

The Future of District 2 – David J. Cowen Ph.D.

- **Introduction**
 - Supplement current excellent GIS based work by Will and Bethany
 - Point level geocoding, Cohort modeling for each School, School Bus routing etc.
 - Provide additional authoritative resources to supplement
 - 2014 Census American Community Survey / National Center for Educational Statistics
 - Richland County Assessor's Current Parcel Data 56, 760 parcels (Thanks Liz MacDonald)
 - Central Midlands COG – Water and Sewer & Population Projections
 - Richland County – Permit Applications
- **Objective – Assemble precise information and analytical tools to continuously monitor new residential development and enrollment in District 2 schools**
- **Projected Enrollments – What to expect & plan for**
- **Demographic, Economic and Housing Conditions**
 - District level 2014 Bureau of Census American Community Survey from National Center for Educational Statistics
 - Census tract population pyramids
- **Geographic Characteristics of the District – Opportunities and Constraints**
 - Utilities
 - Transportation
 - Land use & Housing Characteristics
 - Residential types , year of development, value etc.
- **GIS based analysis of enrollment in 394 Assessor Defined neighborhoods**
 - What are the geographic patterns?
 - How are they changing?
 - Where can we expect new demand?
- **Next Steps**

Richland County to add 290,000 residents by 2050!

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 FACEBOOK.COM/THESSTATENEWS TWITTER.COM/THESSTATE

The State

1 million in the Columbia area? Expect it by 2035, report says

BY TIM FLACH
 tflach@thestate.com

The Midlands will be welcoming a lot more neighbors in the coming years, with the Columbia area's population expected to hit 1 million by 2035 and double today's number by 2050.

The combined population of Lexington and Richland counties will be 1 million in 20 years, an increase of 40 percent from today, according to newly released estimates from the Central Midlands Council of Governments.

Reaching that benchmark will be a brief stop en route to 1.3 million residents in the area by 2050, nearly double the current population, the report says.

"That's a lot of growth to handle in such a short period," Lexington Mayor Steve MacDougall said. "It's going to demand a lot more services."

The forecast by the regional planning agency was developed to help leaders of local communities prepare for what's coming.

Dealing with the influx is going to increase the strain of keeping pace, particularly with roads not designed to handle extra traffic, as more homes and stores sprout farther from existing cities and towns, some officials said.

"New building will put more stress on a (road) system already overused," Lexington County Council chairman Todd Cullum of Cayce said.

And more homes will mean less farmland and wooded areas - and more schools, hospitals, grocery stores, ball fields and downtown high-rises.

"Those numbers put a real face on the opportunities and challenges that metropolitan areas face," Columbia Mayor Steve Benjamin said. "These decisions as to how we're going to invest in roads, roads and traffic: Travel will be more congested, making for longer commutes. Interest might rise in commuter rail, buses and ride-sharing.

Public safety: More police, firefighters, ambulance crew and 911 dispatchers will be needed. Adding them will mean more taxes. For now, water and sewer service appears adequate.

Schools: More families mean more classrooms, particularly in steadily growing Richland 2 and Lexington 1, which covers about half the county.

New neighbors
 Estimated population of Lexington and Richland counties
 2015: 708,725
 2035: 996,833
 2050: 1,287,953
 SOURCE: Central Midlands Council of Governments

SEE POPULATION, 6A

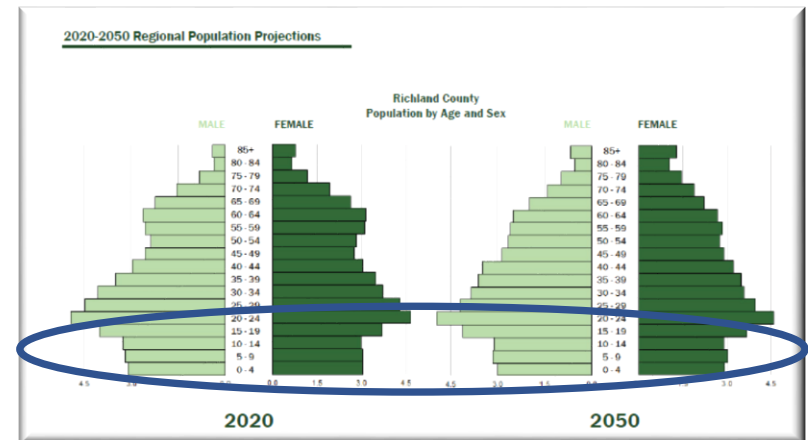
WHAT DO ALL THESE PEOPLE MEAN FOR US?

Some trends likely to emerge as more people settle in the Columbia area:

Roads and traffic: Travel will be more congested, making for longer commutes. Interest might rise in commuter rail, buses and ride-sharing.

Public safety: More police, firefighters, ambulance crew and 911 dispatchers will be needed. Adding them will mean more taxes. For now, water and sewer service appears adequate.

Schools: More families mean more classrooms, particularly in steadily growing Richland 2 and Lexington 1, which covers about half the county.



Note: Not a big change in proportion of school aged children

AGE	2010	2015	2020	2025	2030	2035	2040	2045	2050
0-14	72,247	77,869	84,984	90,914	97,958	104,515	111,600	119,355	127,898
15-25	74,180	77,415	78,910	85,958	92,976	99,097	107,599	115,155	122,587
25-39	83,373	95,247	107,305	115,426	120,750	127,902	137,234	149,540	160,144
40-64	117,163	123,336	127,524	132,551	142,088	156,867	171,253	185,072	200,920
65 & Older	37,541	45,892	57,305	69,292	78,928	83,473	85,897	89,328	95,269
TOTAL	384,504	419,758	456,027	494,141	532,702	571,854	613,584	658,451	706,818

Projected District 2 Enrollments Could Add ~19,000 Students

Year	CMGOG - County Projected Population	District 2 Population (38%)	Estimated Enrollment (20.2%)
2000	320,677	122,819	24,809
2010	384,504	147,265	29,748
2015	419,758	160,767	32,475
2020	456,027	174,658	35,281
2025	494,141	189,256	38,230
2030	532,702	204,025	41,213
2035	571,854	219,020	44,242
2040	613,584	235,003	47,471
2045	658,451	252,187	50,942
2050	707,818	271,094	54,761

Source: **Central Midlands Council of Governments, 2017, *Population Projections for the Central Midlands Region***

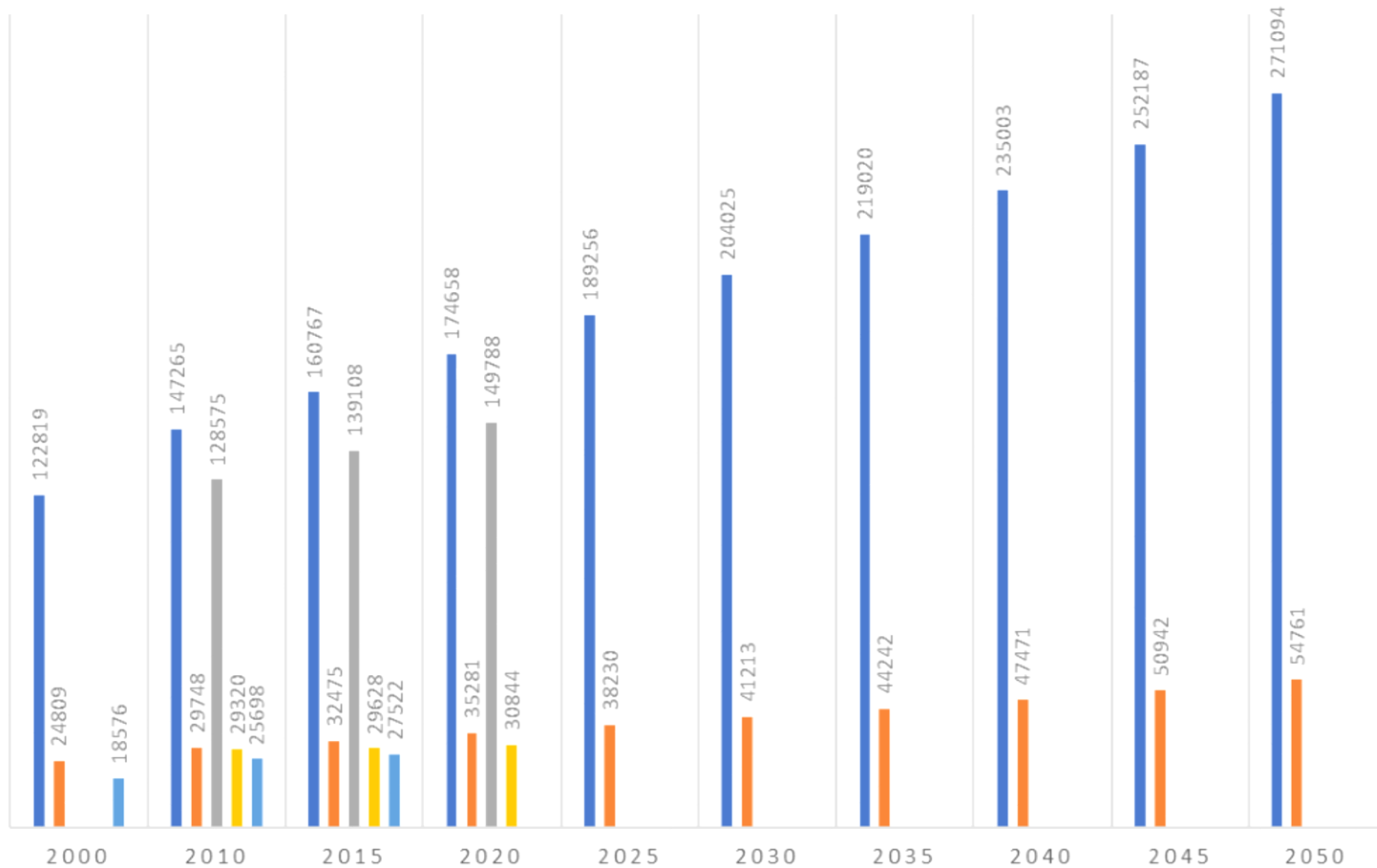
Assumptions: “When developing population forecasts, sets of projections are often prepared or collected, ranging from slow growth to rapid growth to accommodate different potential outcomes. Utilizing this approach, population projections were collected from the CMCOG age-cohort component model, Woods and Poole Economics, Inc., and the SC Budget and Control Board, Office of Research and Statistics. Population forecasts were available from other sources other than the Cohort - component model CMCOG utilized in developing future projections to the year 2050. The Office of Research and Statistics at the S. C. Budget and Control Board (ORSS) also calculated five-year projections from 2000 to 2030.” CMCOG

The National Center for Educational Statistics (NCES) using the Census Bureau American Community Survey for 2014, estimated that District 2 houses 38% of the total population of Richland County. Based on their estimates approximately 20.2 per cent of the population of District 2 are enrolled in K – 12 schools.

Staff at CMCOG are preparing census tract level estimates for their projections, however, they do not expect any major change in the distribution of the population between the two school districts.

ESTIMATED FUTURE ENROLLMENT OF DISTRICT 2 USING CURRENT TRENDS

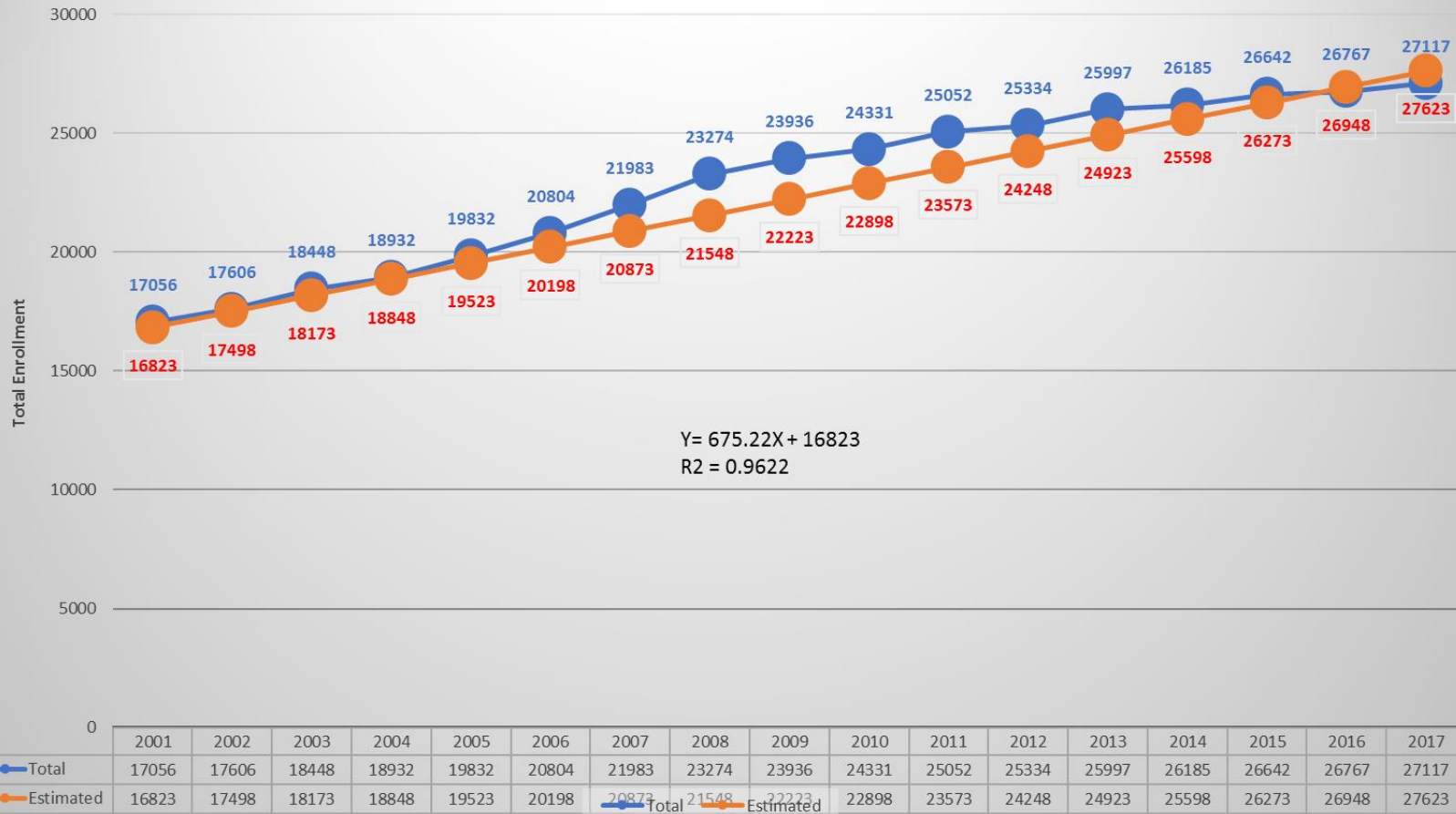
■ District 2 (38%) ■ Est Enrollment (.202) ■ Esri Pop ■ Esri 5-19 ■ Enrollment



	2014 pop	%	k	1-8	9-12	Total	% of Pop
Dist 2	128949	0.383857	1959	16126	7999	26084	0.202282
Dist1	206981	0.616143	2365	16603	9656	28624	0.138293
	335930						

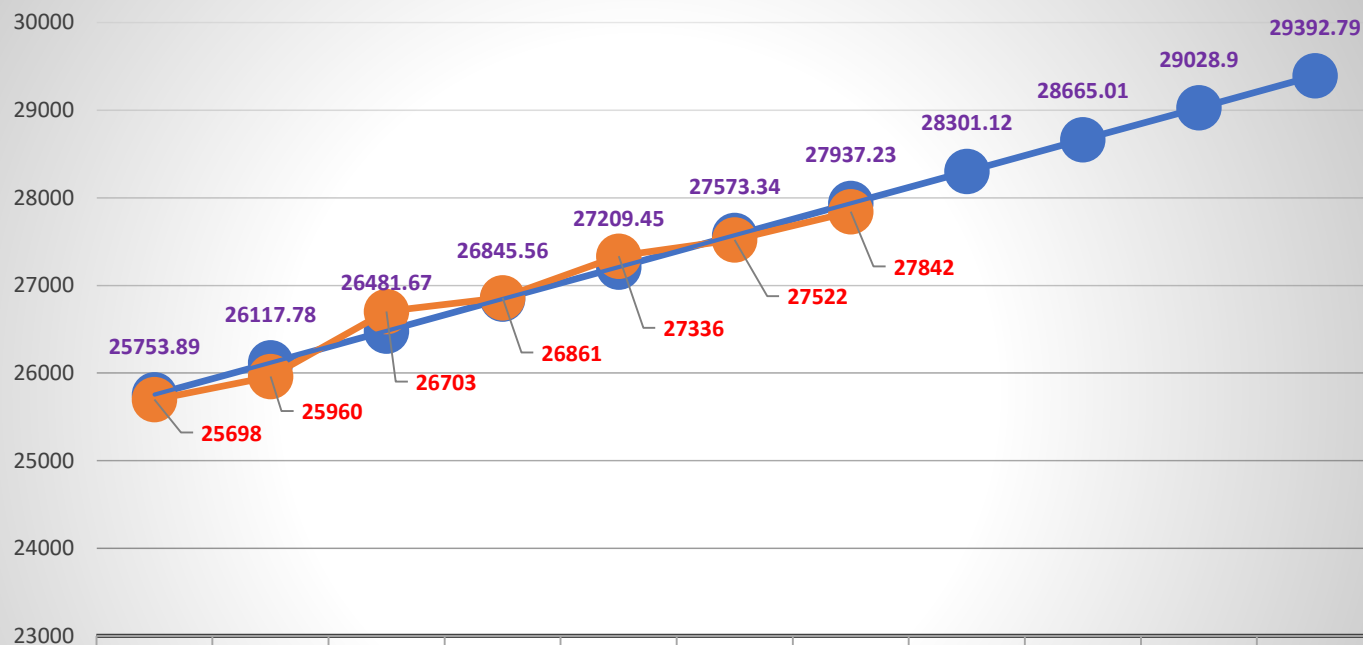
Trends Based on Enrollment In District

Total Enrollment - Adding 675 per year



Estimated Total Enrollment – Forecast (2020 =29392)

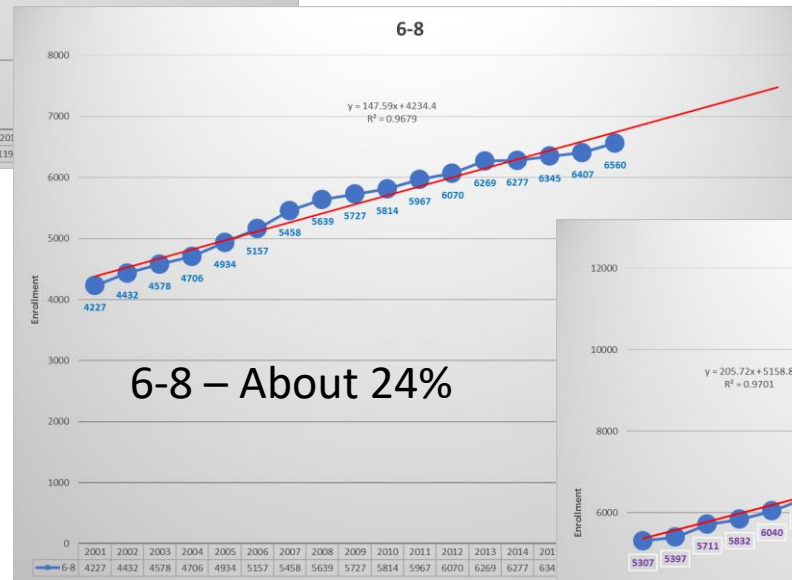
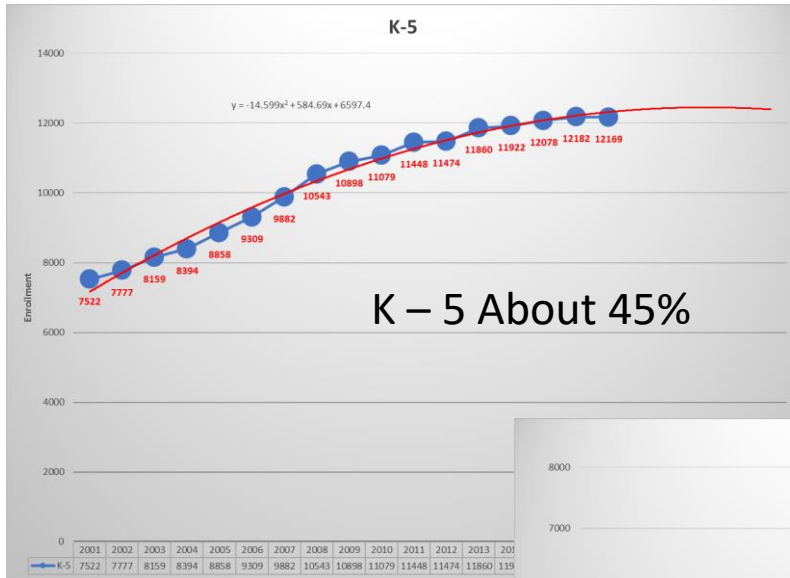
Estimated Total Enrollment



Axis Title

Estimated total Linear (Estimated)

Growth at all levels – Maybe slow down K-5



District 2 2014 Population 128,949 (NCES)

[DP05] ACS DEMOGRAPHIC AND HOUSING ESTIMATES

Dataset: ACS 2010-2014 Profile
 Geography: Richland School District 2, SC
 Population Group: Total Population

	Estimate	Margin of Error	Percent	Margin of Error
SEX AND AGE				
Total population	128,949	+/-2,215	n/a	n/a
Male	59,515	+/-1,388	46.2%	+/-0.8
Female	69,434	+/-1,599	53.8%	+/-0.8
Under 5 years	8,756	+/-760	6.8%	+/-0.5
5 to 9 years	9,900	+/-668	7.7%	+/-0.5
10 to 14 years	10,027	+/-801	7.8%	+/-0.6
15 to 19 years	8,184	+/-580	6.3%	+/-0.5
20 to 24 years	8,547	+/-859	6.6%	+/-0.6
25 to 34 years	18,225	+/-1,045	14.1%	+/-0.8
35 to 44 years	20,213	+/-826	15.7%	+/-0.6
45 to 54 years	17,602	+/-952	13.7%	+/-0.8
55 to 59 years	7,894	+/-656	6.1%	+/-0.5
60 to 64 years	6,809	+/-739	5.3%	+/-0.6
65 to 74 years	7,827	+/-440	6.1%	+/-0.3
75 to 84 years	3,717	+/-338	2.9%	+/-0.3
85 years and over	1,248	+/-228	1.0%	+/-0.2

Black or African American and American Indian and Alaska Native	50	+/-46	0.0%	+/-0.1
Race alone or in combination with one or more other races				
Total population	128,949	+/-2,215	n/a	n/a
White	58,663	+/-1,733	45.5%	+/-1.2
Black or African American	63,382	+/-1,944	49.2%	+/-1.2
American Indian and Alaska Native	976	+/-326	0.8%	+/-0.3
Asian	5,972	+/-598	4.6%	+/-0.5
Native Hawaiian and Other Pacific Islander	250	+/-271	0.2%	+/-0.2
Some other race	3,581	+/-768	2.8%	+/-0.6
HISPANIC OR LATINO AND RACE				
Total population	128,949	+/-2,215	n/a	n/a
Hispanic or Latino (of any race)	7,914	+/-826	6.1%	+/-0.6
Mexican	3,076	+/-698	2.4%	+/-0.5
Puerto Rican	2,272	+/-564	1.8%	+/-0.4
Cuban	196	+/-109	0.2%	+/-0.1
Other Hispanic or Latino	2,370	+/-701	1.8%	+/-0.5
Not Hispanic or Latino	121,035	+/-2,190	93.9%	+/-0.6
White alone	51,750	+/-1,494	40.1%	+/-1.0
Black or African American alone	60,692	+/-1,874	47.1%	+/-1.2
American Indian and Alaska Native alone	298	+/-158	0.2%	+/-0.1
Asian alone	5,246	+/-606	4.1%	+/-0.5
Native Hawaiian and Other Pacific Islander alone	21	+/-39	0.0%	+/-0.1
Some other race alone	143	+/-99	0.1%	+/-0.1
Two or more races	2,885	+/-617	2.2%	+/-0.5
Two races including Some other race	96	+/-98	0.1%	+/-0.1
Two races excluding Some other race, and Three or more races	2,789	+/-619	2.2%	+/-0.5
Total housing units	54,101	+/-646	n/a	n/a

District 1 Versus District 2

Table Preview

[DP02.6] SCHOOL ENROLLMENT

Dataset: ACS 2010-2014 Profile
 Geography: Richland School District 1, SC
 Population Group: Total Population

	Estimate	Margin of Error	Percent	Margin of Error
SCHOOL ENROLLMENT				
Population 3 years and over enrolled in school	66,634	+/-1,621	n/a	n/a
Nursery school, preschool	2,740	+/-363	4.1%	+/-0.5
Kindergarten	2,365	+/-336	3.5%	+/-0.5
Elementary school (grades 1-8)	16,603	+/-826	24.9%	+/-1.1
High school (grades 9-12)	9,656	+/-642	14.5%	+/-0.9
College or graduate school	35,270	+/-1,203	52.9%	+/-1.1

	2014 pop	%	k	1-8	9-12	Total	% of Pop
Dist 2	128949	0.383857	1959	16126	7999	26084	0.202282
Dist1	206981	0.616143	2365	16603	9656	28624	0.138293
	335930						

Table Preview

[DP02.6] SCHOOL ENROLLMENT

Dataset: ACS 2010-2014 Profile
 Geography: Richland School District 2, SC
 Population Group: Total Population

	Estimate	Margin of Error	Percent	Margin of Error
SCHOOL ENROLLMENT				
Population 3 years and over enrolled in school	40,499	+/-1,537	n/a	n/a
Nursery school, preschool	2,465	+/-444	6.1%	+/-1.1
Kindergarten	1,959	+/-412	4.8%	+/-1.0
Elementary school (grades 1-8)	16,126	+/-892	39.8%	+/-2.1
High school (grades 9-12)	7,999	+/-614	19.8%	+/-1.6
College or graduate school	11,950	+/-1,220	29.5%	+/-2.2

School District Population Estimates 2020 (Esri)



Housing Profile

Richland School District 2

Area: 162.60 Square miles

Population

2010 Total Population	128,575
2015 Total Population	139,108
2020 Total Population	149,788
2015-2020 Annual Rate	1.49%

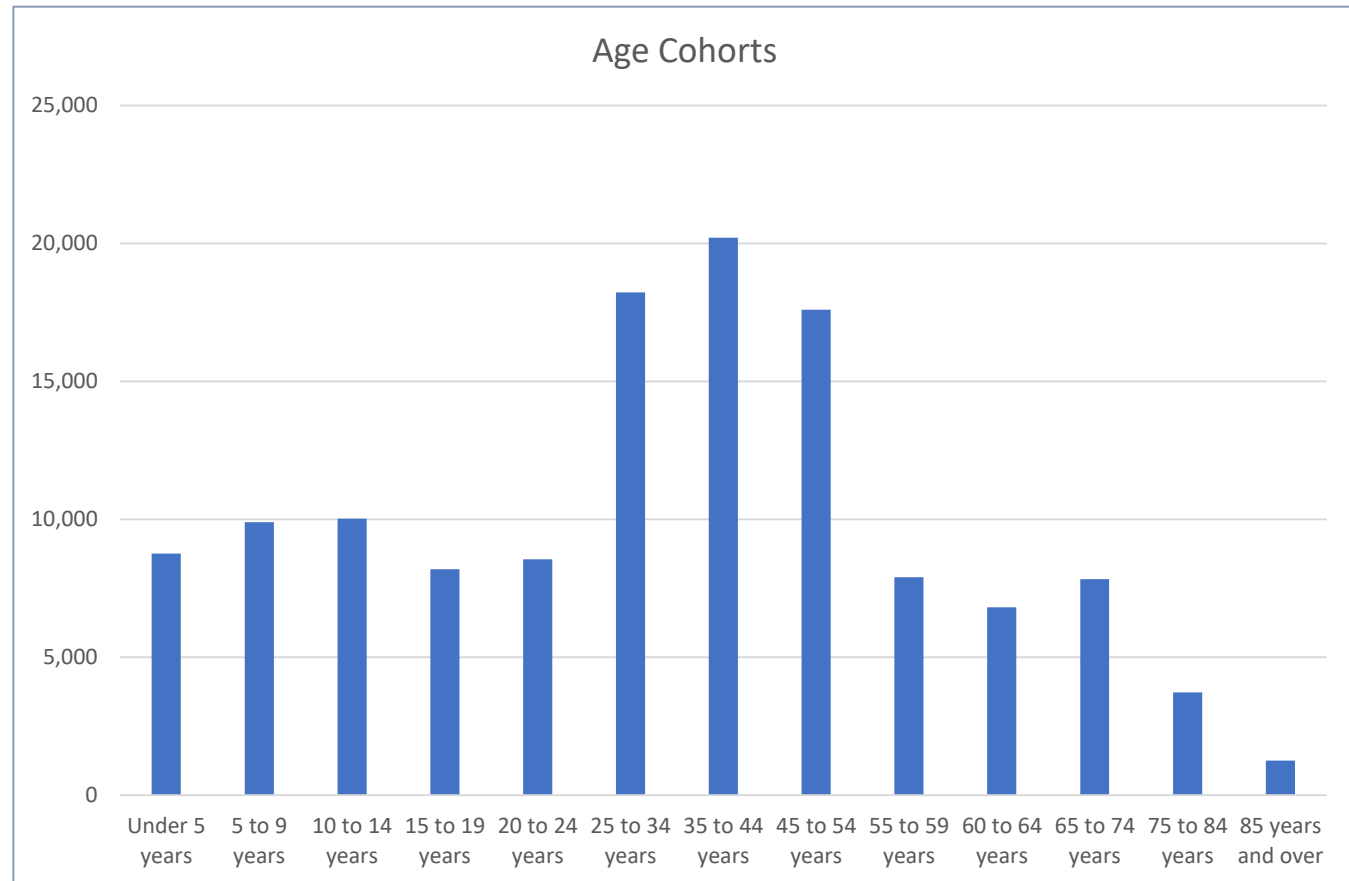
Poverty Levels Increasing from 11.4 to 15.2%

Increasing
% Below Poverty
Level

Census Bureau Estimates		www.census.gov/did/www/saipe/data/interactive/				
			total pop	Age 5 - 17	Age 5 - 17 poverty	Ratio
2015	Richland School District 2 (SC)	PK-12	148,694	26,881	4,097	15.2
2014	Richland School District 2 (SC)	PK-12	146,691	26,760	4,045	15.1
2013	Richland School District 2 (SC)	PK-12	145,847	26,693	4,112	15.4
2012	Richland School District 2 (SC)	PK-12	143,865	26,733	4,081	15.3
2011	Richland School District 2 (SC)	PK-12	142,143	26,402	4,040	15.3
2010	Richland School District 2 (SC)	PK-12	140,912	26,216	3,389	12.9
2009	Richland School District 2 (SC)	PK-12	110,603	19,624	2,430	12.4
2008	RICHLAND SCHOOL DISTRICT 02 (SC)	PK-12	108,229	19,239	2,085	10.8
2007	RICHLAND SCHOOL DISTRICT 02 (SC)	PK-12	106,366	19,154	1,685	8.8
2006	RICHLAND SCHOOL DISTRICT 02 (SC)	PK-12	103,535	18,550	2,191	11.8
2005	RICHLAND SCHOOL DISTRICT 02 (SC)	PK-12	101,628	18,220	2,143	11.8
2004	RICHLAND SCHOOL DISTRICT 02 (SC)	PK-12	101,113	17,896	1,633	9.1
2003	RICHLAND SCHOOL DISTRICT 02 (SC)	PK-12	99,524	17,927	1,531	8.5
2002	RICHLAND SCHOOL DISTRICT 02 (SC)	PK-12	98,778	18,031	1,344	7.5
2001	RICHLAND SCHOOL DISTRICT 02 (SC)	PK-12	97,698	17,891	1,348	7.5
2000	RICHLAND SCHOOL DISTRICT 02 (SC)	PK-12	83,627	16,685	1,153	6.9
1999	RICHLAND SCHOOL DISTRICT 02 (SC)	PK-12	82,590	17,108	1,269	7.4
1997	RICHLAND SCHOOL DISTRICT 02 (SC)		61,677	12,485	1,352	10.8
1995	RICHLAND SCHOOL DISTRICT 02 (SC)	KG-12	73,706	13,104	1,494	11.4

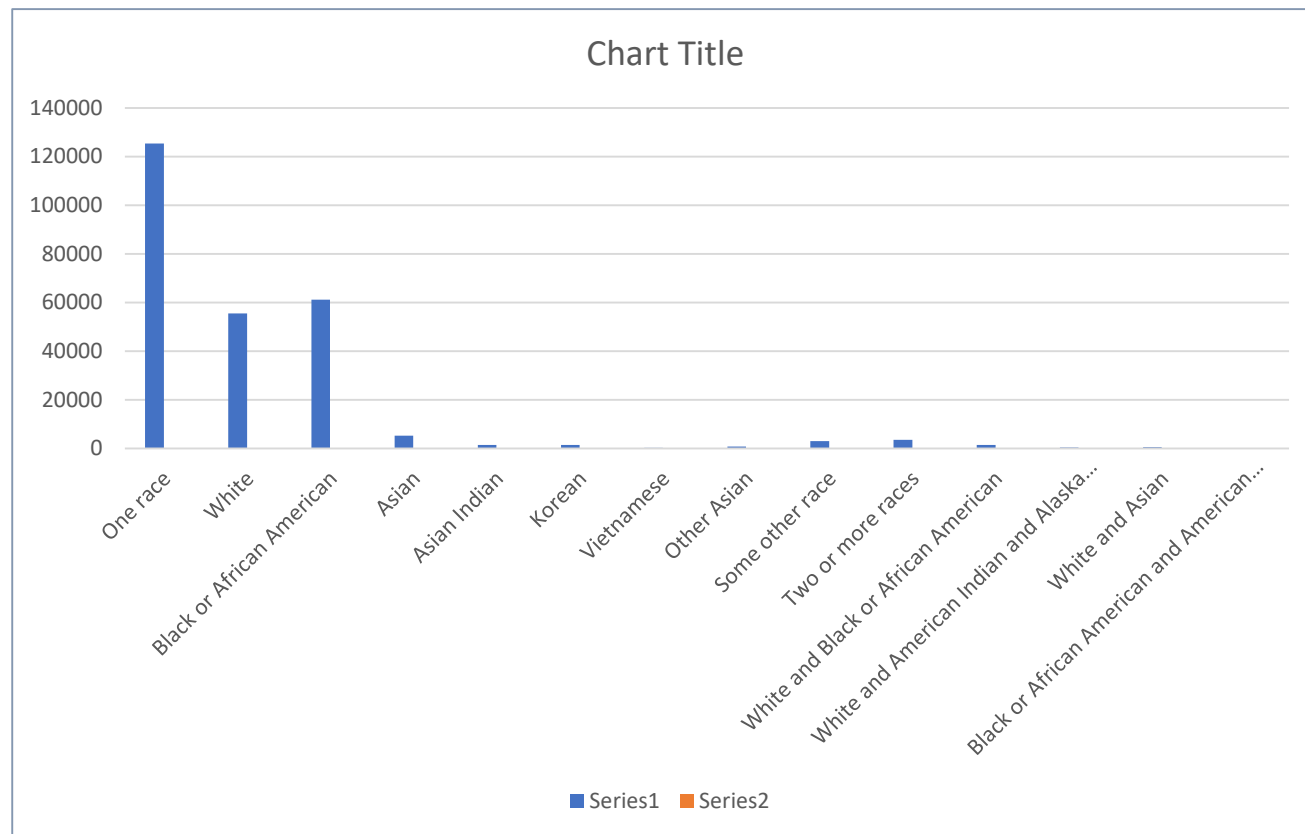
Age Cohorts – 2014

SEX AND AGE	
Total population	128,949
Male	59,515
Female	69,434
Under 5 years	8,756
5 to 9 years	9,900
10 to 14 years	10,027
15 to 19 years	8,184
20 to 24 years	8,547
25 to 34 years	18,225
35 to 44 years	20,213
45 to 54 years	17,602
55 to 59 years	7,894
60 to 64 years	6,809
65 to 74 years	7,827
75 to 84 years	3,717
85 years and over	1,248
Median age (years)	35.3



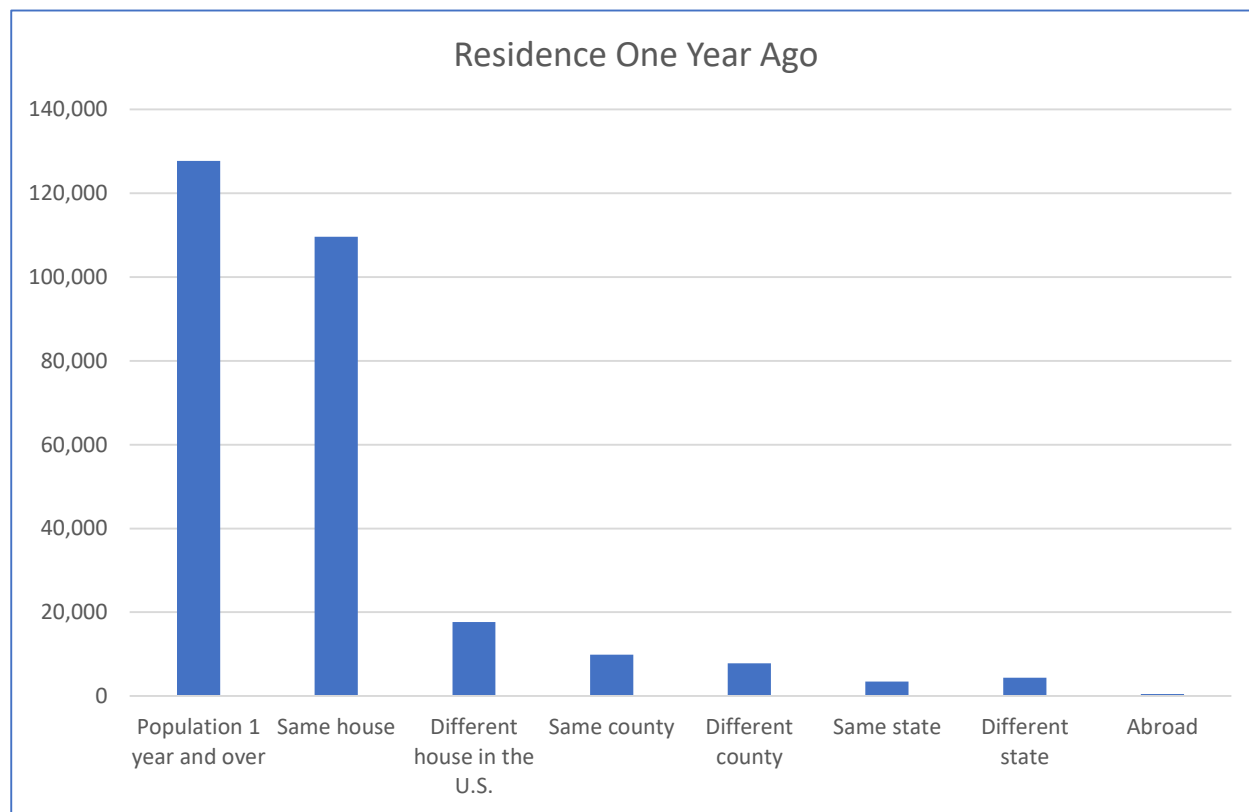
One Race - 2014

	Estimate	%
One race	125411	0.973
White	55559	0.431
Black or African American	61223	0.475
Asian	5254	0.041
Asian Indian	1432	0.011
Korean	1454	0.011
Vietnamese	284	0.002
Other Asian	735	0.006
Some other race	3031	0.024
Two or more races	3538	0.027
White and Black or African American	1474	0.011
White and American Indian and Alaska Native	394	0.003
White and Asian	537	0.004
Black or African American and American Indian and Alaska Native	50	0



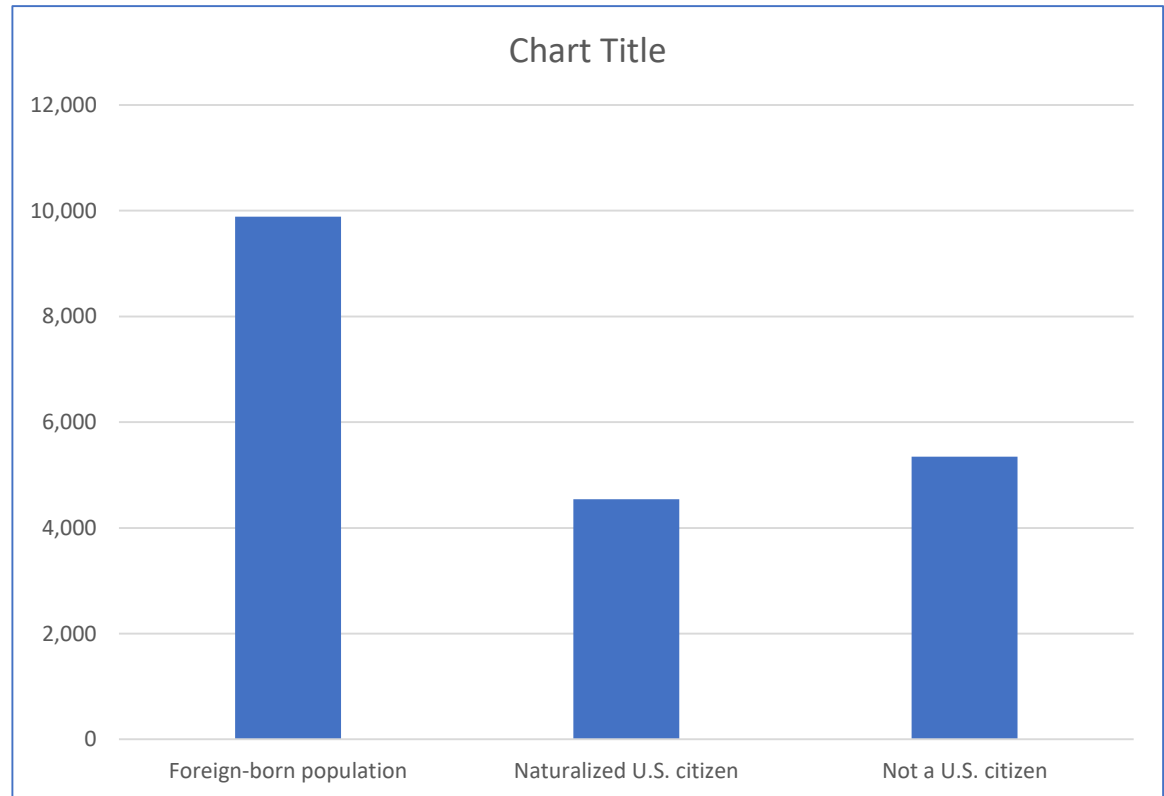
Residence A Year Ago – 2014

	Estimate	Percent
RESIDENCE 1 YEAR AGO		
Population 1 year and over	127,750	n/a
Same house	109,644	85.80%
Different house in the U.S.	17,643	13.80%
Same county	9,839	7.70%
Different county	7,804	6.10%
Same state	3,453	2.70%
Different state	4,351	3.40%
Abroad	463	0.40%



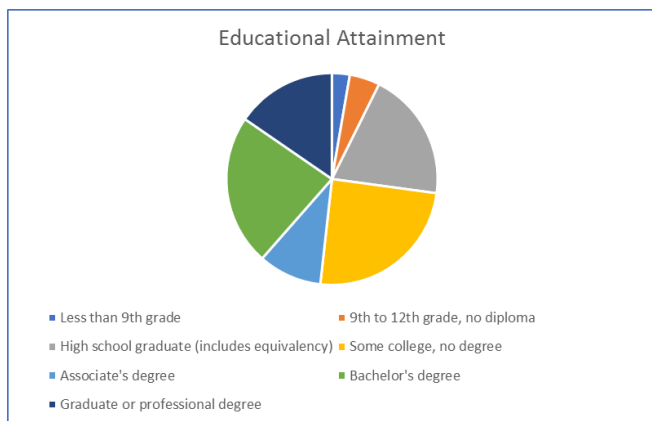
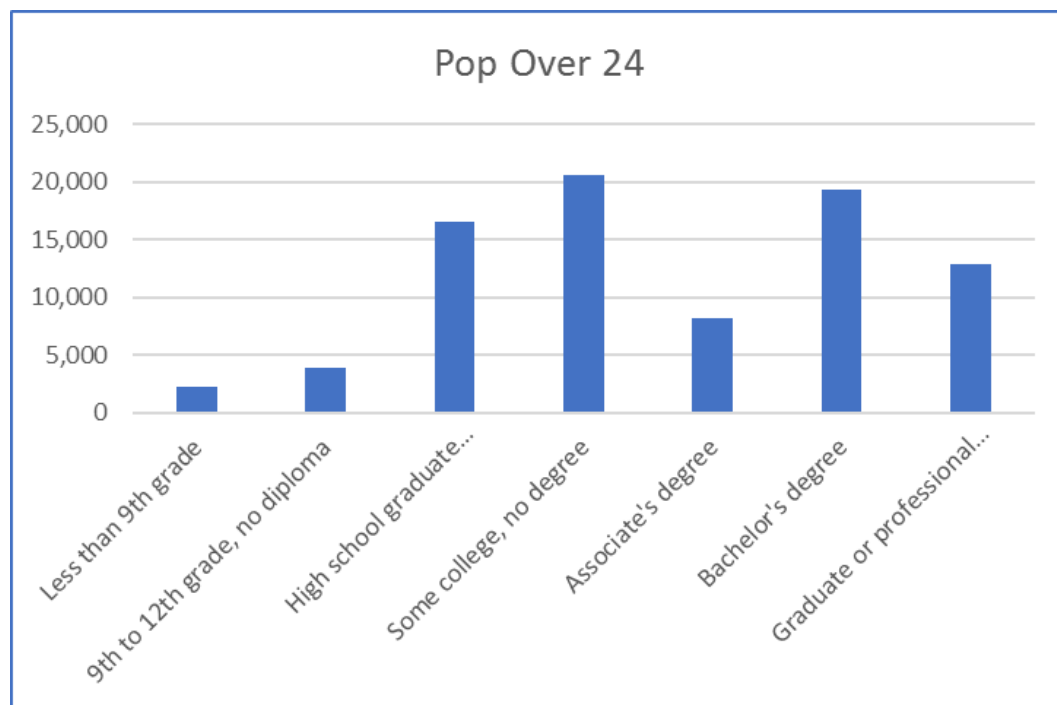
Citizenship

	Estimate	Percent
U.S. CITIZENSHIP STATUS		
Foreign-born population	9,890	n/a
Naturalized U.S. citizen	4,544	45.90%
Not a U.S. citizen	5,346	54.10%



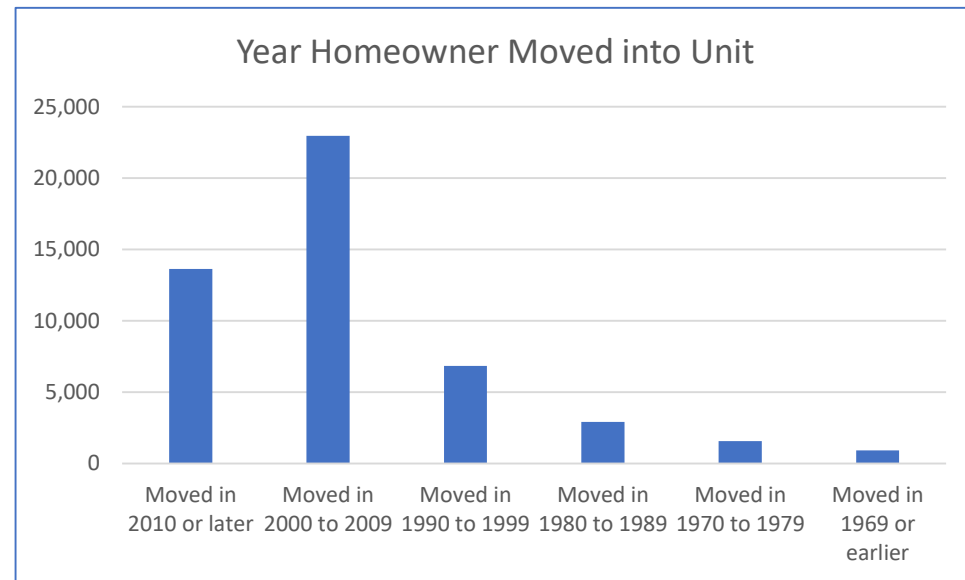
Educational Attainment – 2014

EDUCATIONAL ATTAINMENT		%
Population 25 years and over	83,535	n/a
Less than 9th grade	2,274	2.70%
9th to 12th grade, no diploma	3,880	4.60%
High school graduate (includes equivalency)	16,523	19.80%
Some college, no degree	20,569	24.60%
Associate's degree	8,124	9.70%
Bachelor's degree	19,274	23.10%
Graduate or professional degree	12,891	15.40%
Percent high school graduate or higher	(X)	92.60%
Percent bachelor's degree or higher	(X)	38.50%



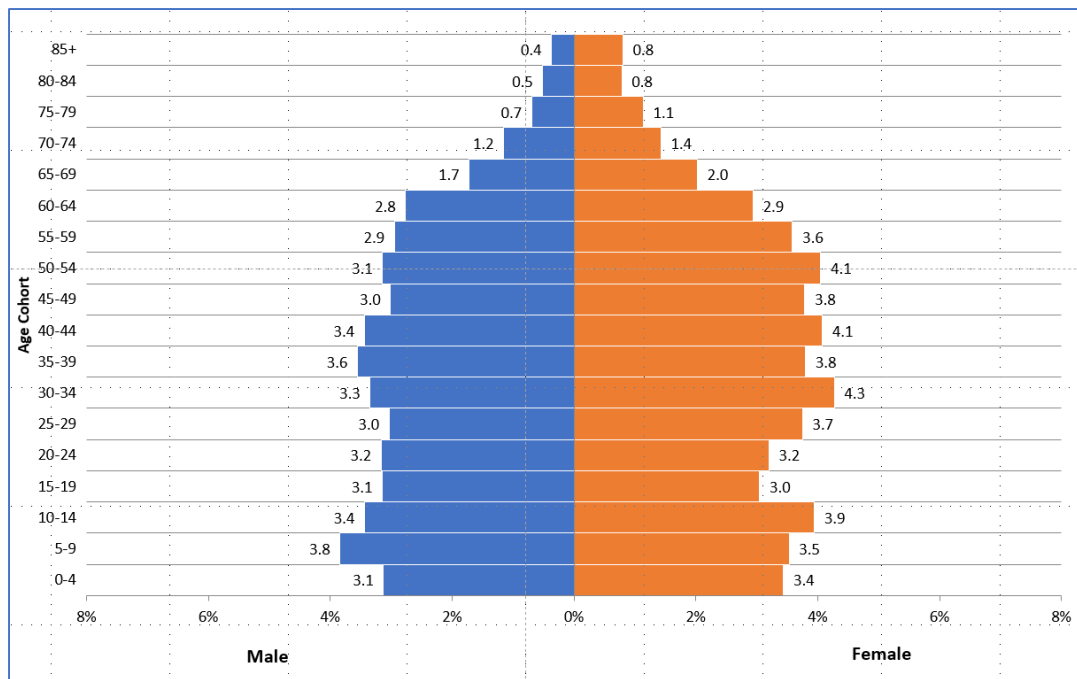
Year Homeowner Moved Into Unit

YEAR HOUSEHOLDER MOVED INTO UNIT		%
Occupied housing units	48,779	n/a
Moved in 2010 or later	13,635	28.00%
Moved in 2000 to 2009	22,954	47.10%
Moved in 1990 to 1999	6,829	14.00%
Moved in 1980 to 1989	2,898	5.90%
Moved in 1970 to 1979	1,564	3.20%
Moved in 1969 or earlier	899	1.80%



2014 Estimated Population – All Tracts

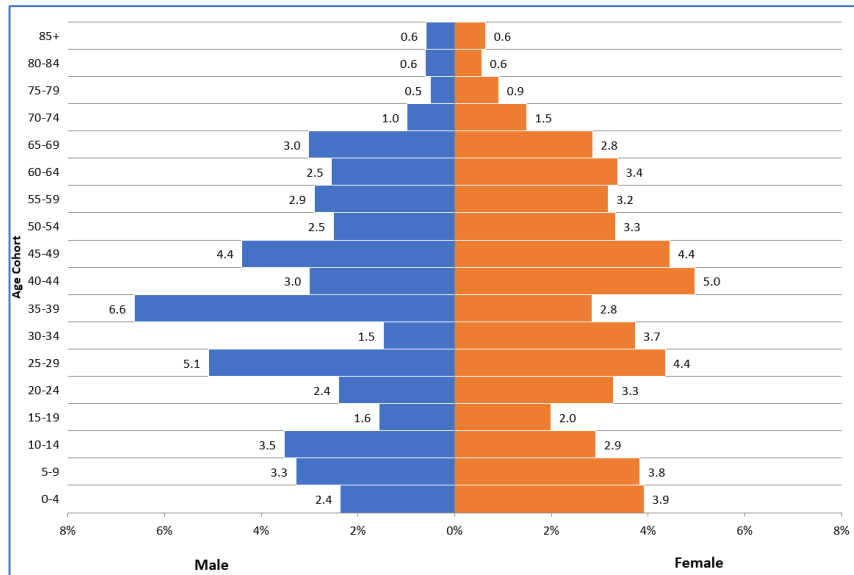
Census American Community Survey



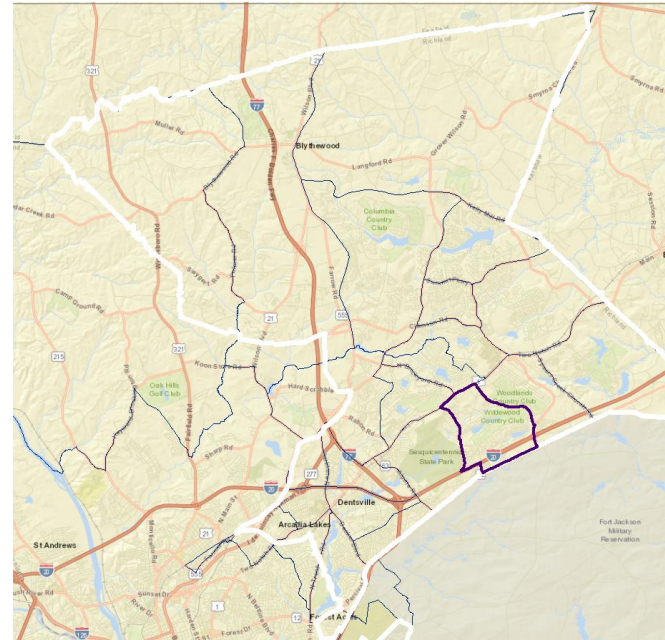
	Male	Female	Total
0-4	4409	4851	9260
5-9	5416	4979	10395
10-14	4850	5564	10414
15-19	4437	4298	8735
20-24	4465	4513	8978
25-29	4280	5289	9569
30-34	4718	6025	10743
35-39	5013	5360	10373
40-44	4854	5749	10603
45-49	4247	5345	9592
50-54	4431	5713	10144
55-59	4157	5059	9216
60-64	3900	4145	8045
65-69	2426	2856	5282
70-74	1627	2011	3638
75-79	981	1602	2583
80-84	722	1105	1827
85+	522	1130	1652
Total	65455	75594	141049

2014 Estimated Population - Tract 11413

Census American Community Survey

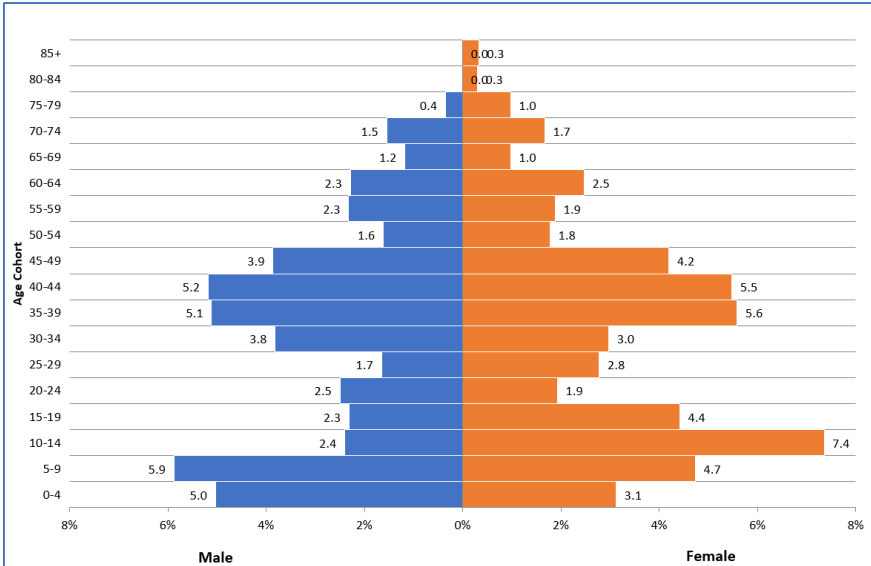


	Male	Female	Total
0-4	195	323	518
5-9	271	316	587
10-14	291	241	532
15-19	129	164	293
20-24	198	271	469
25-29	420	359	779
30-34	122	308	430
35-39	547	234	781
40-44	248	410	658
45-49	363	367	730
50-54	207	274	481
55-59	240	262	502
60-64	210	278	488
65-69	249	235	484
70-74	81	123	204
75-79	42	75	117
80-84	50	46	96
85+	49	53	102
Total	3912	4339	8251

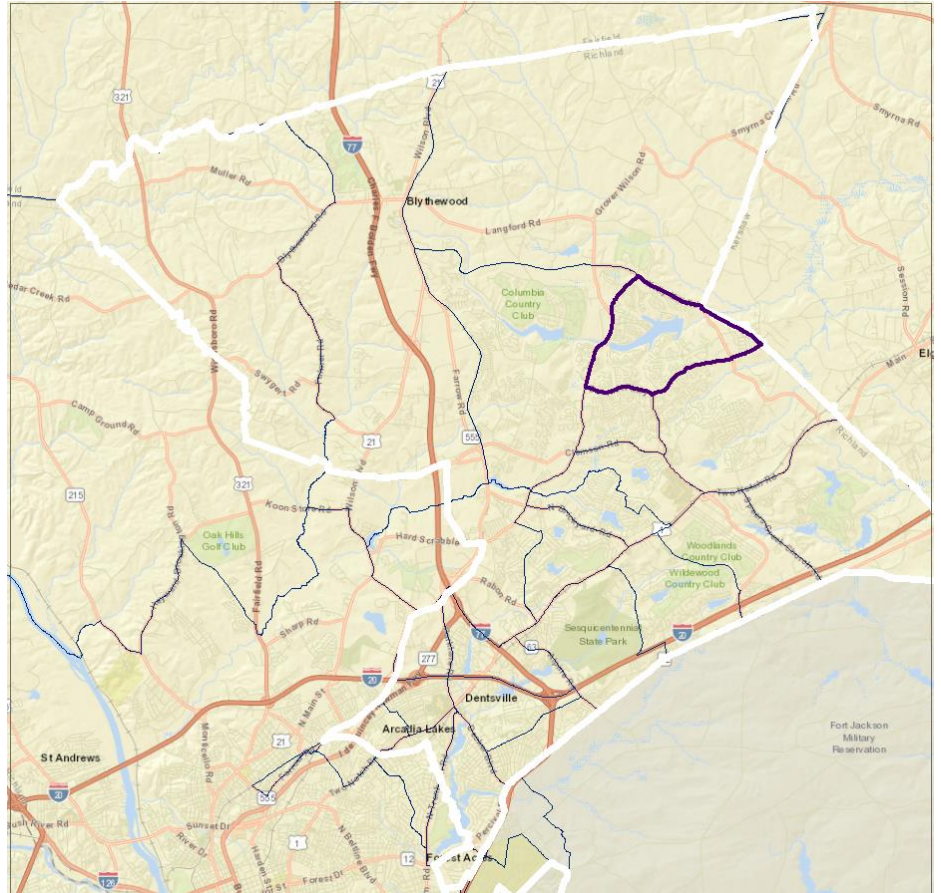


2014 Estimated Population - Tract 11416

Census American Community Survey

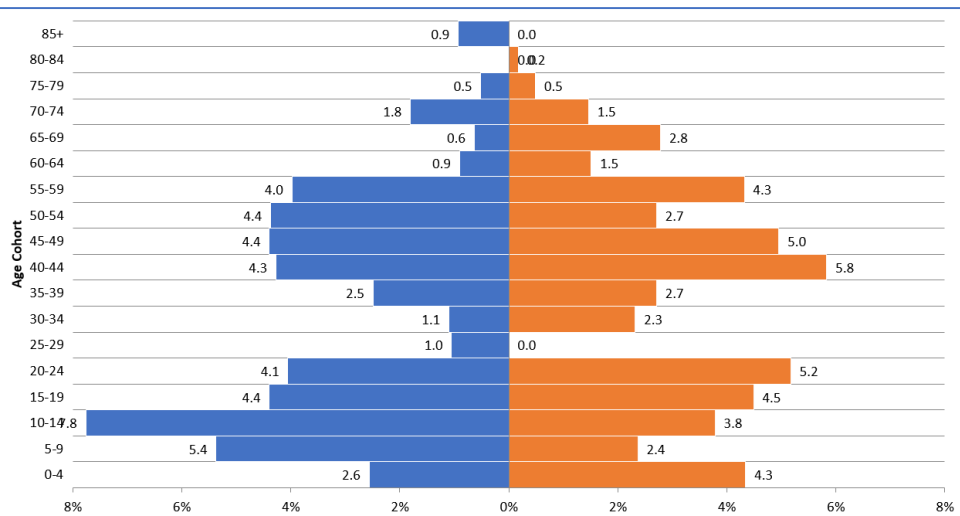


	Male	Female	Total
0-4	572	365	927
5-9	668	538	1206
10-14	273	836	1109
15-19	263	502	765
20-24	284	219	503
25-29	188	316	504
30-34	434	338	772
35-39	581	635	1216
40-44	589	623	1212
45-49	439	477	916
50-54	184	202	386
55-59	264	214	478
60-64	260	281	541
65-69	134	111	245
70-74	176	190	366
75-79	40	11	51
80-84	0	34	34
85+	0	37	37
	5349	6019	11368



2014 Estimated Population - Tract 10104

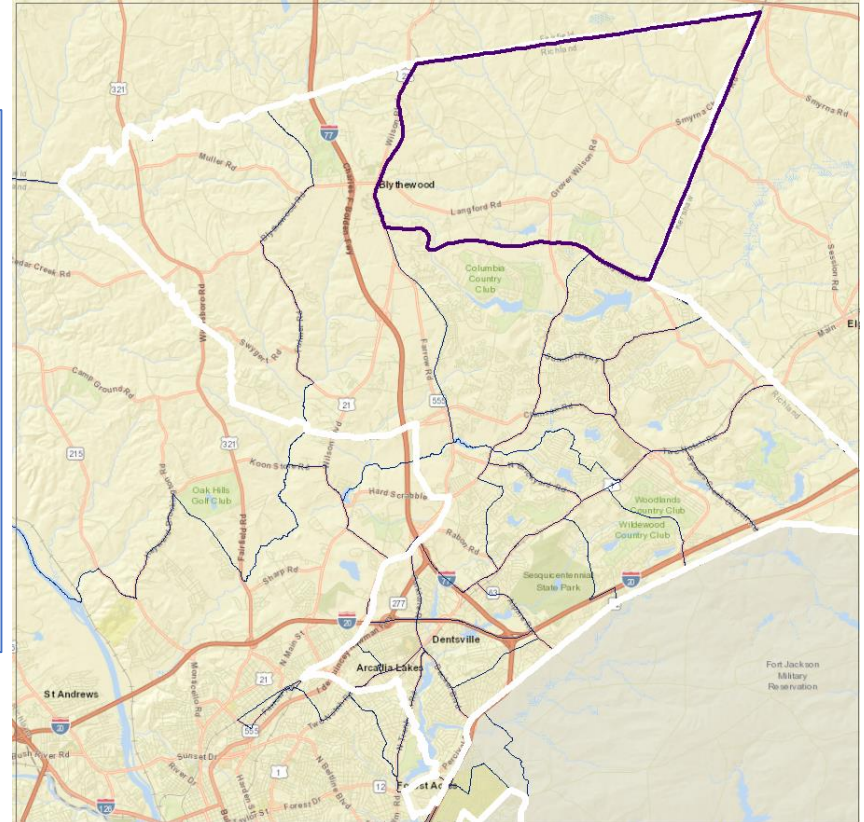
Census American Community Survey



Male

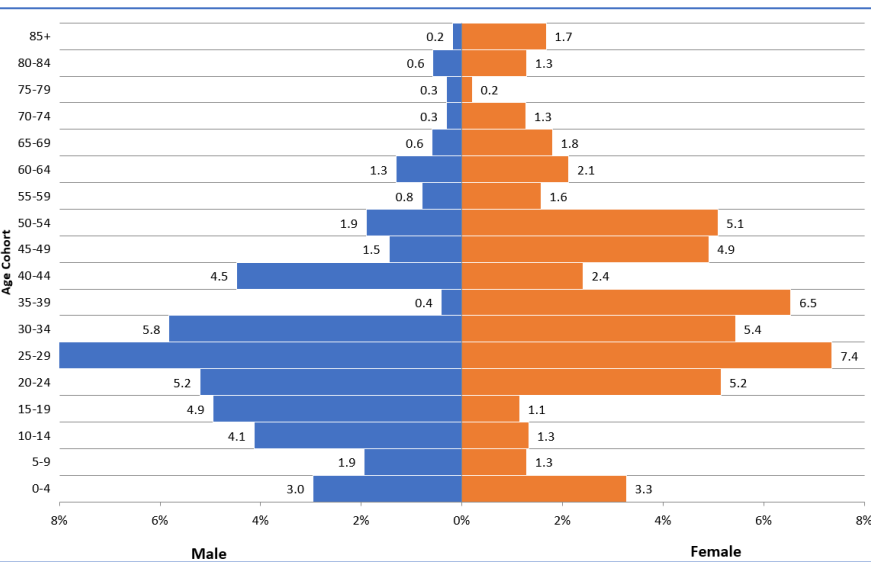
Female

	Male	Female	Total
0-4	105	179	283
5-9	220	97	317
10-14	318	155	473
15-19	180	184	364
20-24	166	212	378
25-29	43	0	43
30-34	45	95	140
35-39	102	111	213
40-44	175	239	414
45-49	180	203	383
50-54	179	111	290
55-59	163	177	340
60-64	37	62	99
65-69	26	114	140
70-74	74	60	134
75-79	21	20	41
80-84	0	7	7
85+	38	0	38
Total	2072	2025	4097

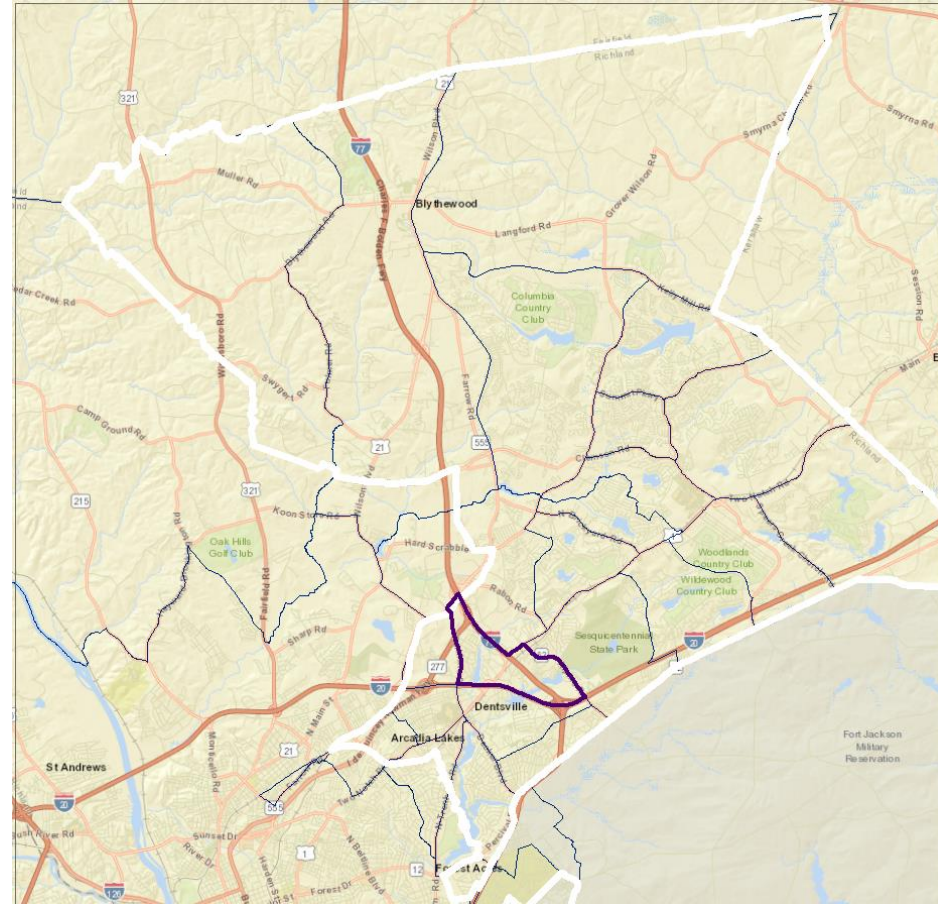


2014 Estimated Population - Tract 11303

Census American Community Survey

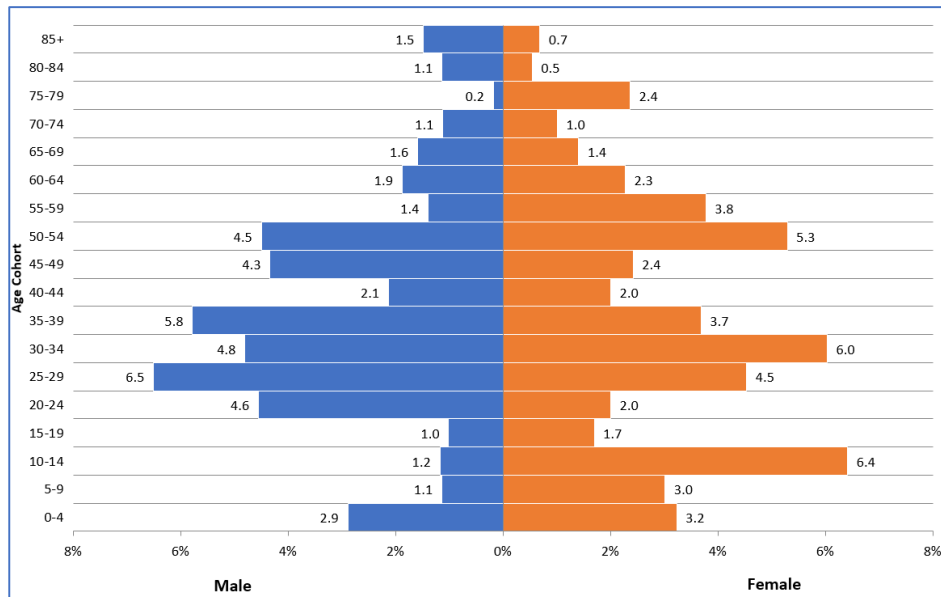


	Male	Female	Total
0-4	145	160	305
5-9	95	63	158
10-14	202	65	267
15-19	242	56	298
20-24	255	252	507
25-29	432	360	792
30-34	285	266	551
35-39	20	320	340
40-44	219	118	337
45-49	71	240	311
50-54	93	249	342
55-59	39	77	116
60-64	64	104	168
65-69	29	88	117
70-74	15	62	77
75-79	15	10	25
80-84	28	63	91
85+	9	82	91
Total	2258	2635	4893

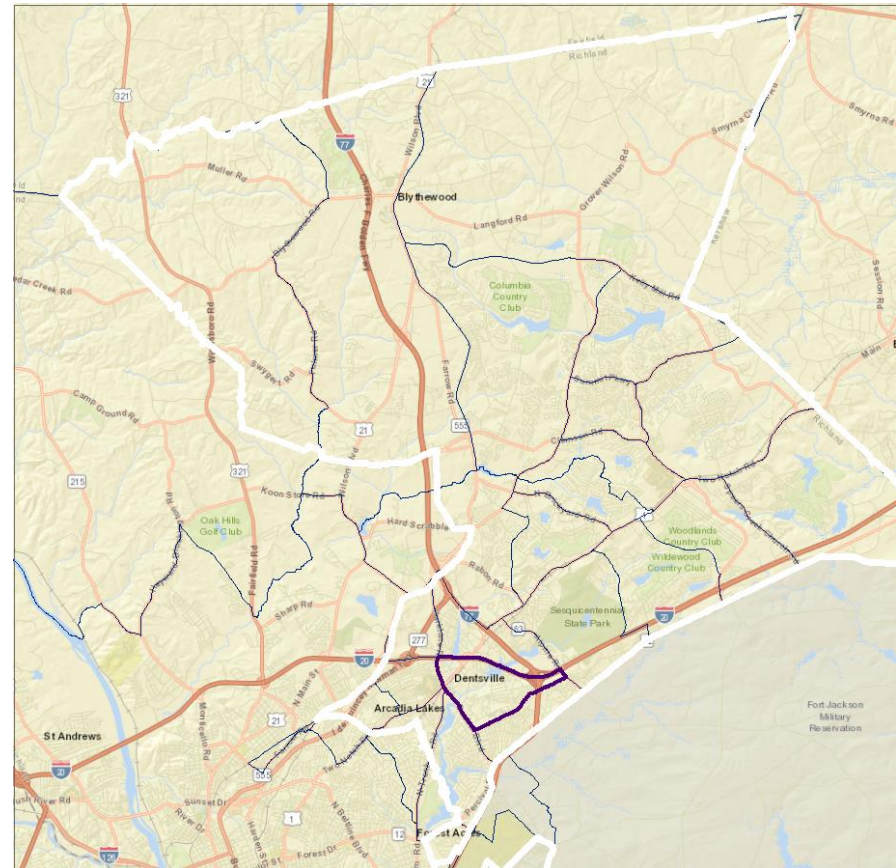


2014 Estimated Population - Tract 11304

Census American Community Survey

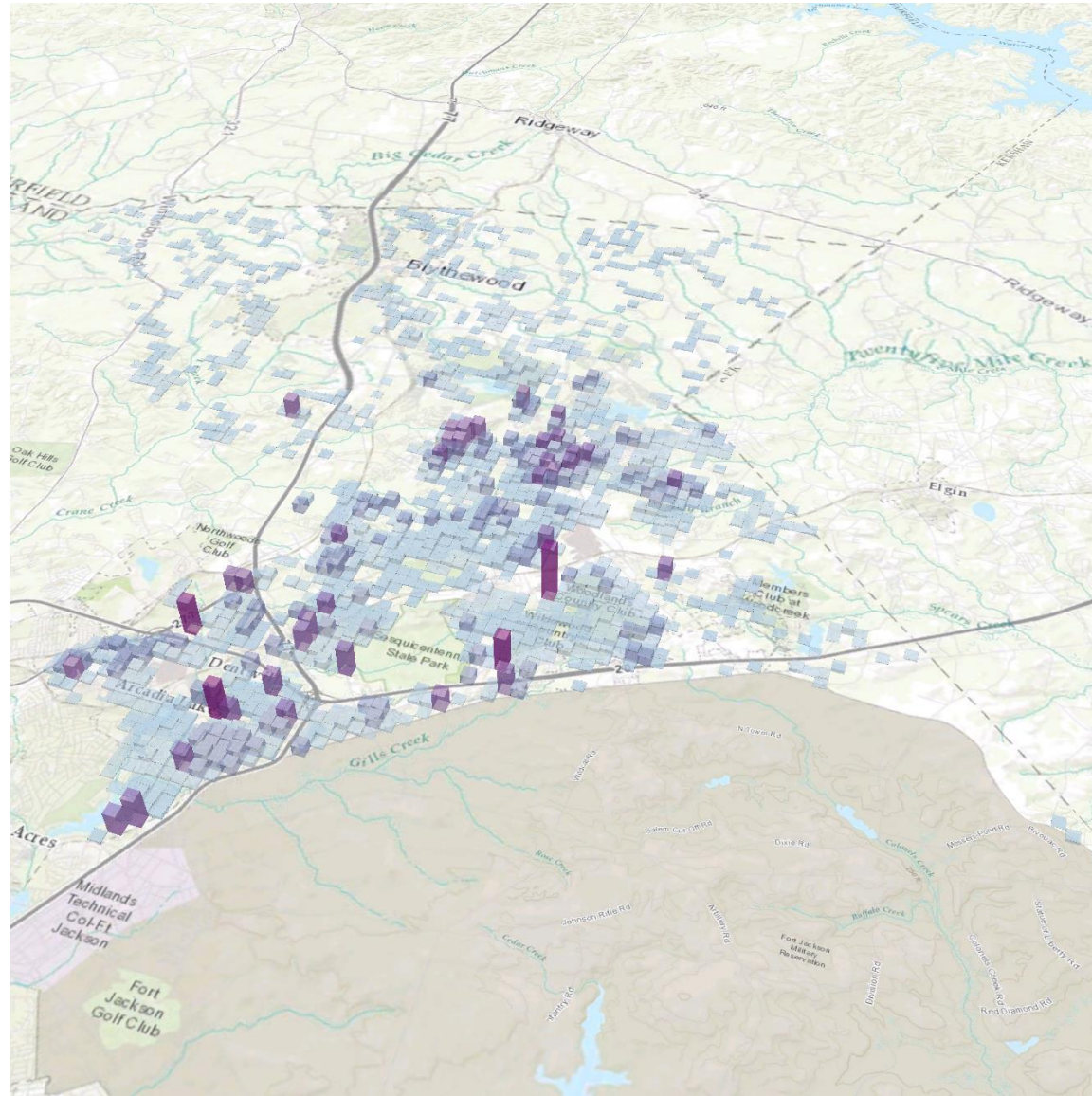


	Male	Female	Total
0-4	160	179	339
5-9	63	167	230
10-14	65	355	420
15-19	56	94	150
20-24	252	111	363
25-29	360	251	611
30-34	266	334	600
35-39	320	204	524
40-44	116	111	227
45-49	240	134	374
50-54	249	293	542
55-59	77	209	286
60-64	104	125	230
65-69	88	78	166
70-74	62	56	118
75-79	10	131	141
80-84	63	30	93
85+	82	38	120
Total	2635	2901	5536

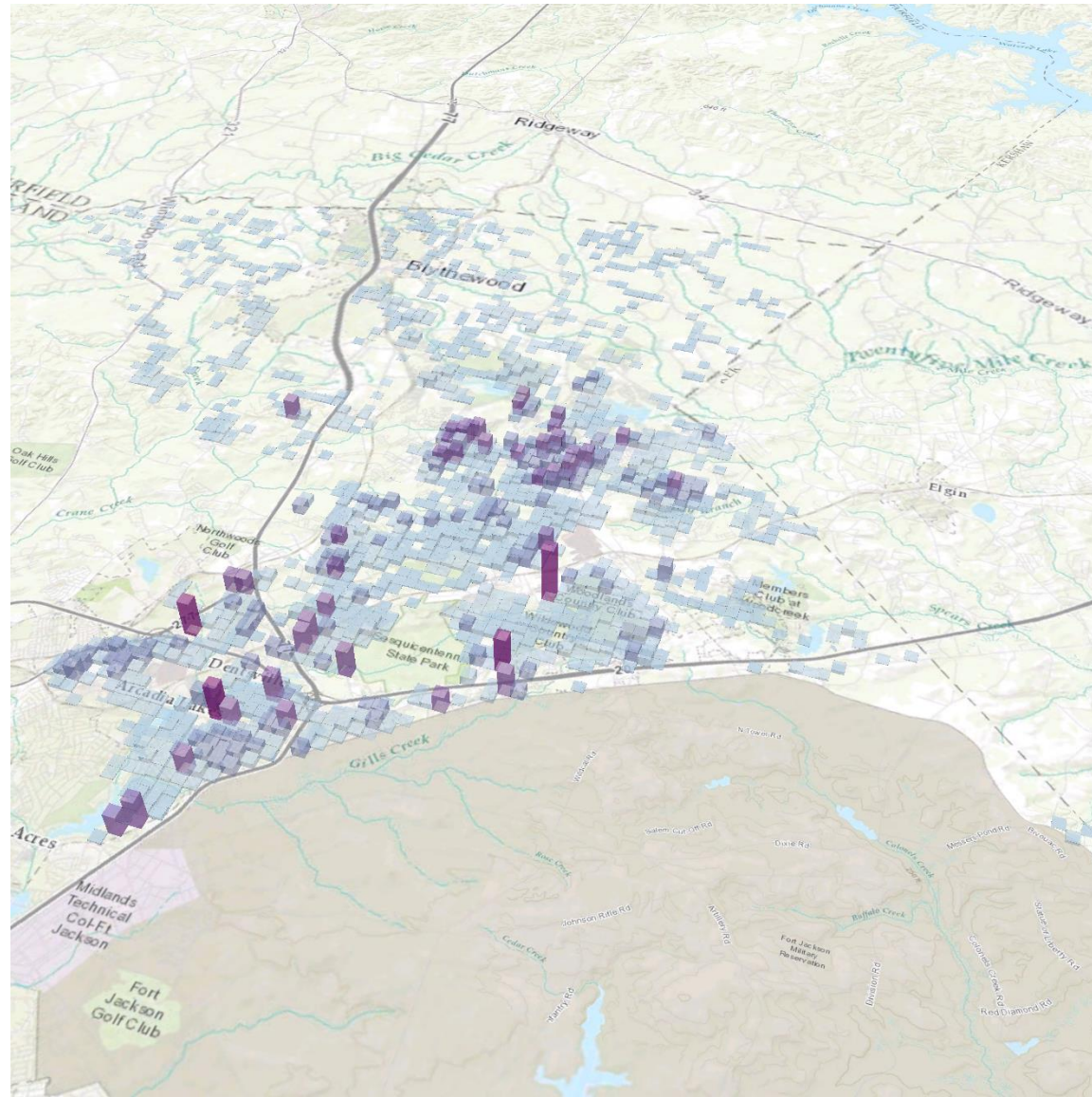


Enrollment

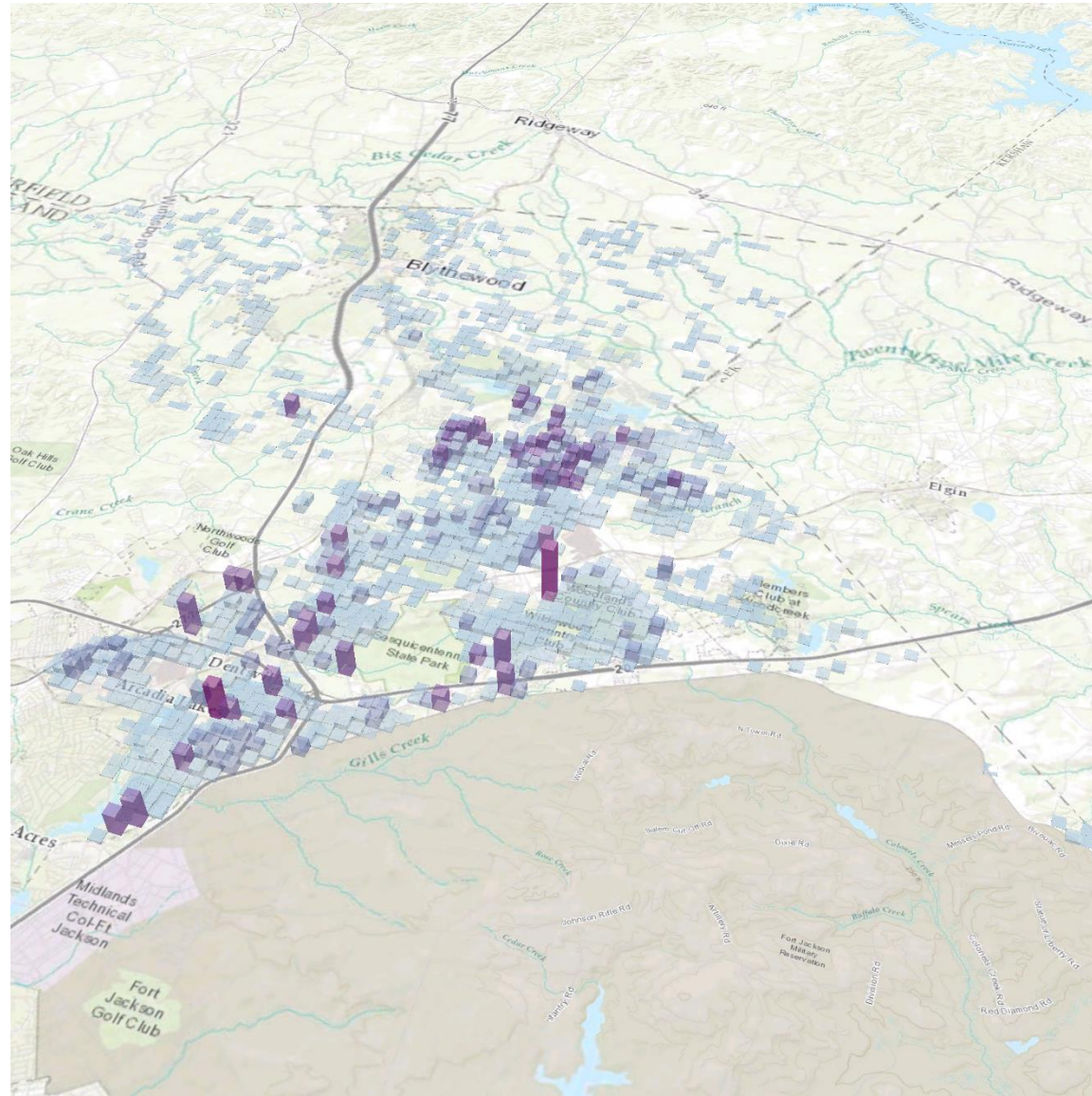
2002



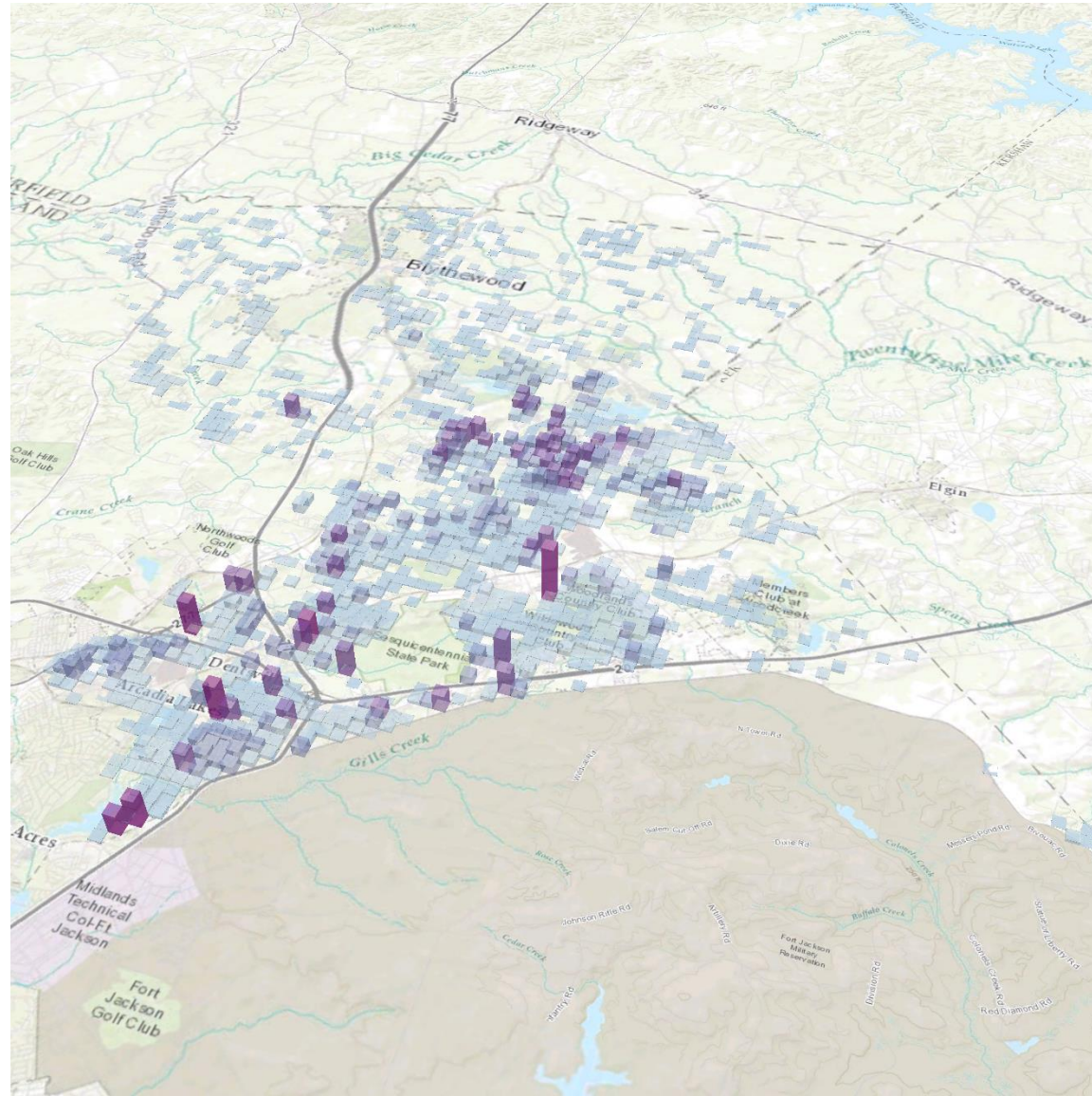
2003



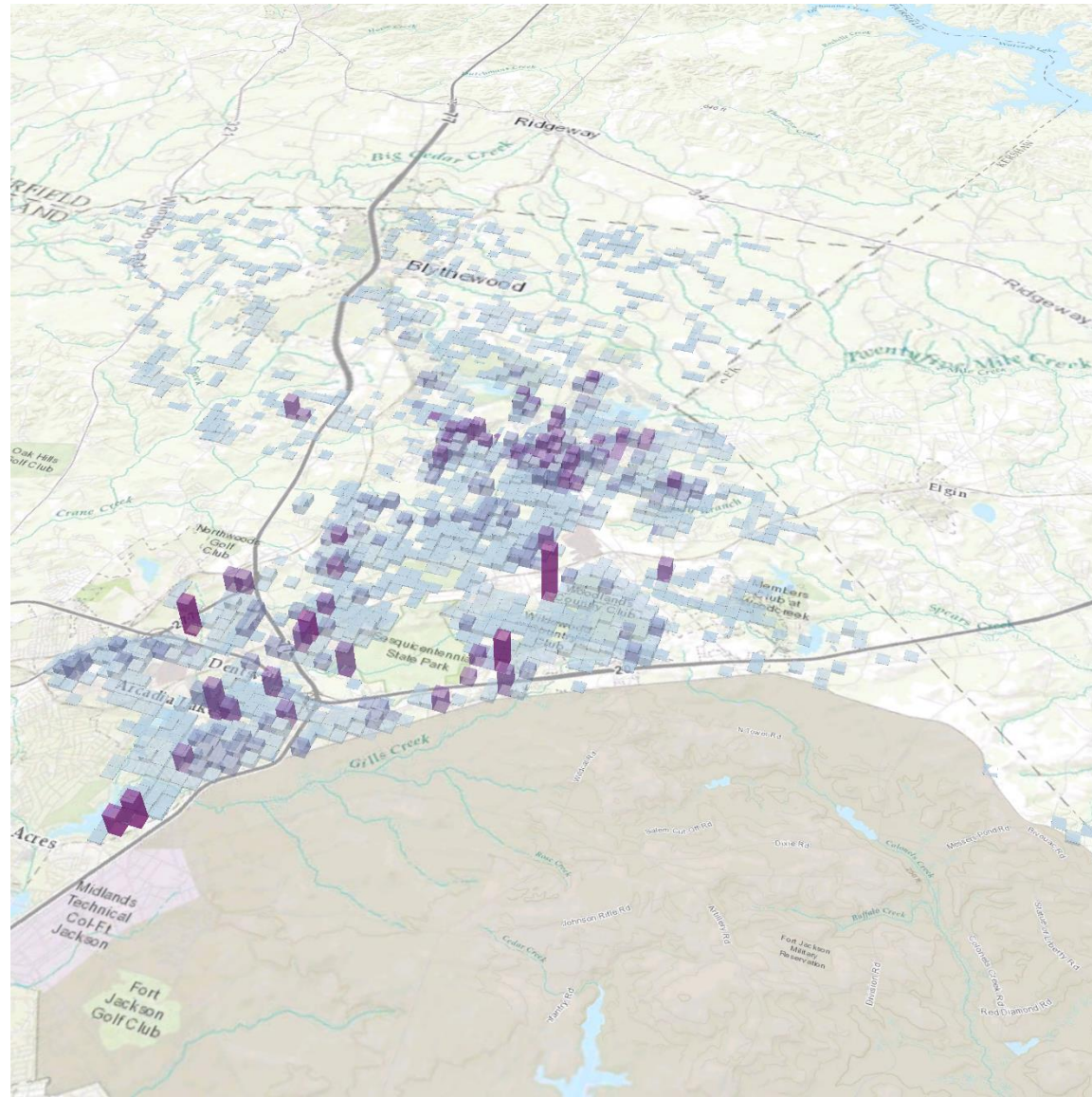
2004



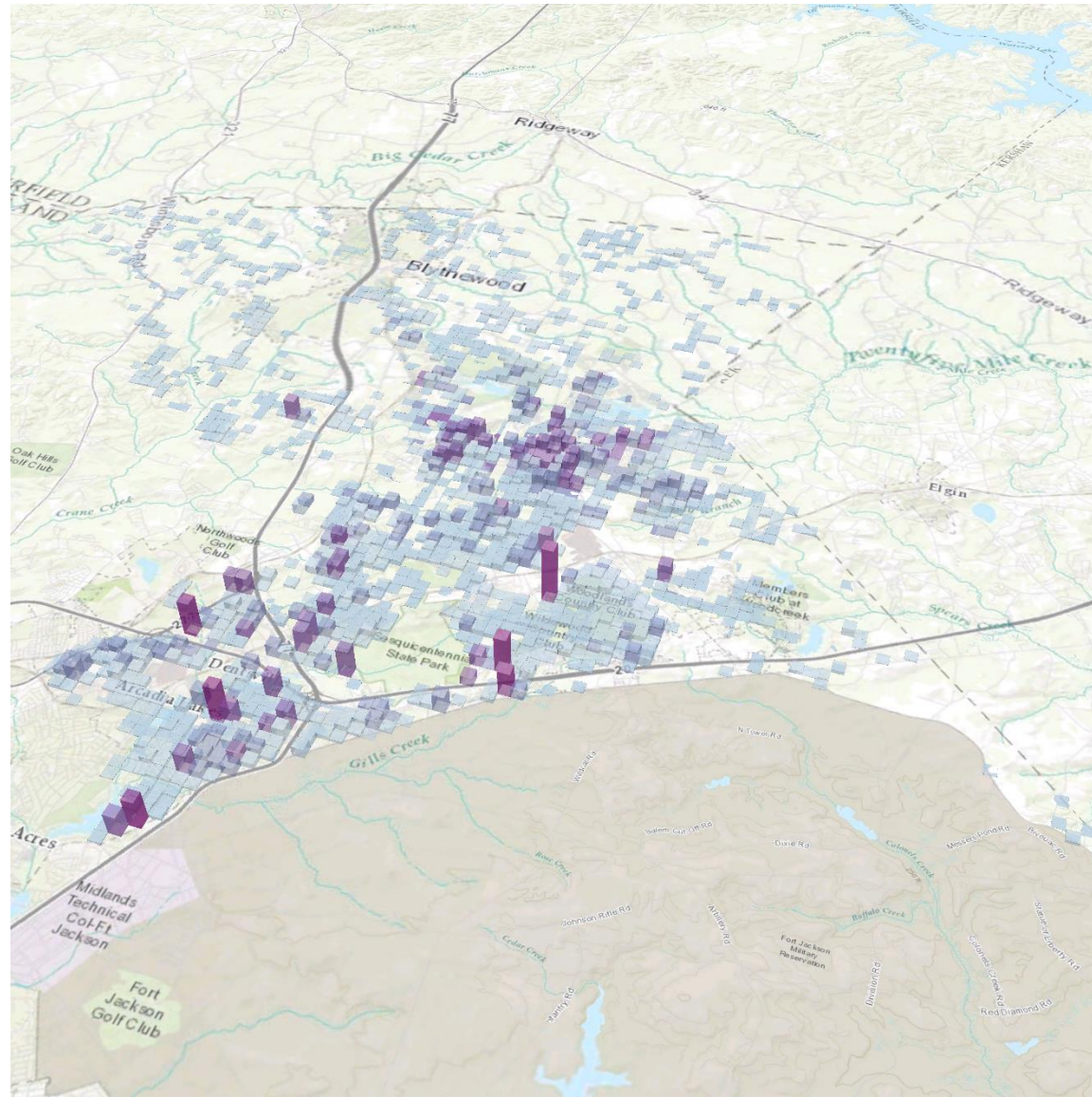
2005



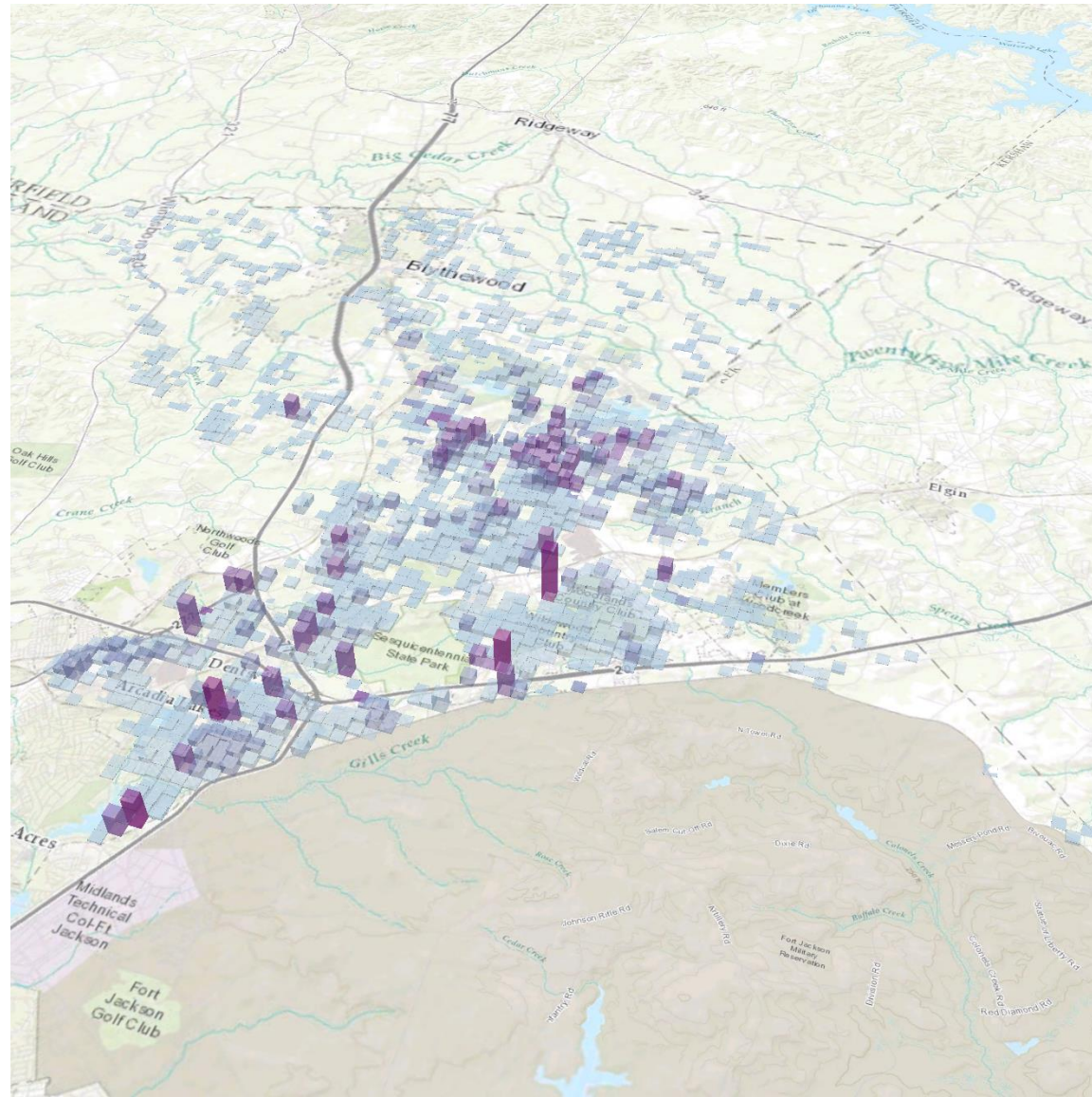
2006



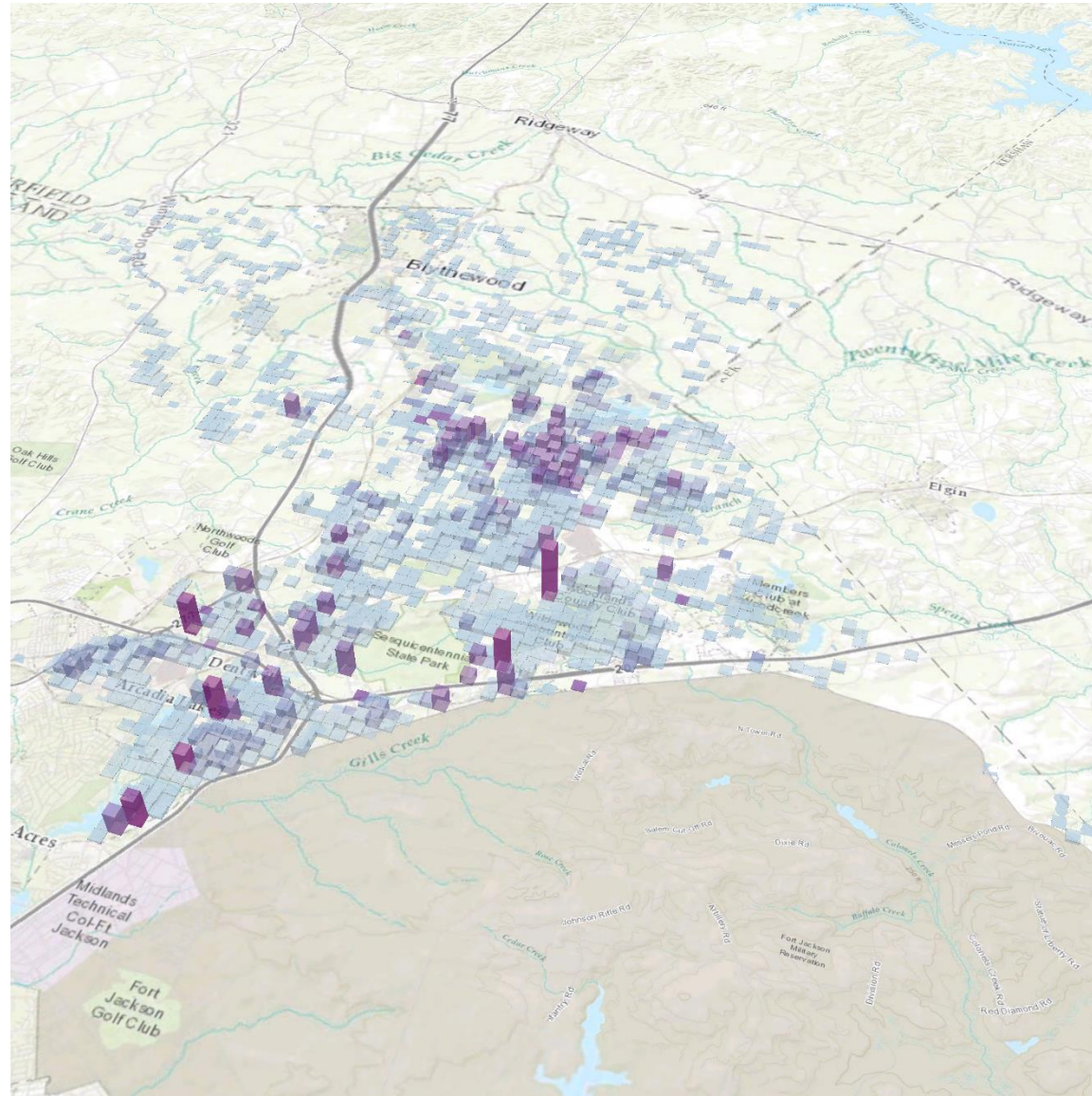
2007



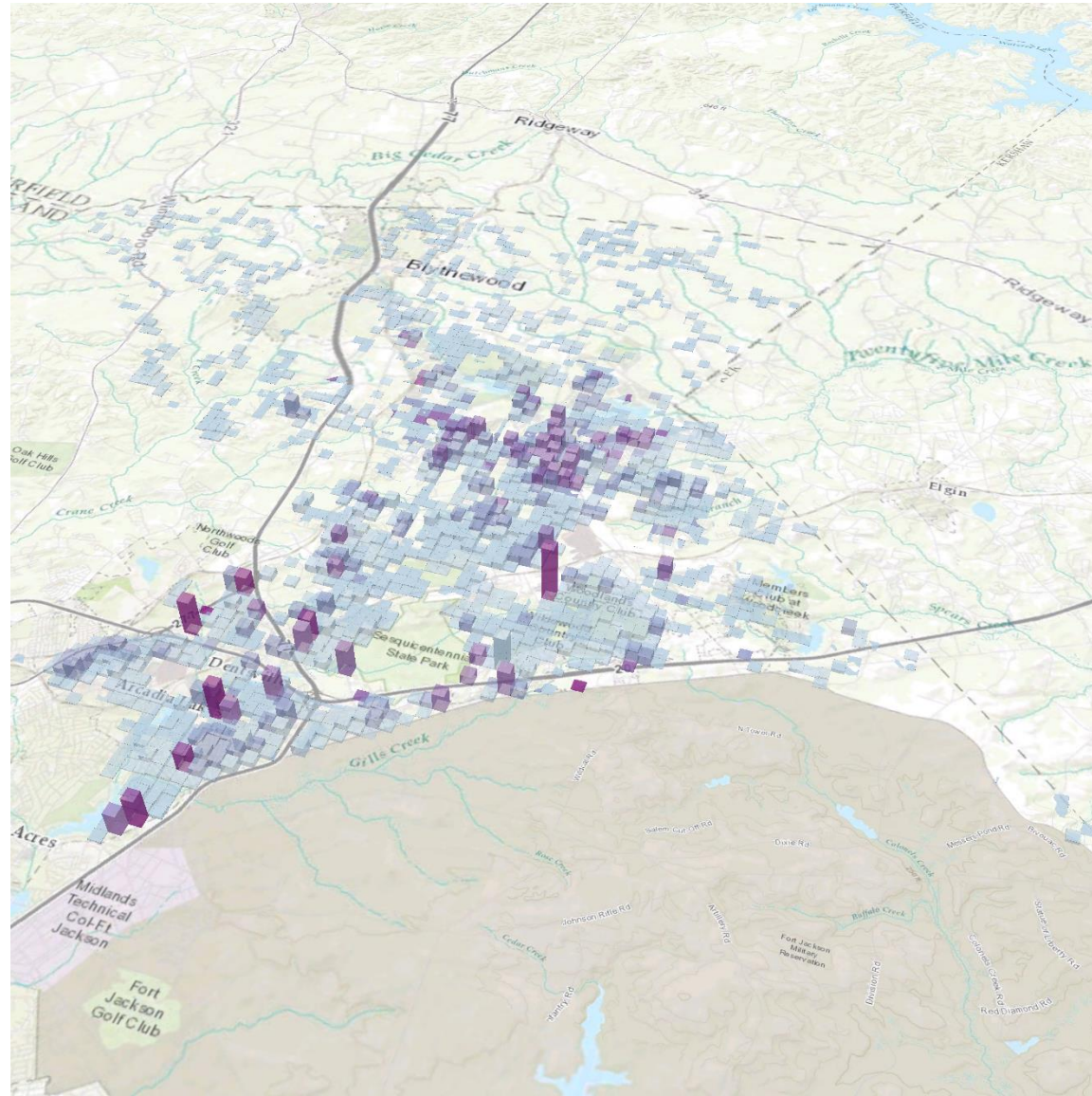
2008



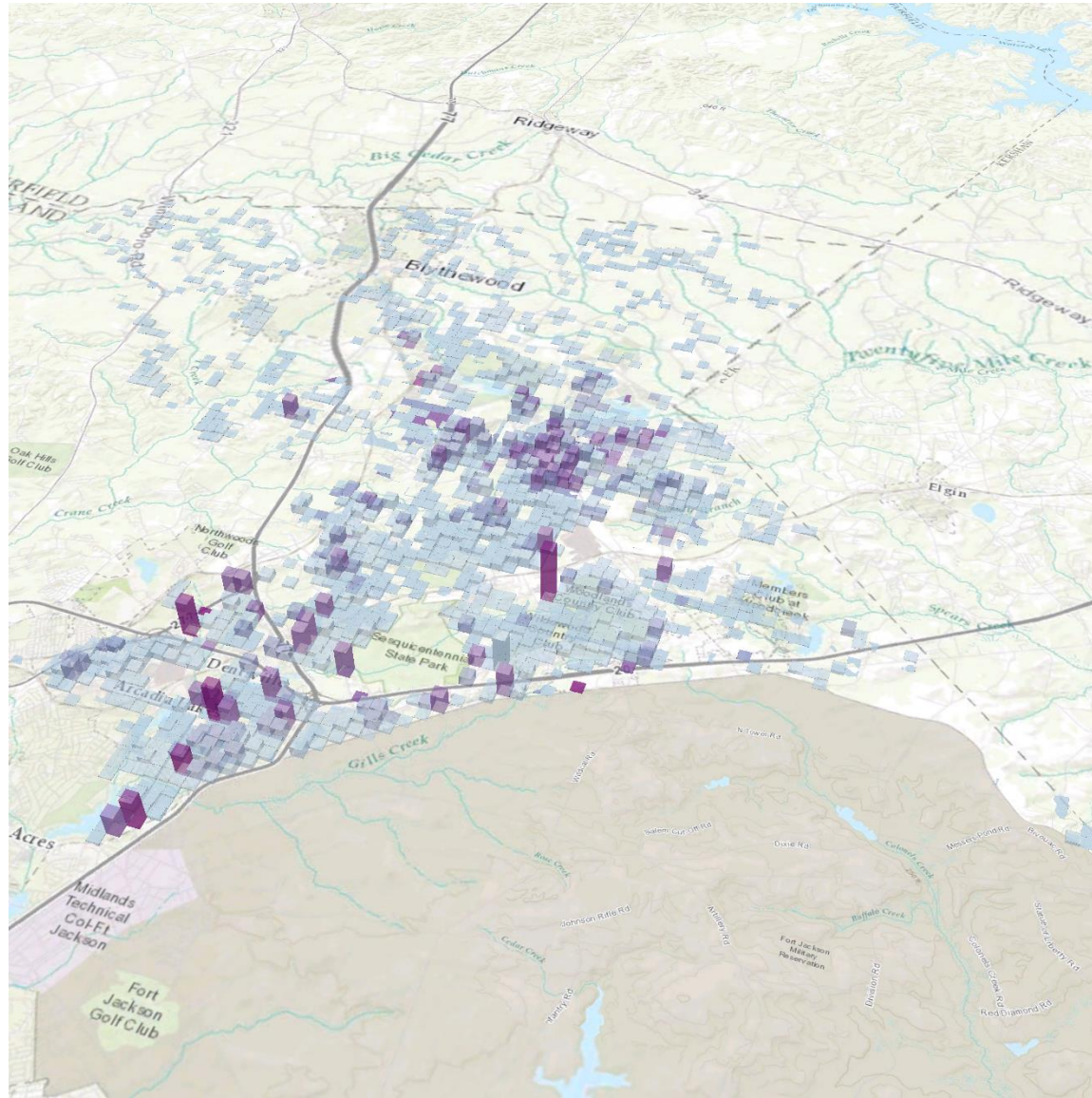
2009



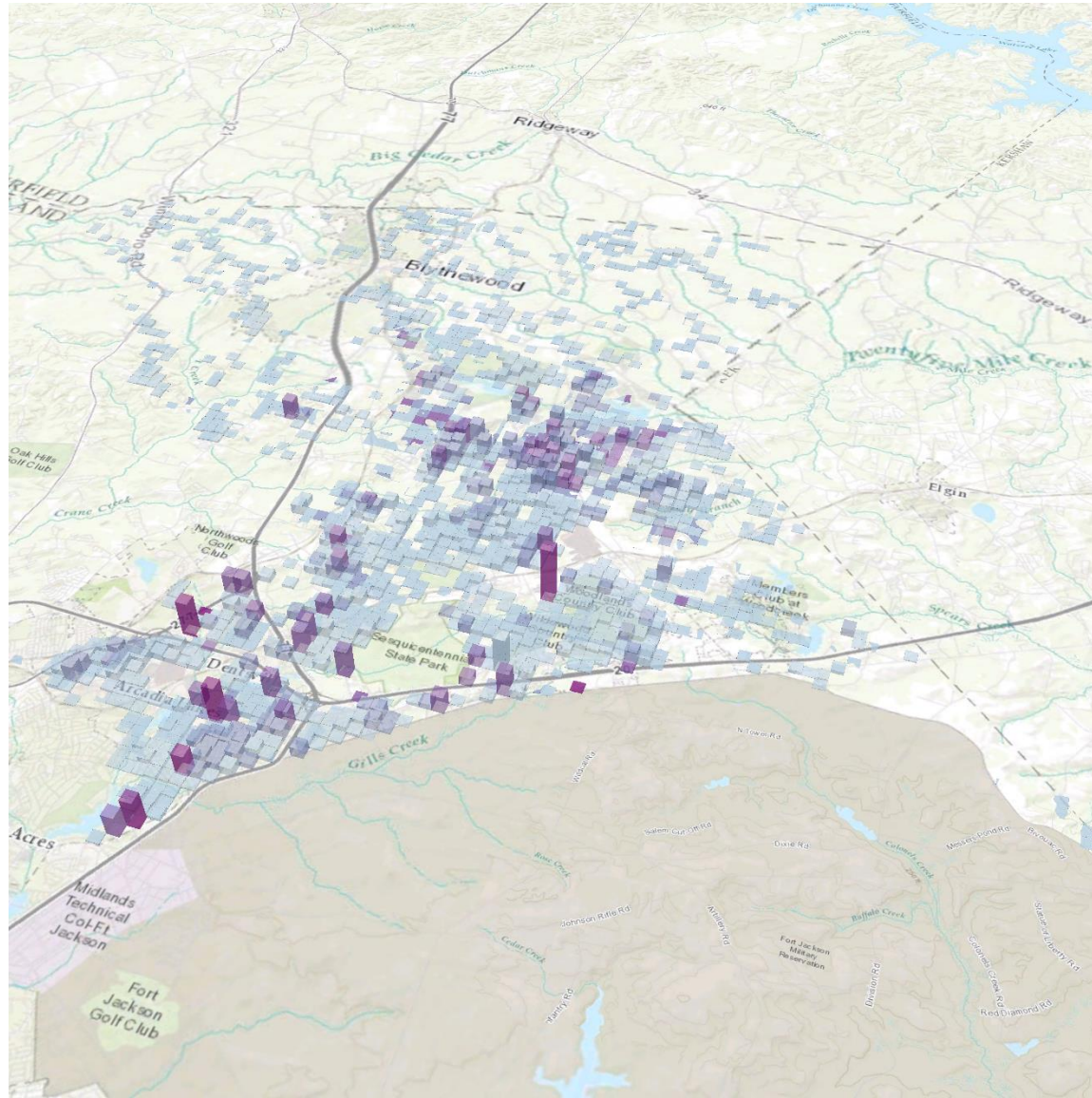
2010



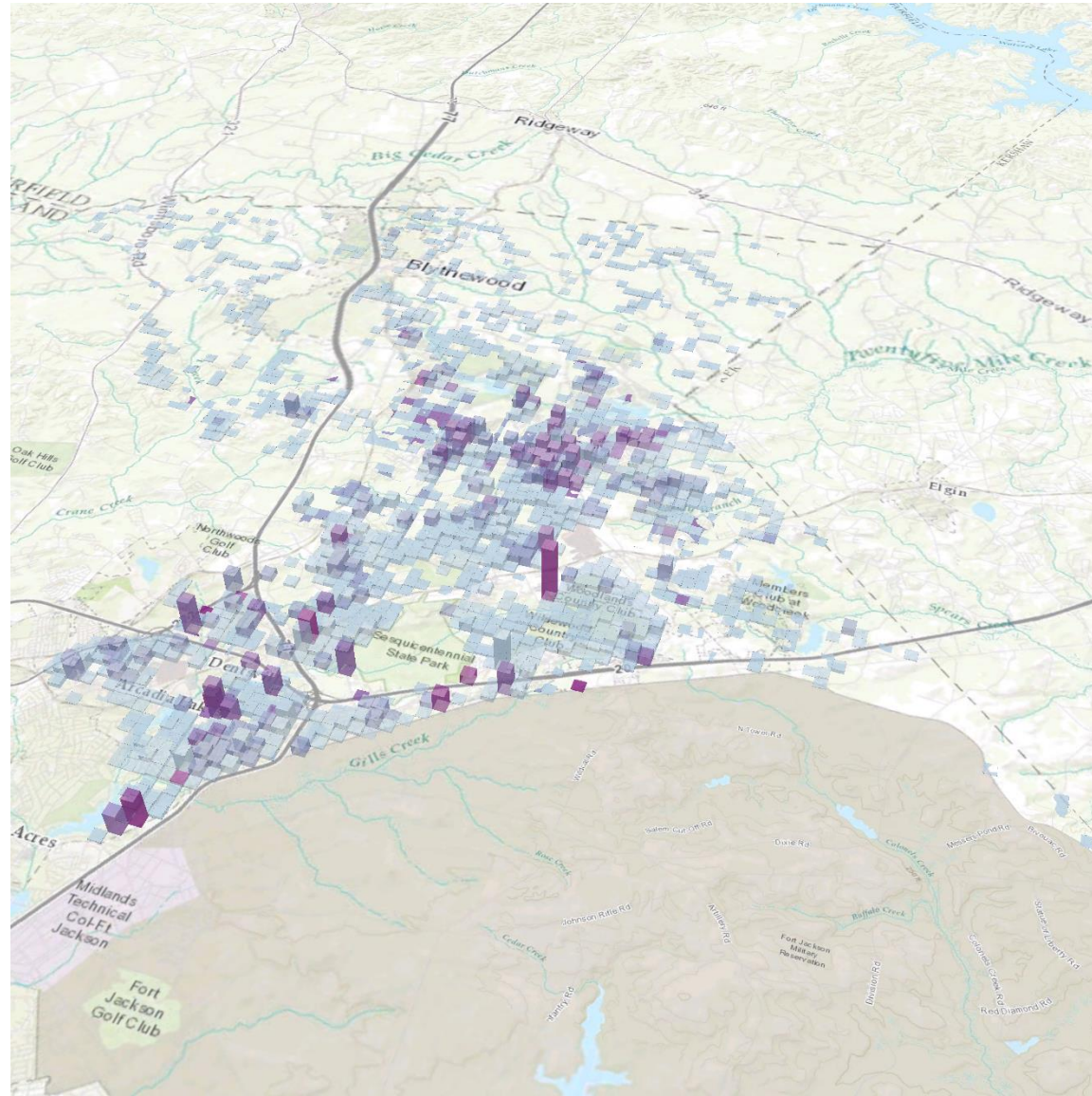
2011



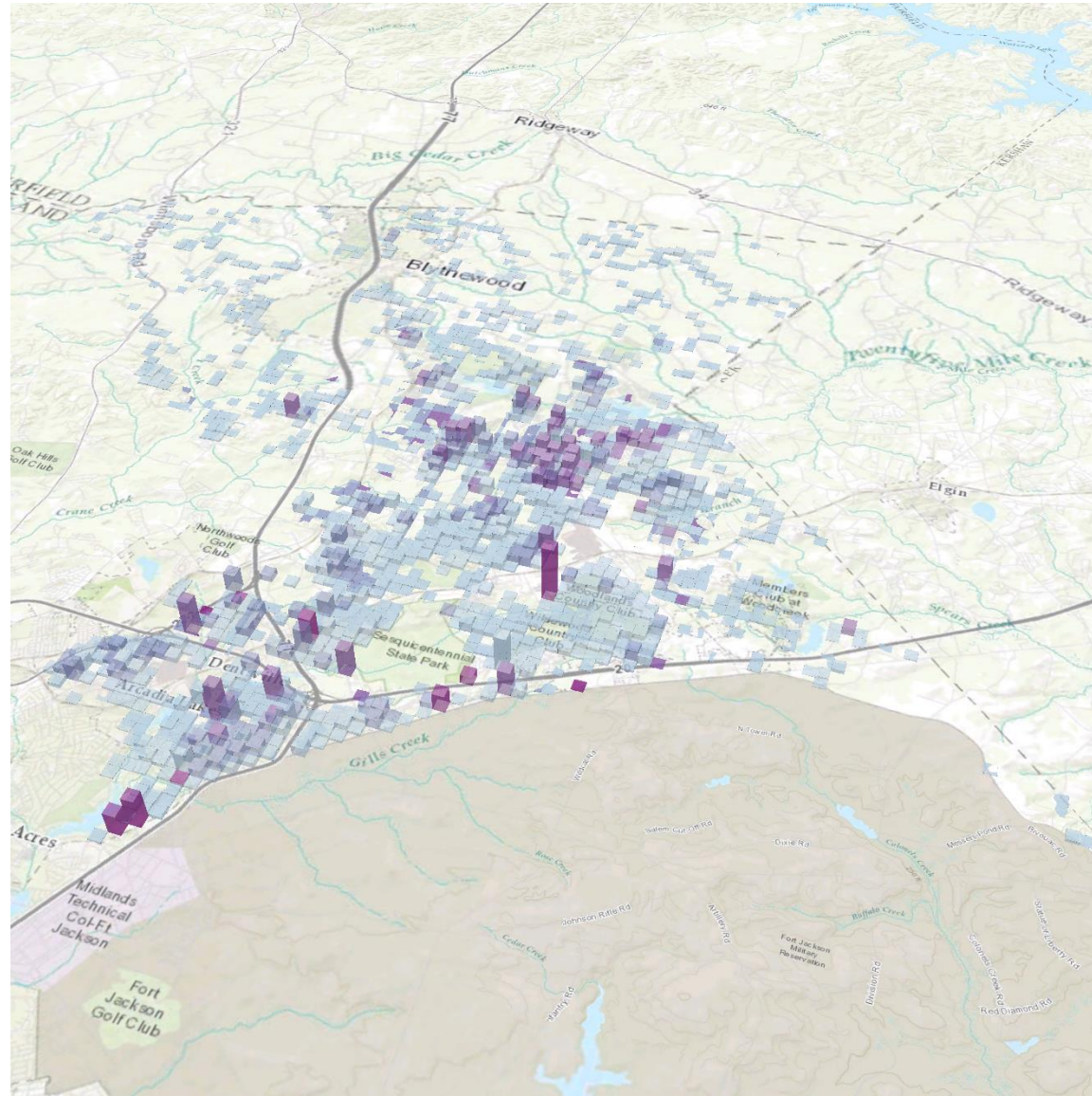
2012



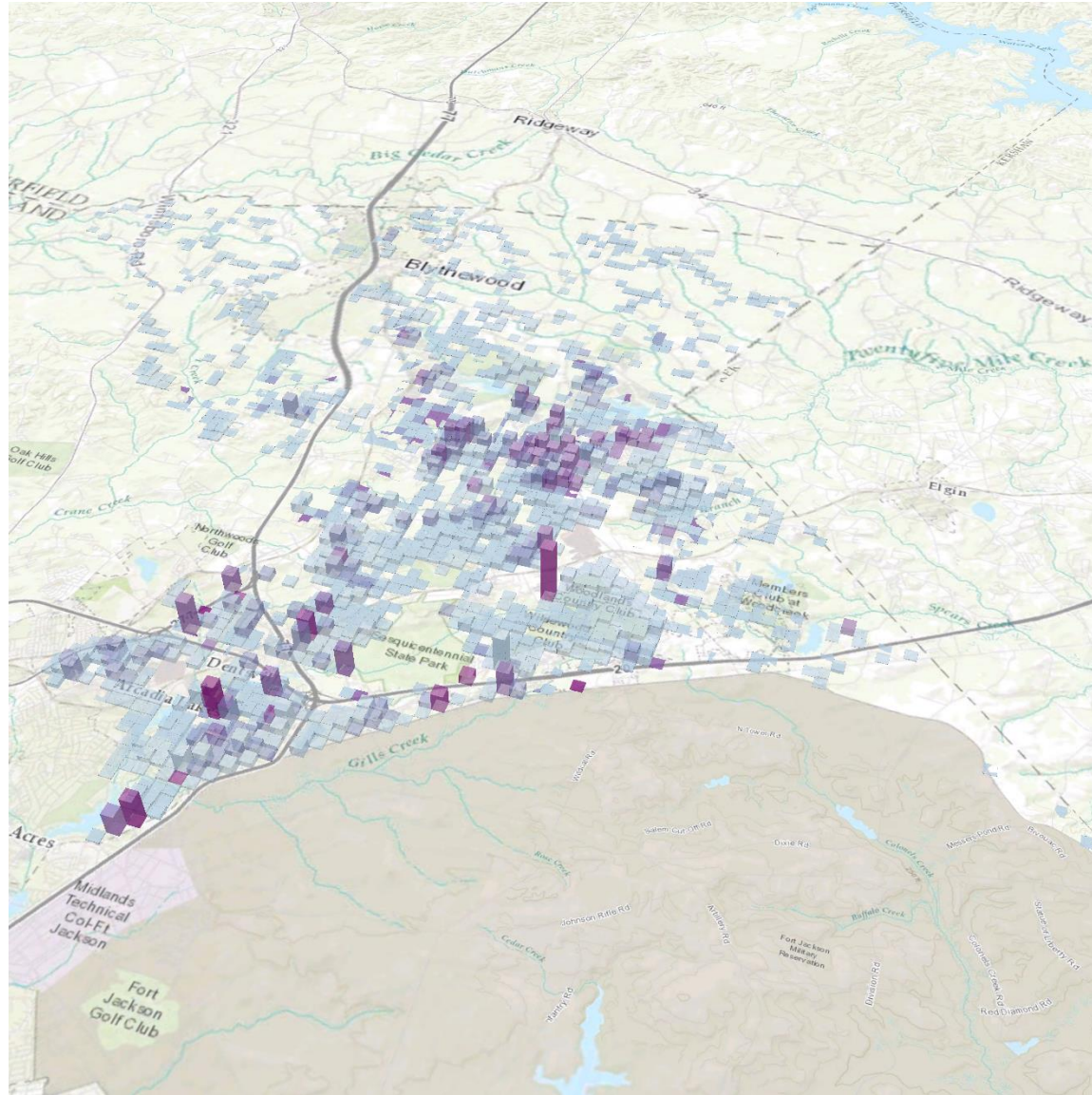
2013



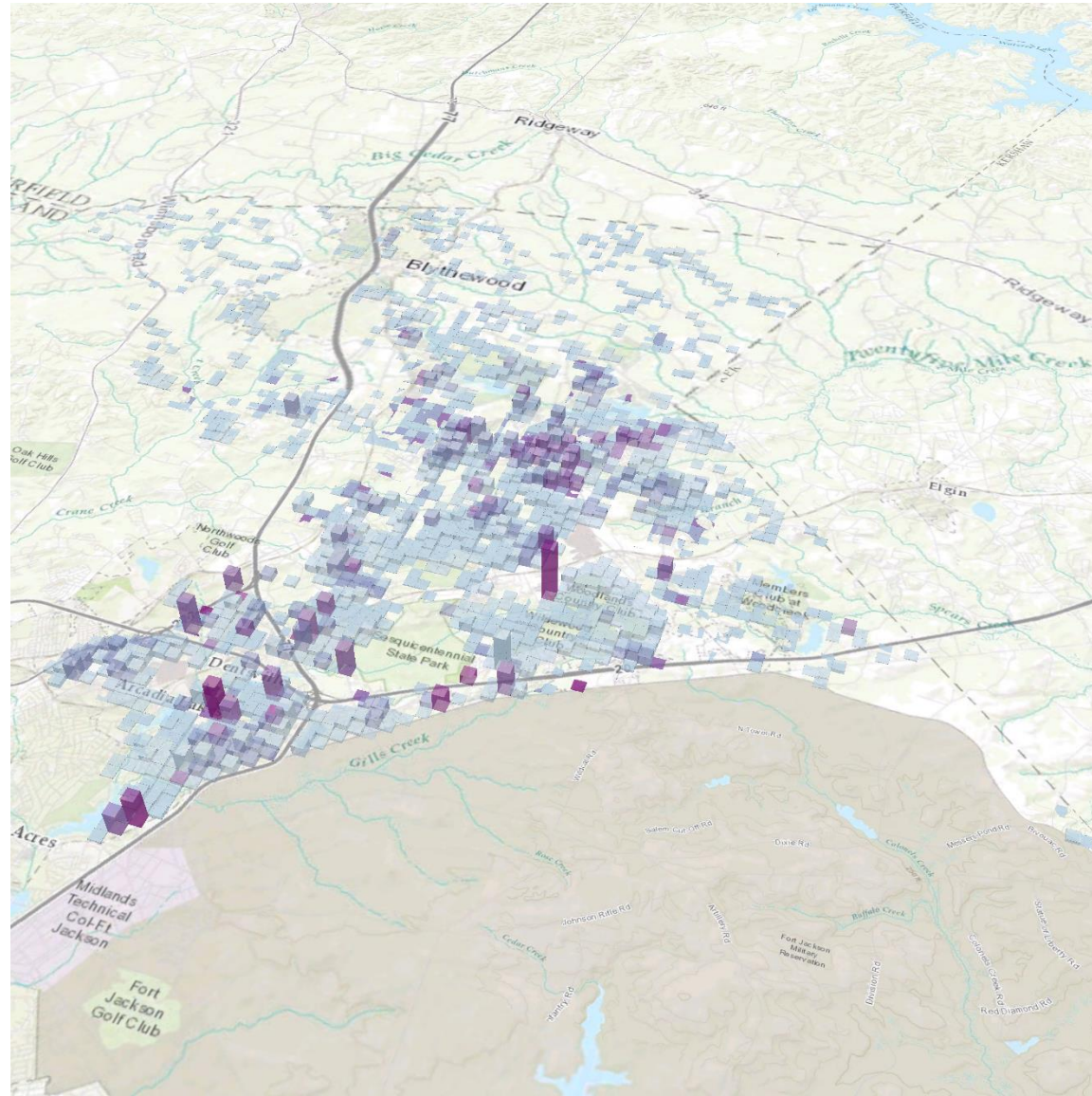
2014



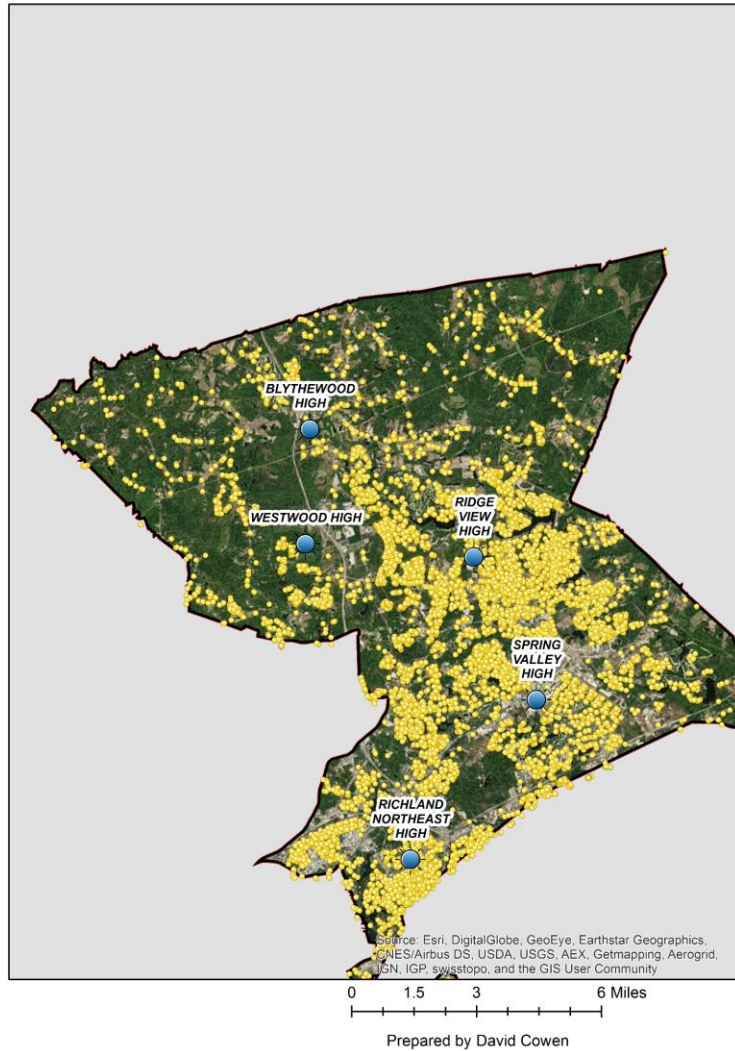
2015



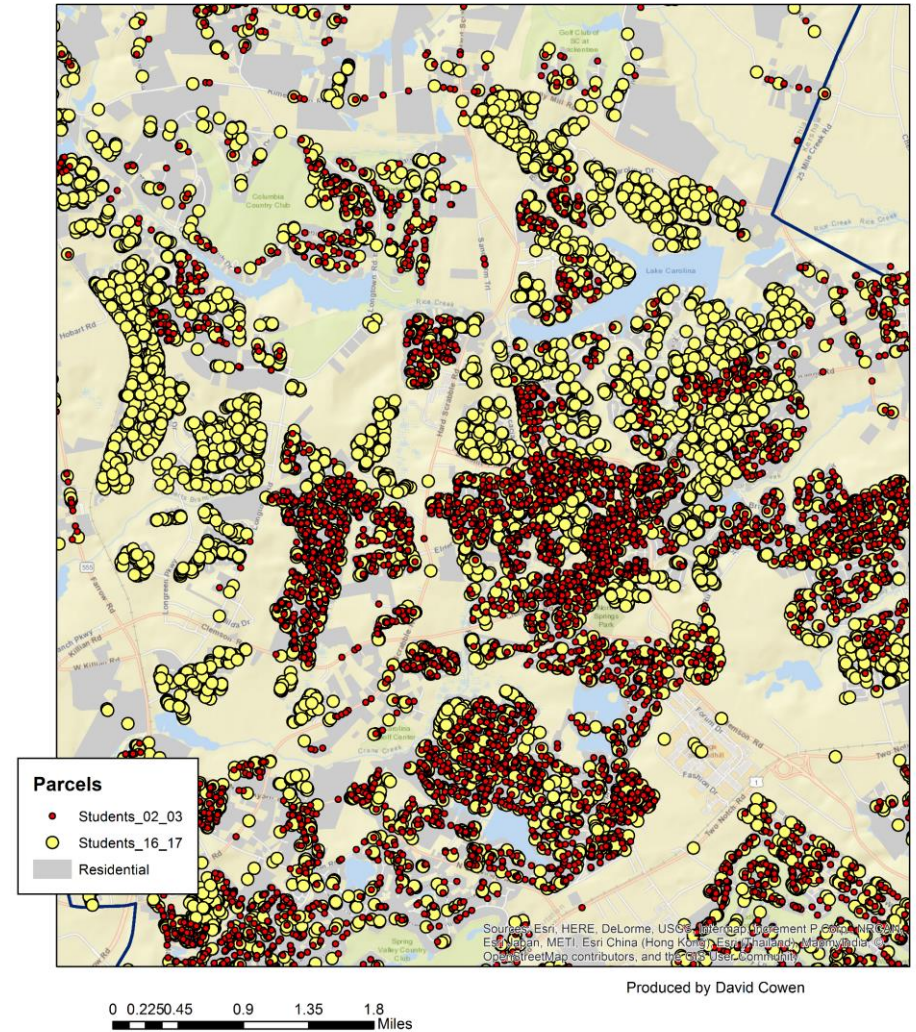
2016



2016 Enrollment

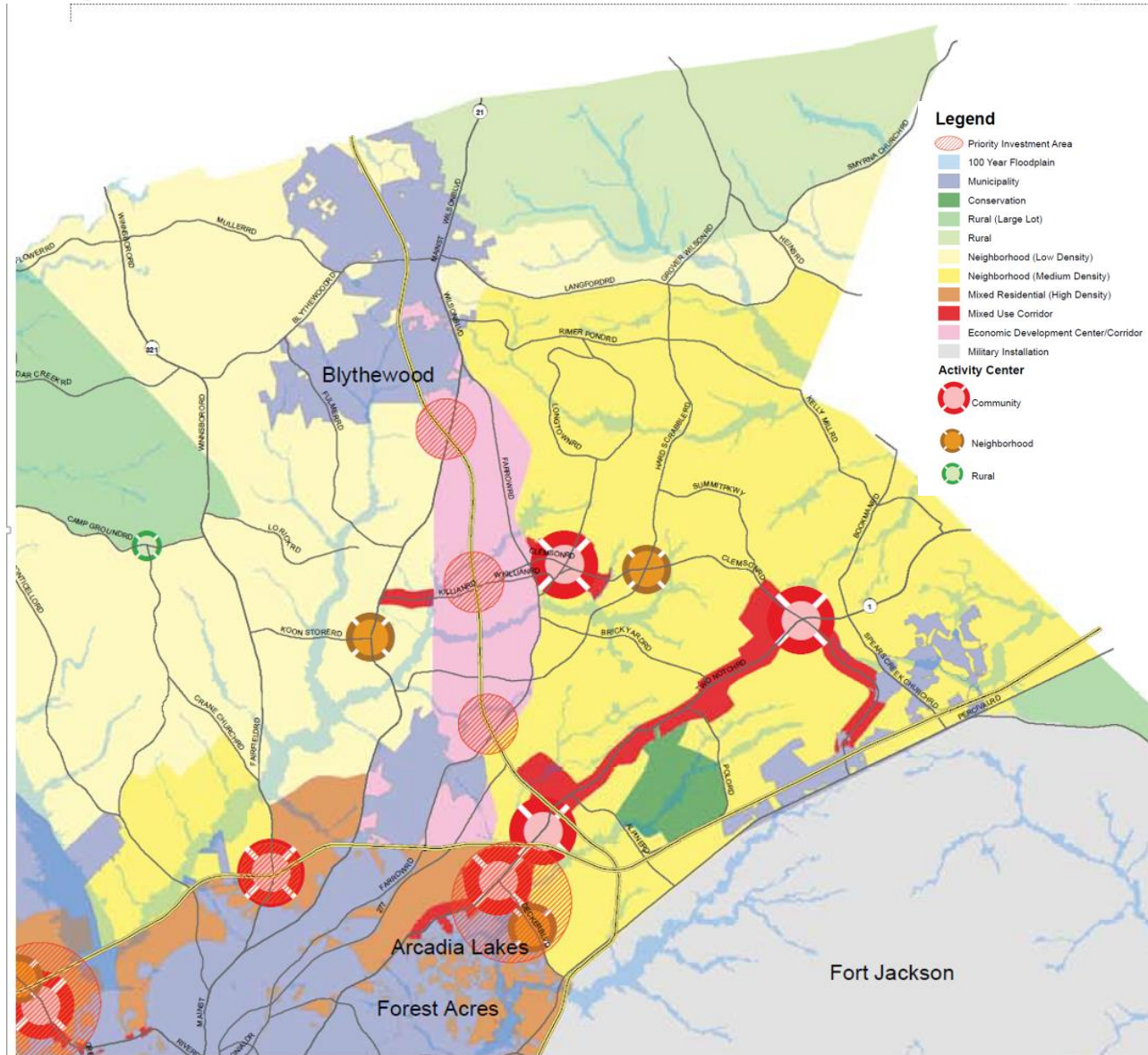


Students 2002 Vs 2016

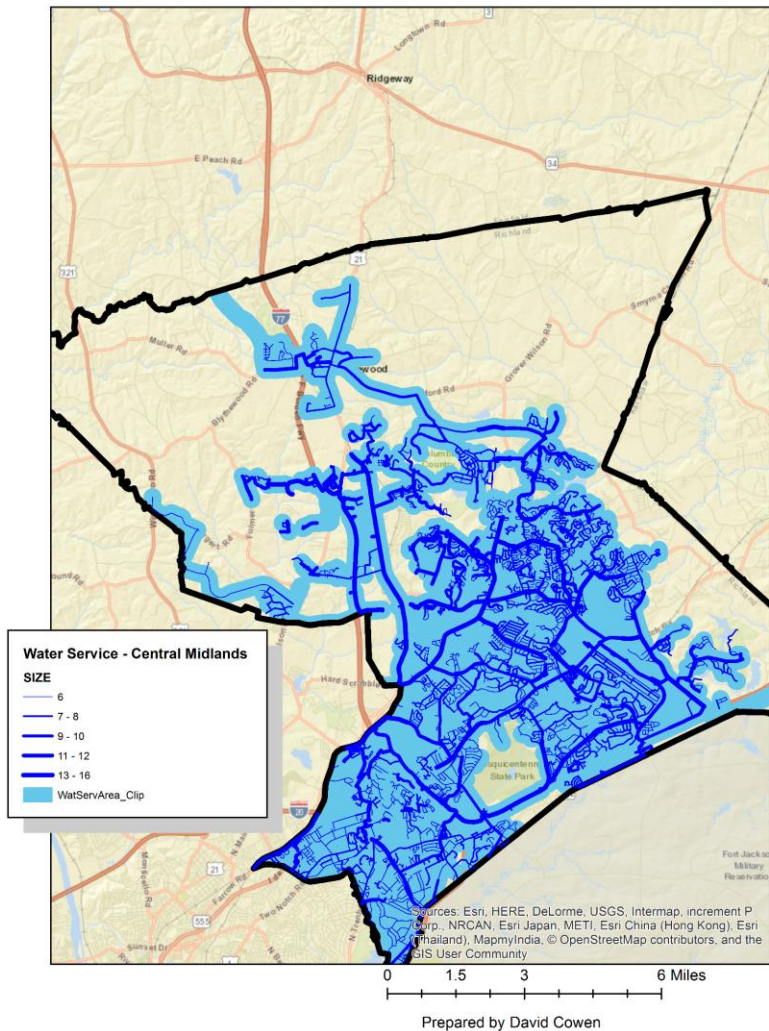


Characteristics of the District – Opportunities & Constraints

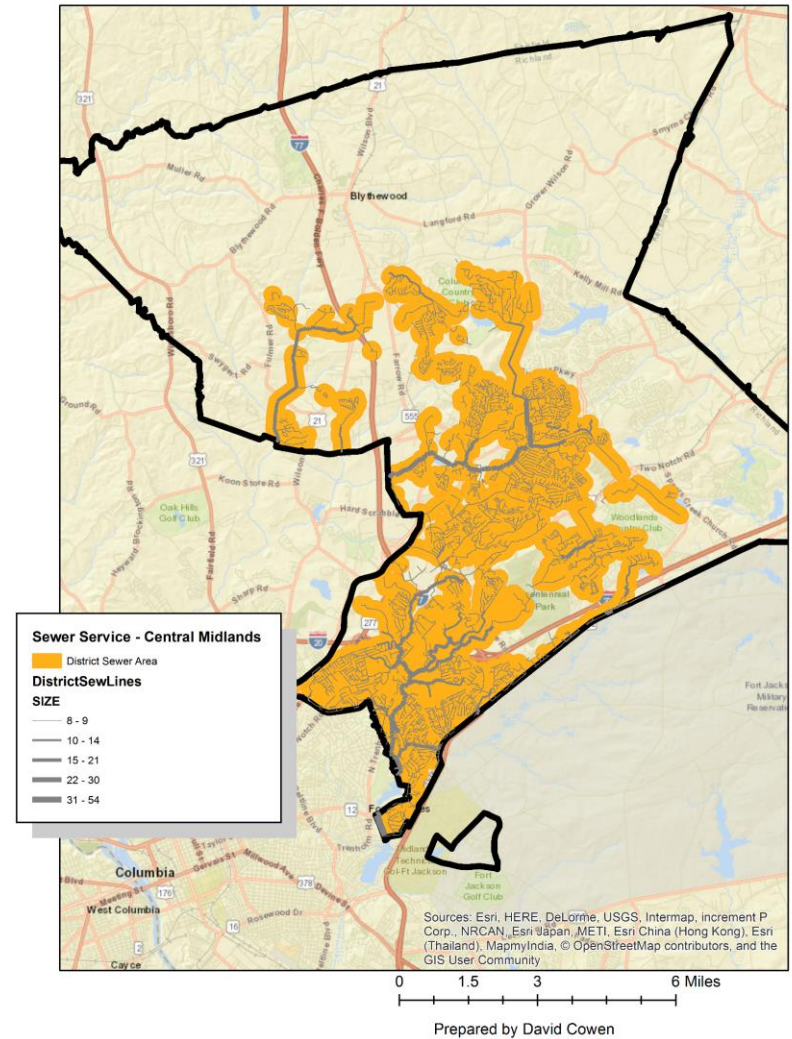
Comprehensive Plan – Richland County



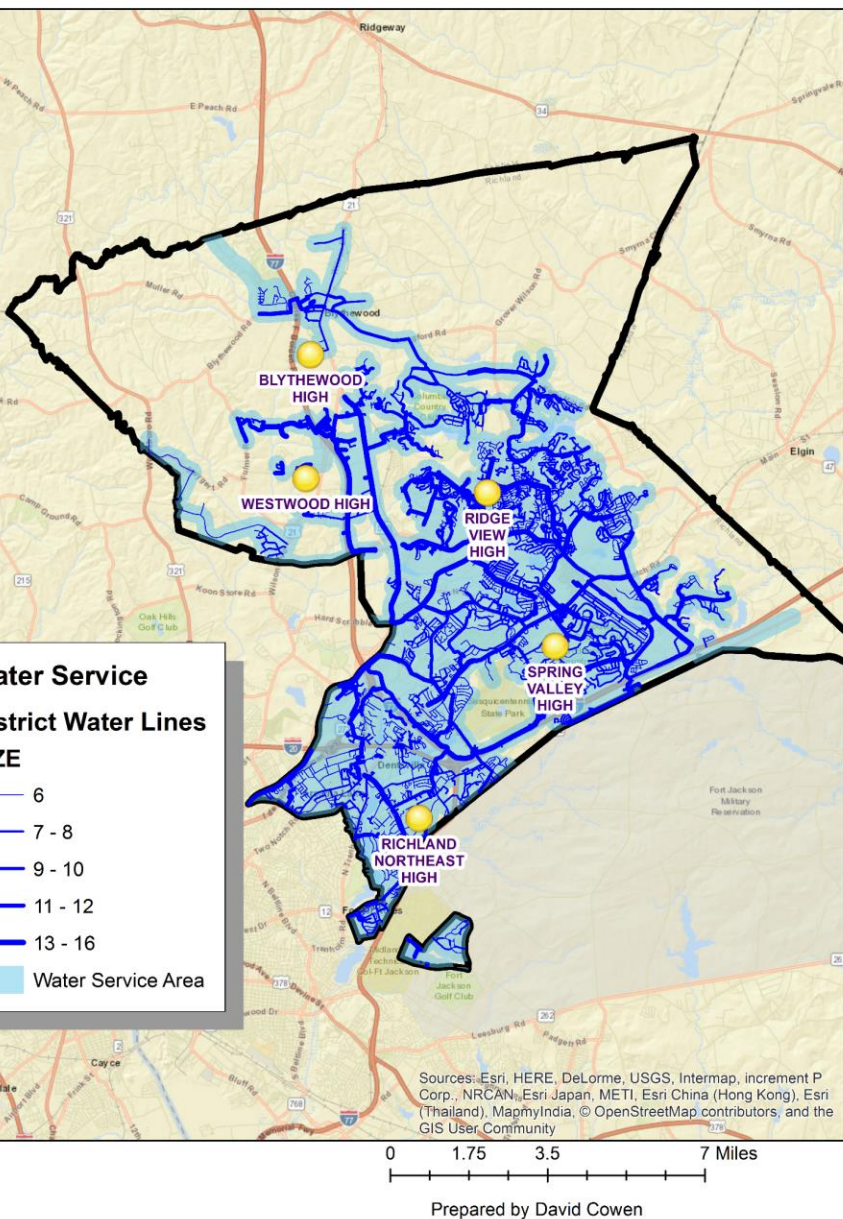
Water Service - From Central Midlands COG



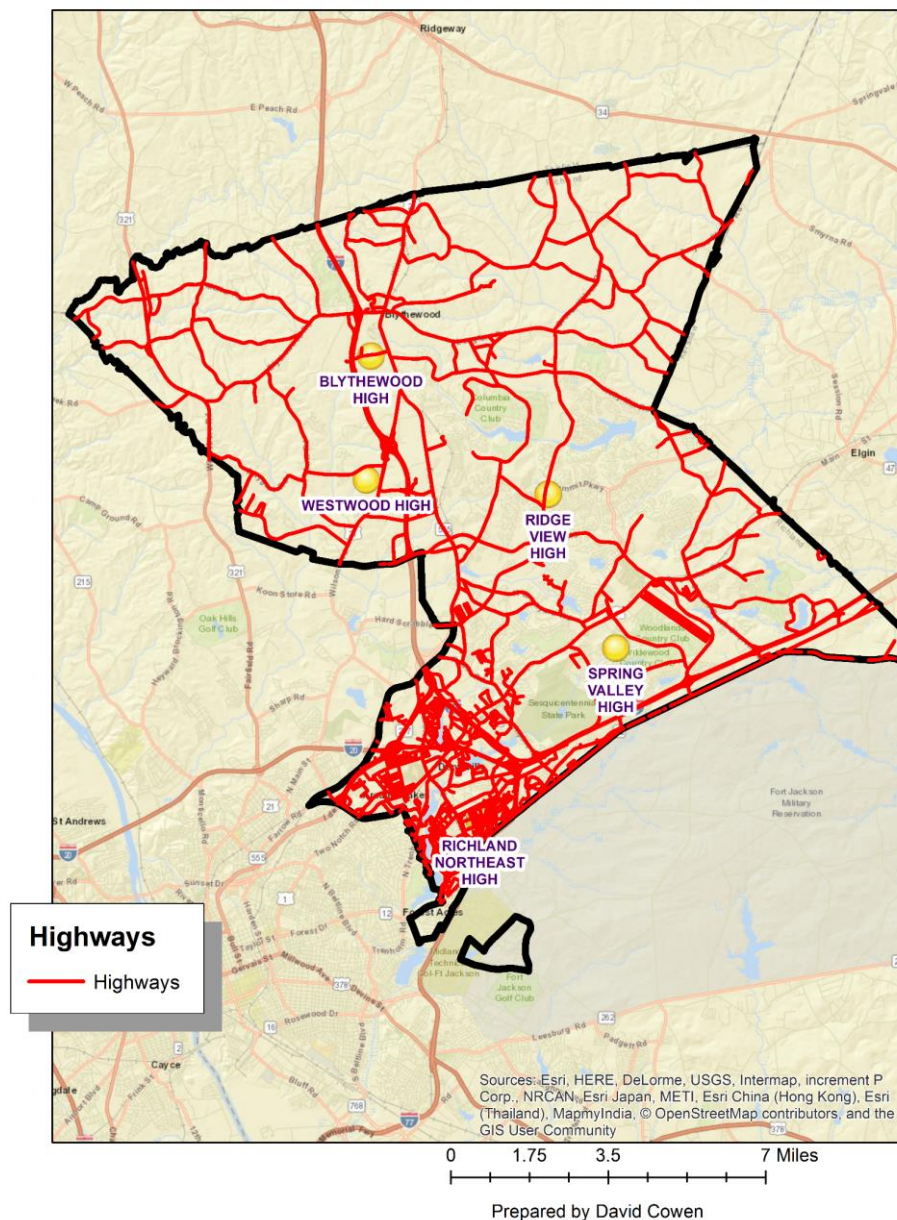
Sewer Service - From Central Midlands COG (Subject to Revision)



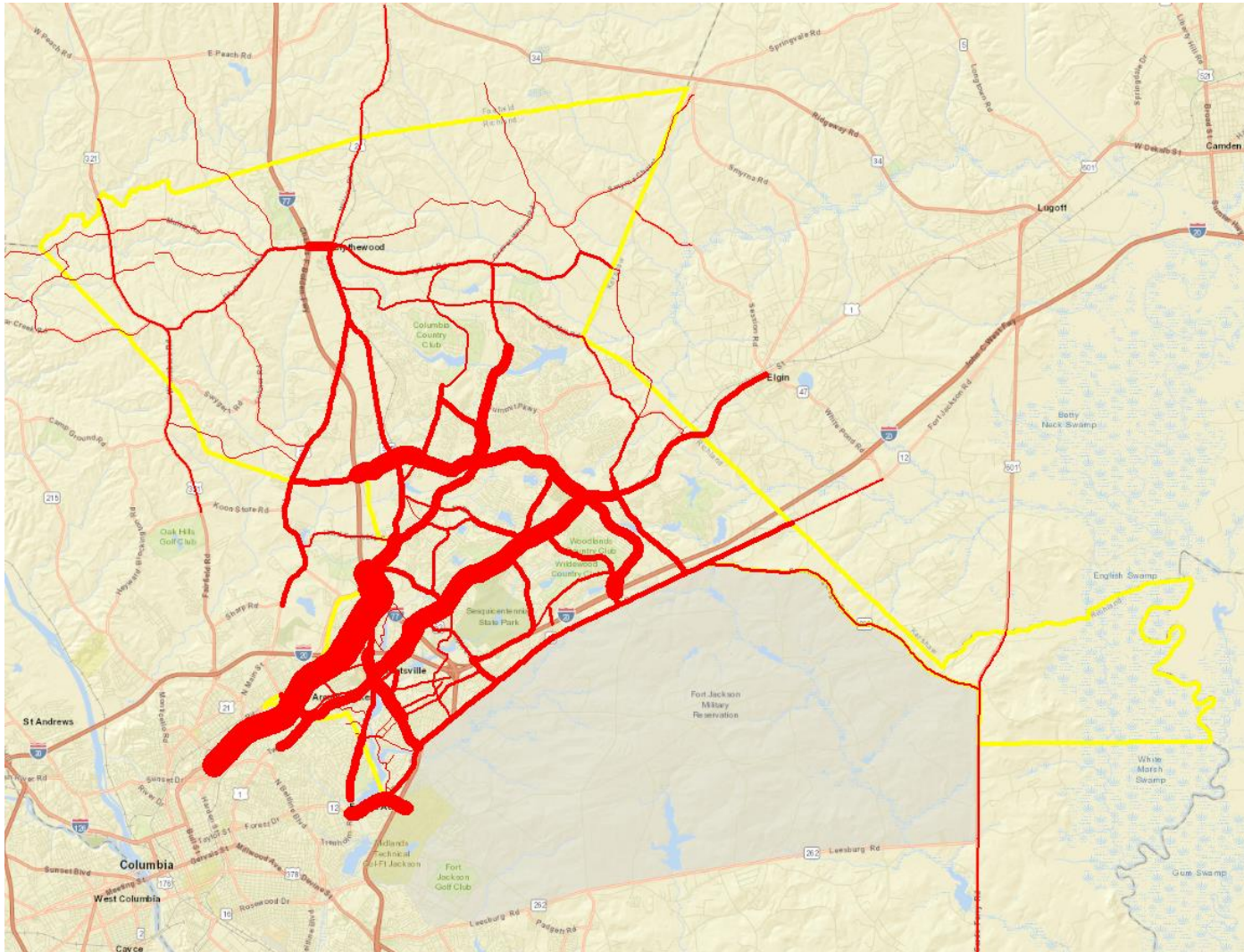
Water Service - Central Midlands COG (Subject to Revision)



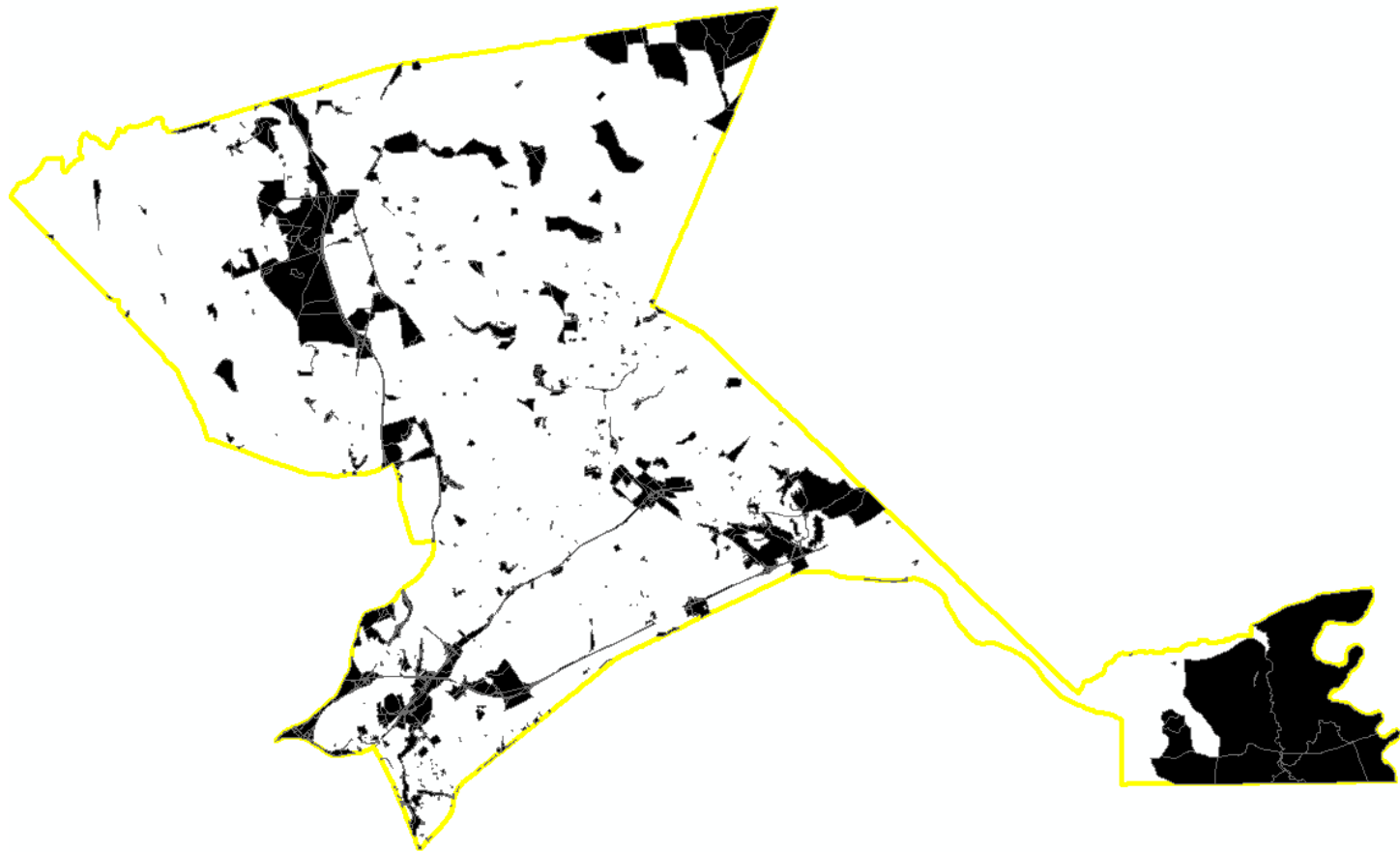
Highways



Traffic



Blocks with Zero Population 2010



Land use and Housing

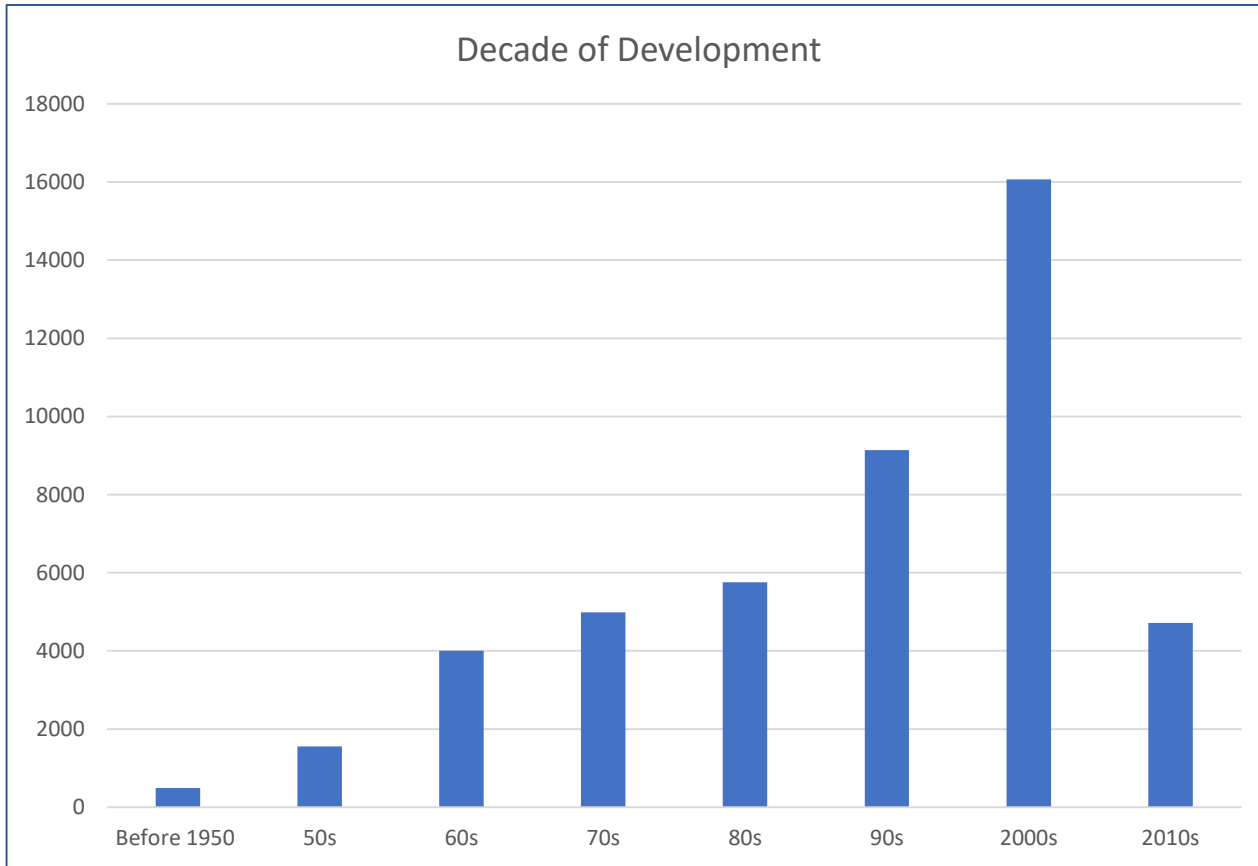
Summary of Parcel Data for District

- Grand Total = 56,760
- Size : Parcel Area Minus Fort Jackson = 151 Sq Miles
- Number with residential structures = 45,348
- Number with residential land type = 52,420
- Average Value of single family structure = \$126,176
- Mobile homes = 237, value = \$7411
- Town Houses = 546 Value = \$44,198
- 7,020 Homestead Exemption
- 220 County Owned
- 105 Municipal Owned
- 2,118 Tax Exempt

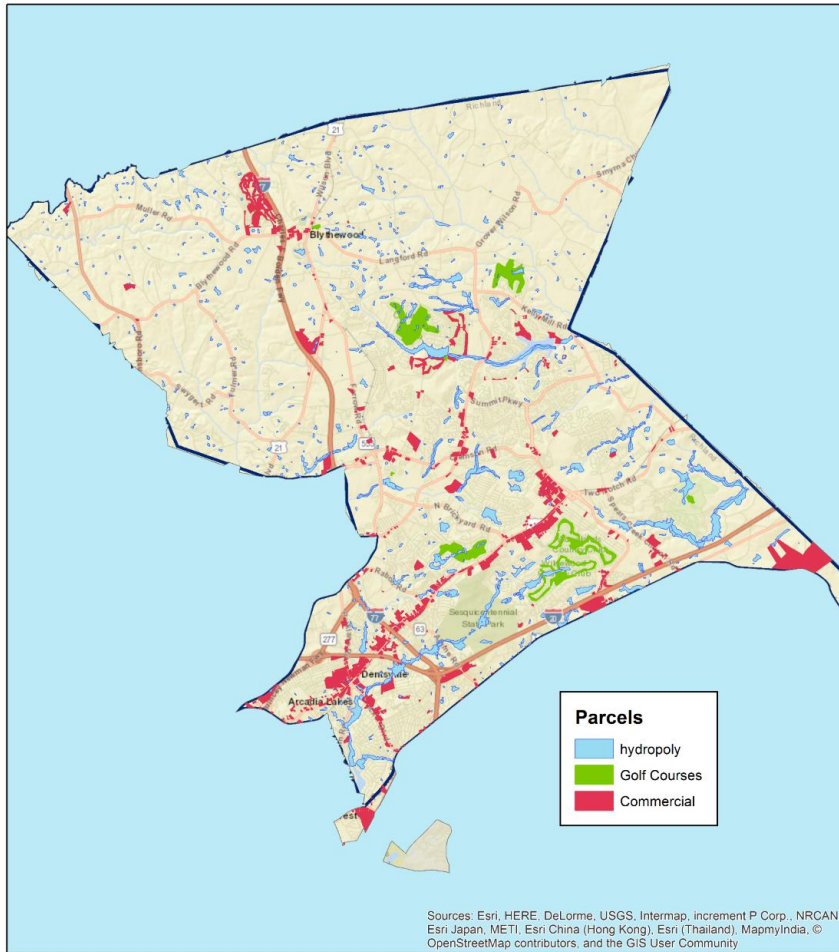
Summary of Parcel Data for District

- Assessed Value – \$404,395,802, Ave \$7,124.
- Taxable Value – \$875,0962,041 Ave \$154,174
- Value per Square Foot – Ave \$54.85
- Acres – 148,601 Ave 2.6
- Price Per Acre - Ave \$50.325

Decade Of development



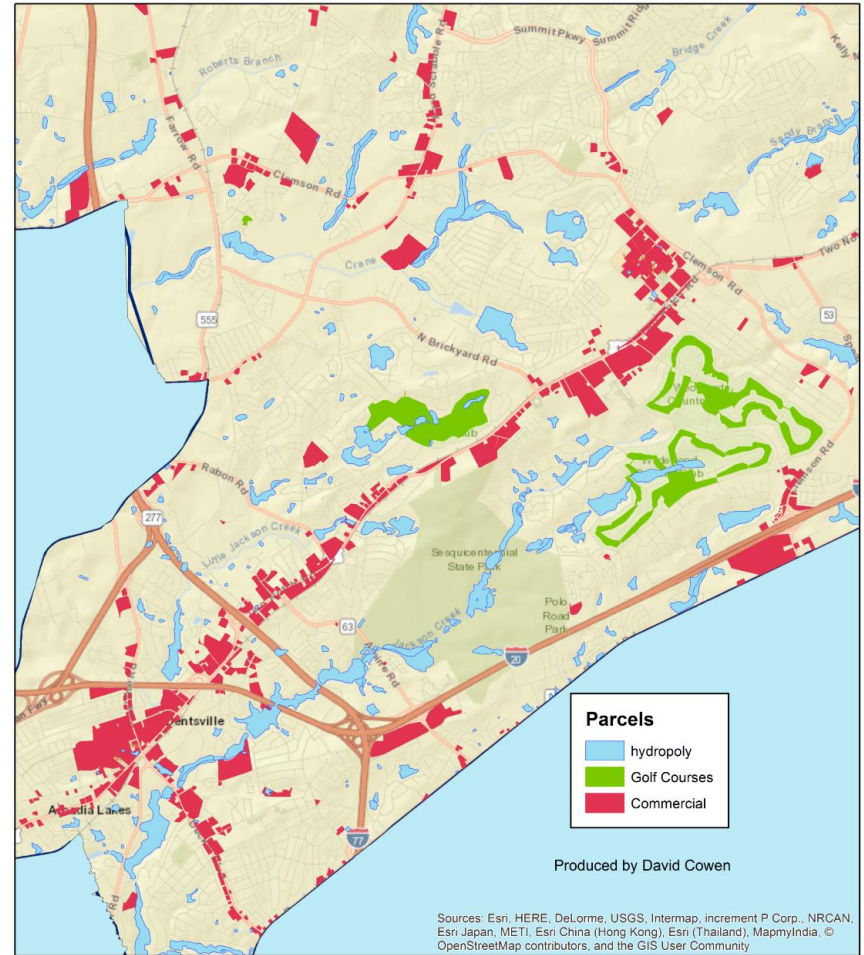
General Land Use



0 0.75 1.5 3 4.5 6 Miles

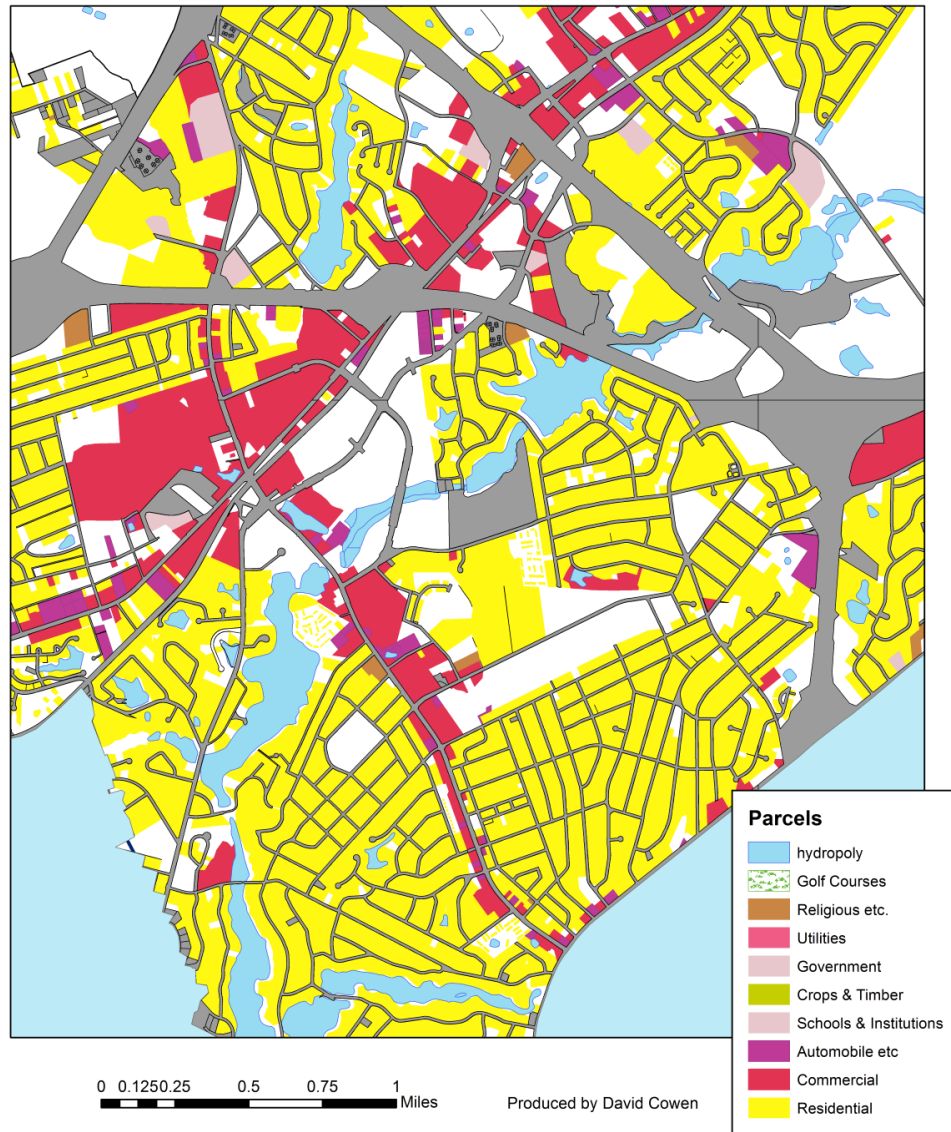
Produced by David Cowen

General Land Use



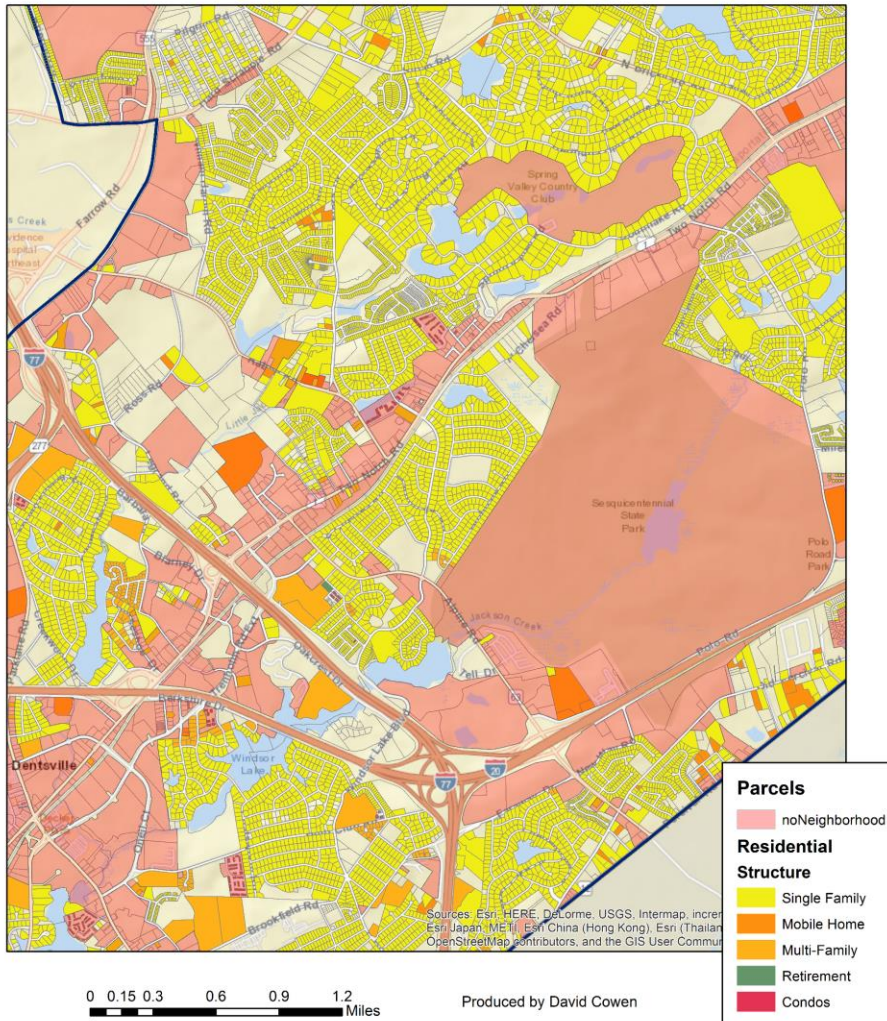
0 0.3 0.6 1.2 1.8 2.4 Miles

General Land Use



Residential Types based on Structure

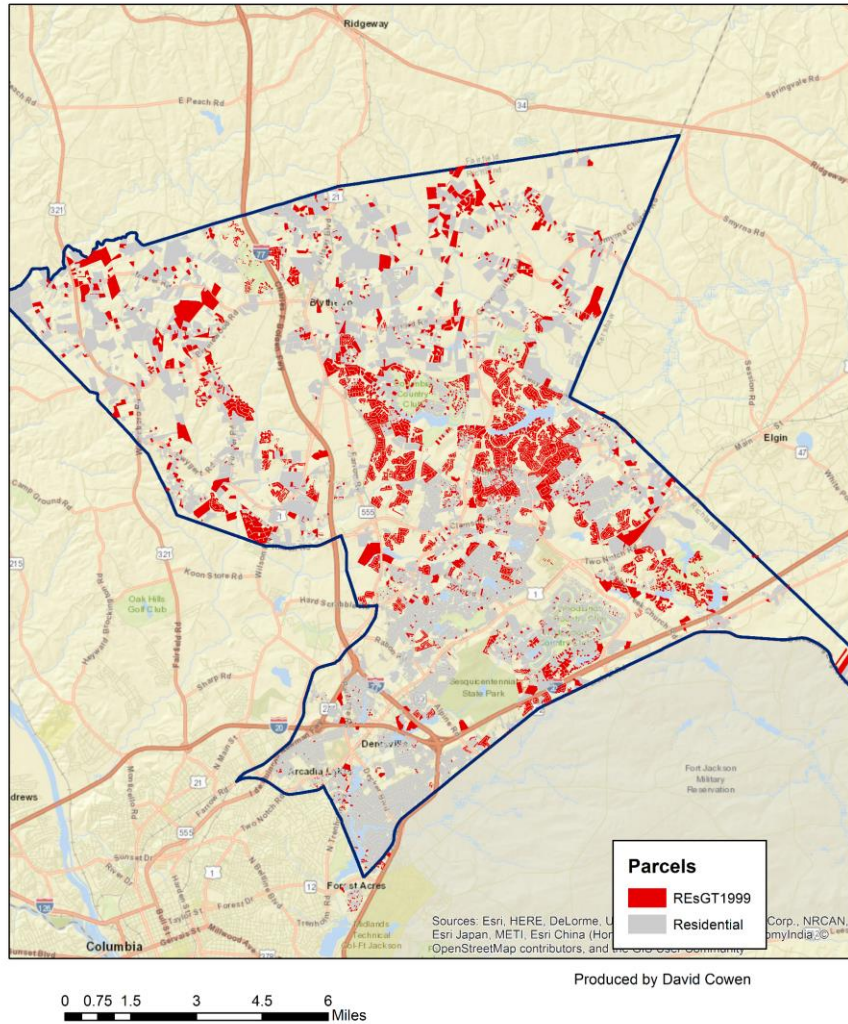
Residential Structures



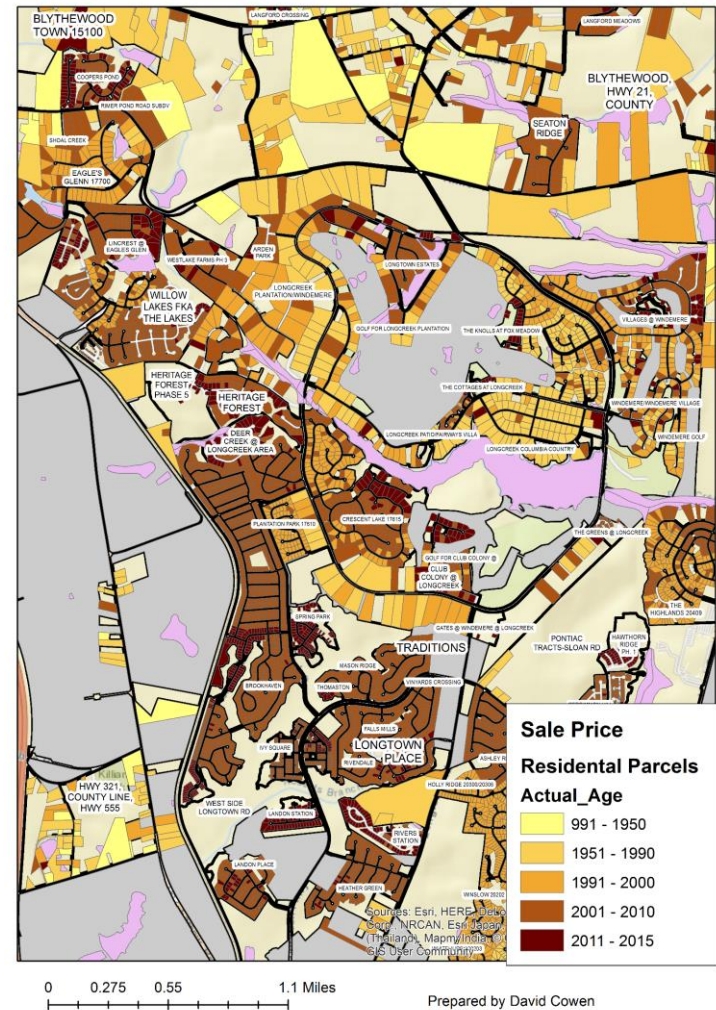
Residential Structures

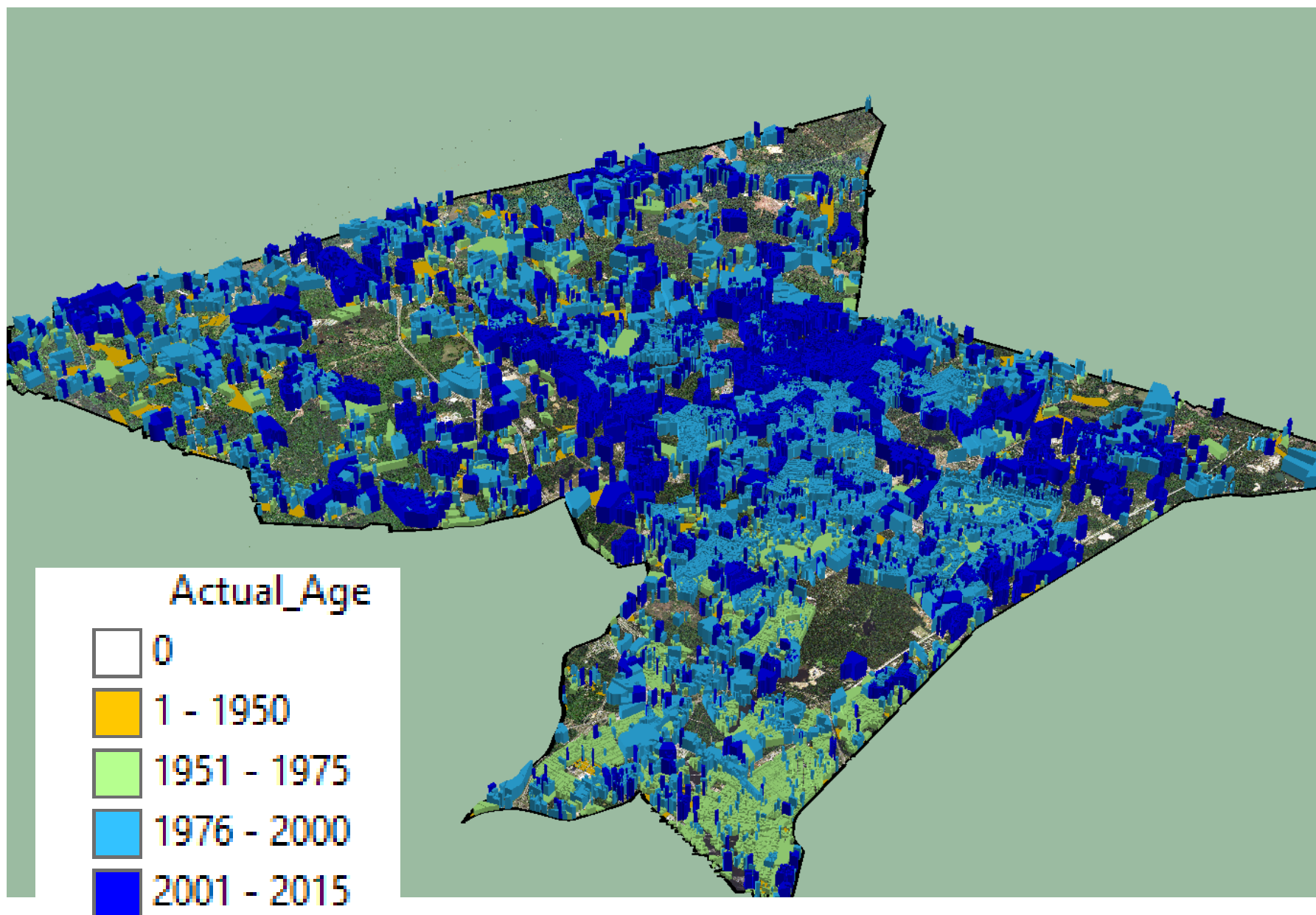


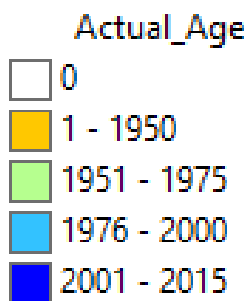
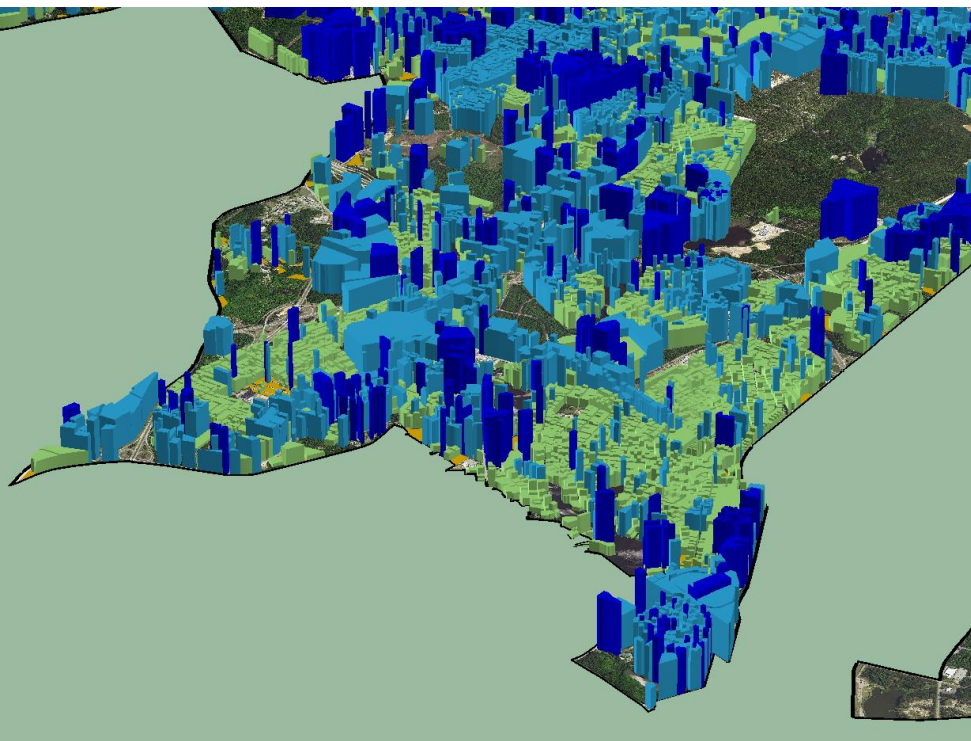
Residential Development Since 1999



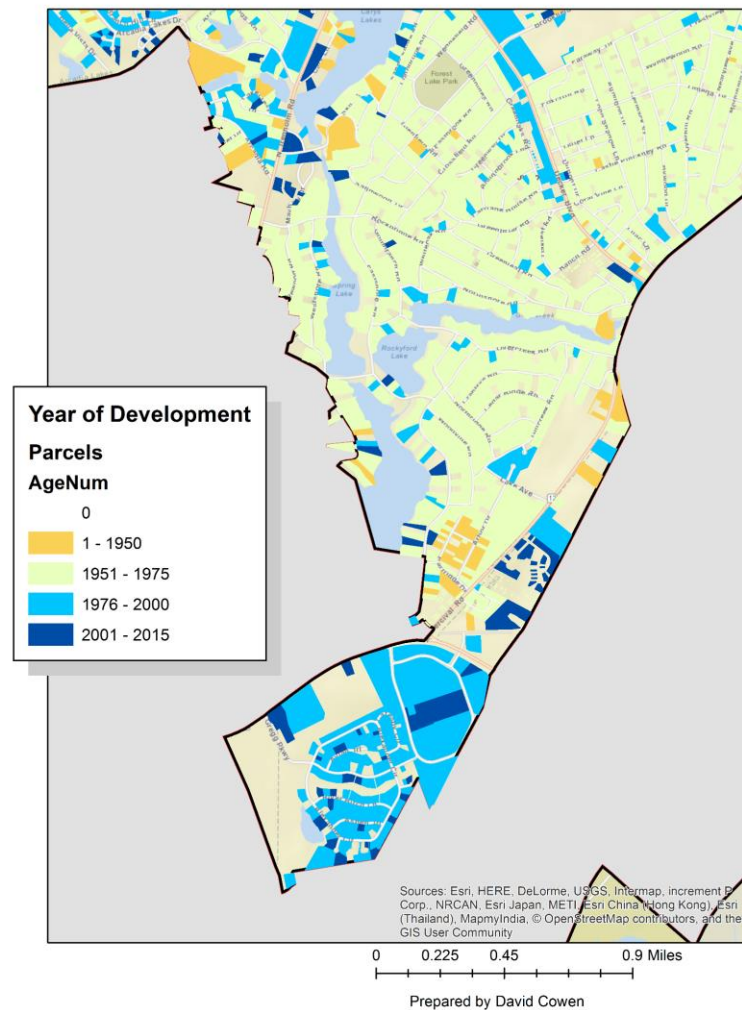
Actual Age (Assessor's Data)



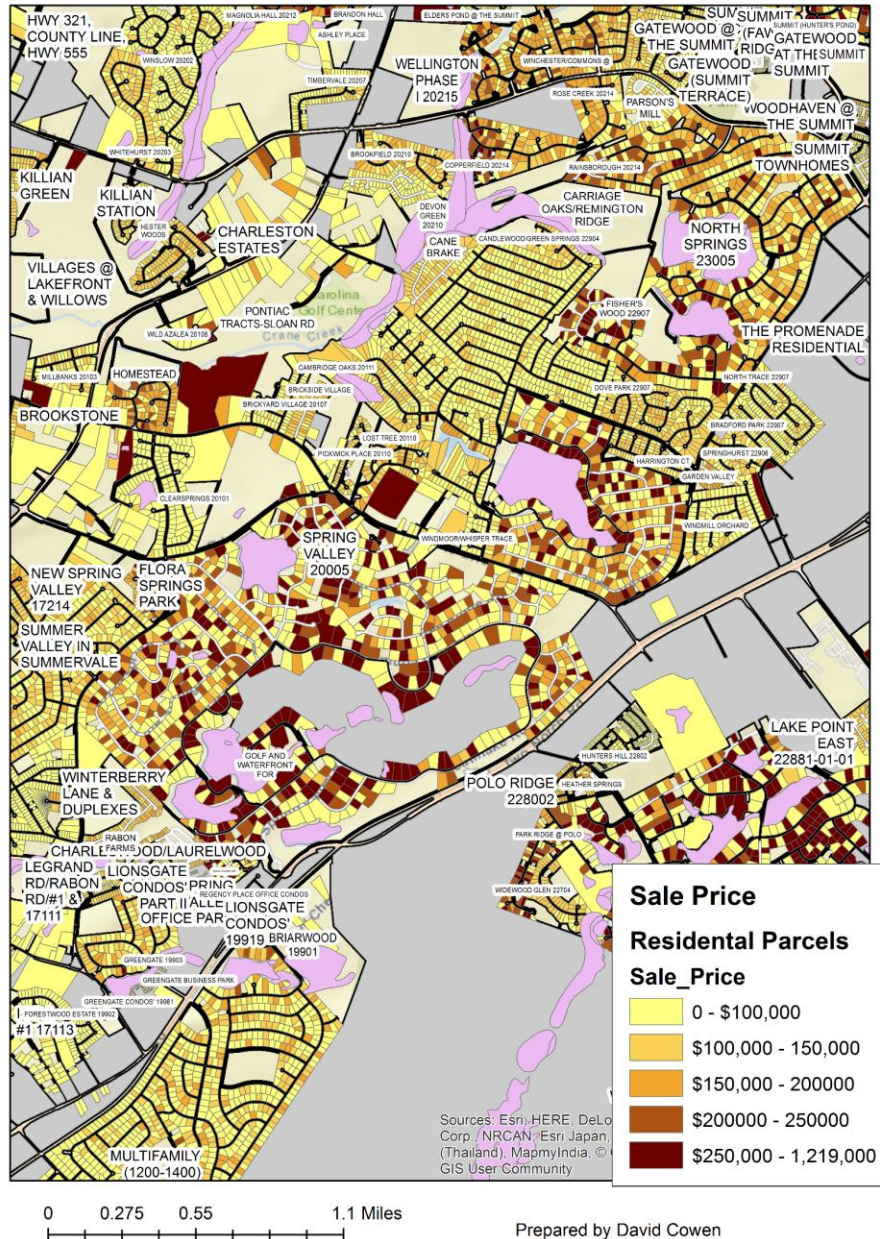




Year of Development

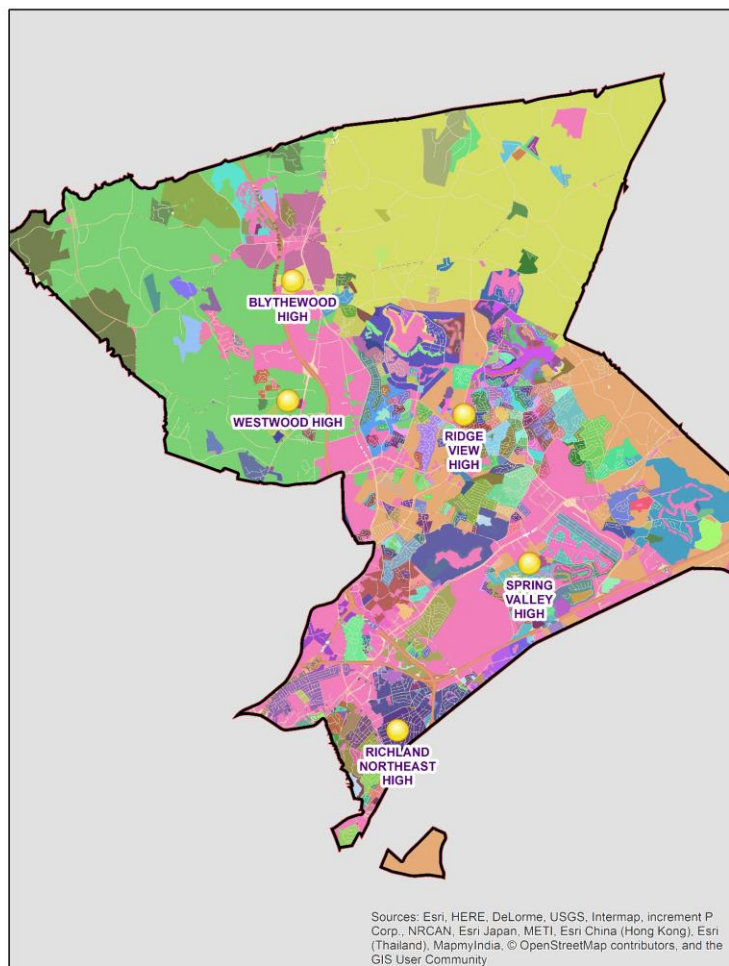


Sales Price Of Parcels (Assessor's Data)



Neighborhoods

394 Neighborhoods

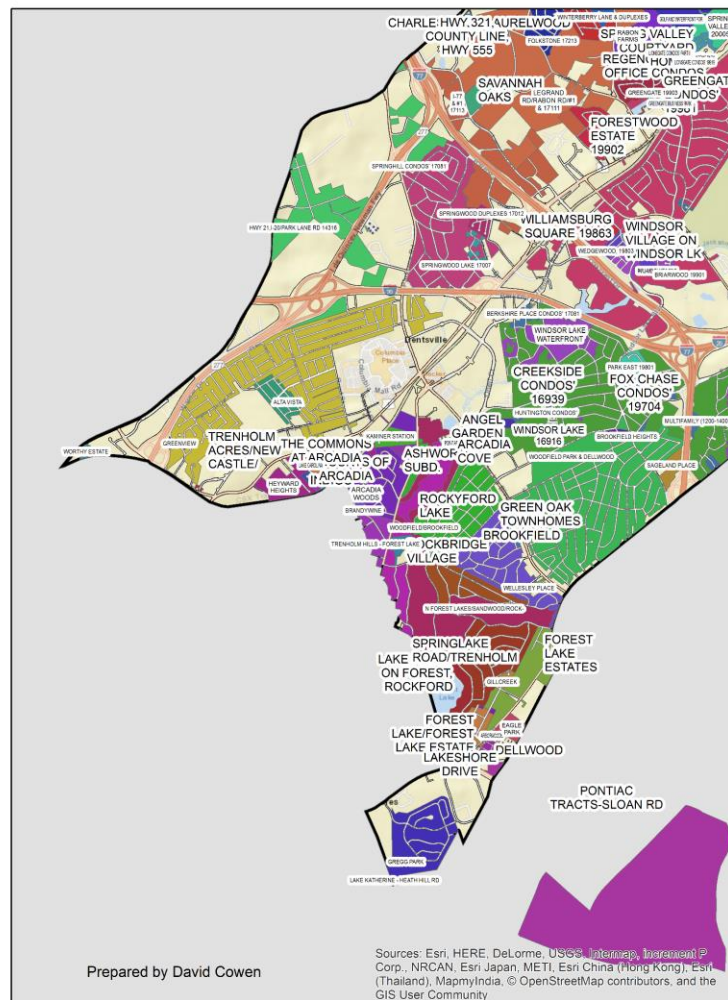


Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

0 1.5 3 6 Miles

Prepared by David Cowen

Richland County Assessor Neighborhoods



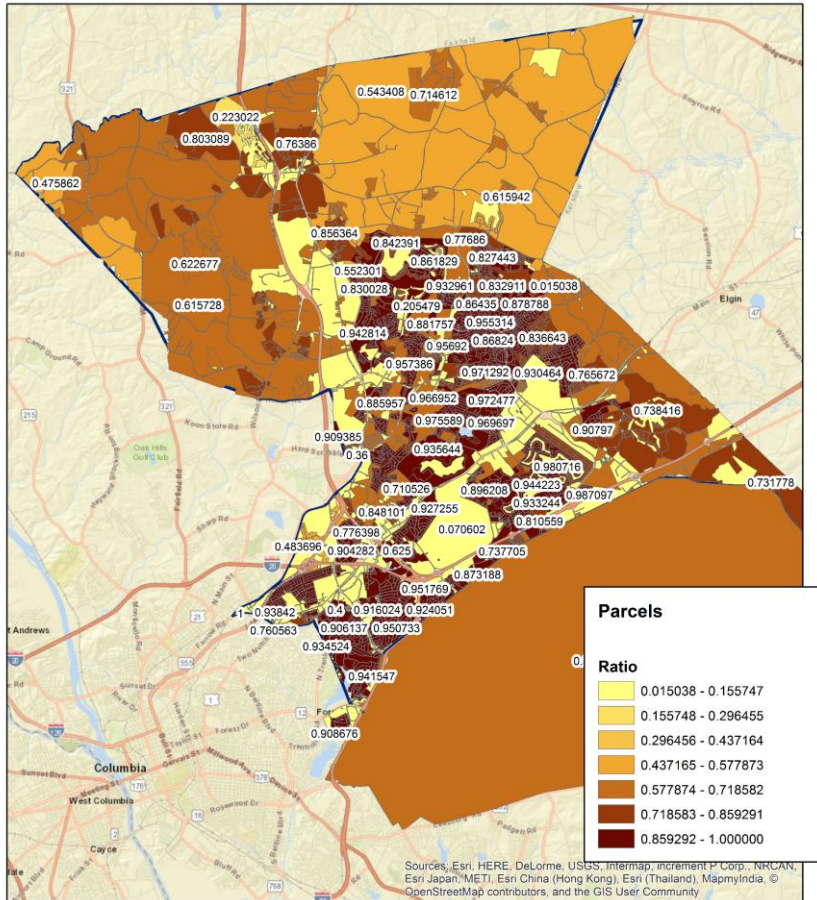
Prepared by David Cowen

Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

0 0.5 1 2 Miles

Ratio of Residential Parcels

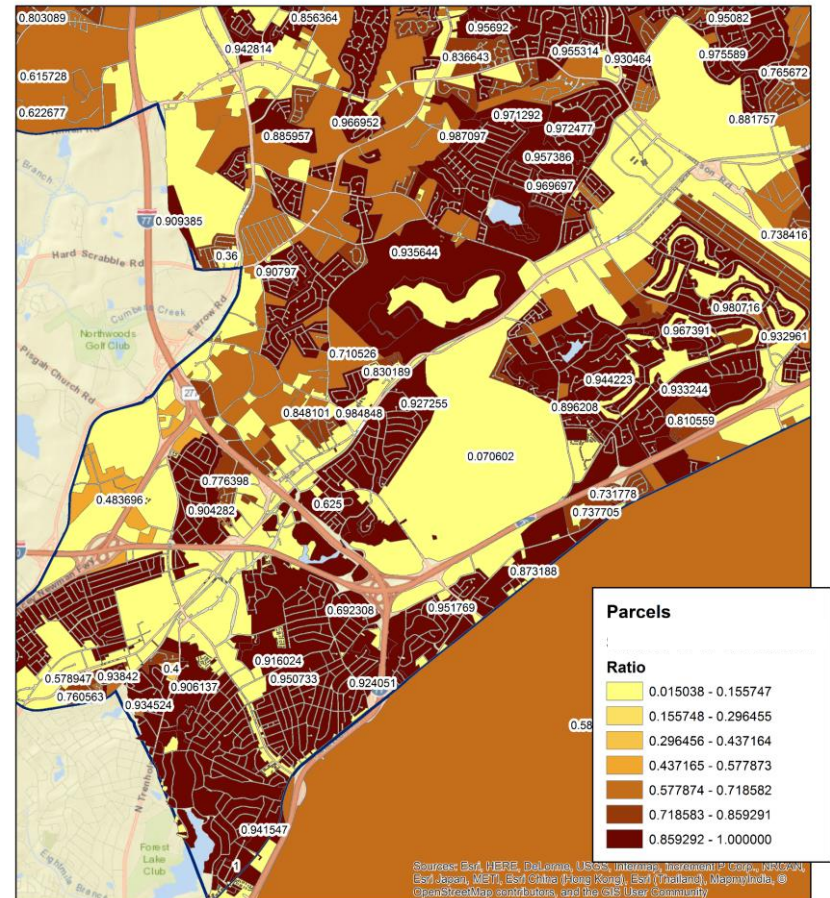
Ratio of Parcels with Residential Structures to Total Parcels



0 0.75 1.5 3 4.5 6 Miles

Produced by David Cowen

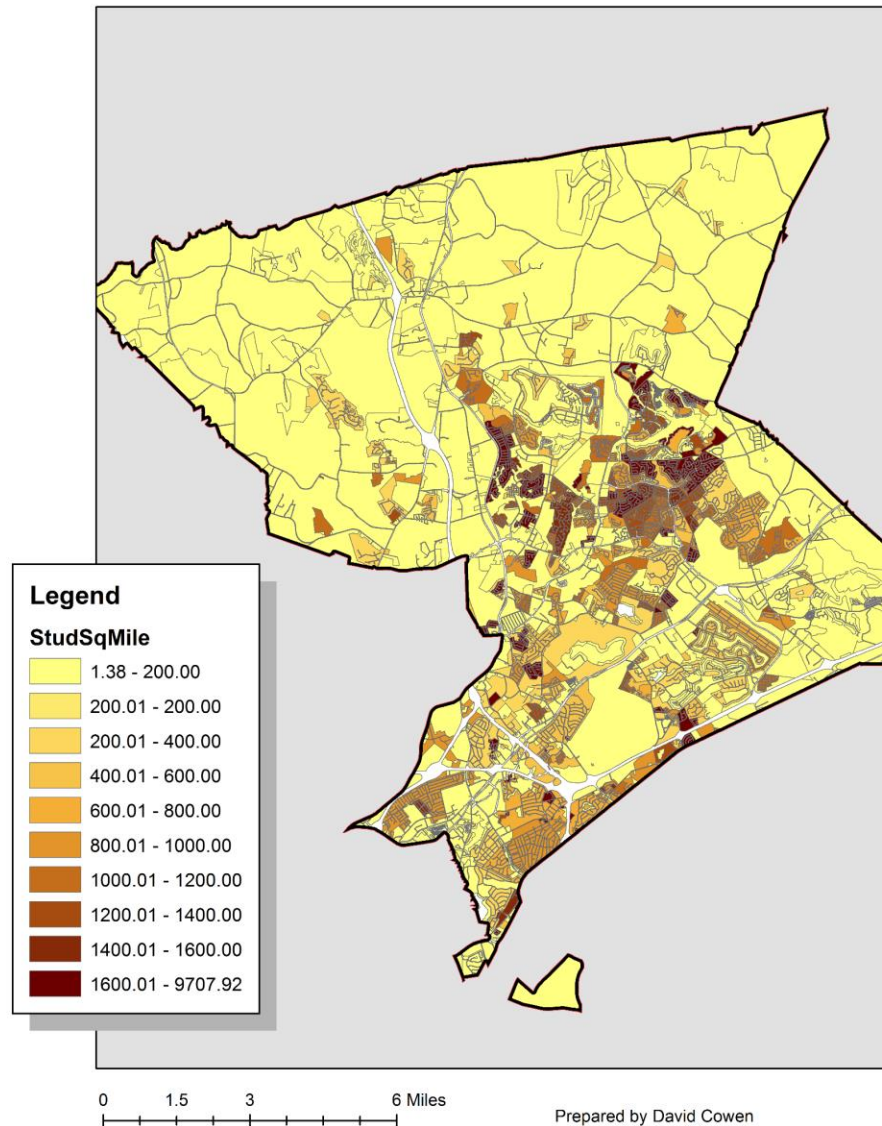
Ratio of Parcels with Residential Structures to Total Parcels



0 0.3 0.6 1.2 1.8 2.4 Miles

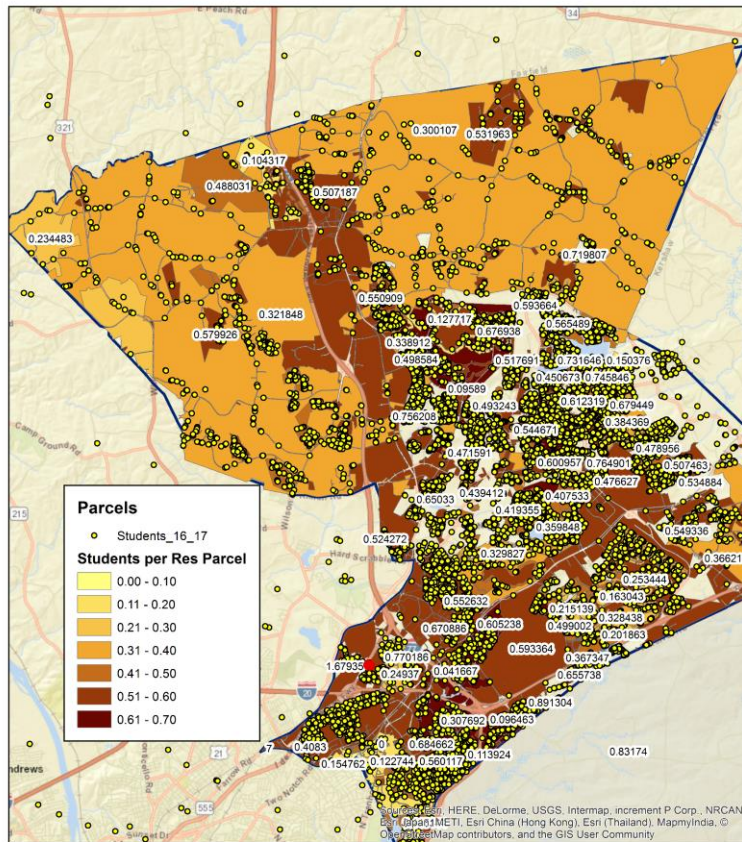
Produced by David Cowen

Students Per Square Mile by Neighborhood



Student generation rate Students in 2016/17

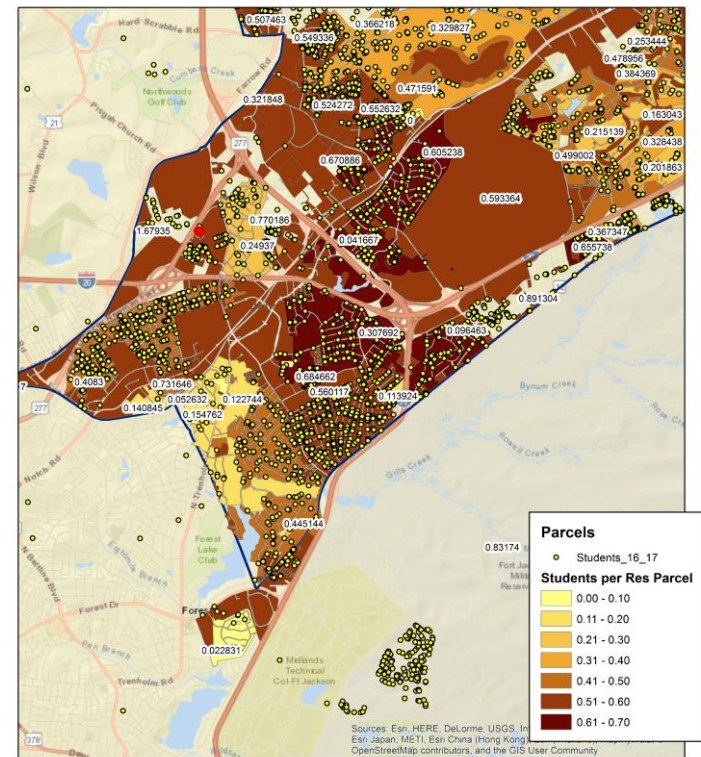
Students Per Residential Parcel by Neighborhood



0 0.5 1 2 3 4 Miles

Produced by David Cowen

Students Per Residential Parcel by Neighborhood

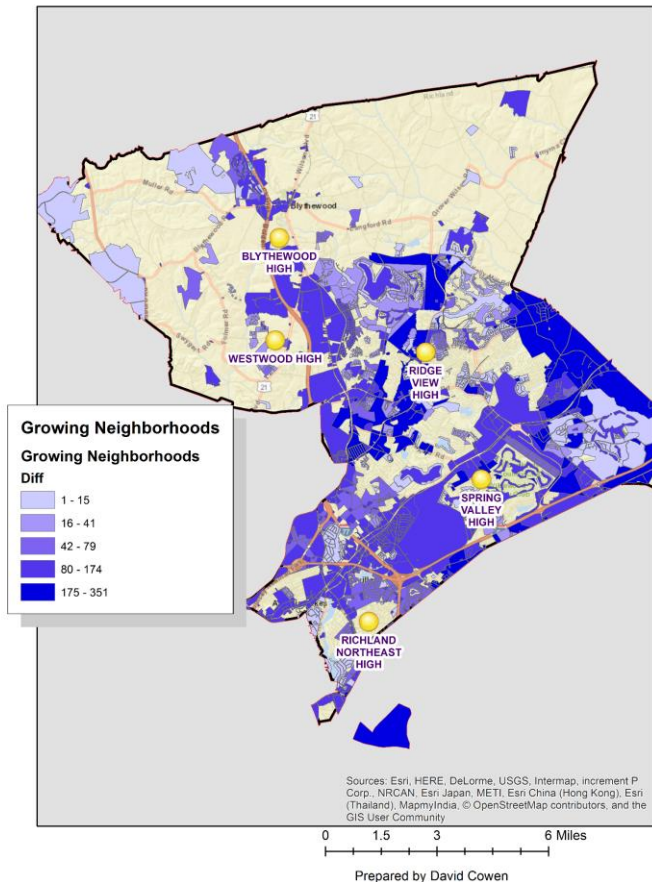


0 0.3 0.6 1.2 1.8 2.4 Miles

Produced by David Cowen

Neighborhoods that gained enrollment since 2010

Neighborhoods That Gained Enrollment Since 2010



Difference 2010-16

% of Enrollment

NBHD_12	Name	Cnt_2010	Cnt_2011	Cnt_2012	Cnt_2013	Cnt_2014	Cnt_2015	Cnt_2016	Mean	SDEV	Diff	Total	Proportion	SqMiles
7377	108 PONTIAC TRACTS-SLOAN RD.	1113	1140	1181	1409	1445	1432	1464	1312	146.85	351	9184	0.053	92.3984
7261	123.4 ASHLAND @ LAKE CAROLINA	44	77	113	165	190	228	241	151	69.81	197	1058	0.009	0.121704
4757	97 ALPINE RD. L20, SMALLWOODS RD	116	118	123	278	298	283	309	218	86.14	193	1525	0.011	0.321761
8741	108.61 JACOBS CREEK	255	291	333	365	395	417	429	355	60.47	174	2405	0.016	0.387525
4217	125.02 BROOKHAVEN	689	719	769	771	813	821	830	773	49.49	141	5412	0.03	0.313764
2283	114.26 THE VIEW	0	14	40	82	99	127	137	71	50.21	137	499	0.005	0.133043
7218	123.28 CENTENNIAL @ L CAROLINA-VINYL	229	244	276	316	335	355	363	303	49.54	134	2118	0.013	0.128553
7190	112.10 HUNTER'S RUN	0	0	9	50	76	101	128	52	47.83	128	364	0.005	0.1763
9664	63 BRIARWOOD 19901	444	425	365	473	506	526	551	470	59.44	107	3290	0.02	1.627
8667	97.05 ALLEN'S MILL	21	37	57	77	83	100	120	71	32.23	99	495	0.004	0.0919
8992	113.02 BLYTHECREEK	22	34	43	62	77	105	121	66	34.17	99	464	0.004	0.125937
7551	121 SUMMIT	0	0	0	96	97	97	98	55	48.01	98	388	0.004	0.22533
6775	0	1383	1399	1536	1386	1413	1411	1476	1429	52.24	93	10004	0.054	21.3749
4211	66.99 MULTIFAMILY (1200-1400)	135	141	147	205	199	207	228	180	35.16	93	1282	0.008	0.056414
5758	108.83 FARROW POINTE	7	7	7	7	7	7	7	7	7	7	7	0.005	0.055716
9494	125.1 VILLAGES @ LAKEFRONT & WILLOWS	7	7	7	7	7	7	7	7	7	7	7	0.006	0.167295
4359	114.9 COBBLESTONE @ THE UNIVERSITY	2	2	2	2	2	2	2	2	2	2	2	0.003	0.619781
8095	121.4 AMARYLLIS WOODS VILL. & SUMMIT	2	2	2	2	2	2	2	2	2	2	2	0.004	0.115951
5068	114.25 HAWKINS CREEK	7	7	7	7	7	7	7	7	7	7	7	0.003	0.085344
4783	68.11 BROOKFELD	7	7	7	7	7	7	7	7	7	7	7	0.005	0.195627
5862	57.02 RABON FARMS	5	5	5	5	5	5	5	5	5	5	5	0.004	0.119605
8667	108.12 ROYAL PINES 22914	17	17	17	17	17	17	17	17	17	17	17	0.009	0.306229
1869	112.17 COOPERS POND	4	4	4	4	4	4	4	4	4	4	4	0.004	0.087119
3506	93 HWY 21.1-20/PARK LANE RD 14316	24	24	24	24	24	24	24	24	24	24	24	0.011	0.336336
7143	57 LEGRAND RD/RABON RD/1 & 17111	11	11	11	11	11	11	11	11	11	11	11	0.006	0.774733
5714	125.14 SPRING PARK	17	17	17	17	17	17	17	17	17	17	17	0.002	0.035346
8741	123.41	17	17	17	17	17	17	17	17	17	17	17	0.002	0.025411
4118	112.19 LANGFORD CROSSING	62	62	62	62	62	62	62	62	62	62	62	0.002	0.091992
8677	66 WINDSOR LAKE 16916	62	62	62	62	62	62	62	62	62	62	62	0.025	1.01164
8741	114.14 STONINGTON PHASE II	62	62	62	62	62	62	62	62	62	62	62	0.002	0.03946
3333	114.28 ABNEY HILL ESTATES	62	62	62	62	62	62	62	62	62	62	62	0.002	0.363032
7451	114.24 RIVERS STATION	62	62	62	62	62	62	62	62	62	62	62	0.002	0.046723

Statistics of neigh_gain

Field

Proportion

Statistics:

Count: 184

Minimum: 0

Maximum: 0.054

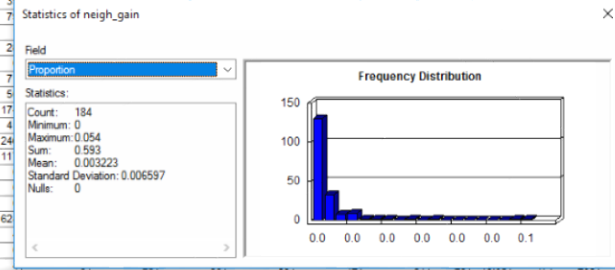
Sum: 0.593

Mean: 0.003223

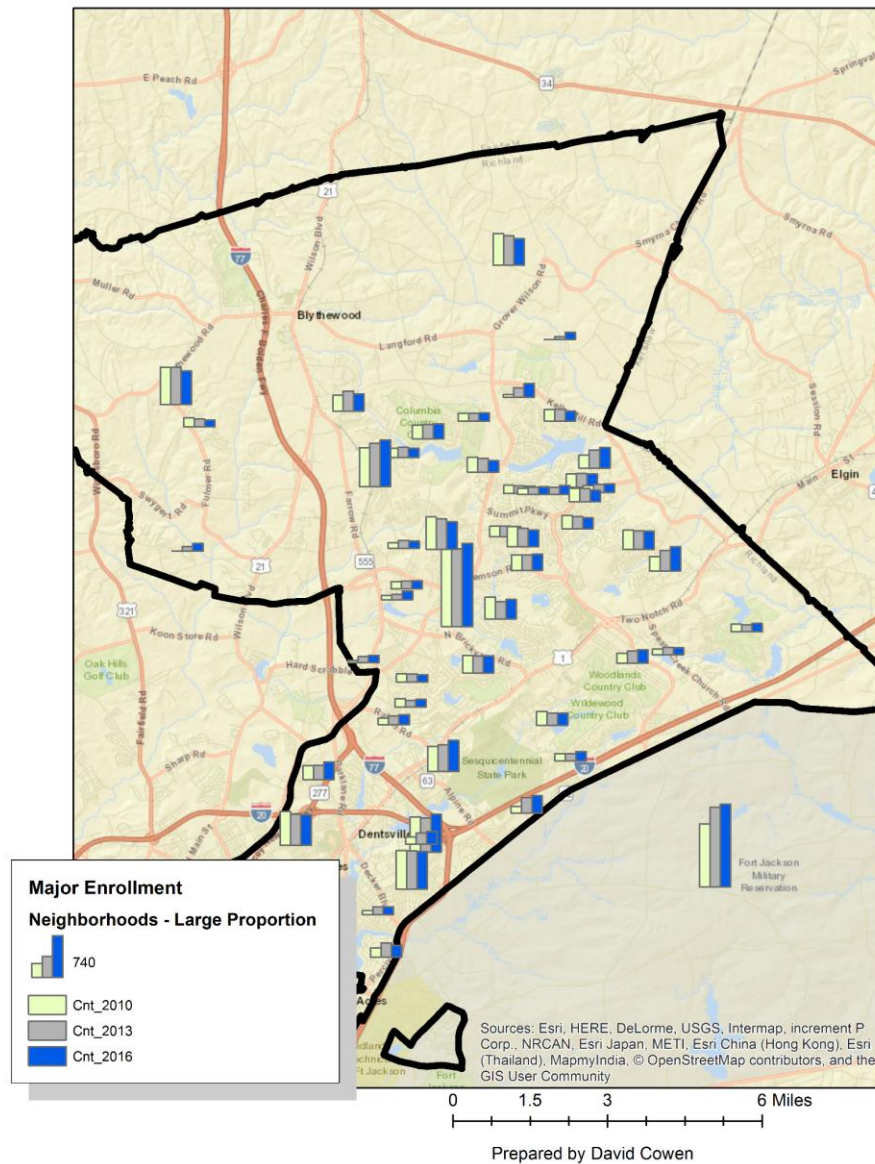
Standard Deviation: 0.006597

Nulls: 0

Frequency Distribution

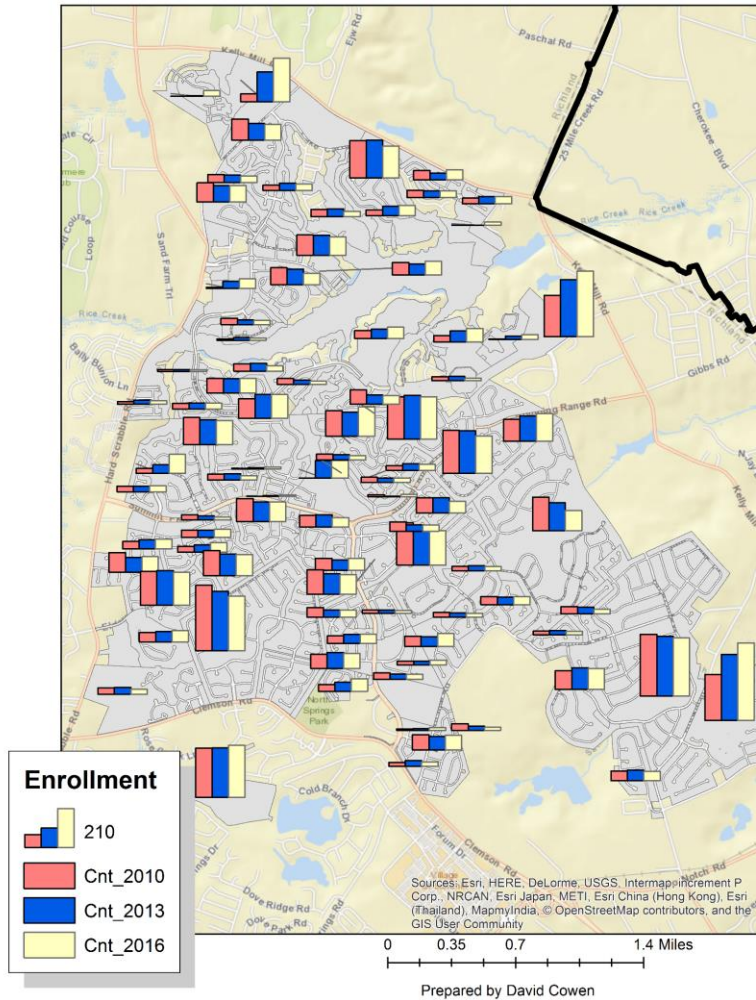


Major Enrollment Trends - about 60%

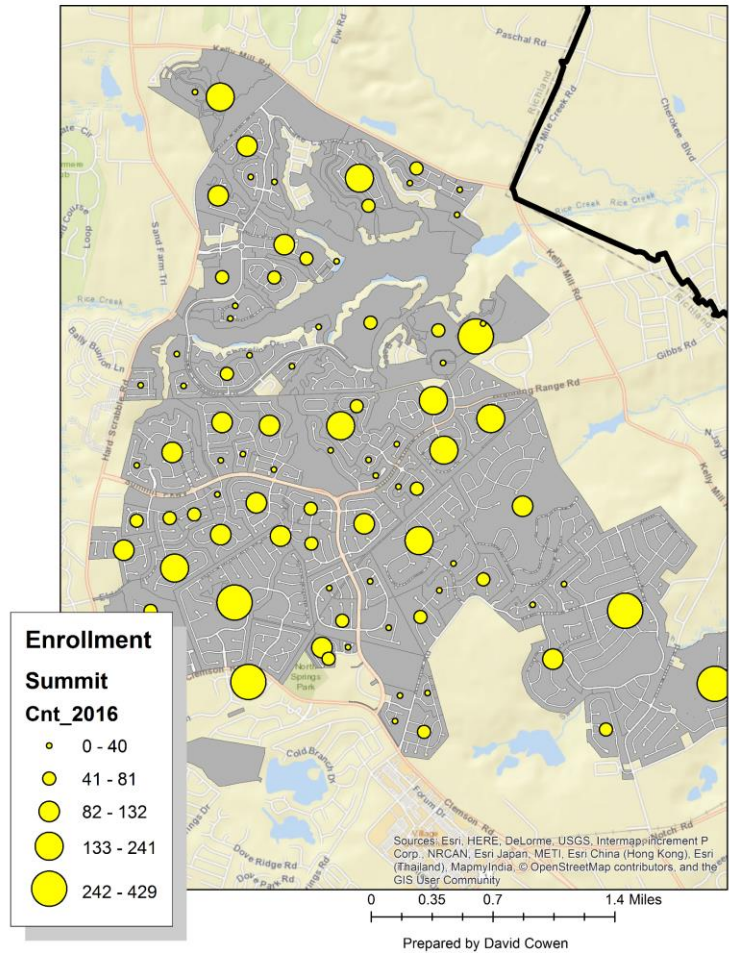


Summit & Clemson Rd

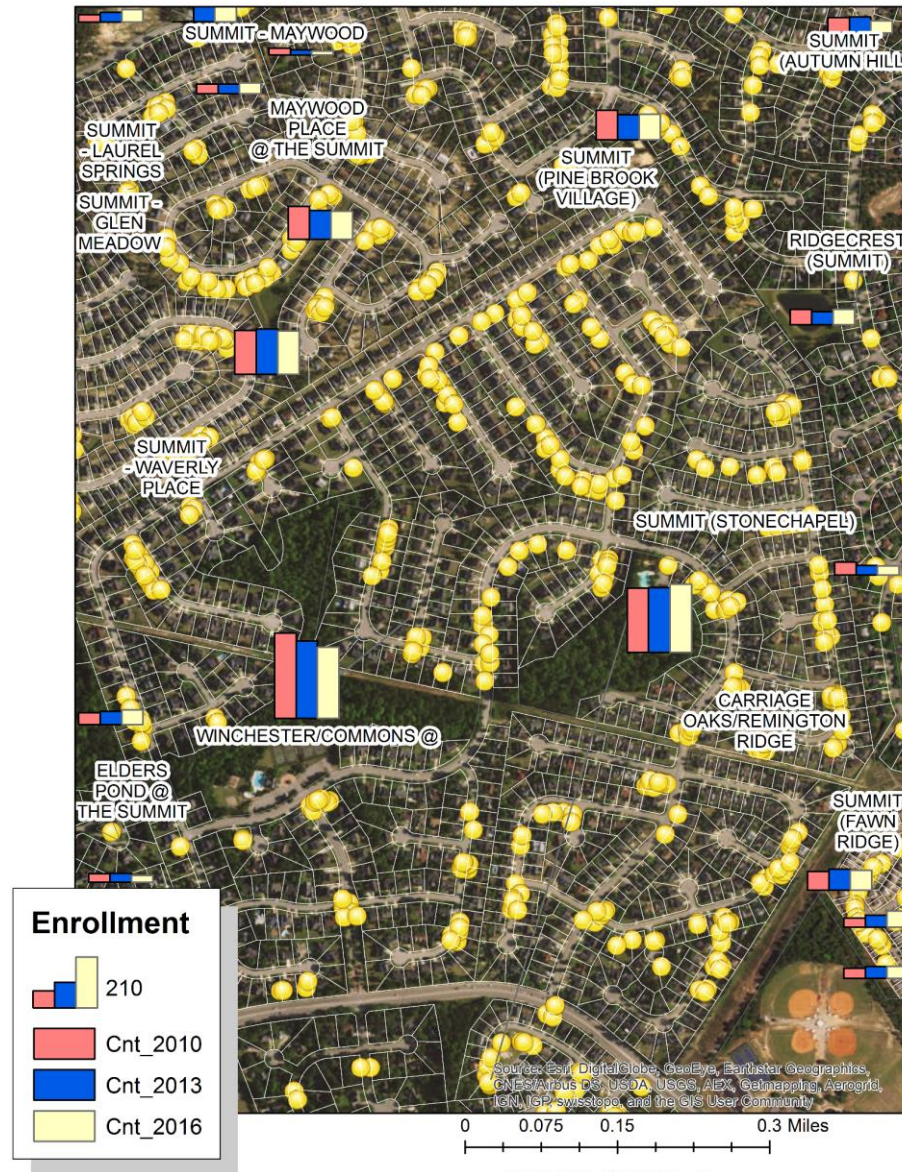
Summit Enrollment Trends



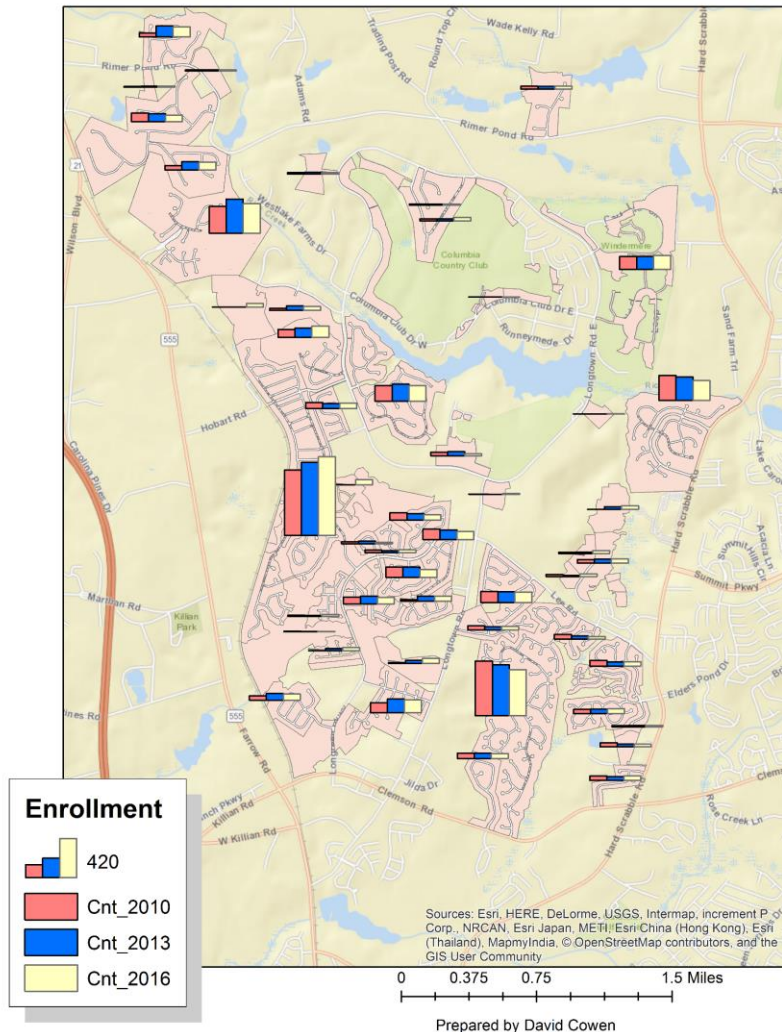
Summit Enrollment 2016



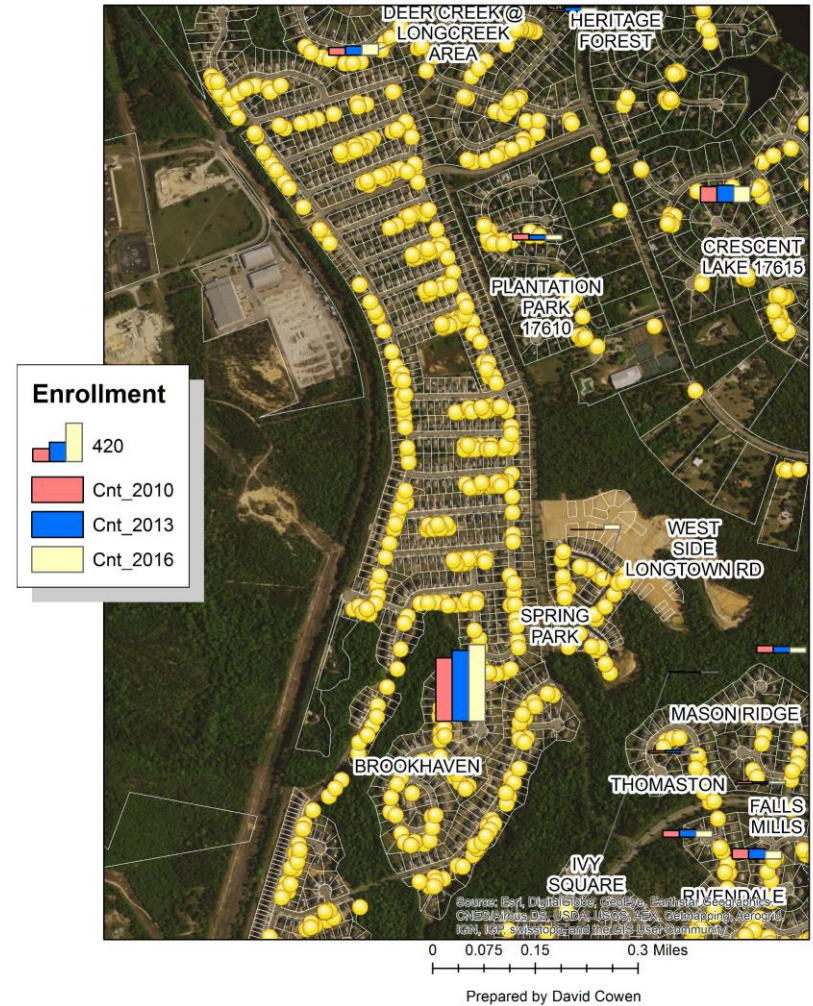
Summit Trends



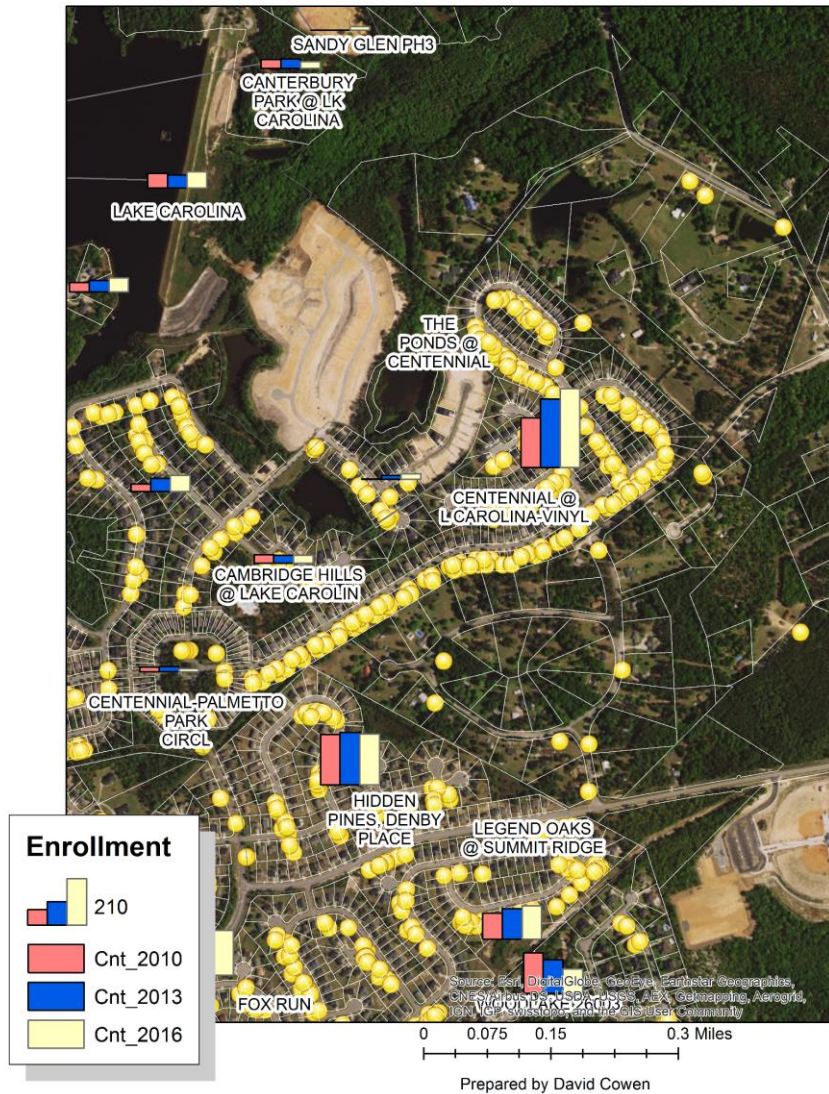
Clemson Trends



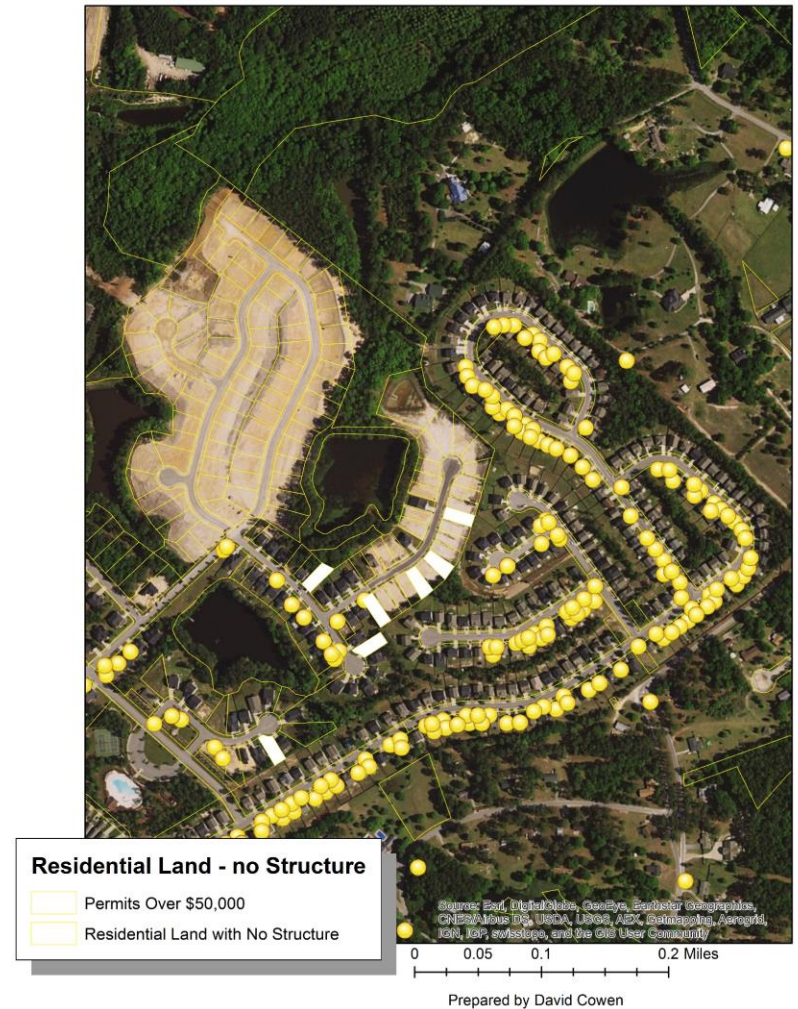
Brookhaven



Centennial Trends

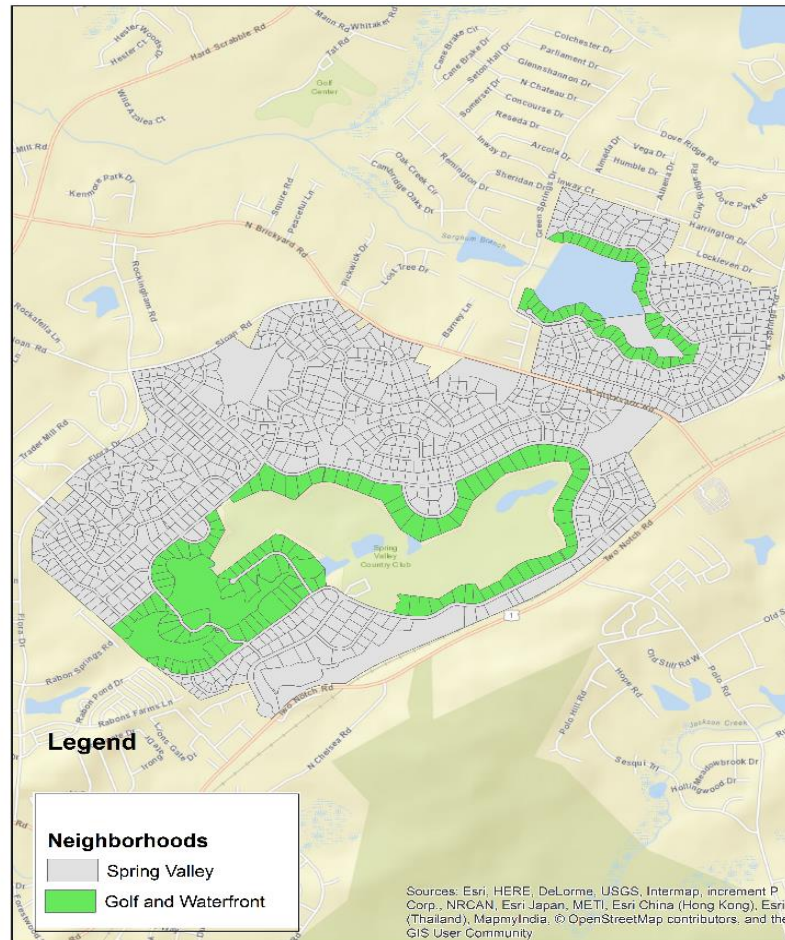


Centennial Future



A Closer look at Spring Valley

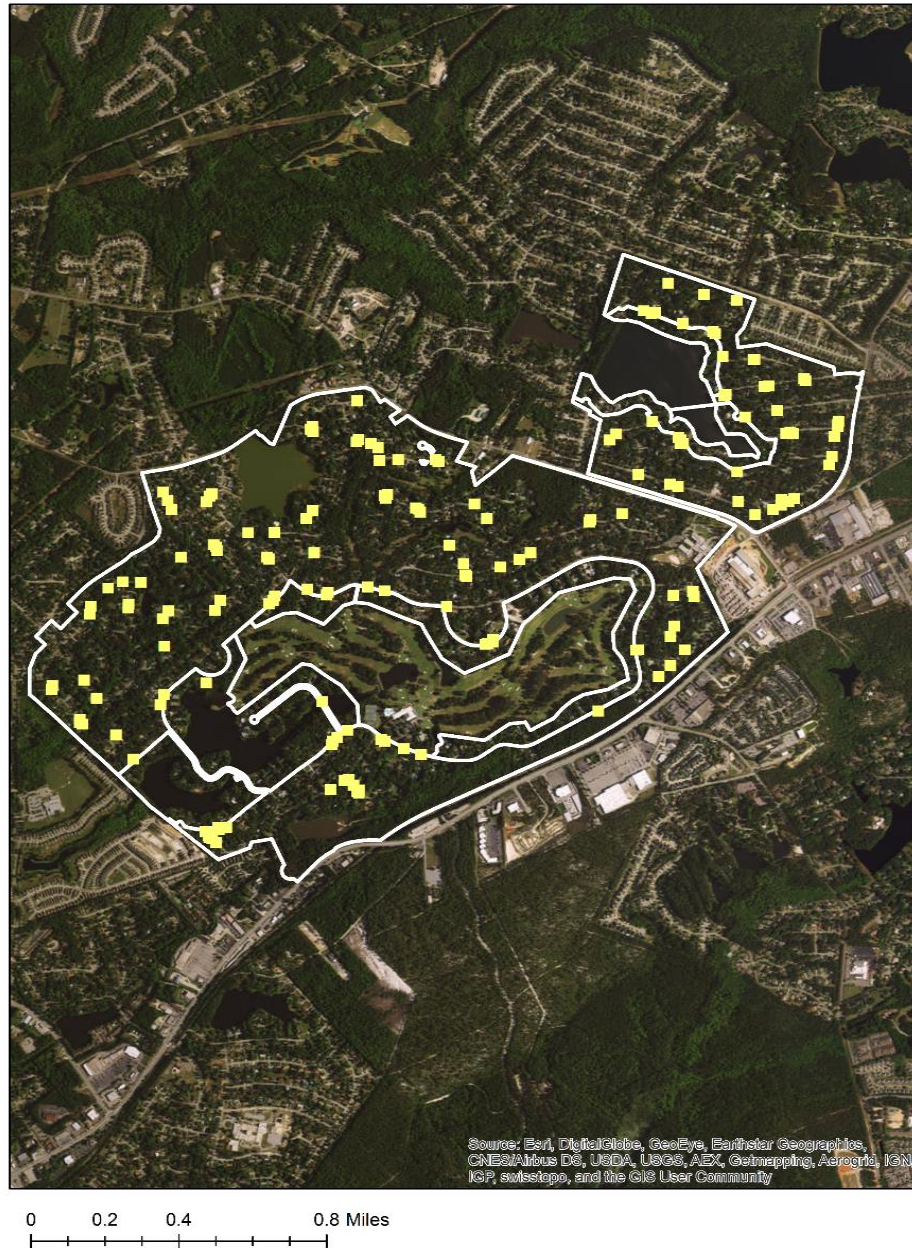
Spring Valley 1148 Parcels (173 Golf & Waterfront/ 975 Other)

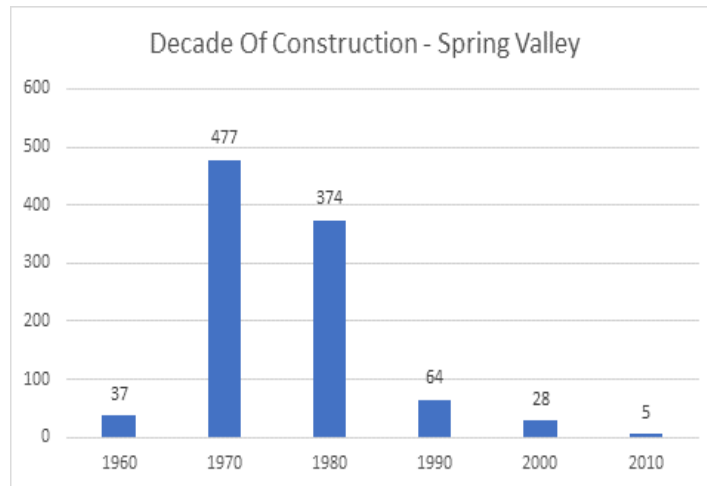


0 0.225 0.45 0.9 Miles

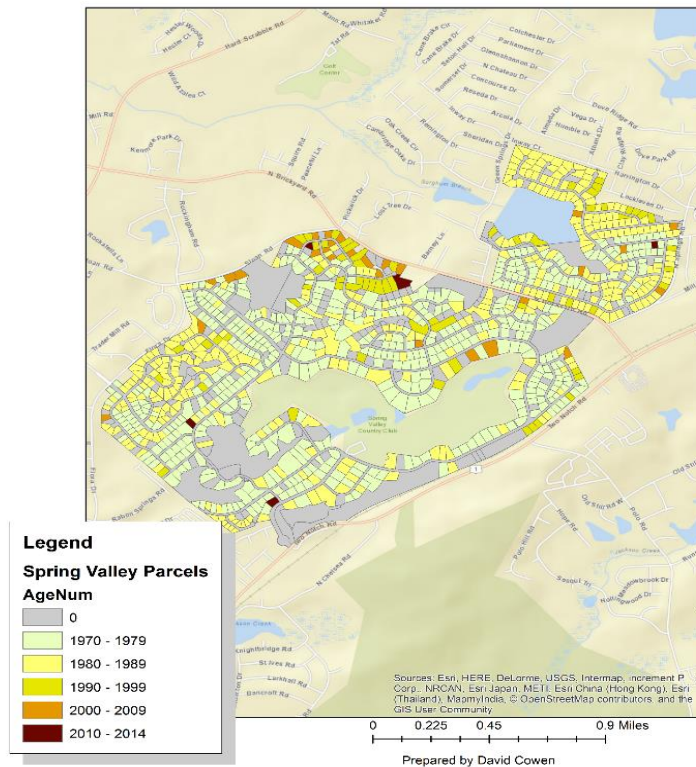
Prepared by David Cowen

District Two Students From Spring Valley Neighborhood - 2016

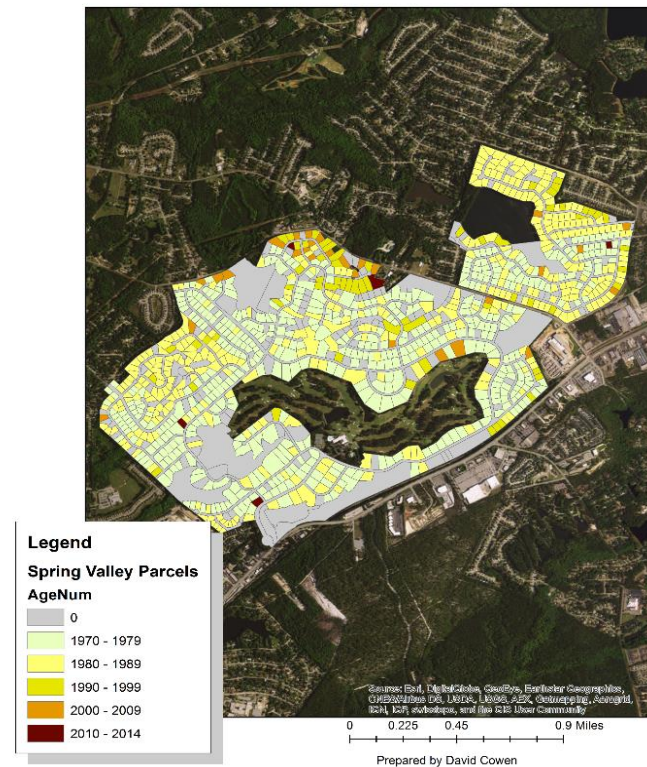


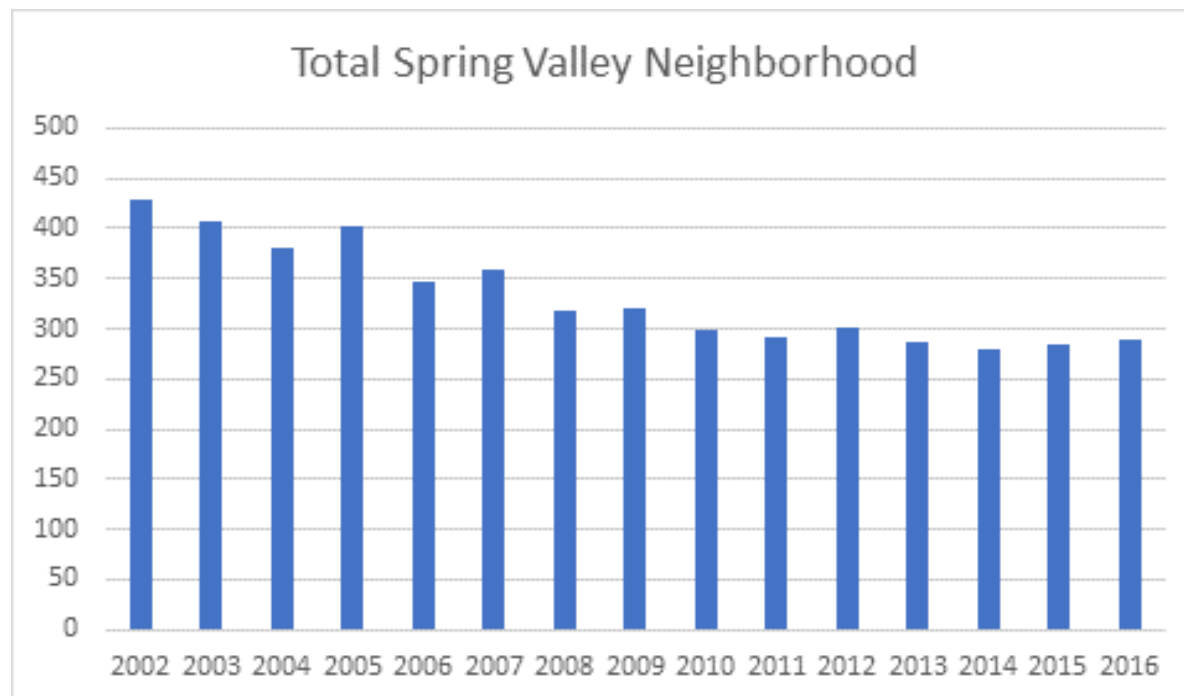


Decade Of Development



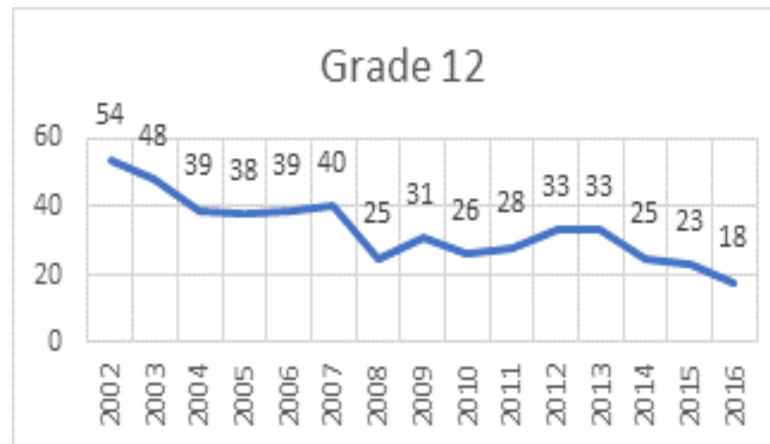
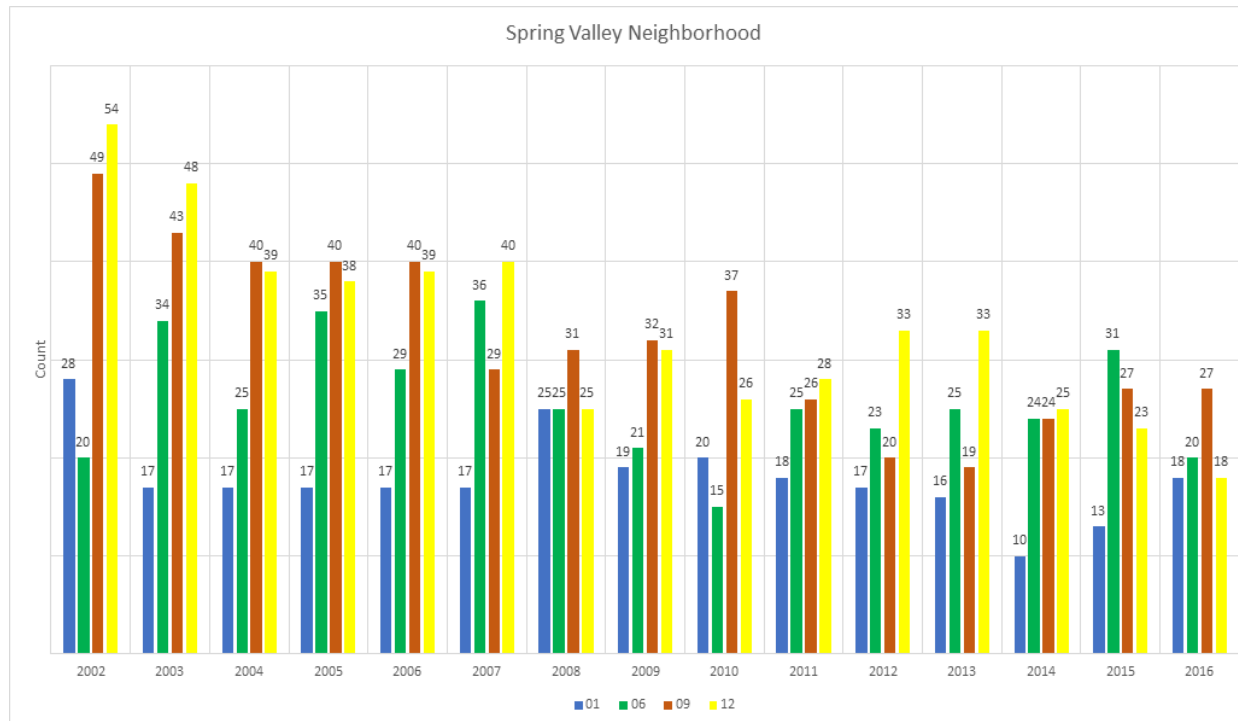
Decade Of Development





Grade	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
0	16	15	16	17	12	29	16	24	16	11	16	9	11	14	21
1	28	17	17	17	17	17	25	19	20	18	17	16	10	13	18
2	24	27	17	25	15	21	19	23	20	20	19	22	19	15	14
3	27	25	25	26	18	19	18	19	25	20	23	18	27	19	19
4	22	27	26	28	22	18	13	19	20	23	21	23	22	27	18
5	30	25	28	25	32	24	17	13	19	20	22	20	26	21	27
6	20	34	25	35	29	36	25	21	15	25	23	25	24	31	20
7	32	30	35	32	28	27	38	22	18	17	23	23	24	26	34
8	41	34	32	40	24	30	28	37	23	18	18	26	23	26	24
9	49	43	40	40	40	29	31	32	37	26	20	19	24	27	27
10	43	44	40	41	34	38	27	34	31	39	28	22	21	20	28
11	44	38	41	39	37	30	37	27	29	27	39	30	24	22	22
12	54	48	39	38	39	40	25	31	26	28	33	33	25	23	18
Total	430	407	381	403	347	358	319	321	299	292	302	286	280	284	290

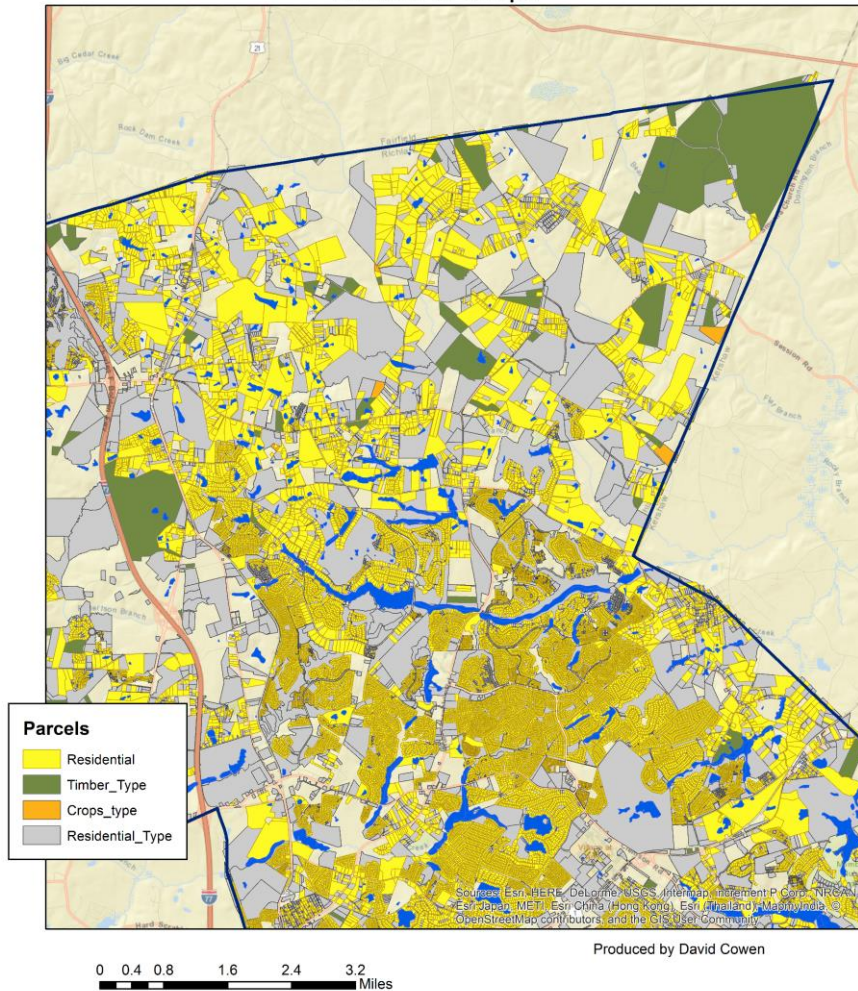
Spring Valley Enrollments



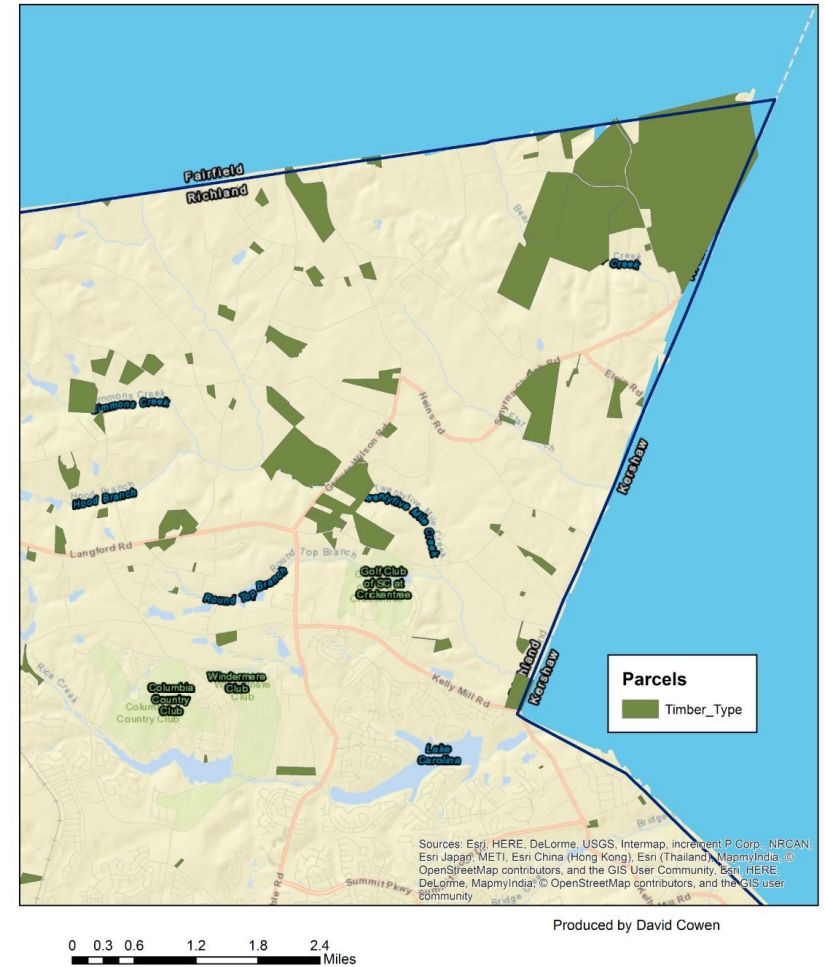
	2002	Count	%	2016	Count	%
Meals	F	16	3.7%	F	27	9.0%
	N	413	95.4%	P	252	84.3%
	R	4	0.9%	R	20	6.7%
Total		433			299	
Gender	F	210	48.5%	F	136	45.5%
	M	223	51.5%	M	163	54.5%
Ethnicity	A	16	3.7%	A	10	3.3%
	B	73	16.9%	B	78	26.1%
	H	2	0.5%	H	19	6.4%
	W	342	79.0%	W	181	60.5%
				M	11	3.7%

Northeast

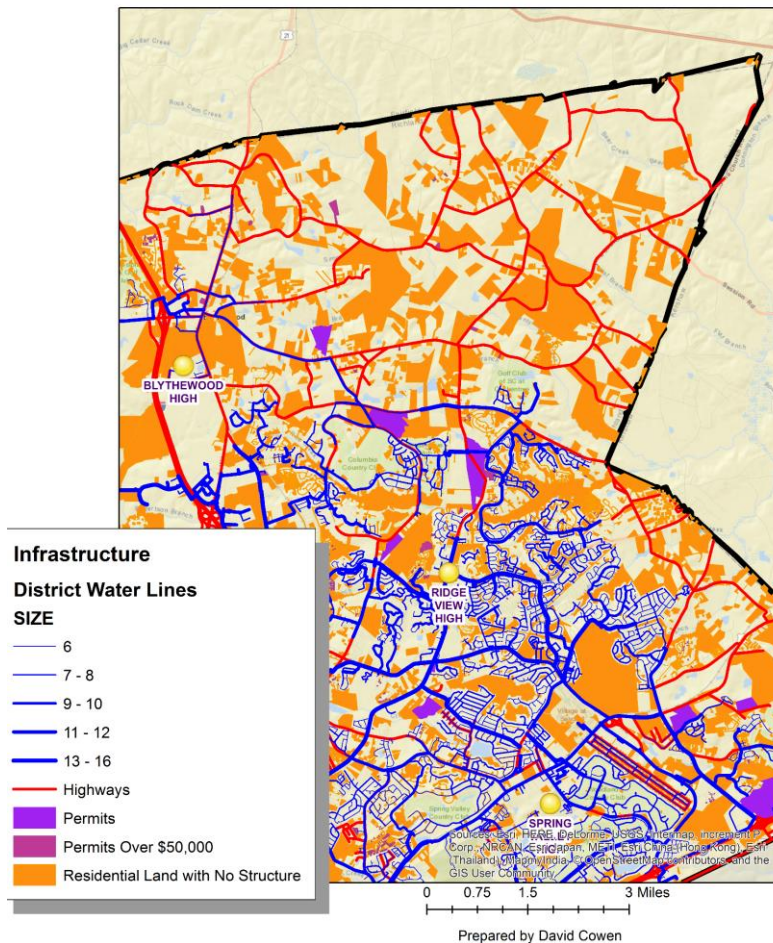
Residential Land Type Vs Structure
Timber & Crops



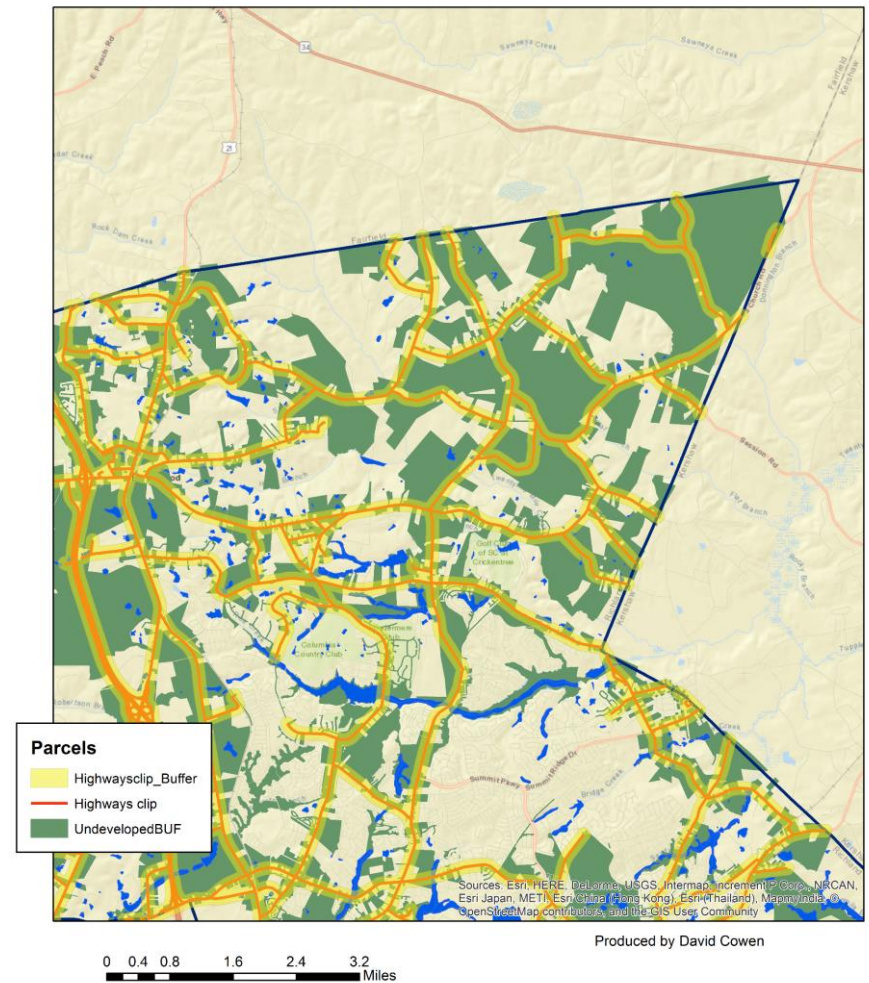
Timber Land Type



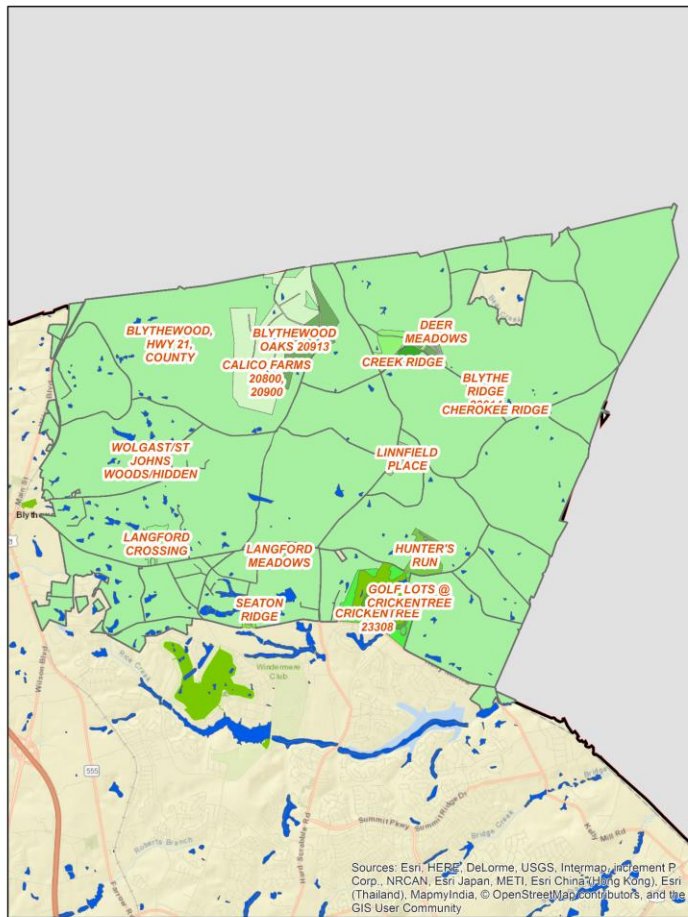
Potential New Residential Developments



Unimproved Parcels Within 150 Yards of Major Road



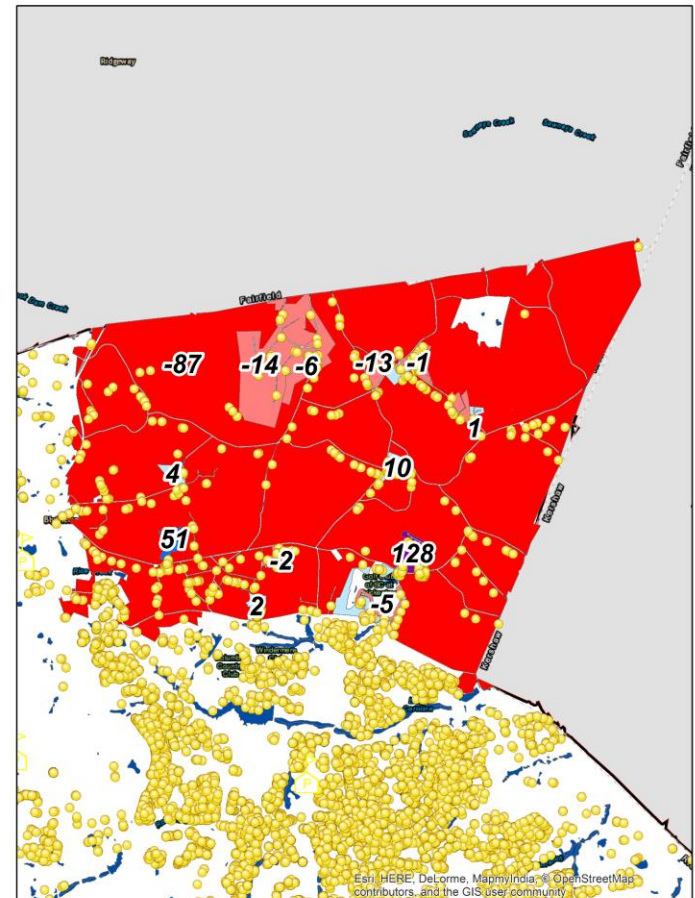
Northeast Neighborhoods



0 0.75 1.5 3 Miles

Prepared by David Cowen

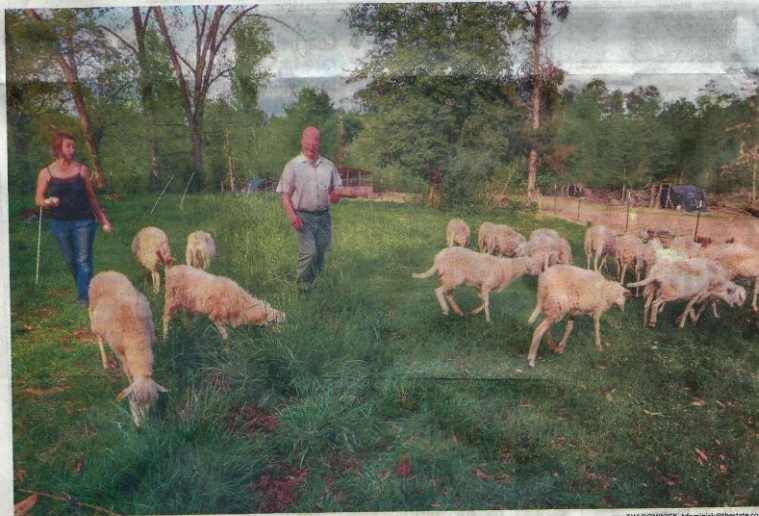
Change in Enrollment 2010 - 2016



0 0.75 1.5 3 Miles

Prepared by David Cowen

I Don't Want the city coming out here !



USC environmental health science professor Joe Jones and his wife Amanda operate the 43-acre Doko Farm near Blythewood. The farm has been in his family since 1839. They are concerned about the rapid growth around Blythewood affecting their rural lifestyle.

DEVELOPMENT

Shift from forests to suburbs sparks tension in Blythewood area

BY TIM FLACH
tflach@thestate.com

Joe Johnson is upset that homes and stores are replacing forests in the Blythewood area that's been his home and hunting grounds for 40 years.

"It's my getaway," he said. "Now stuff keeps growing up around the trees and keeps expanding."

Johnson is among longtime residents who are unhappy as the countryside they enjoy is transformed into neighborhoods and shopping centers around the town on the northern edge of Richland County.

Development in the Blythewood area is booming thanks to a pastoral setting dotted with horse farms and a few golf courses, top-rated Richland 2 schools and handy access to I-77

ONLINE
THESTATE.COM: See where Blythewood is located and what's near the town.

for commutes to jobs and activities in downtown Columbia. Blythewood has been slower to develop than other bedroom communities in the Columbia area. Larger, upscale homes on a few acres have been more common than subdivisions.

Now it's on the radar for developers.

With more new neighborhoods and a burst of shops and restaurants, the area is undergoing dramatic change, Johnson's wife, Kathy, said.

"I don't want the city coming out here," she said. "I want to be off to the side."

The change can be seen in

SEE BLYTHEWOOD, 8A

8A News

The State



Tension is rising over the transition of Blythewood and the surrounding area as more homes and stores sprout along the I-77 corridor in northern Richland County. Fast-food restaurants are plentiful on Blythewood Road.

FROM PAGE 1A

BLYTHEWOOD

two snapshots from the Central Midlands Council of Governments:

• The population in Blythewood itself and the area 3 miles around the town increased from 3,219 in 2000 to 6,346 in 2010 and to an estimated 7,485 today. It's projected to reach 8,429 in 2021.

• Homes in the town and surrounding area increased from 1,168 in 2000 to 2,297 in 2010 and to an estimated 2,707 today. That total is expected to be 3,037 in 2021.

Jerry Rega measures the transition in the longer commute to the print shop he operates. The 3-mile trip now takes up to 15 minutes instead of five because of traffic signals and stop signs added to handle traffic coming from neighborhoods mostly established during the past decade, he said.

Residents warn county leaders that the area's sense of a suburban retreat is fading.

TOWN TEMPER

Blythewood town leaders are familiar with the tension that the influx is bringing.

The community is home to an estimated 2,600 residents in a 10-square-mile area, significantly larger than when it was a town of less than 200 per square mile in 2000, according to census reports.

Town Hall's focus has shifted to consolidation of gains as efforts are underway to set standards guiding what's built and its appearance, Mayor Michael Ross said.

"We've got to catch up," he said. "We can't keep growing like we have."

Blythewood's goal is to avoid being known as a pit stop on I-77. "We don't want traffic to move through too fast," Ross said. "We don't want to be a thoroughfare."

Town leaders are skeptical of pop-mill development, such as the new

elling exhibit from the Smithsonian Institution on how Americans work. Blythewood was called Doko - believed to be a Native American or African word for a watering place - when it was established in the 1850s as a rail stop between Charlotte and Columbia.

That name seemed appropriate for a depot surrounded by plantations and farms, according to records kept by the town Garden Club.

The community was rechristened Blythewood a reference to the beauty of surrounding pine forests - when a private school for girls with that name was established in the 1870s, records say.

But the 25-acre park in the center of town reflects the past with its name of Doko Meadows and a meeting facility called Doko Manor.

Blythewood also is known for horses and golf. The area is home to the University of South Carolina's equestrian center and has been used for training Olympic horse-riding teams.

But that doesn't mean the area is immune to the pressures of growth.

With his wife, Amanda, Jones operates Doko Farm, which specializes in organically raised meat on 43 acres that have been in his family since 1839.

For years, the farm was so remote that it was closer to drive to USC than to any store except for one grocery in town, he said.

“I DON'T WANT THE CITY COMING OUT HERE. I WANT TO BE OFF TO THE SIDE.”

Kathy Johnson, Blythewood resident

are.” Blythewood has no plans to annex that area, Ross said.

KEEP OUR CHARACTER

USC environmental health science professor Joe Jones understands the tension the changes are creating.

A transformation that was slowly unfolding is now happening much faster, at a pace disconcerting for many, he said.

“There's a lot of concern about who we are, what we look like and what we will become,” Jones said.

With his wife, Amanda, Jones operates Doko Farm, which specializes in organically raised meat on 43 acres that have been in his family since 1839.

For years, the farm was so remote that it was closer to drive to USC than to any store except for one grocery in town, he said.

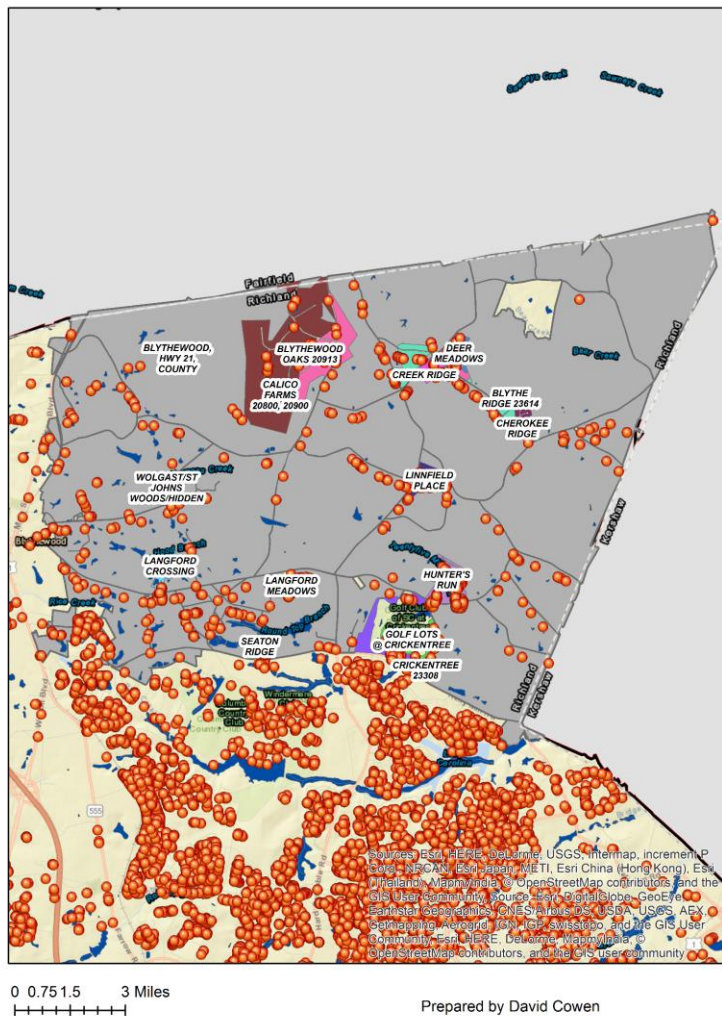
But that changed when the Village at Sandhill shopping center opened in the early 1990s on agricultural land once owned by Clemson University, spurring the arrival of more homes and stores along the I-77 corridor.

“That was a real eye-opener,” Jones said.

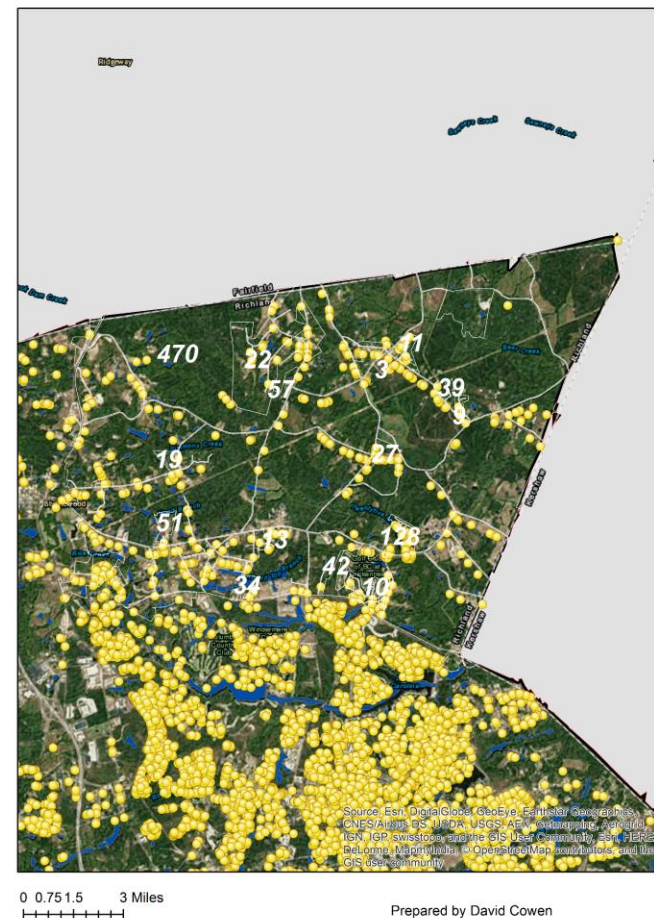
Trips to Sandhill for shopping and recreation now are a family habit, he said.

Jones' farm is far enough from sprouting subdivisions that he has no complaints about noise and odor from livestock disturbing neighbors. But that doesn't mean the area is immune to the pressures of growth.

Enrollment in Northeast

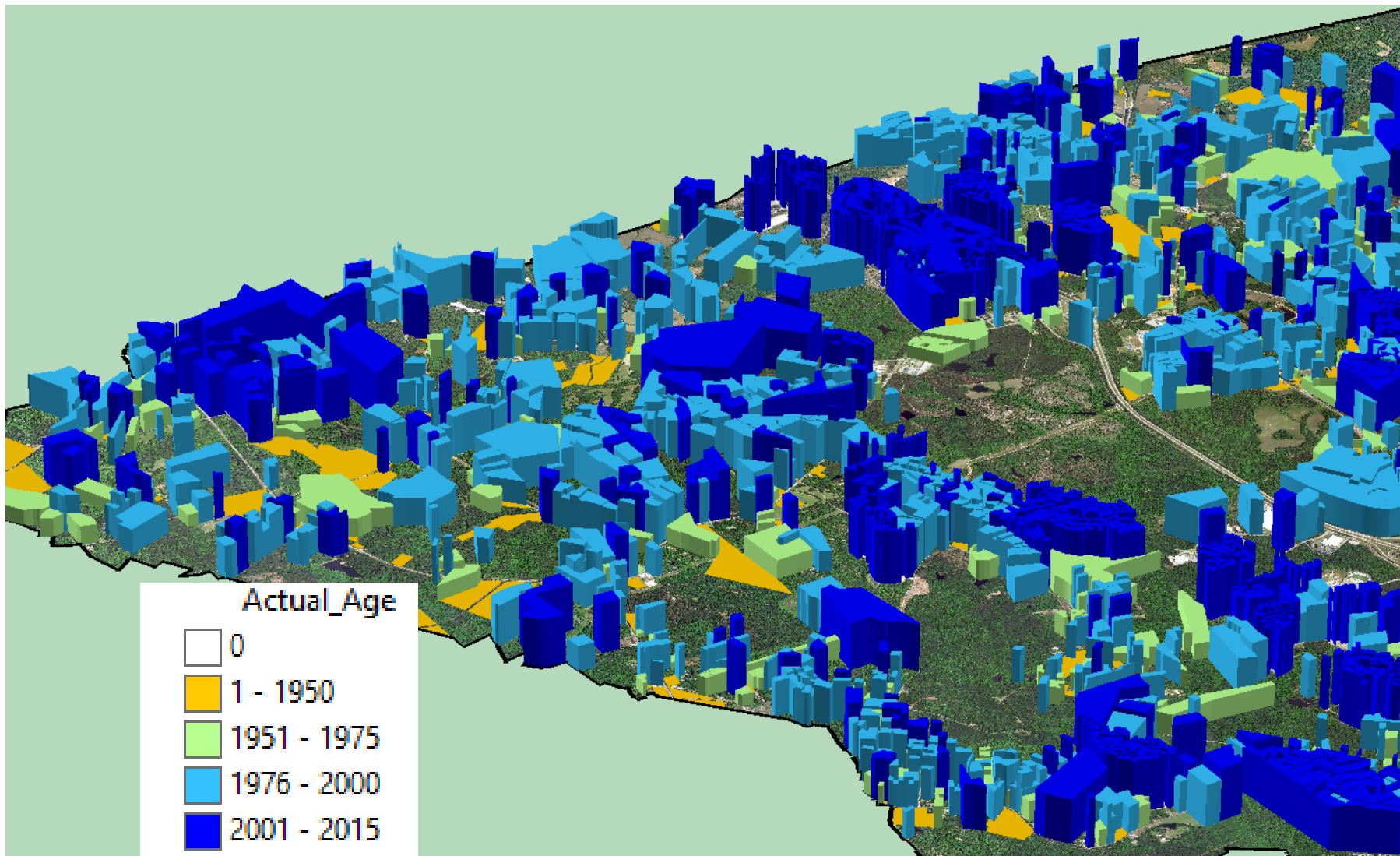


Enrollment in Northeast

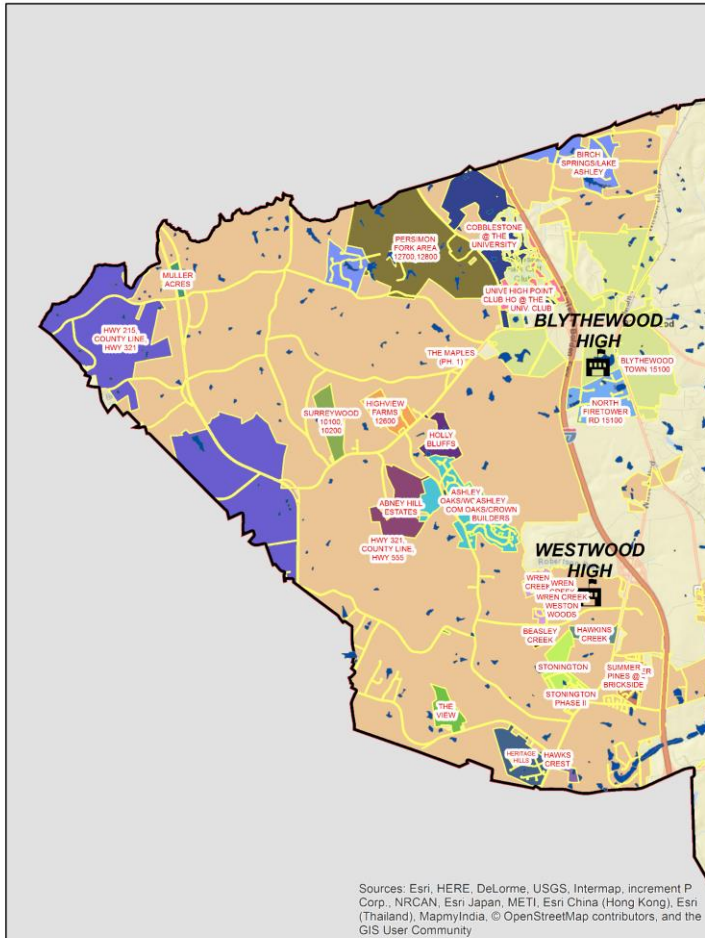


Northwest

Northwest



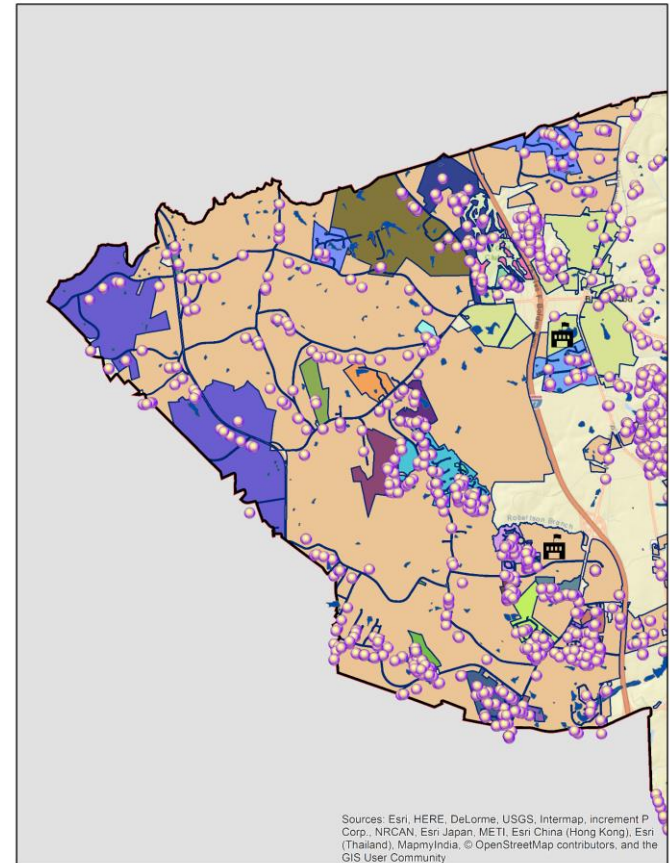
Northwest Neighborhoods



0 0.75 1.5 3 Miles

Prepared by David Cowen

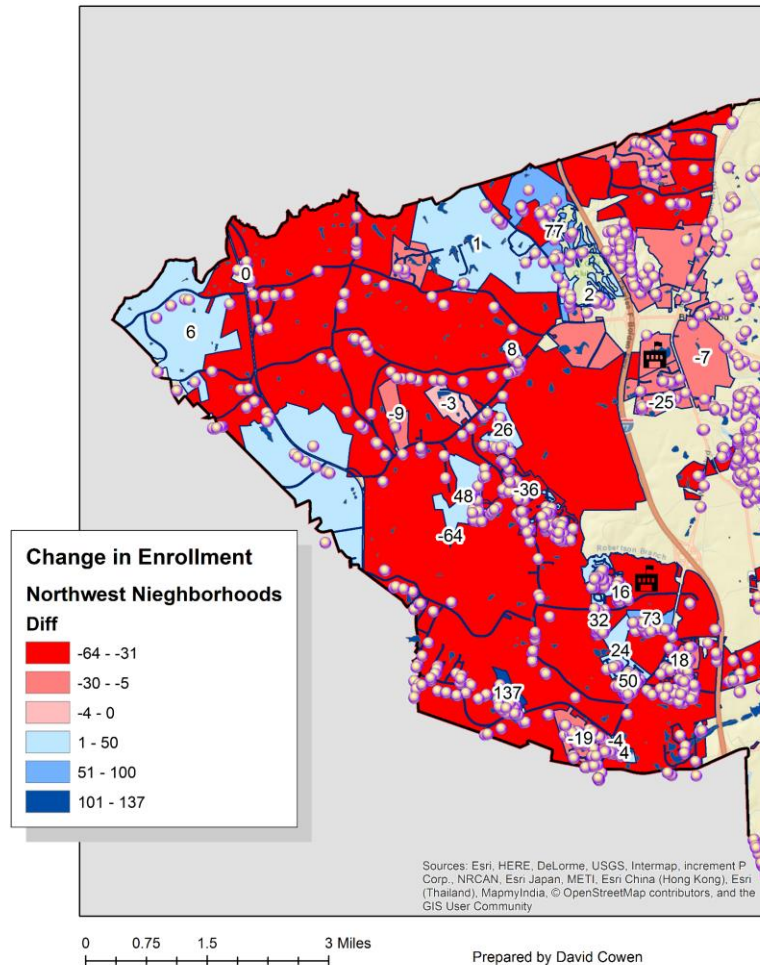
Northwest Neighborhoods Enrollments



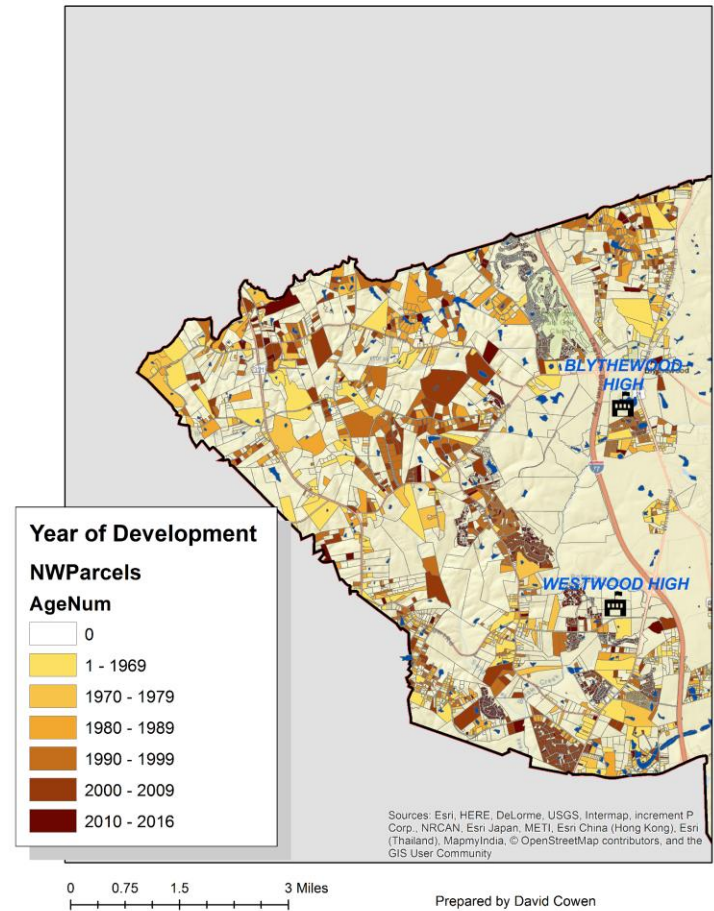
0 0.75 1.5 3 Miles

Prepared by David Cowen

Northwest Neighborhoods
Change in Enrollments 2010- 2016

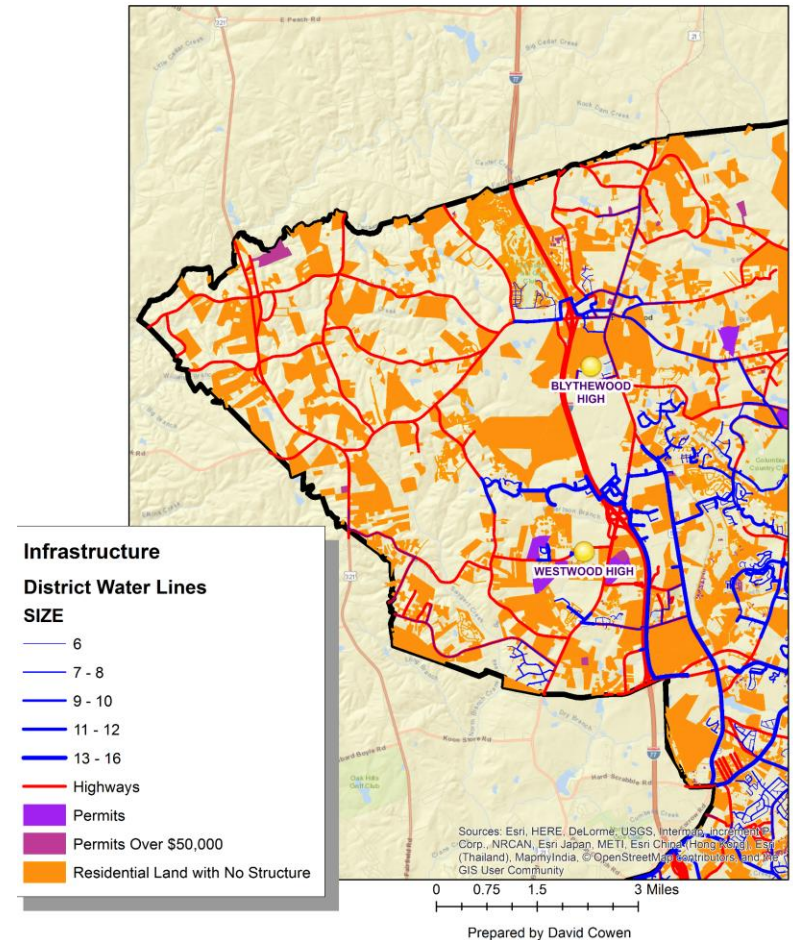
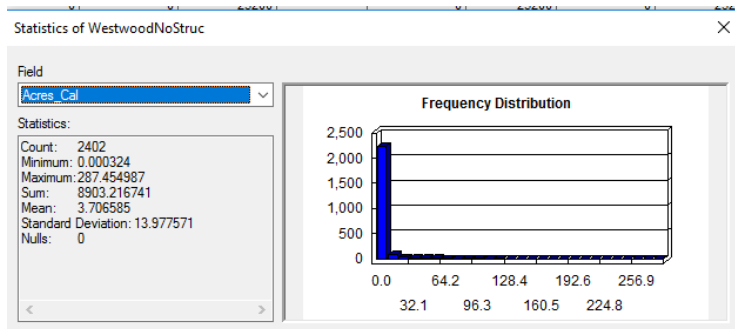
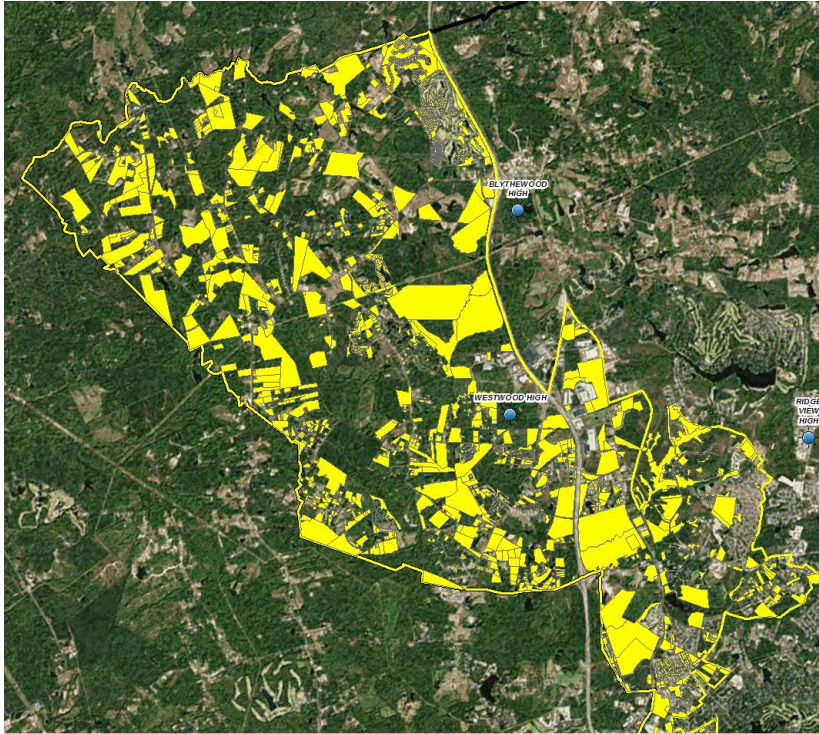


Northwest Year of Development



Westwood Undeveloped Residential Parcels

Potential New Residential Developments



Cobblestone @ University

University Club Change in Enrollment



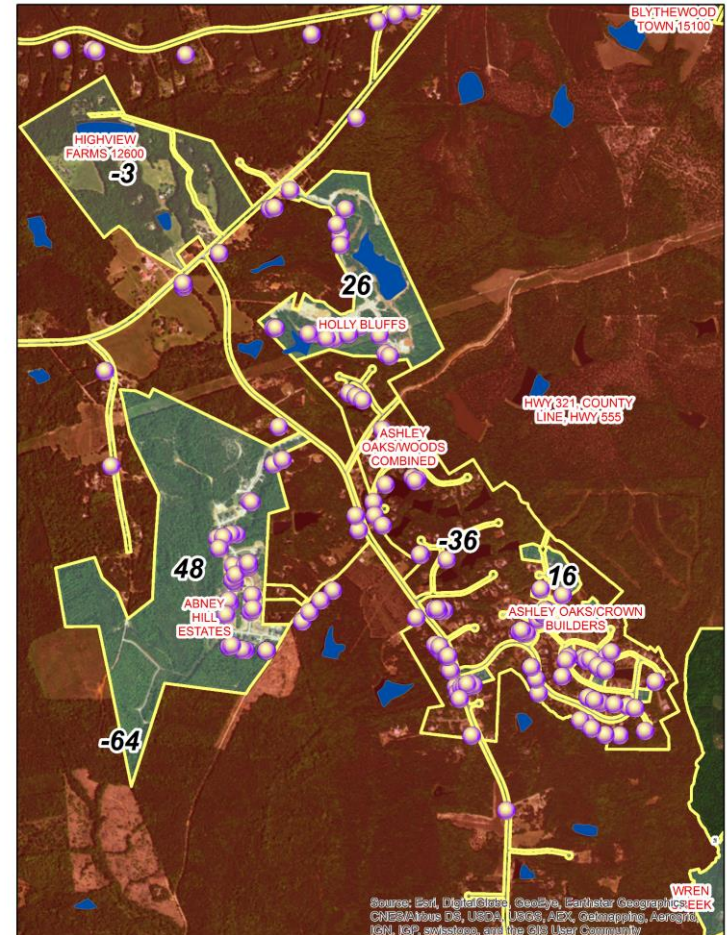
Wren Creek - Change in Enrollment



0 0.1 0.2 0.4 Miles

Prepared by David Cowen

Holly Bluff, Ashley Change in Enrollment



0 0.175 0.35 0.7 Miles

Prepared by David Cowen

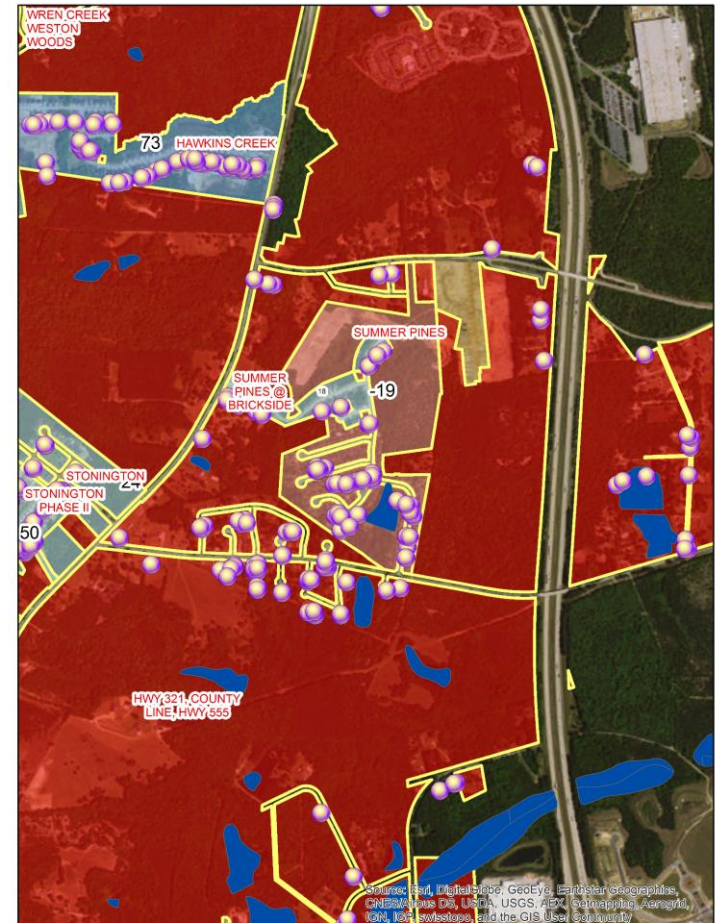
Stonington



0 0.05 0.1 0.2 Miles

Prepared by David Cowen

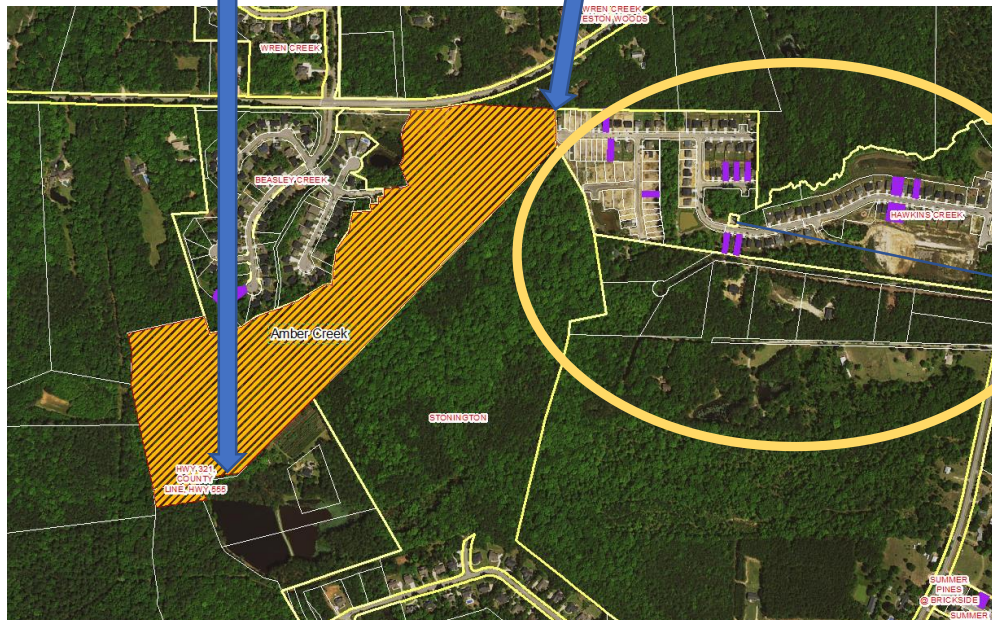
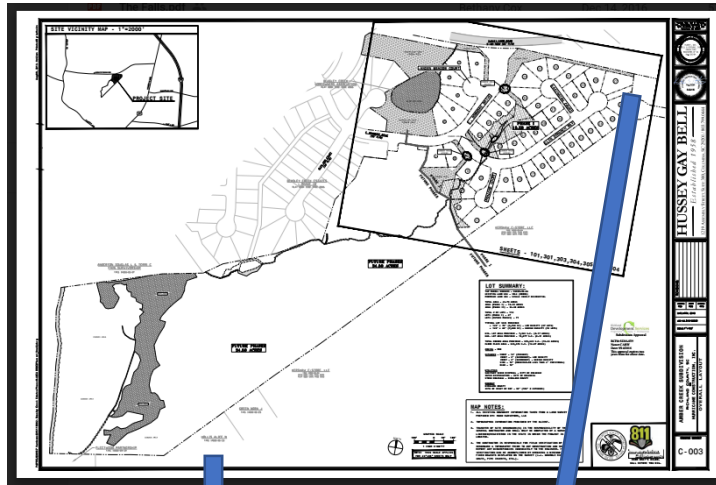
Summer Pines



0 0.125 0.25 0.5 Miles

Prepared by David Cowen

Amber Creek Proposal – Planned Development



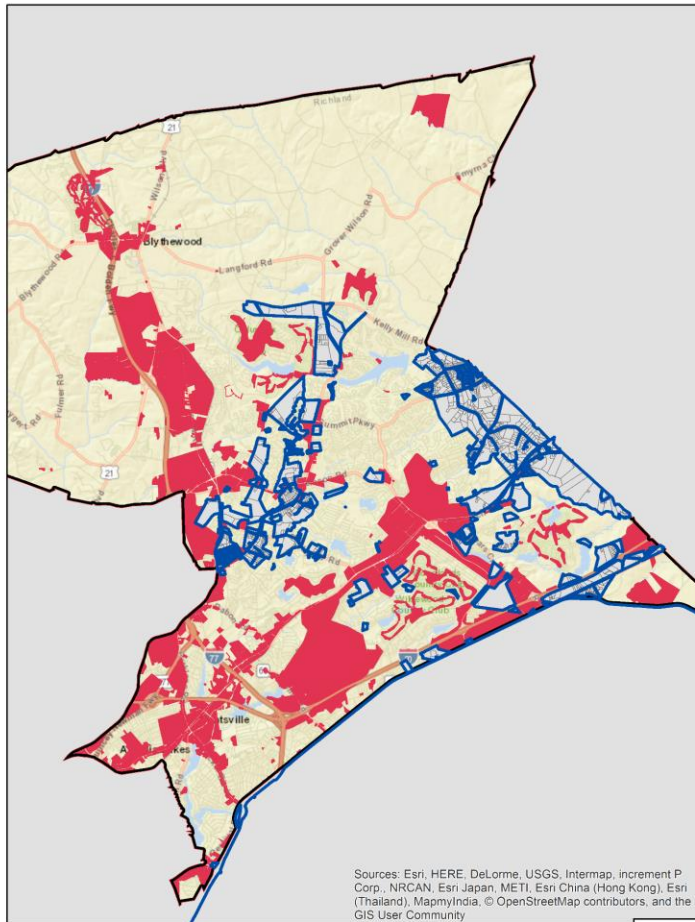
Other Permits
identified by
Assessor

Challenges

Neighborhoods – noncontiguous & too large

Pontiac Tracts - Sloan Road - Neighborhood 108
No Neighborhood

Blythwood Highway 21 County

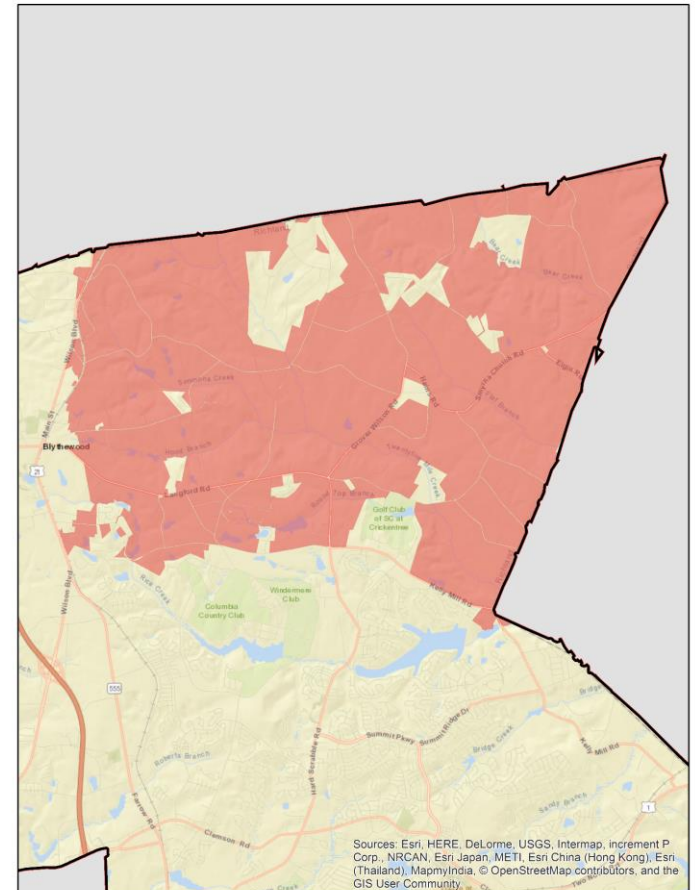


0 1.25 2.5 5 Miles

Prepared by David Cowen

Legend

■ Neigh108
■ NoNeigh

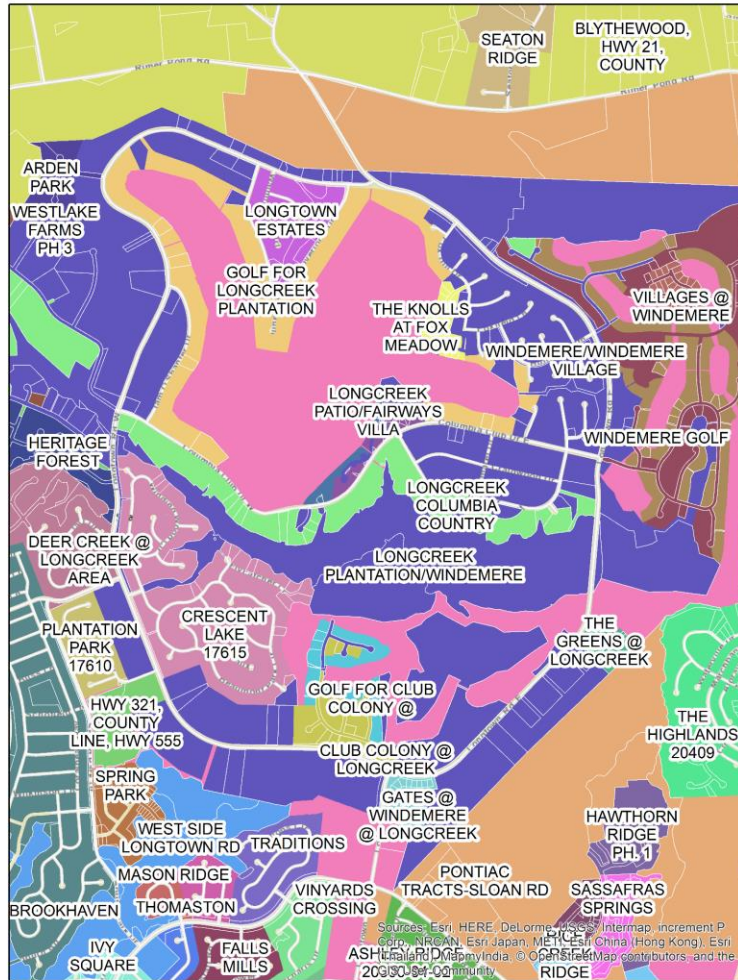


0 0.75 1.5 3 Miles

Prepared by David Cowen

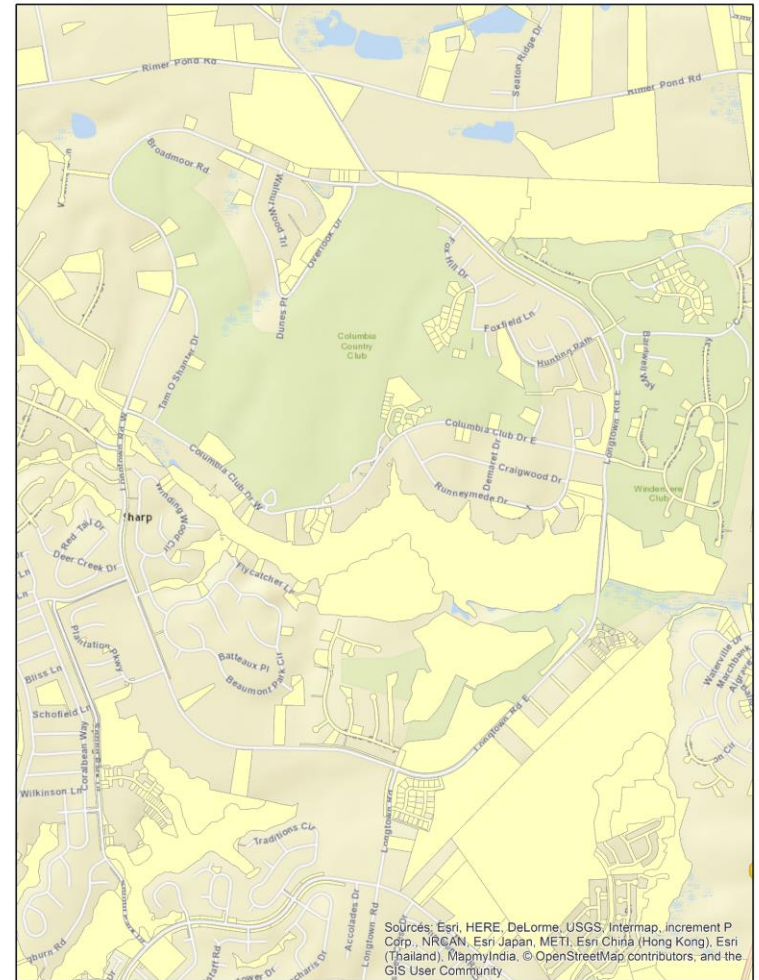
Issues with developable parcels

Complicated Neighborhoods



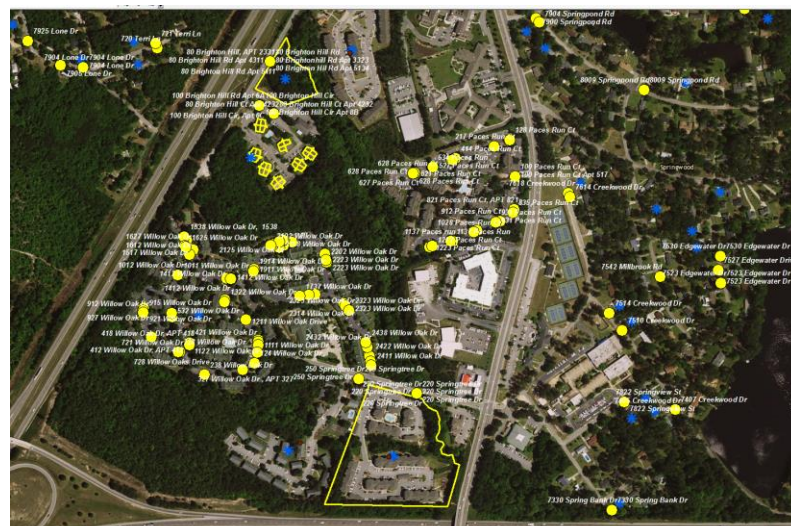
Prepared by David Cowen

Complicated Neighborhoods - Unimproved Residential Parcels



Prepared by David Cowen

Apartments – need to assign students correctly and estimate student generation rates



Next Steps

- Parcel Based Geocoding
 - Place students into parcel – not on the road
- Refine the water and sewer data
- Simplify Neighborhoods
- Obtain birth records from DHEC
- Define potential residential vs. permitted
- Generate more accurate student generation rates
 - Eliminate water bodies
 - Rights of way
 - Refine the apartment / multifamily dwellings