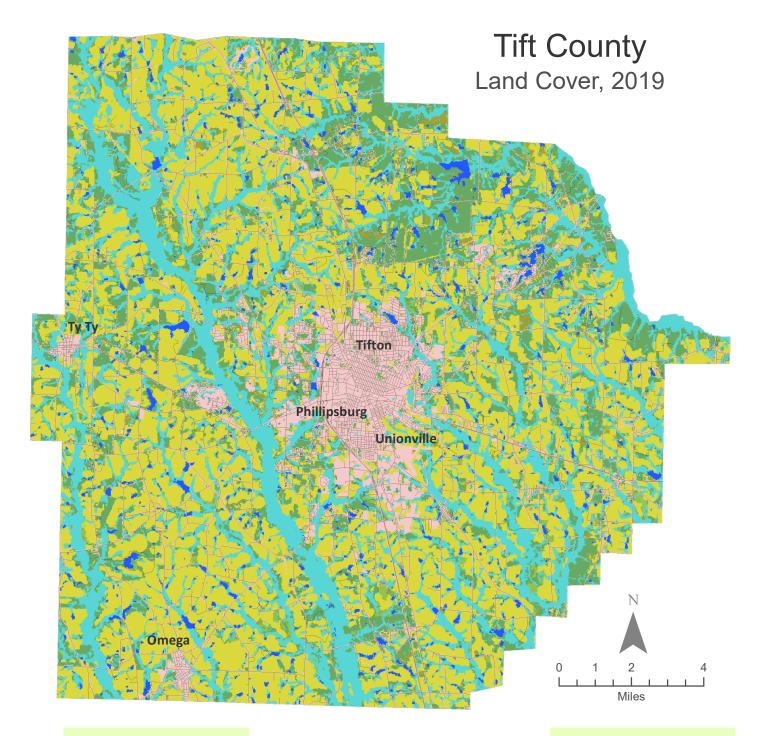
Water (0.9%)
Developed (7.7%)
Barren (0.0%)
Forest (40.2%)
Shrub/Scrub (1.9%)
Herbaceous (2.1%)
Crop/Pasture (26.0%)
Wetland (21.2%)

Population Change

2000: 42,737 2010: 44,720 2020: 45,798

Change of **Developed Area** +0.10% (2011-2019)





Water (2.6%)
Developed (12.9%)
Barren (0.1%)
Forest (16.2%)
Shrub/Scrub (0.7%)
Herbaceous (1.4%)
Crop/Pasture (42.4%)
Wetland (23.7%)

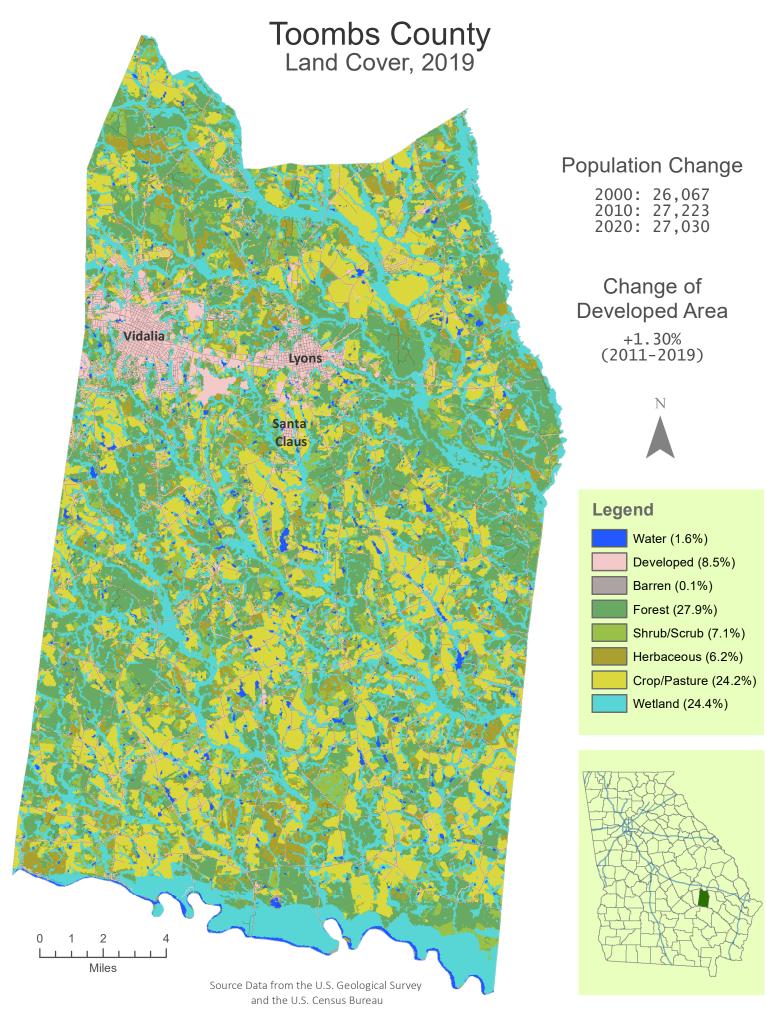
Population Change

2000: 38,407 2010: 40,118 2020: 41,344

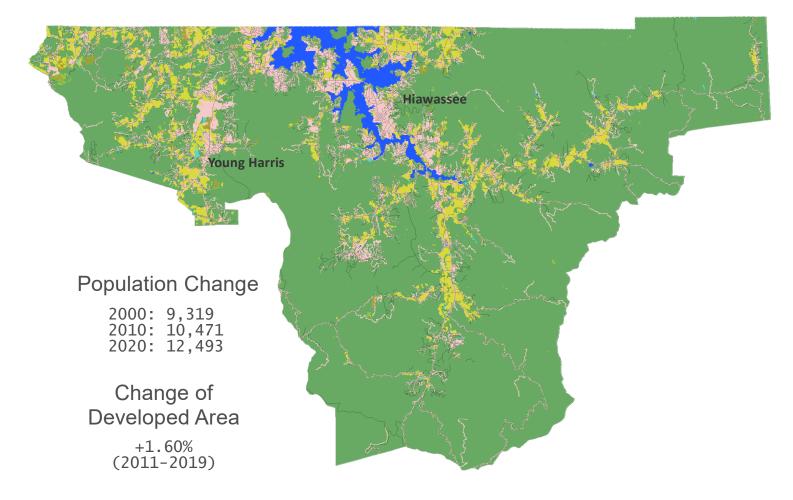
Change of Developed Area

> +1.10% (2011-2019)





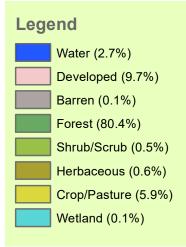
Towns County Land Cover, 2019

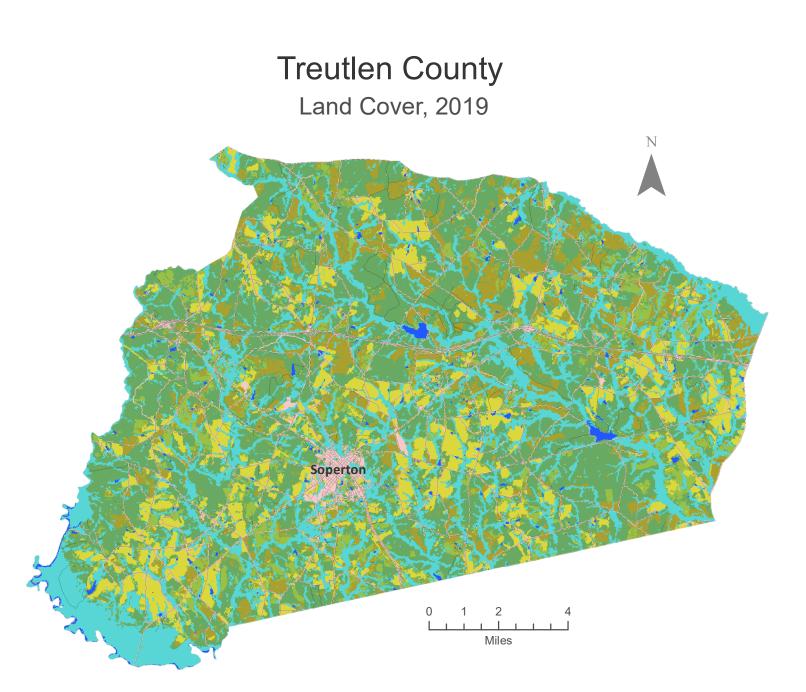






Source Data from the U.S. Geological Survey and the U.S. Census Bureau





Water (0.9%)
Developed (6.4%)
Barren (0.0%)
Forest (38.7%)
Shrub/Scrub (6.7%)
Herbaceous (12.0%)
Crop/Pasture (12.5%)
Wetland (22.7%)

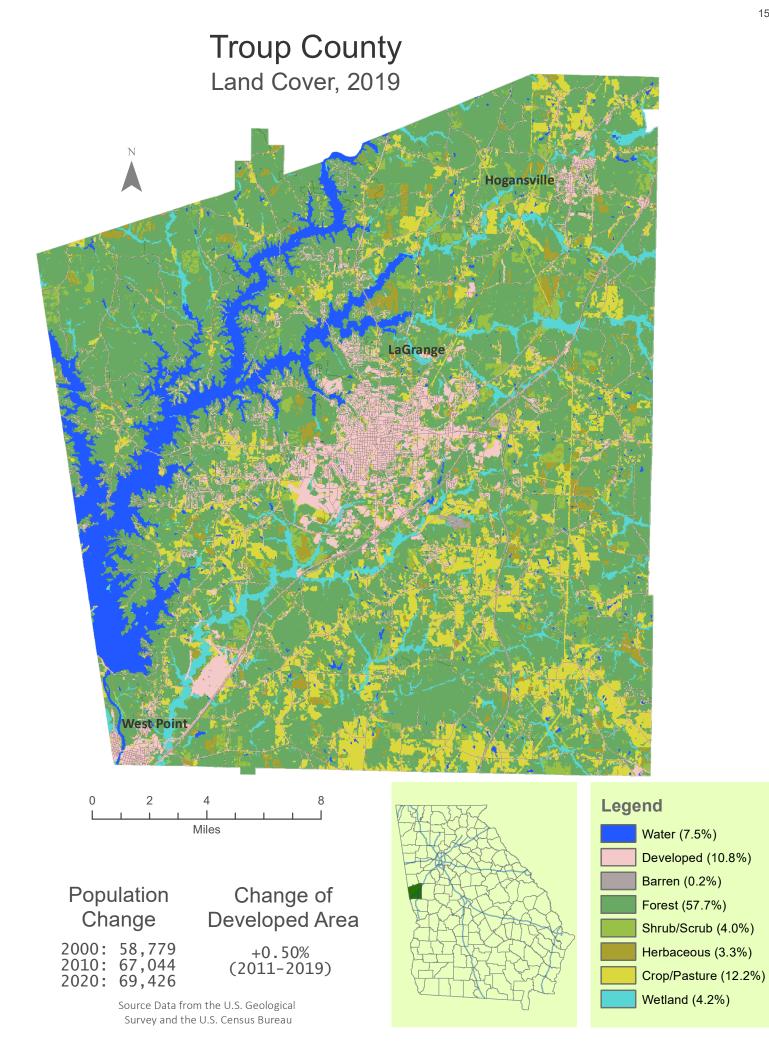
Population Change

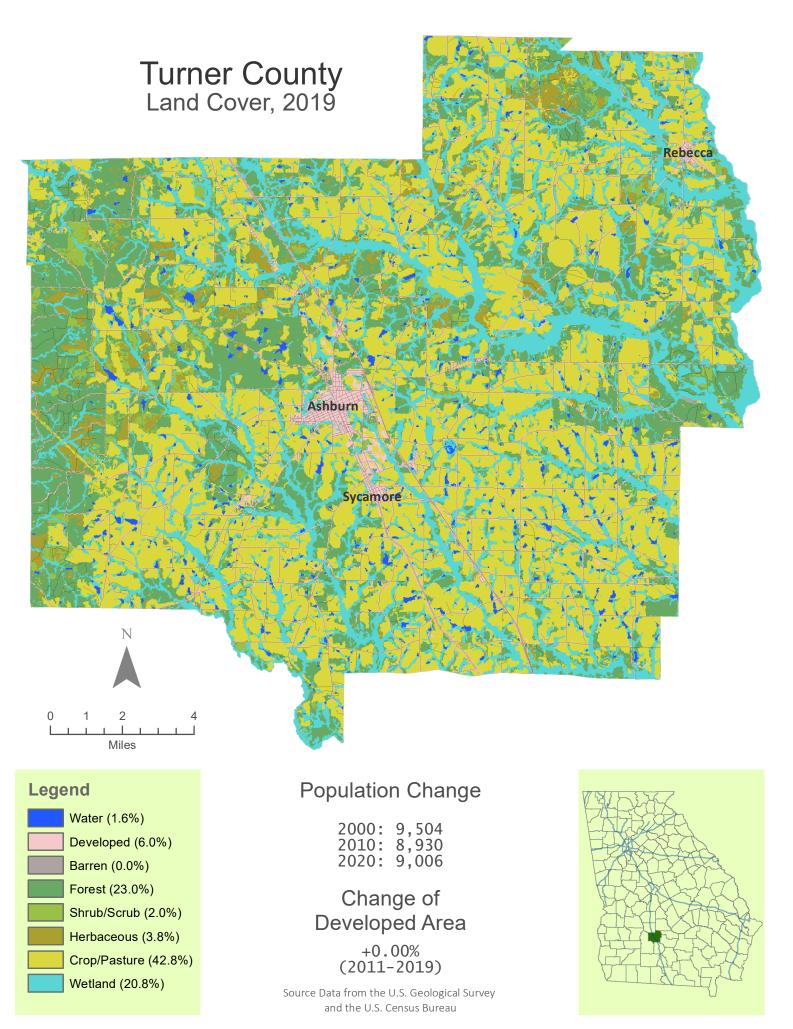
2000:	6,854
2010:	6,885
2020:	6,406

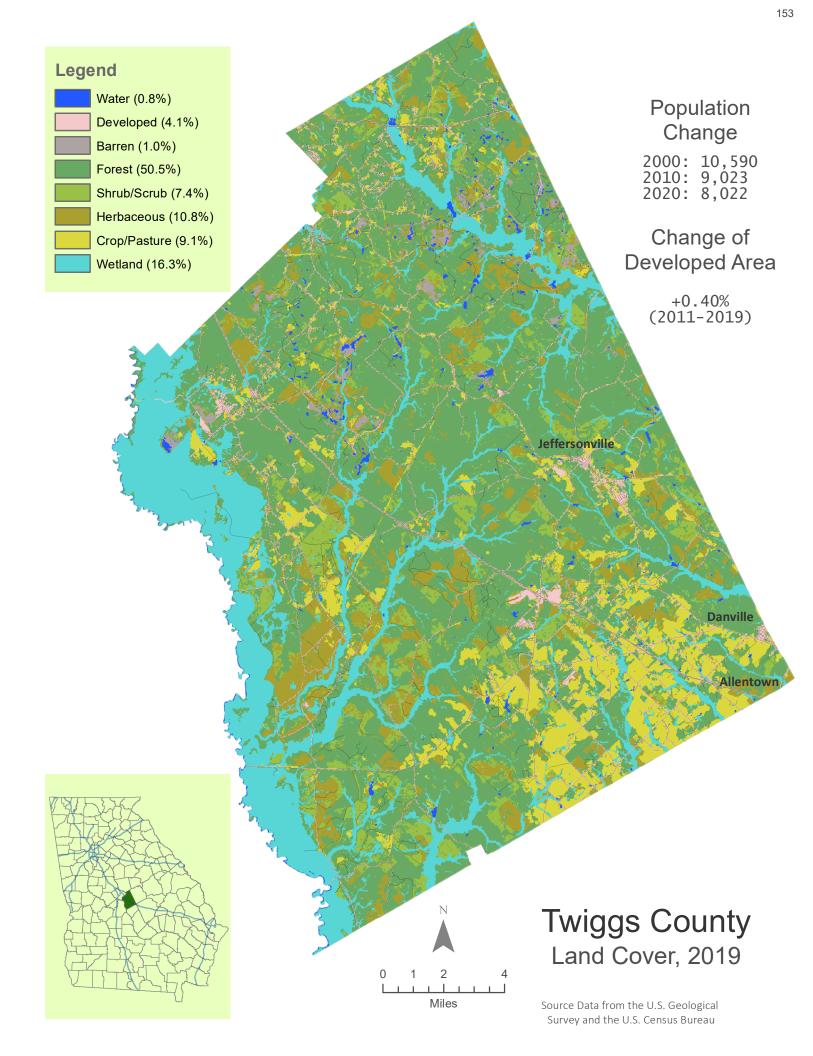
Change of Developed Area

+0.30% (2011-2019)









Union County Land Cover, 2019

0

Blairsville

2

Miles

4

1

Legend

N



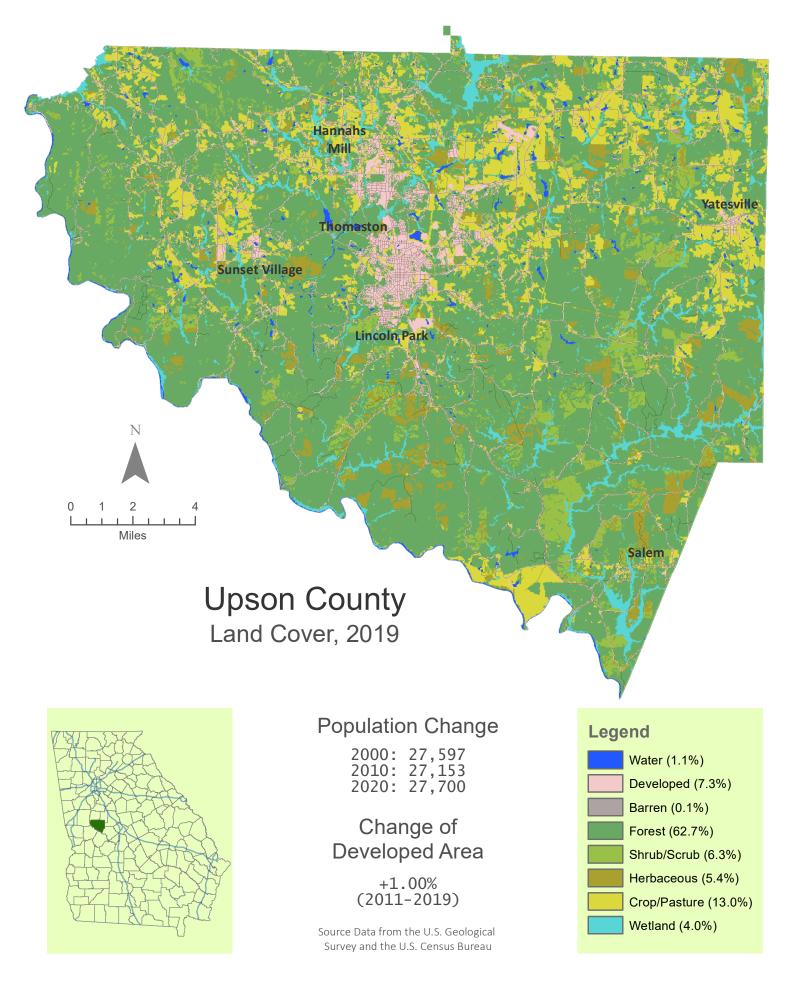
Water (1.7%) Developed (9.3%) Barren (0.2%) Forest (79.6%) Shrub/Scrub (1.0%) Herbaceous (0.9%) Crop/Pasture (7.4%) Wetland (0.1%)

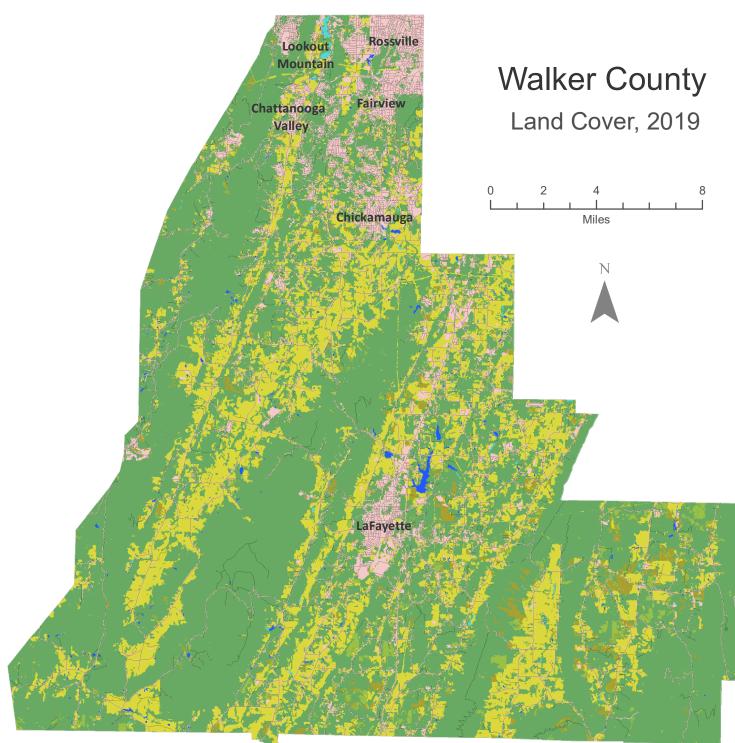


Population Change

2000: 17,289 2010: 21,356 2020: 24,632

Change of Developed Area +1.20% (2011-2019)



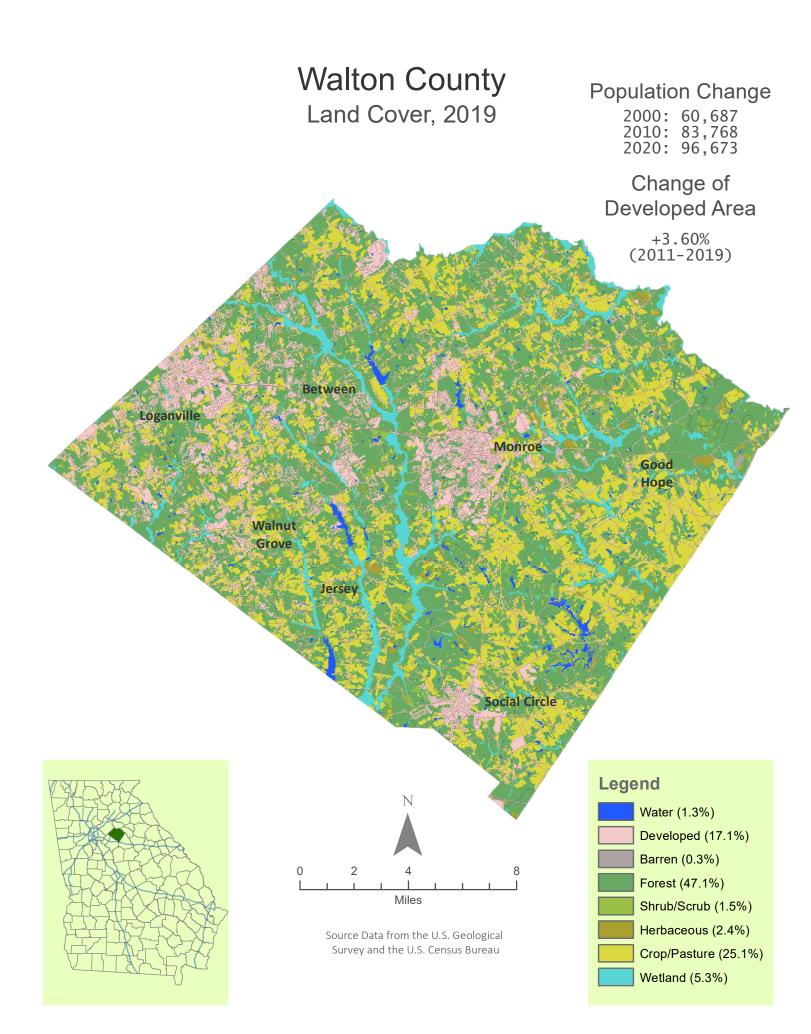


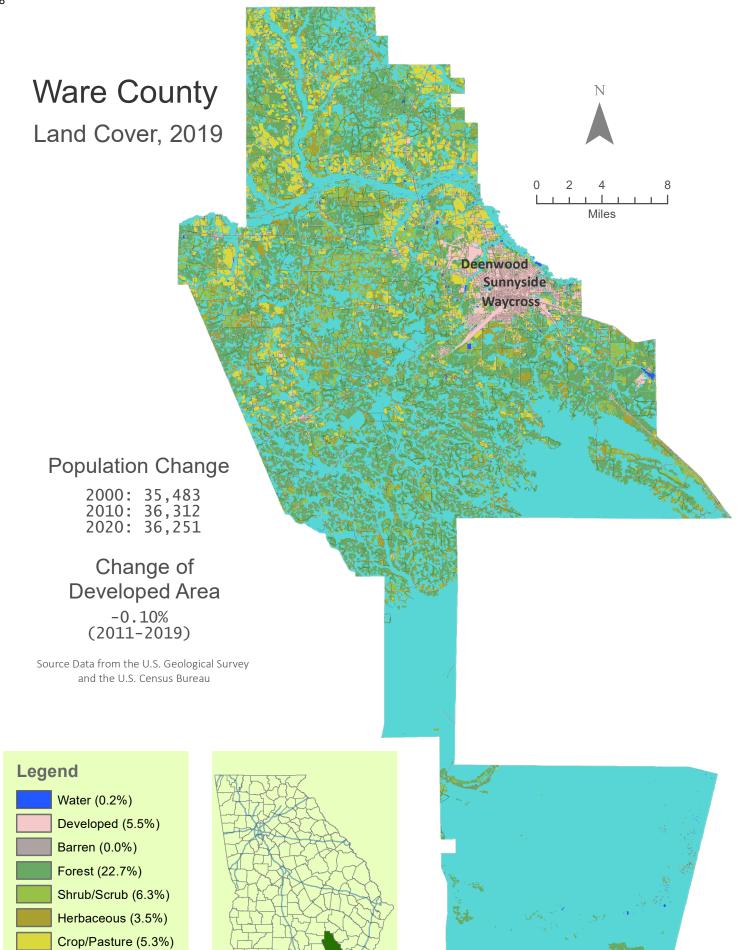
Water (0.4%)
Developed (10.7%)
Barren (0.1%)
Forest (62.9%)
Shrub/Scrub (1.9%)
Herbaceous (2.2%)
Crop/Pasture (21.7%)
Wetland (0.2%)

Population Change

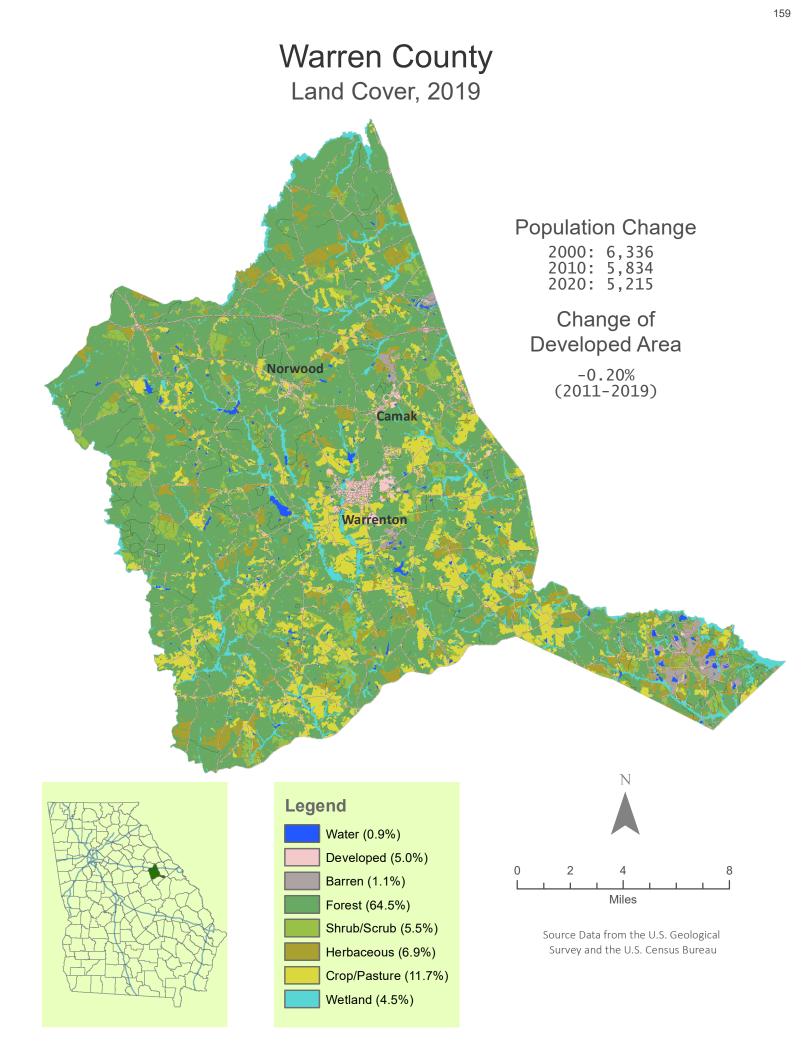
2000:	61,053
2010:	68,756
2020:	67,654

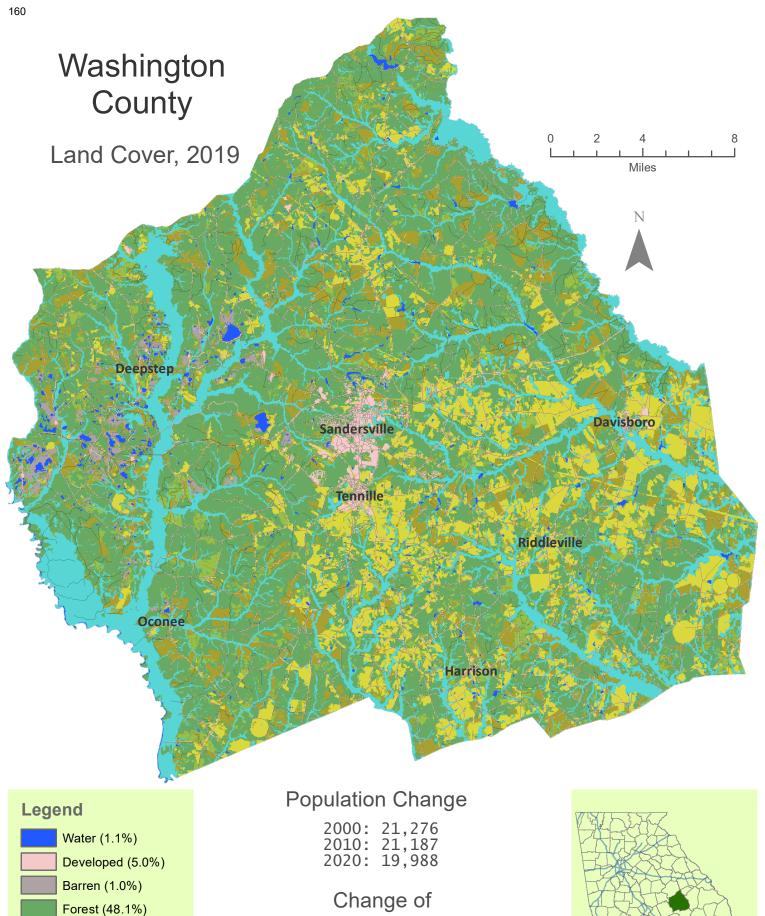
Change of Developed Area +0.30% (2011-2019)





Wetland (56.5%)





Developed Area +1.60%(2011 - 2019)

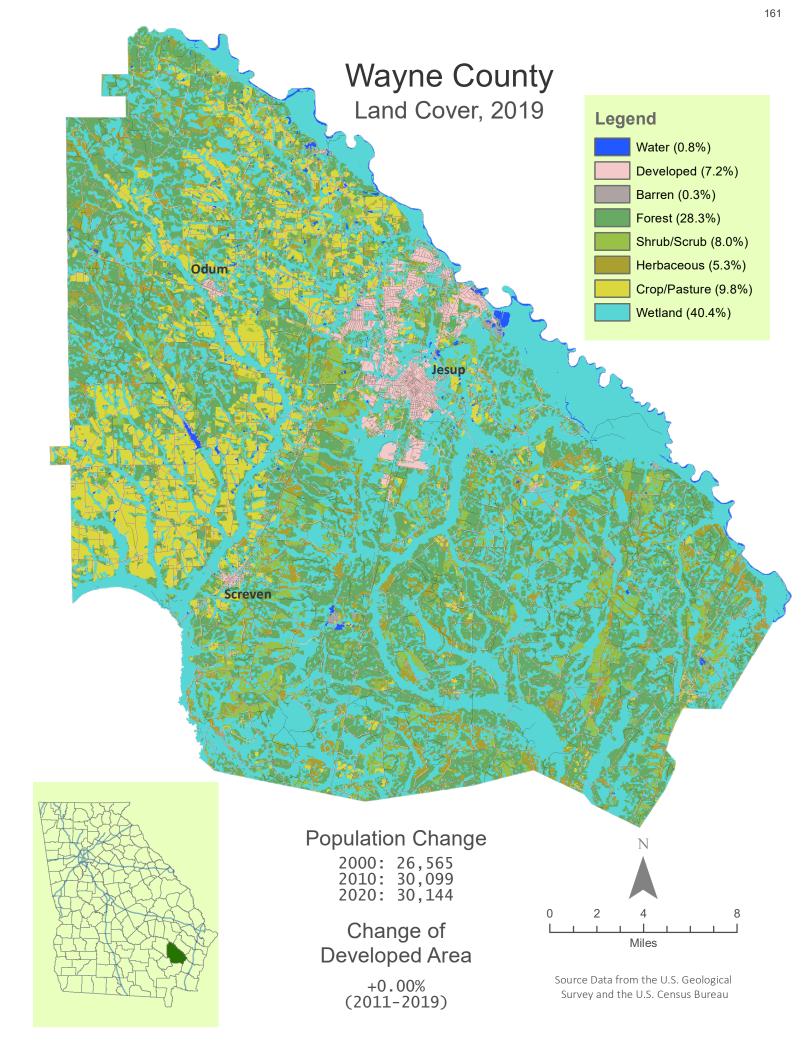
Shrub/Scrub (4.4%)

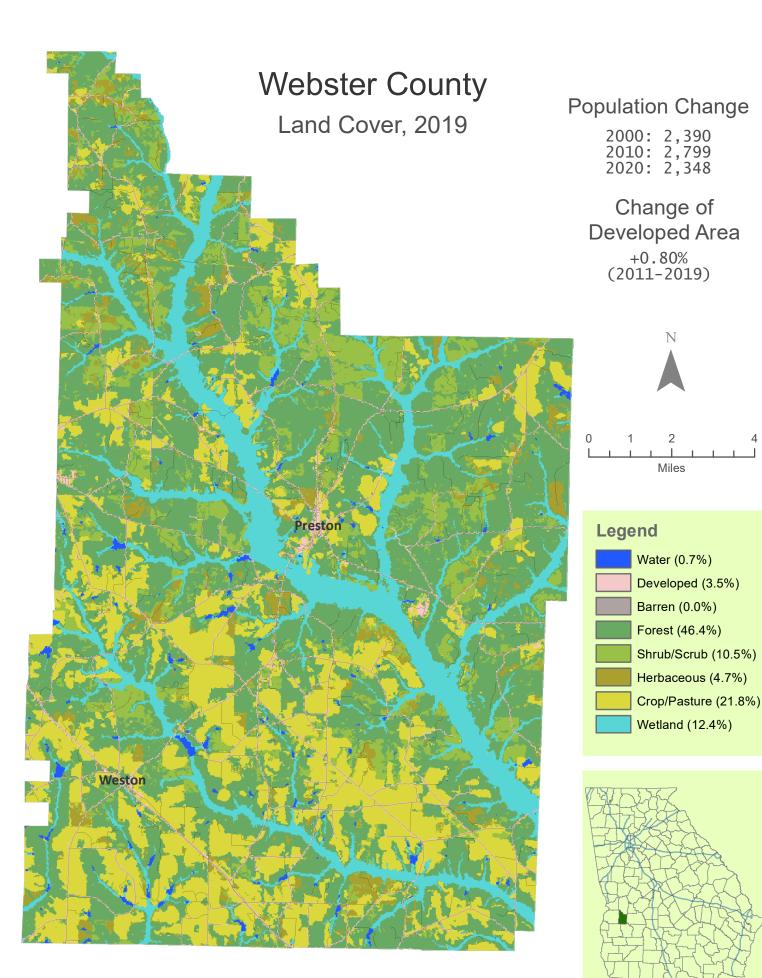
Herbaceous (11.1%)

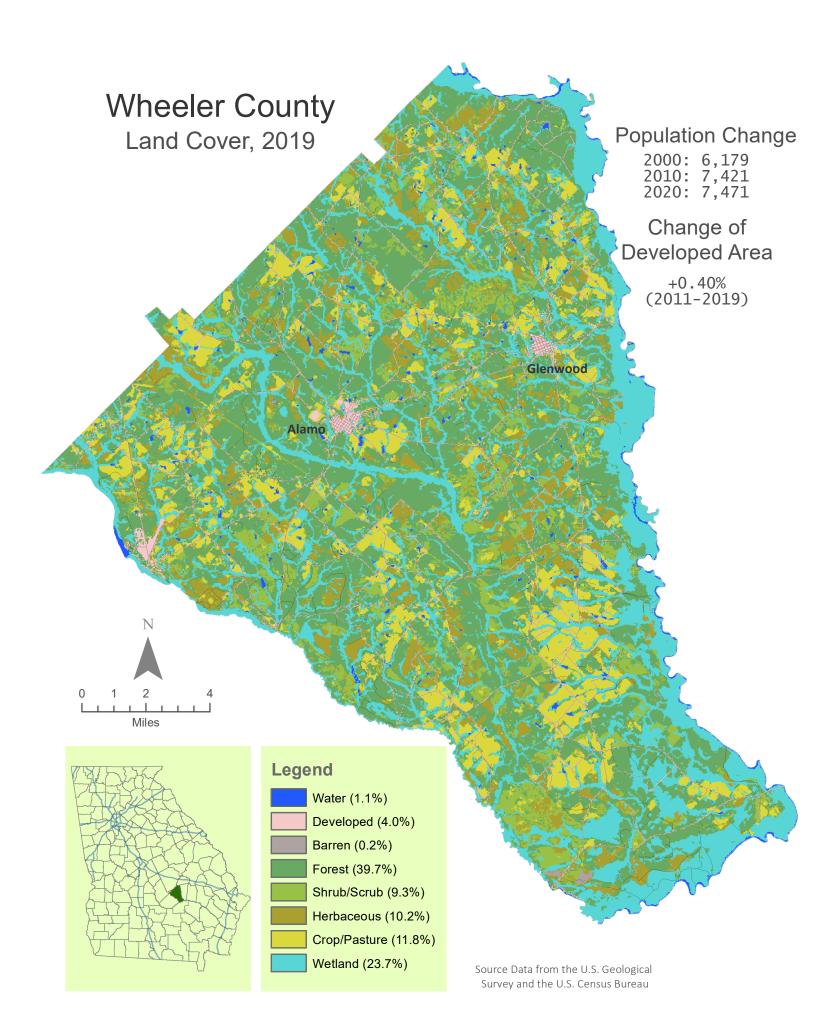
Crop/Pasture (13.0%)

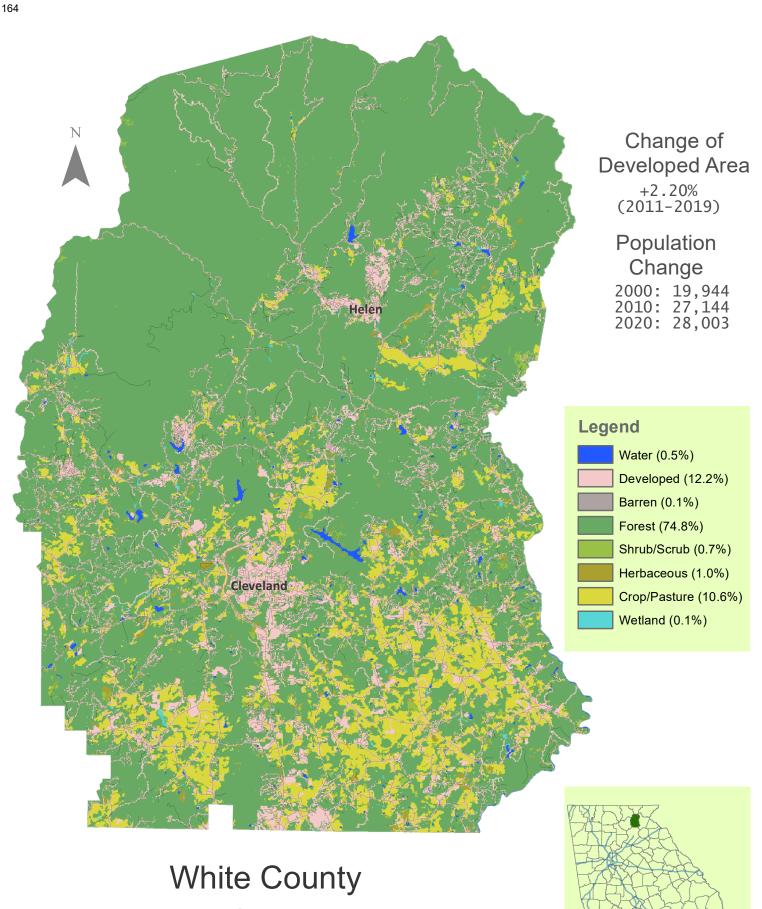
Wetland (16.3%)





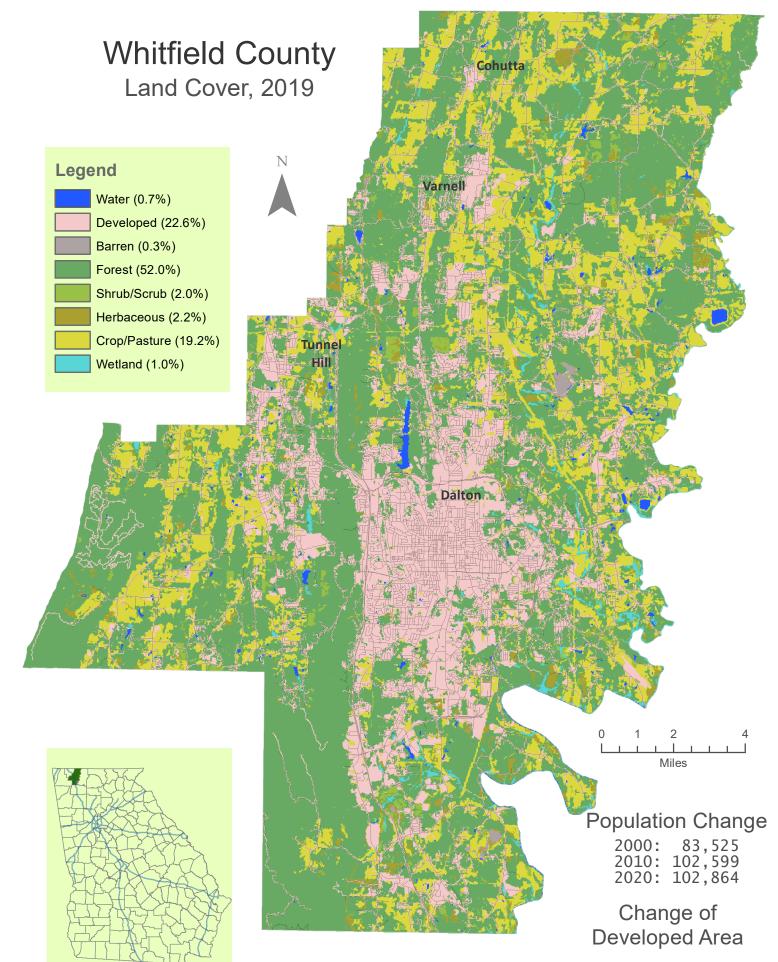






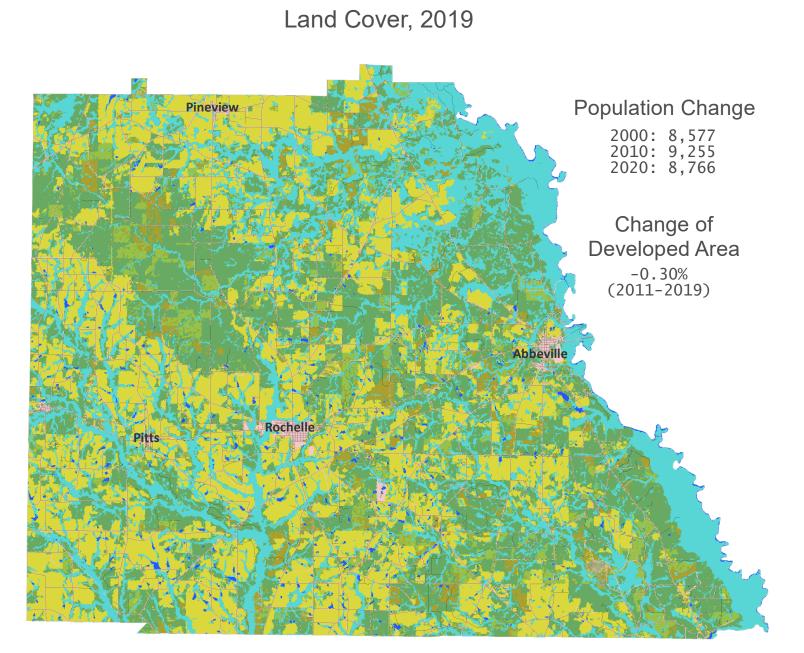
Land Cover, 2019





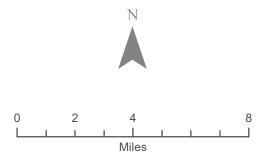
Source Data from the U.S. Geological Survey and the U.S. Census Bureau

+1.60% (2011-2019)

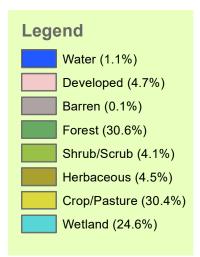


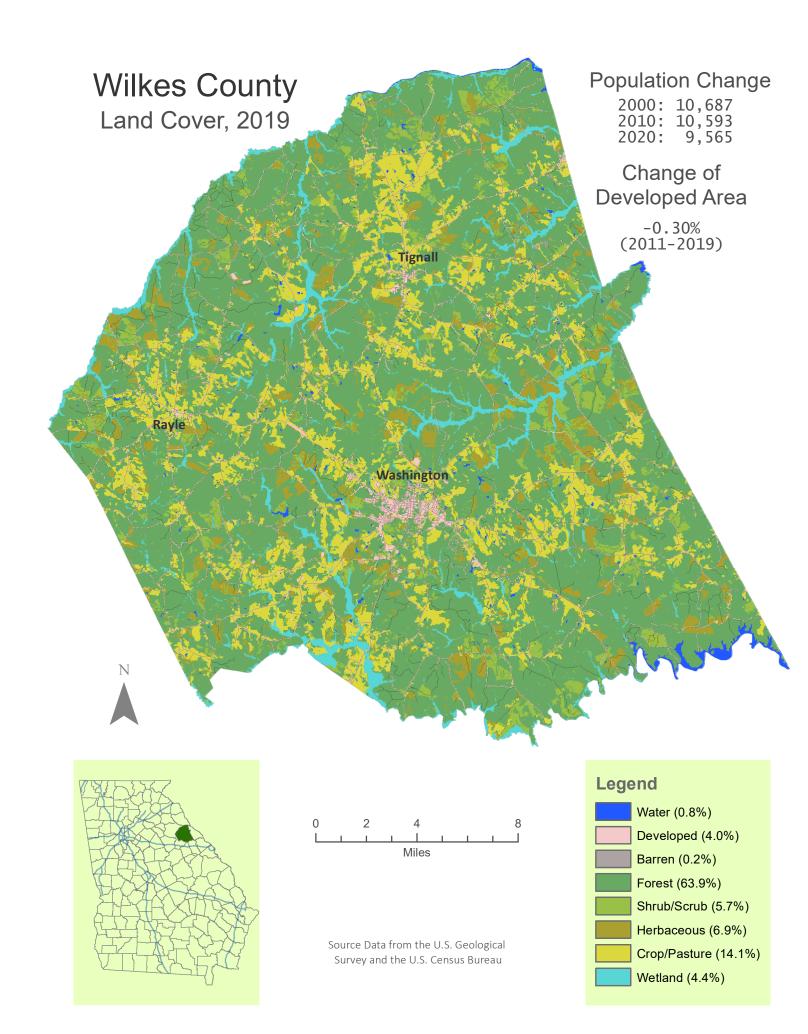
Wilcox County

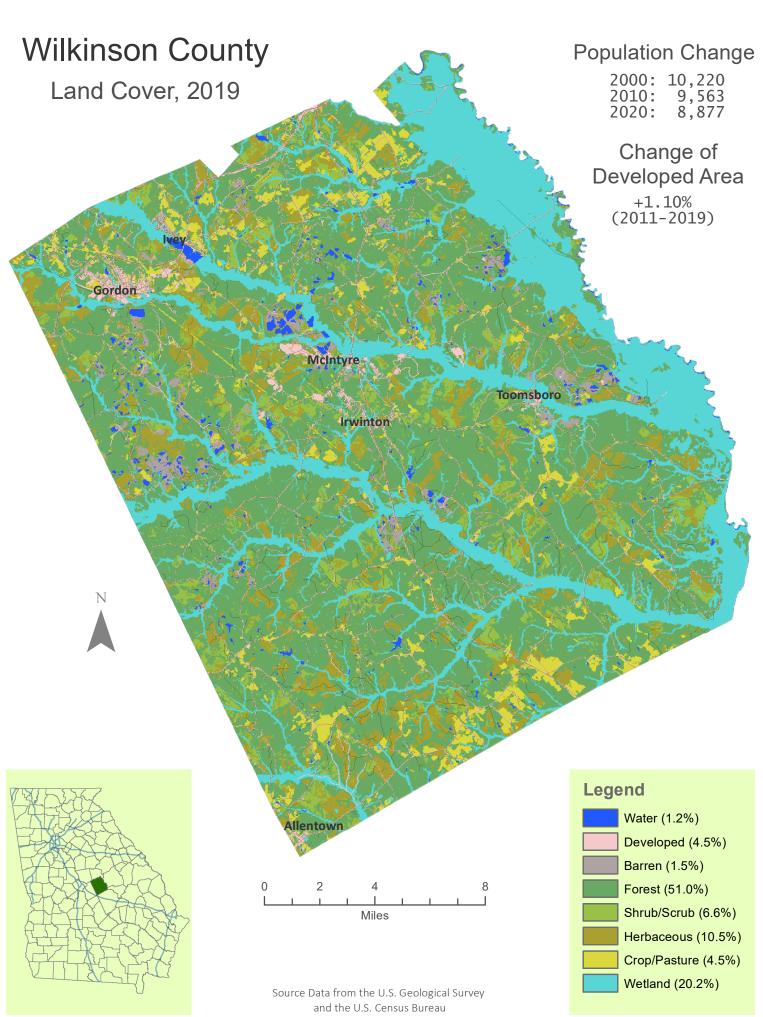




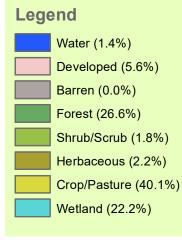
Source Data from the U.S. Geological Survey and the U.S. Census Bureau



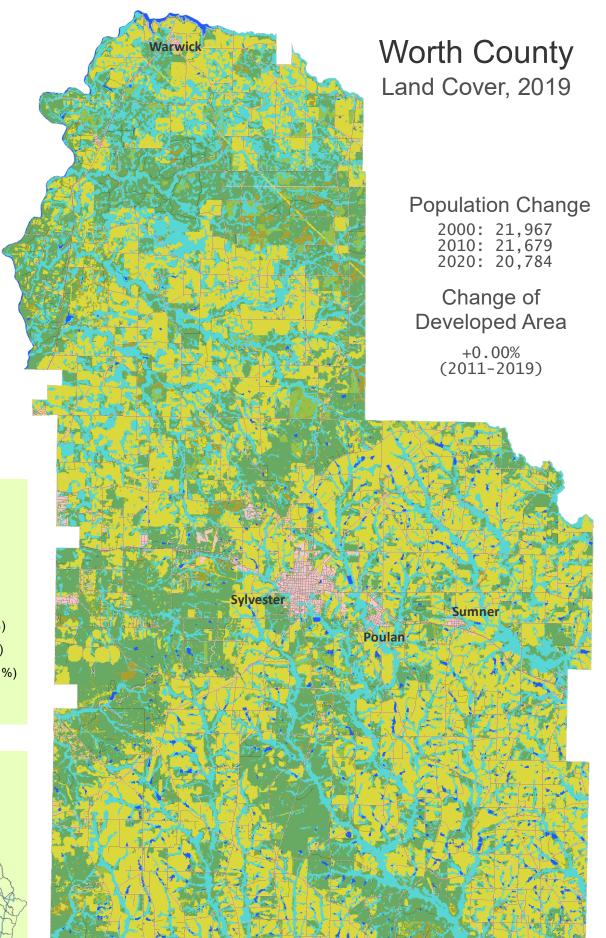










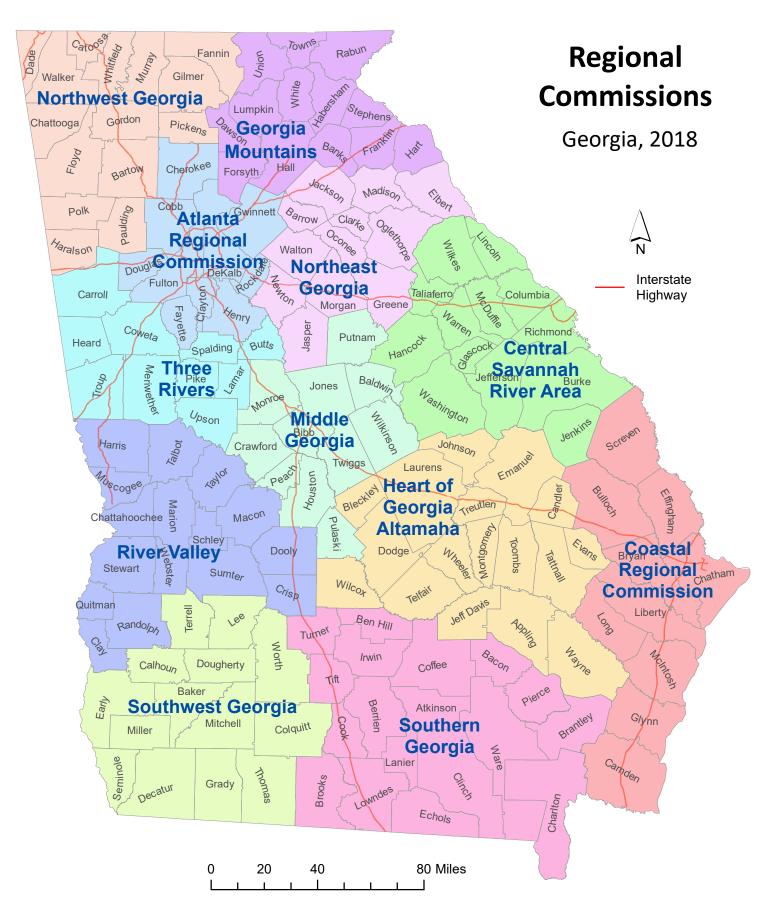


LAND COVER BY REGIONAL COMMISSIONS

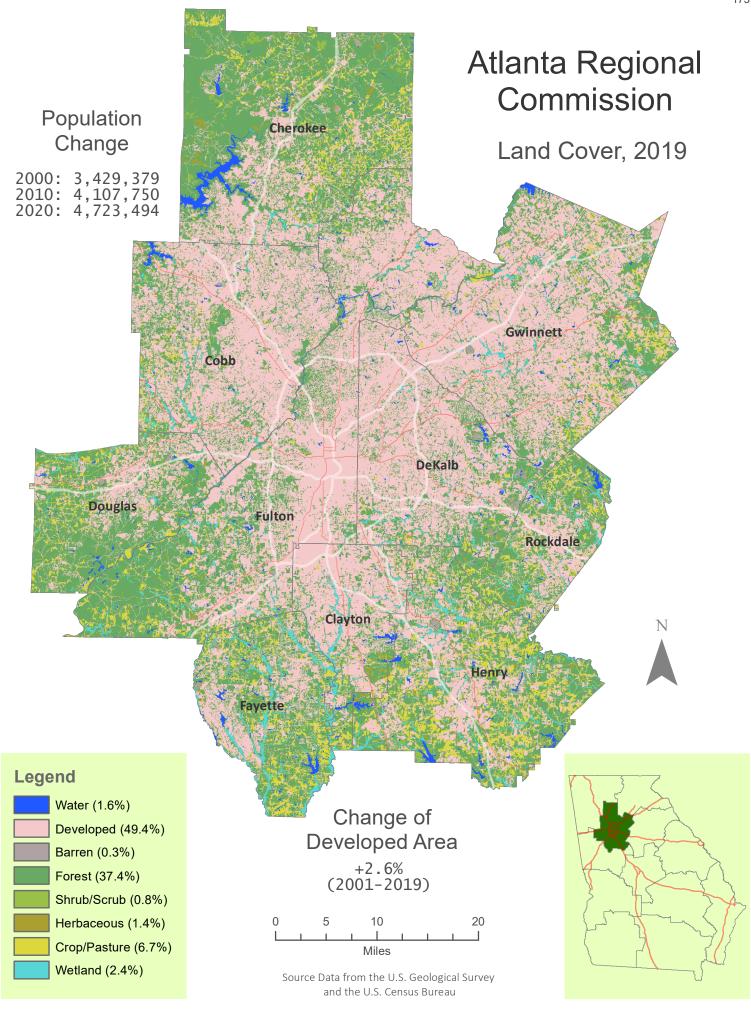
Refer to the following table for each regional commission map page. The regional commissions in Georgia are mapped in the next page.

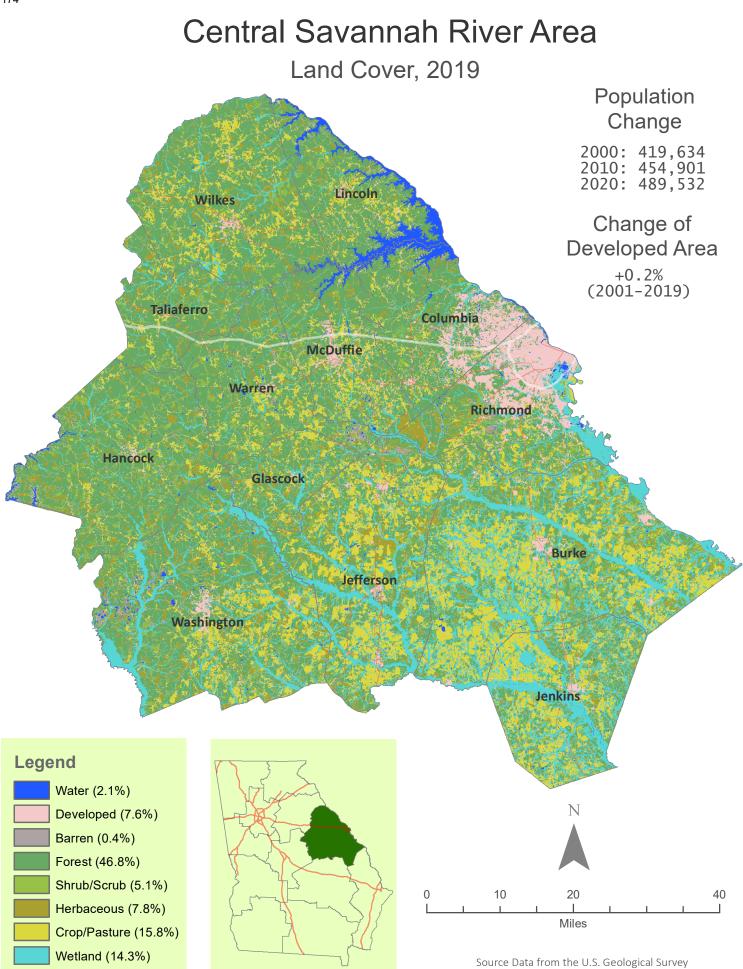
Regional Commission Name	Page
Atlanta Regional Commission	173
Central Savannah River Area	174
Coastal Regional Commission	175
Georgia Mountains	176
Heart of Georgia Altamaha	177
Middle Georgia	178
Northeast Georgia	179
Northwest Georgia	180
River Valley	181
Southern Georgia	182
Southwest Georgia	183
Three Rivers	184

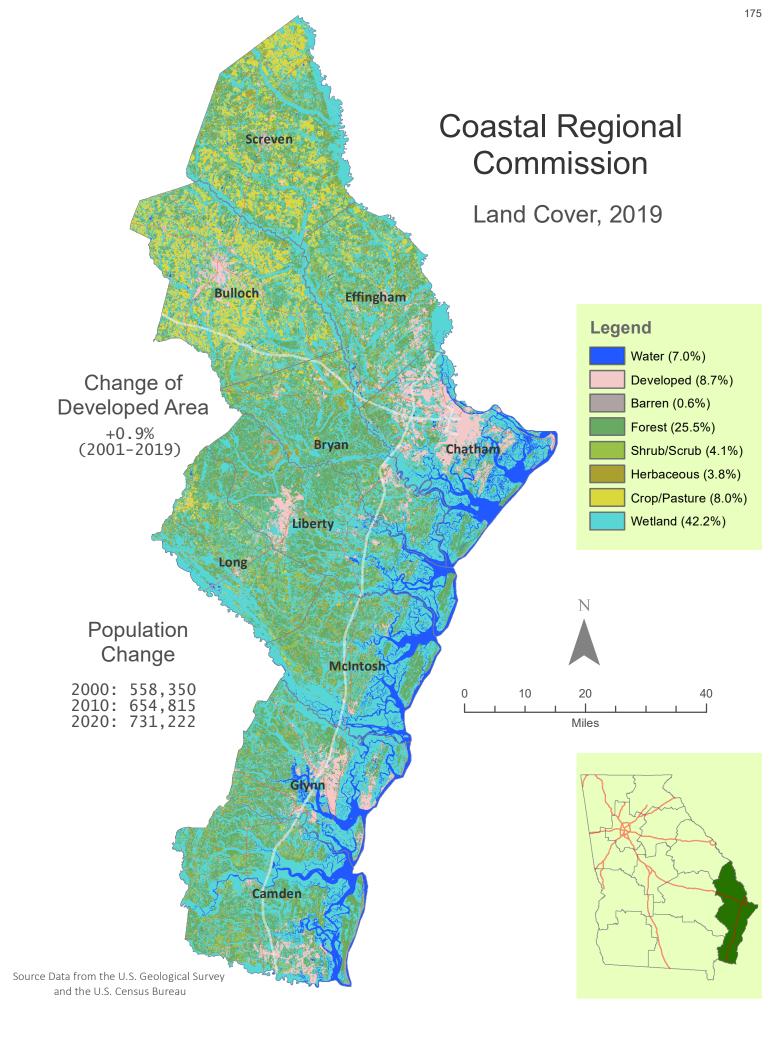
"Georgia's twelve regional commissions are public agencies created and established by the Georgia Planning Act (O.C.G.A. 50-8-32) in order to assist local governments on a regional basis and to develop, promote and assist in establishing coordinated and comprehensive planning in the state. The Department of Community Affairs contracts annually with the Regional Commissions to primarily foster effective local and regional planning and implementation of those plans. Regional Commissions may also administer other state and federal programs." (Refer to https://www.dca.ga.gov for more details.)



Map projection: Georgia Statewide Lambert Projection Background image: a mosaic of Landsat 8 imagery Source data from the U.S. Geological Survey and the U.S. Census Bureau

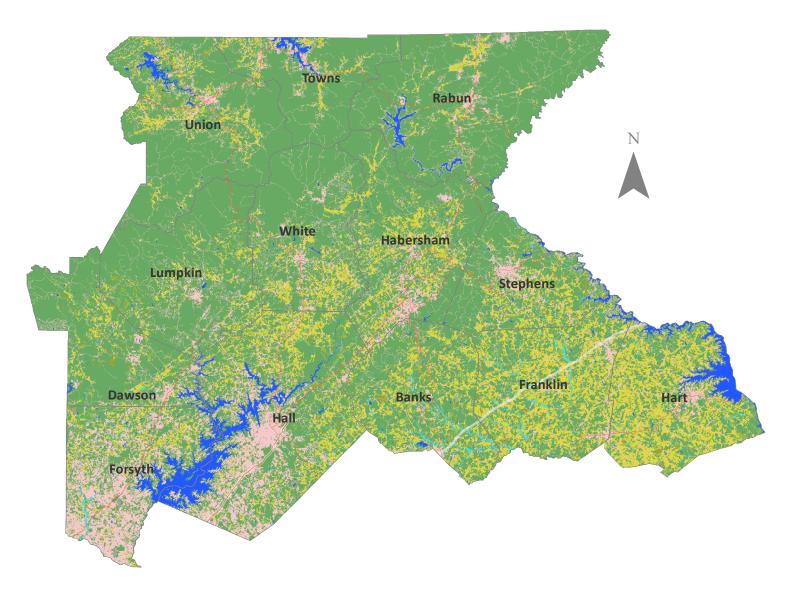


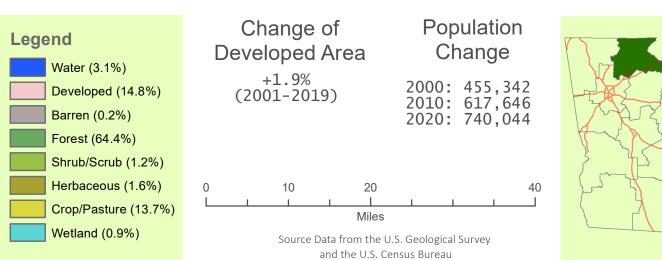


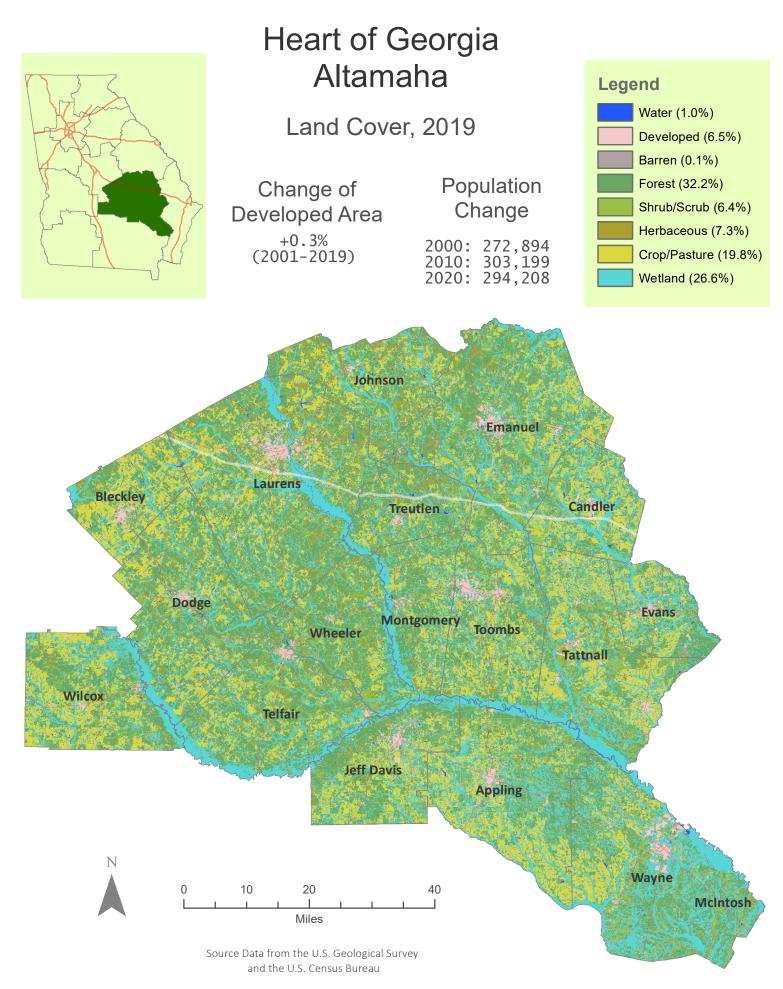


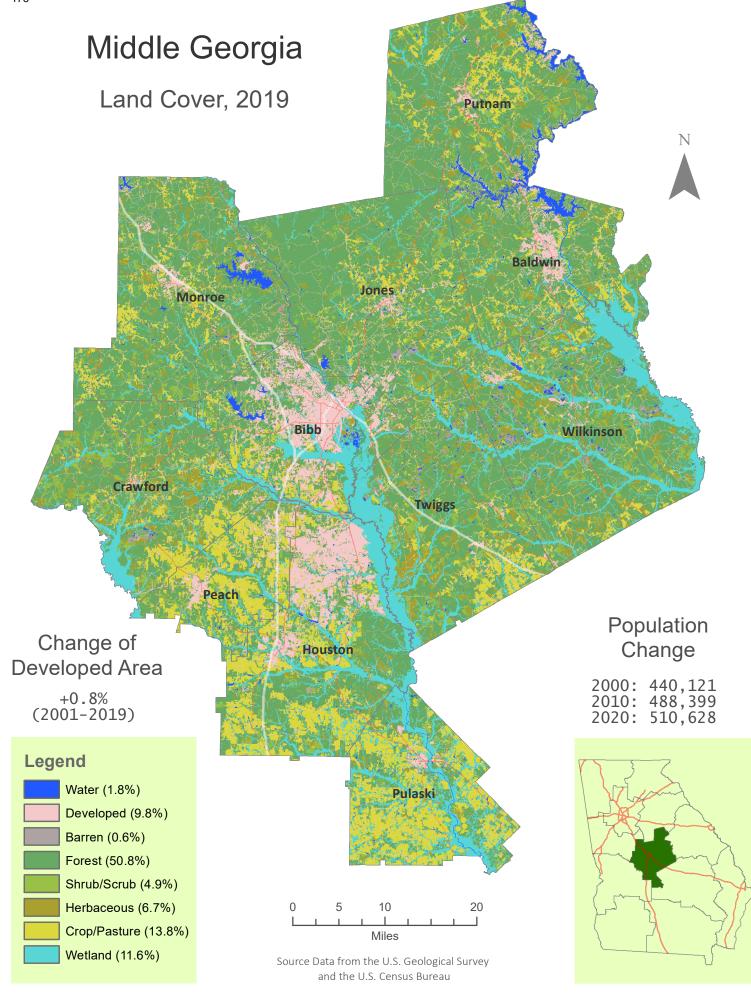
Georgia Mountains

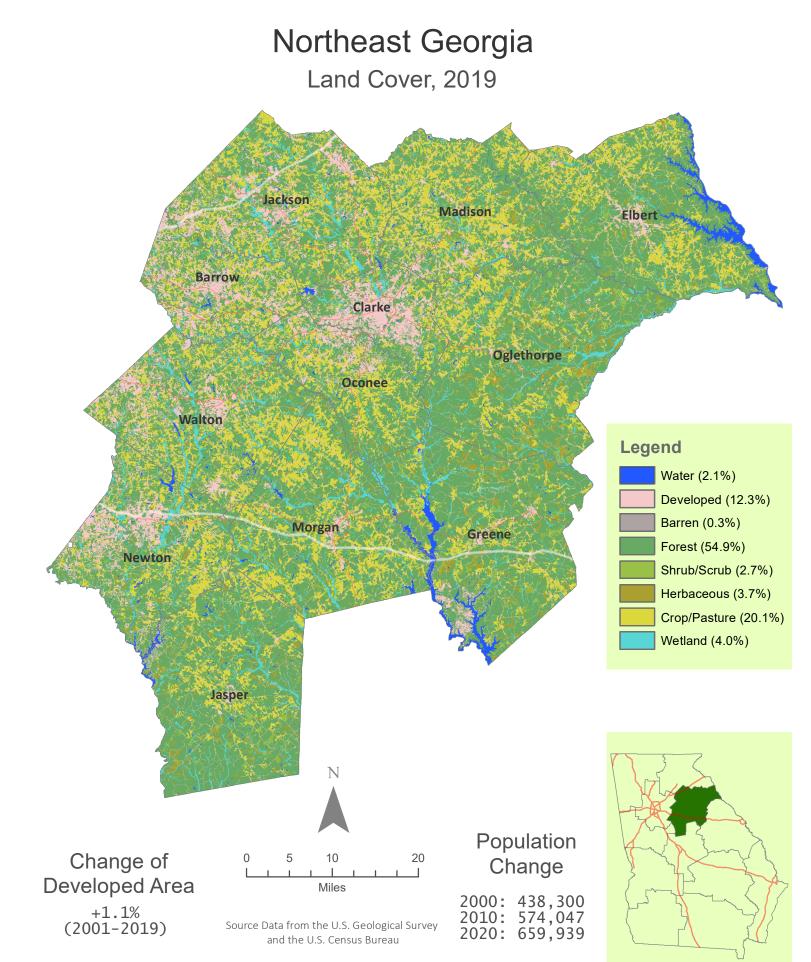
Land Cover, 2019



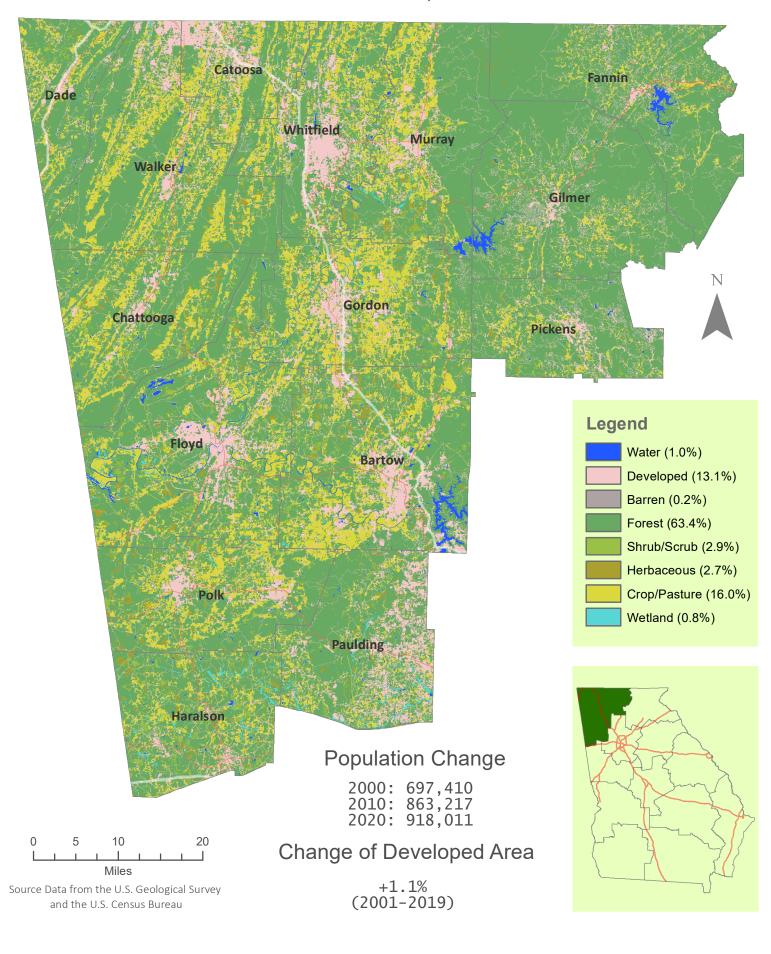


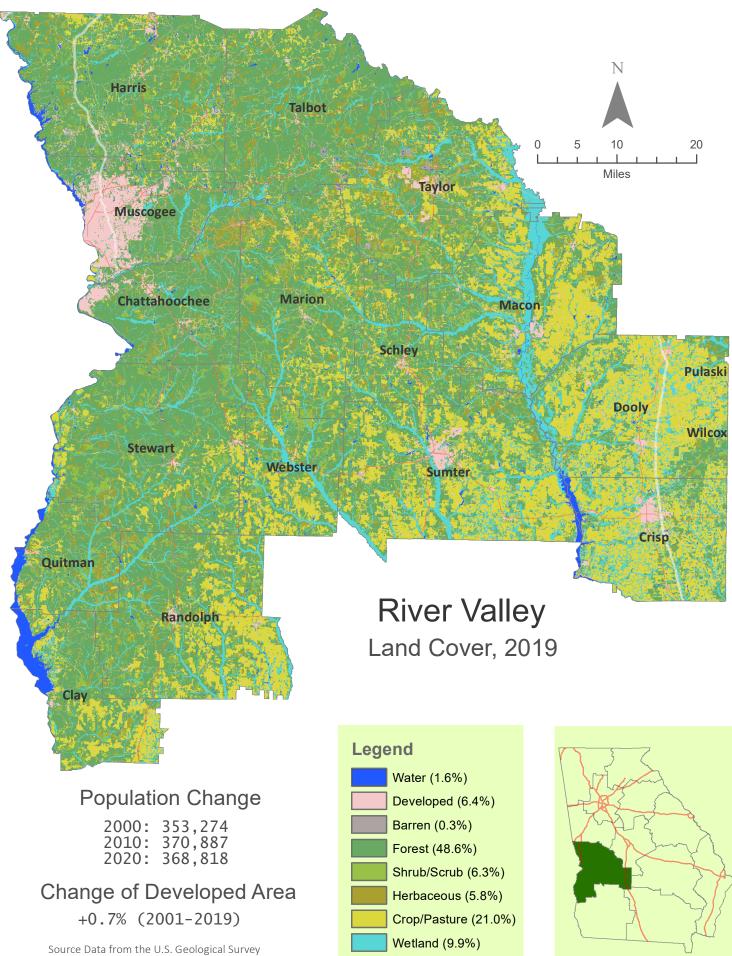




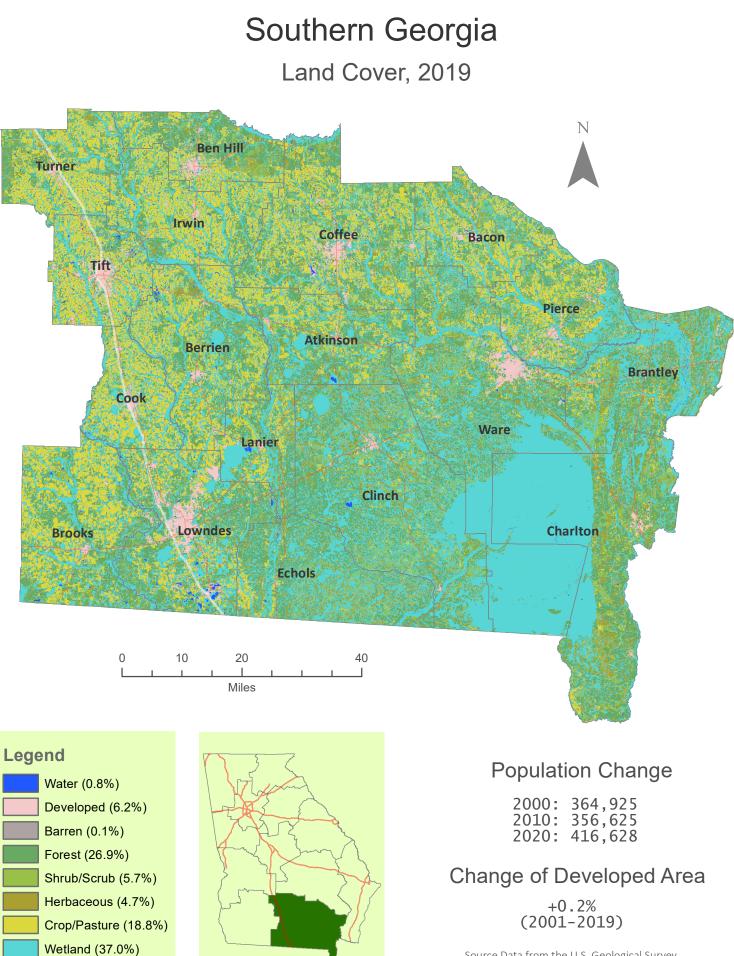


Northwest Georgia Land Cover, 2019

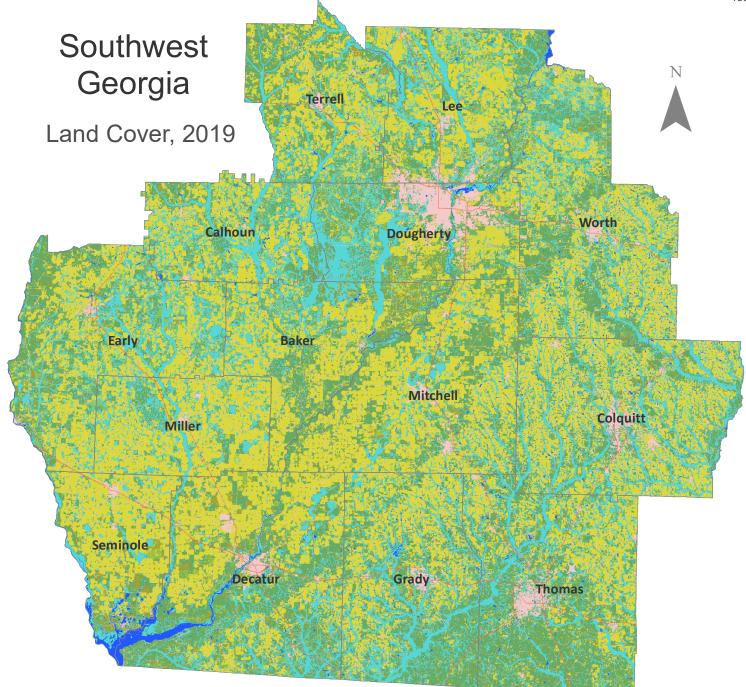


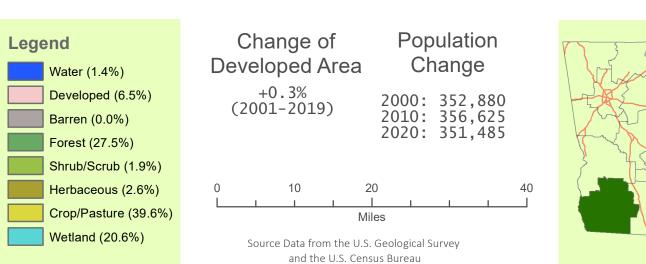


ource Data from the U.S. Geological Surve and the U.S. Census Bureau

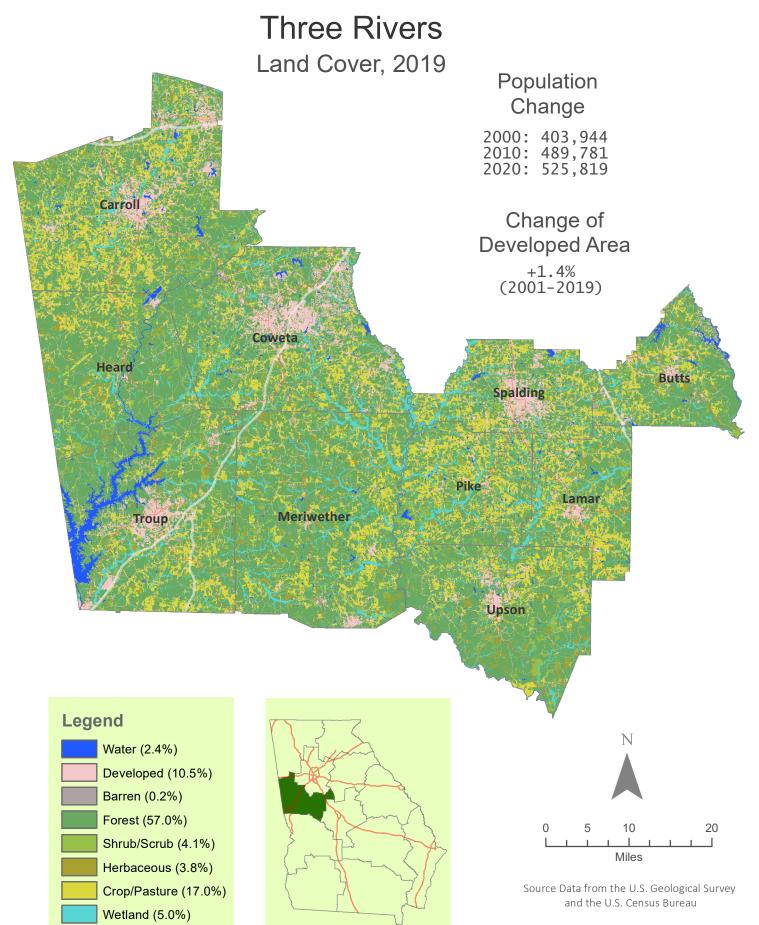


Source Data from the U.S. Geological Survey and the U.S. Census Bureau





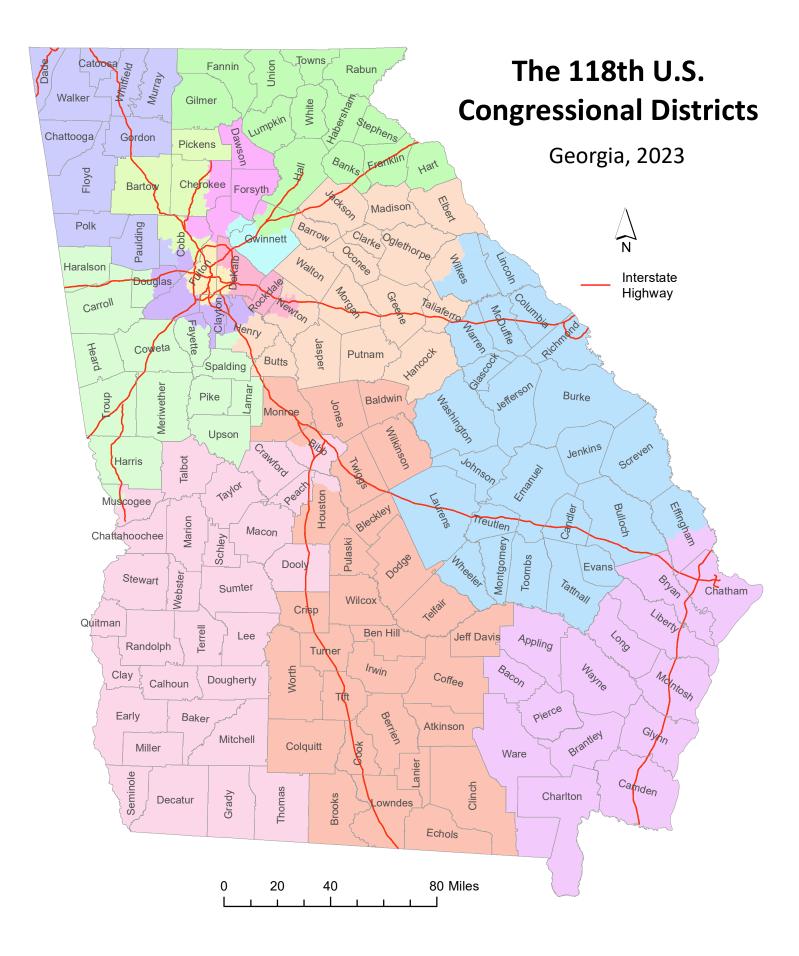




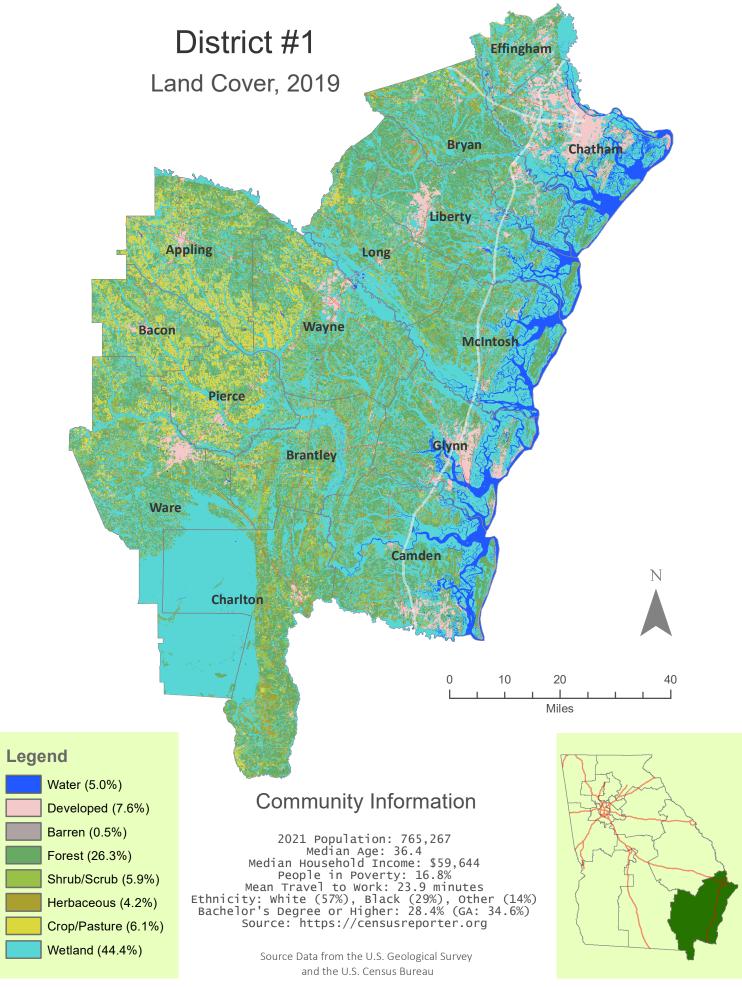
LAND COVER BY U.S. CONGRESSIONAL DISTRICTS

Refer to the table below for each congressional district map page. The U.S. Congressional Districts in Georgia are mapped in the next page.

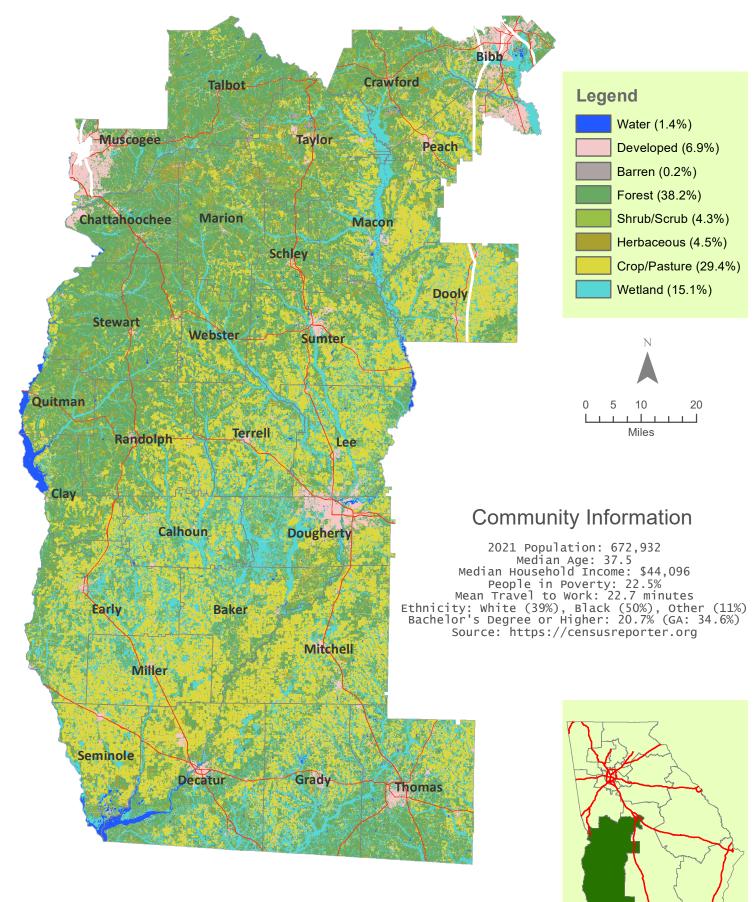
The 118 th U.S. Congressional Districts	Page
District #1	187
District #2	188
District #3	189
District #4	190
District #5	191
District #6	192
District #7	193
District #8	194
District #9	195
District #10	196
District #11	197
District #12	198
District #13	199
District #14	200

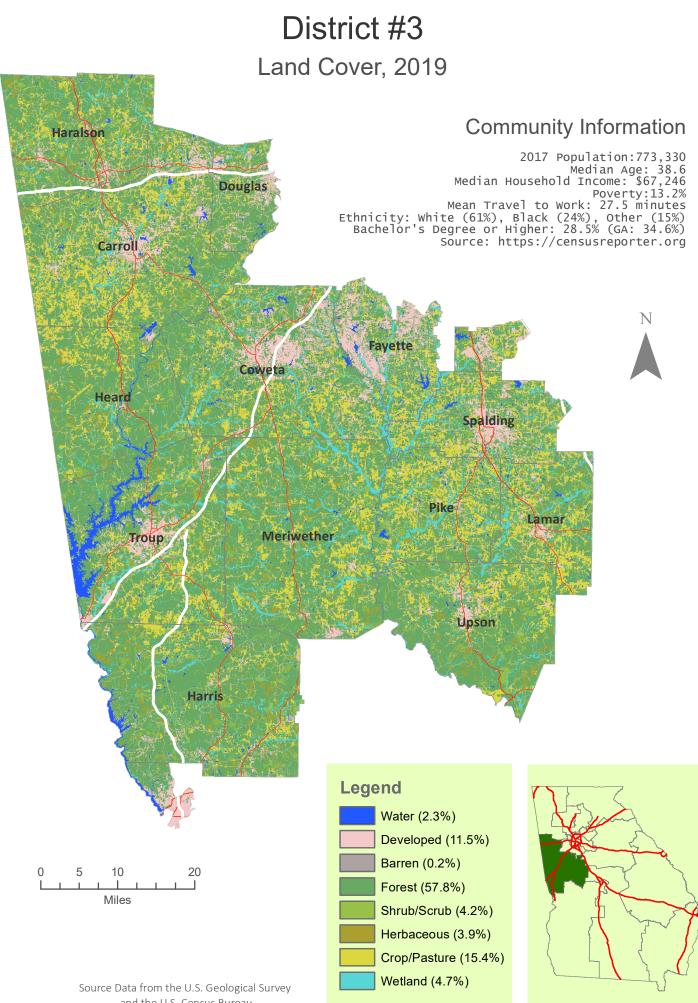


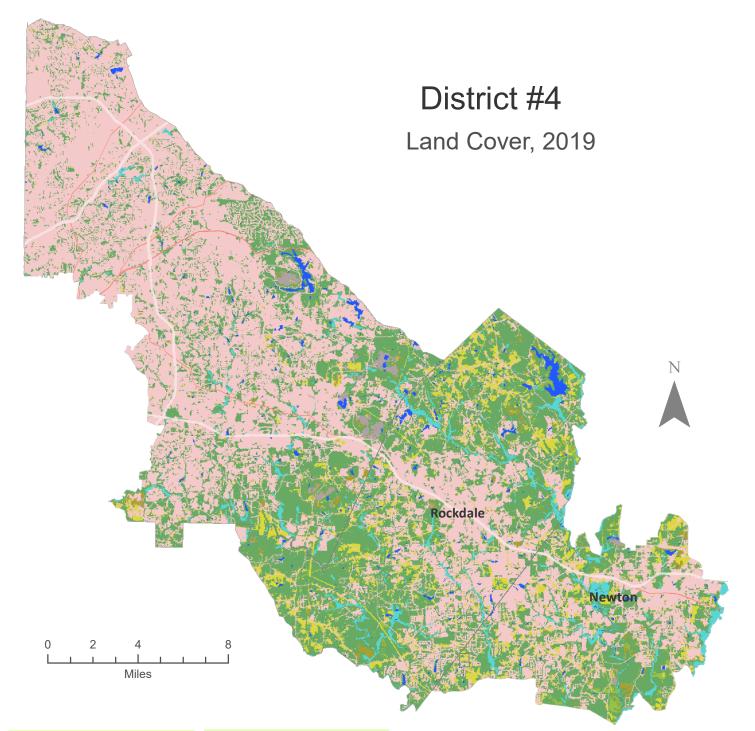
Map projection: Georgia Statewide Lambert Projection Source data from the U.S. Geological Survey and the U.S. Census Bureau



District #2 Land Cover, 2019

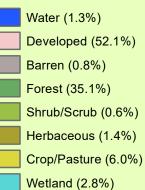








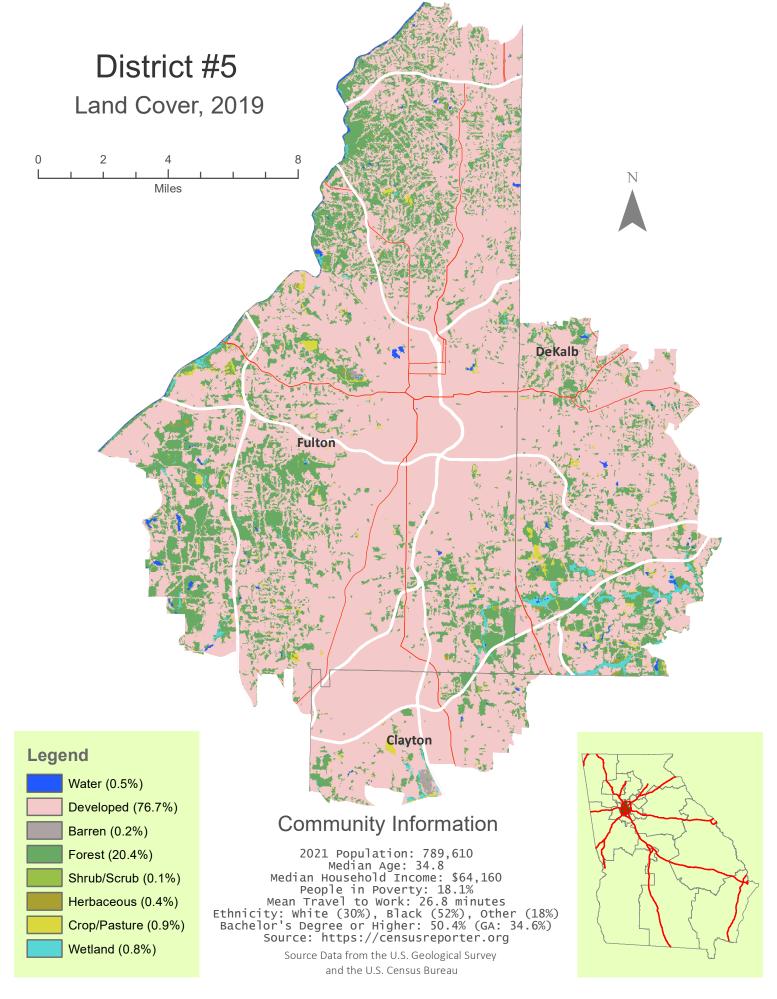
Legend

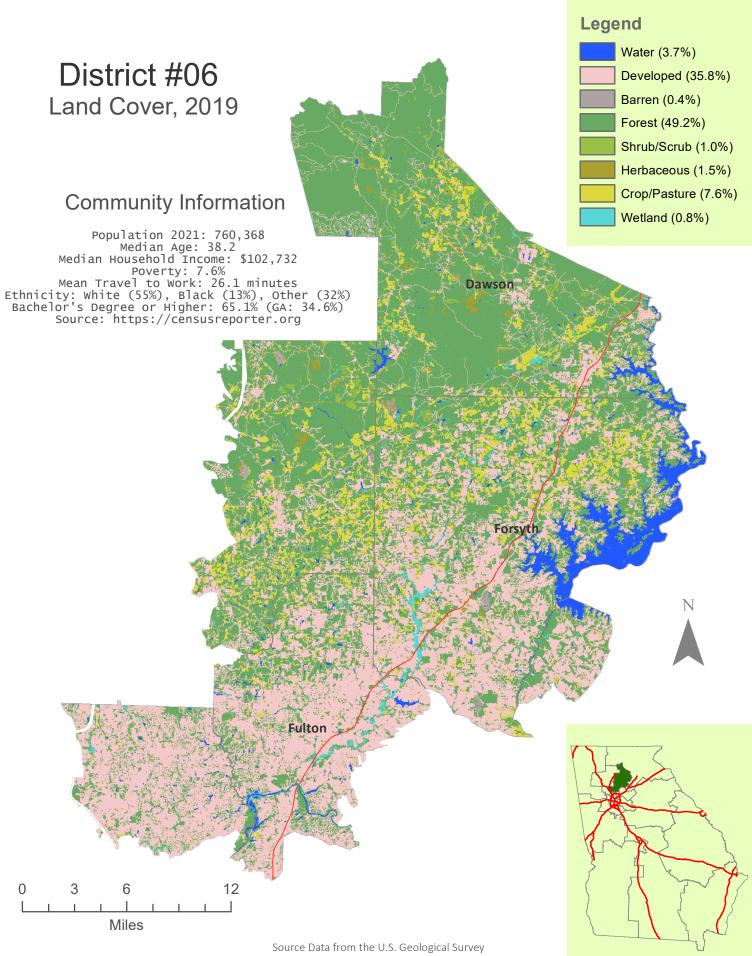


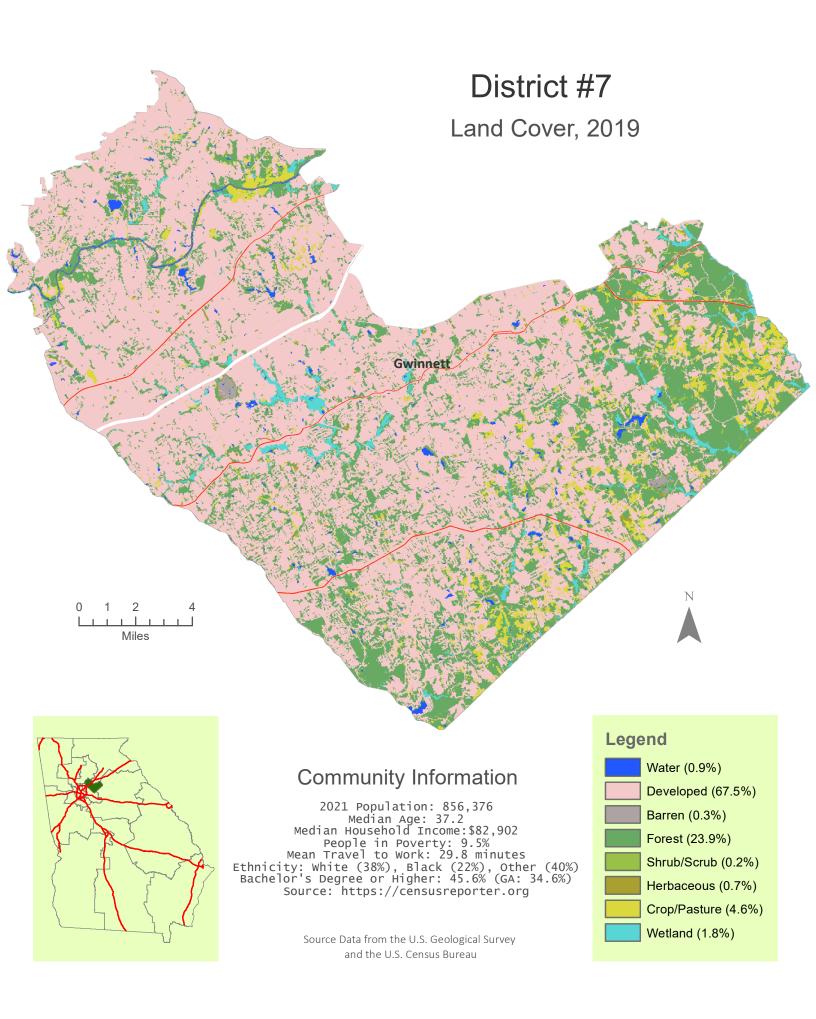
Community Information

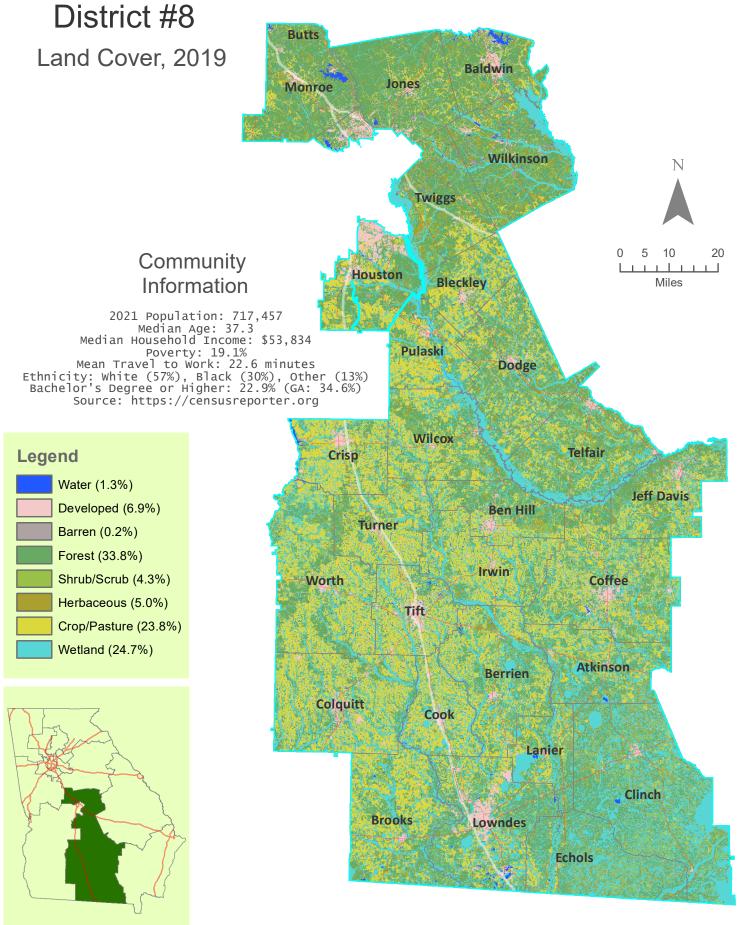
2017 Population: 775,516 Median Age: 38.4 Median Household Income: \$65,307 People in Poverty: 13.6% Mean Travel to Work: 32.4 minutes Ethnicity: White (23%), Black (58%), Other (19%) Bachelor's Degree or Higher: 33.6% (GA: 34.6%) Source: https://censusreporter.org

Source Data from the U.S. Geological Survey and the U.S. Census Bureau



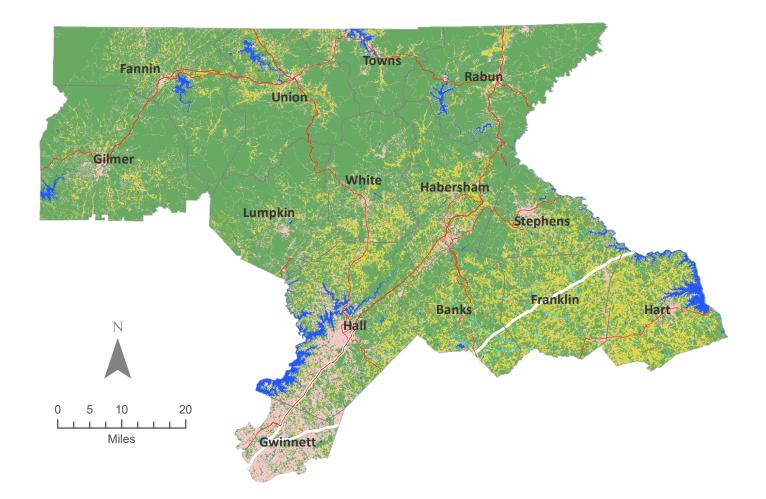




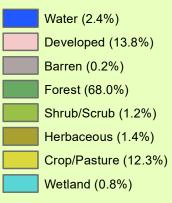


Source Data from the U.S. Geological Survey and the U.S. Census Bureau

District #9 Land Cover, 2019



Legend

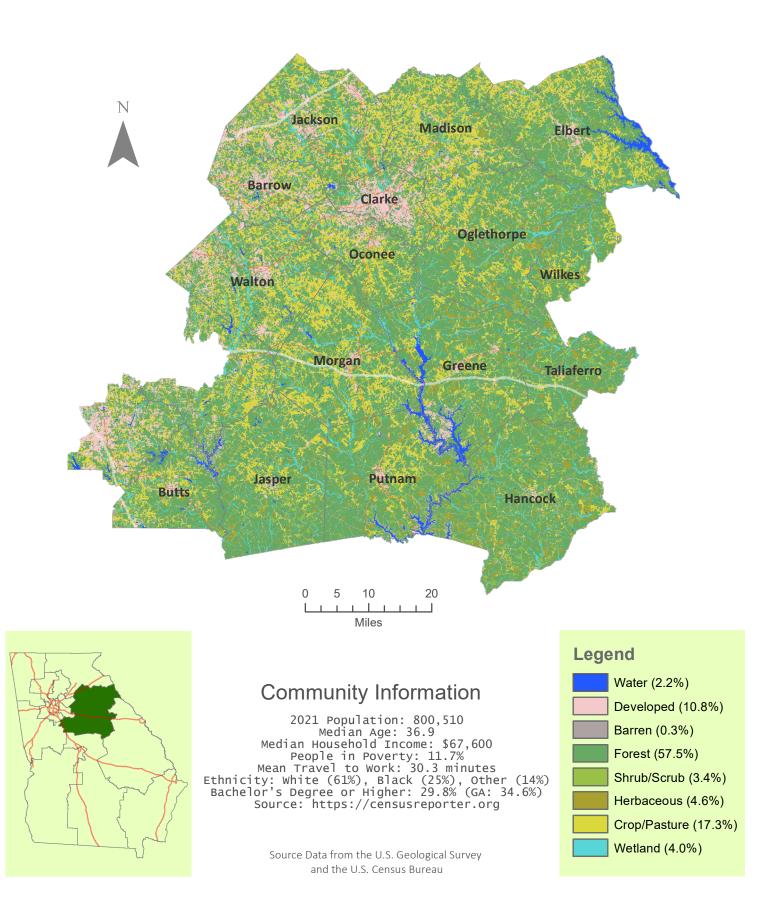


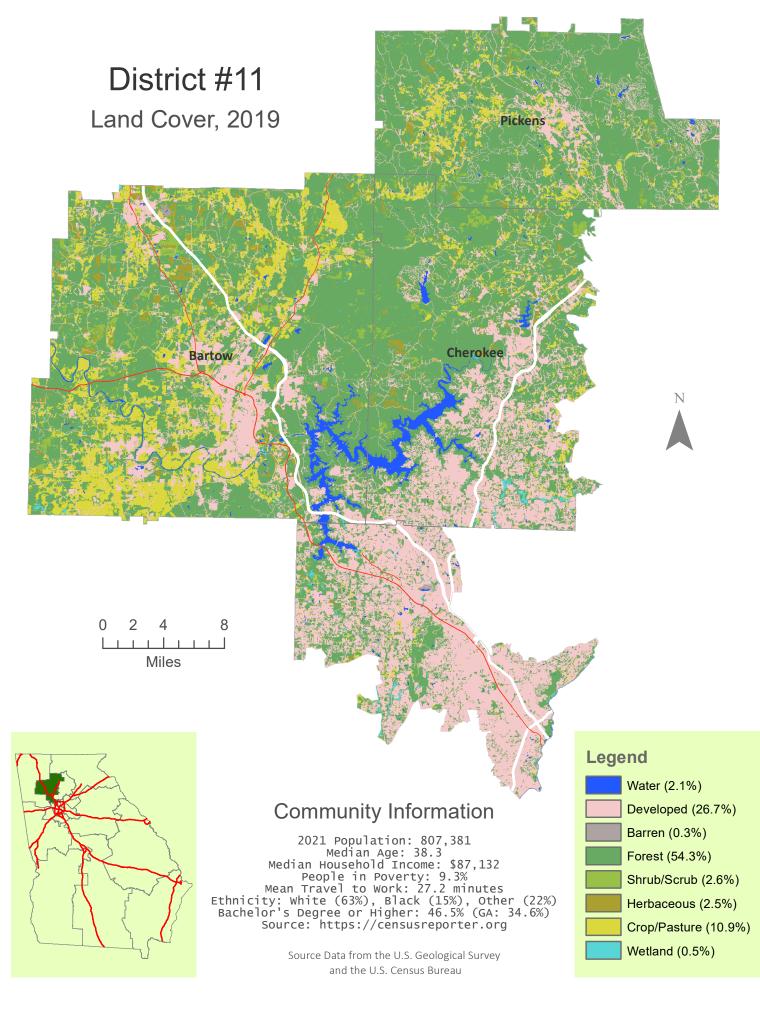
Community Information

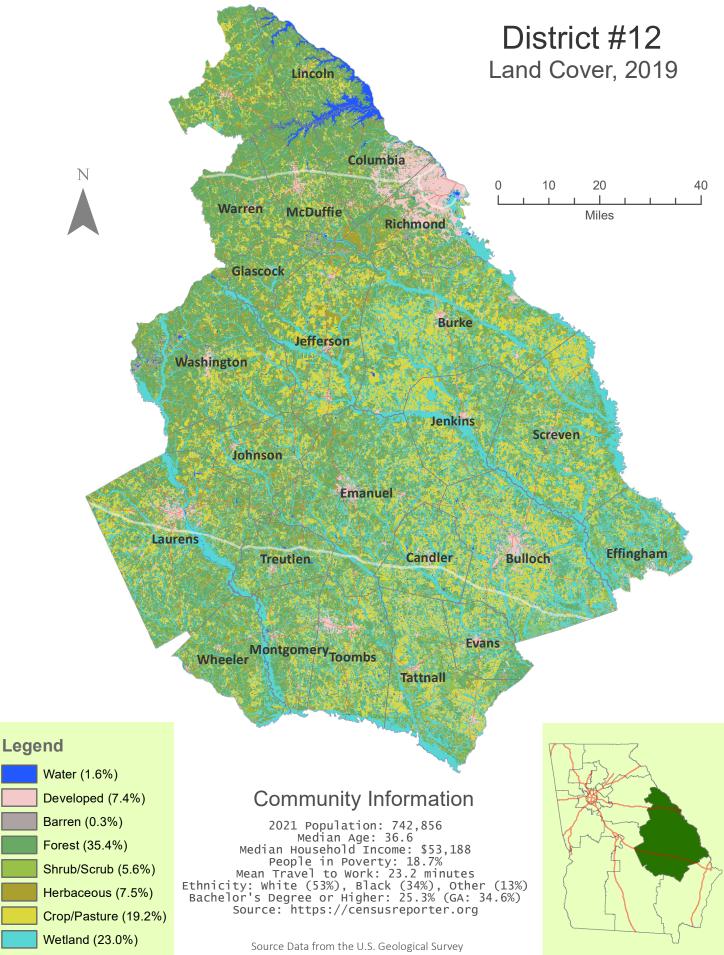
2021 Population: 805,448 Median Age: 41.3 Median Household Income: \$65,575 People in Poverty:12.8% Mean Travel to Work: 27.4 minutes Ethnicity: White (75%), Black (6%), Other (19%) Bachelor's Degree or Higher: 27% (GA: 34.6%) Source: https://censusreporter.org

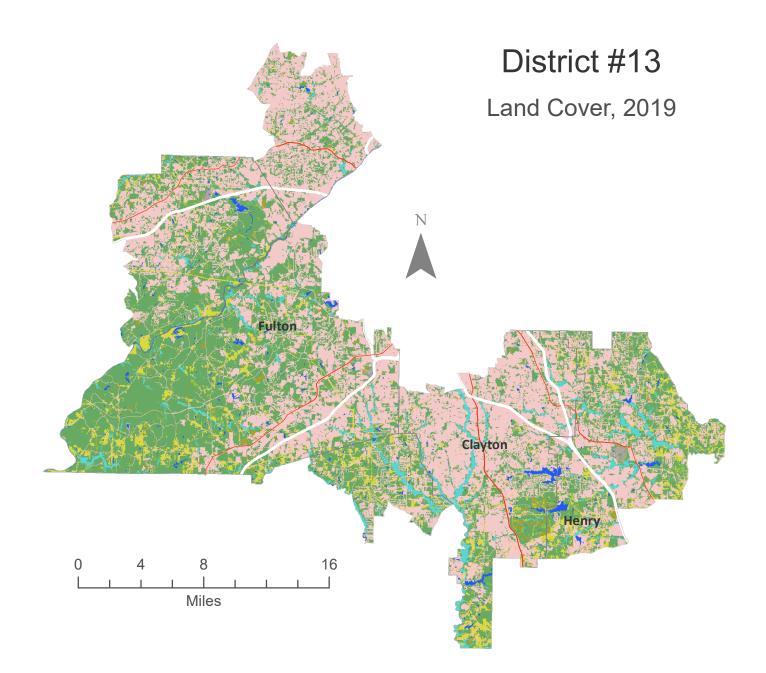
> Source Data from the U.S. Geological Survey and the U.S. Census Bureau











Legend

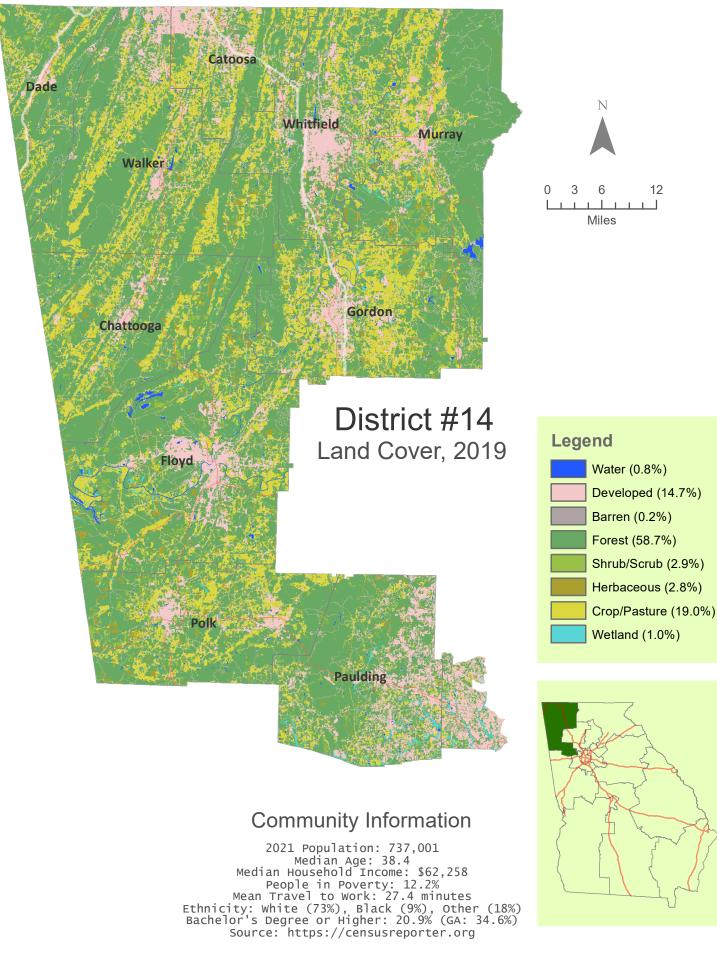
Water (1.4%)
Developed (45.6%)
Barren (0.3%)
Forest (40.2%)
Shrub/Scrub (0.9%)
Herbaceous (1.6%)
Crop/Pasture (6.5%)
Wetland (3.5%)

Community Information

2021 Population: 795,514 Median Age: 36.1 Median Household Income: \$67,779 People in Poverty:14.3% Mean Travel to Work: 30.3 minutes Ethnicity: White (21%), Black (61%), Other (18%) Bachelor's Degree or Higher: 33.9% (GA: 34.6%) Source: https://censusreporter.org

> Source Data from the U.S. Geological Survey and the U.S. Census Bureau





APPENDIX

Online Atlas Download Information

An online version of this atlas in the PDF format may be downloaded free of charge from https://gaview.org.

Founded in 2003, the GeorgiaView Consortium is a member of the AmericaView Consortium, a nationally-coordinated network of academic, agency, non-profit, and industry partners and cooperators that share the vision of promoting and supporting the use of remote sensing data and technology within each state.

This atlas is one of GeorgiaView's outreach activities. The theme of this atlas is land cover and natural hazards in Georgia. Many people underestimate the extensive change of land cover in their living environment. As a way of helping people's environmental awareness and decision making, intuitively and informatively, GeorgiaView has developed this image atlas using Landsat imagery, the U.S. Geological Survey National Land Cover Database, the natural hazard index data from Federal Emergency Management Agency, and the community boundaries in Georgia such as 159 counties, 14 congressional districts, and 12 regional commissions.

> This atlas may appeal to many decision makers who use geographical boundaries at local and state governments. It may also be used for civilizing K-12 students about their communities, primary production fields, and environmental awareness.

