North Carolina Department of Environmental Quality
February 1, 2023

Toyota Battery Manufacturing NC

Environmental Justice Report

Contents

1 Introduction

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies (US EPA). This evaluation examines the demographic and environmental conditions in Census Tract 170 in Guilford County and Census Tract 312 and 313.07 in Randolph County, as well as the one-mile radius around the property boundary of the existing Greensboro-Randolph Mega Site facility. Finally, the demographics of the entire state of North Carolina are also considered as they compare to the county and the local census tract and radius settings.

The primary goal of this EJ Report is to encourage comments and suggestions from the surrounding community, industry, and environmental groups throughout the comment period. Public comments will be considered throughout the remainder of the comment period to inform the Final EJ Report.

2 Environmental Justice Evaluation

The Department of Environmental Quality (DEQ or Department) has assessed the historical context, current permit conductions, and the demographics of the communities in the area surrounding the facility. Accordingly, this EJ Report includes:

- Pertinent permit information
- Facility history overview
- Study of area demographics [determined by utilizing the US EPA Environmental Justice tool (EJSCREEN) https://ejscreen.epa.gov/mapper/ and current, available census data. https://data.census.gov/cedsci/]
- Comparison of local area demographics to the county and statewide census data
- County health assessment
- Sensitive receptors in the surrounding area
- Local industrial sites (using the NCDEQ Community Mapping System: https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=1eb0fbe2bcfb4cccb3cc 212af8a0b8c8)
- Outreach recommendations

Demographics for Guilford and Randolph County and the state are compared to the local (census tract and project radius) level data to identify any disparities surrounding the project area using standard environmental justice guidelines from the EPA and National Environmental Policy Act (NEPA) documentation. Certain areas will be flagged for having the potential for environmental justice concerns using criteria set out in more detail in Section 5, Regional and Local Settings.

3 Proposed Project

Toyota Battery Mfg. Inc. dba Toyota Battery Manufacturing NC (Toyota) has submitted an application (7600353.22B) to modify their existing air quality permit (No. 10735R00). Toyota is currently constructing a new electric vehicle battery manufacturing facility located in Julian, Randolph County, North Carolina.

Toyota is currently permitted for four hybrid electric vehicle (HEV) battery production lines, supported with diesel-fired emergency engines. With this modification, Toyota proposes to add seven battery electric vehicle (BEV) battery production lines, comprised of the following processes:

- Electrode (Cathode & Anode) Mixing, Pressing & Slitting
- Winding, Terminal Bending, and Can Laser Sealing
- Inspection, Cell Stacking, and Electrolyte Injection
- Cap Laser Sealing

Wet and dry scrubbers will be used to collect dust and n-methyl-2-pyrrolidone (NMP, used in cathode production) from the manufacturing processes since maintaining cleanliness is essential to battery production.

Toyota will be subject to multiple federal standards including: National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (40 CFR 63 Subpart ZZZZ), New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60 Subpart IIII) and Spark Ignition Internal Combustion Engines (40 CFR 60 Subpart JJJJ), and NESHAP for Area Sources: Paints and Allied Products Manufacturing (40 CFR 63 Subpart CCCCCCC).

Toyota is expected to remain a minor source for hazardous air pollutants (HAP) since HAP emissions are expected to be well below the major source threshold (10 tons per year (tpy) of a single HAP and 25 tpy of total HAPs). The facility will have the potential to emit close to the 250 tpy major Prevention of Significant Deterioration (PSD) source threshold for volatile organic compounds (VOCs) (Table 1 – see asterisk below). Following the modification, the facility will be classified as Title V.

In accordance with 15A North Carolina Administrative Code (NCAC) 02Q .0711, this facility is subject to North Carolina (NC) Air Toxics (State only requirement). The facility completed a NC air toxics review in their application for 14 toxic air pollutants (TAPs), with none of those TAPs exceeding the Toxics Permitting Emissions Rates (TPERs) in 15A NCAC 02Q .0711.

Table 1. Facility Emissions Overview

Pollutant	Potential Emissions Before Controls (tons/yr)	Potential Emissions After Controls (tons/yr)
VOC	249.62	249.62*
$PM_{10}/PM_{2.5}$	86.5	86.5
NOx	22.9	22.9
CO	12.1	12.1
Highest Individual HAP (methanol)	0.74	0.74
Total HAP	0.75	0.75

*This total includes 7.99 tons of fugitive VOCs that do not count toward PSD applicability. No specific PSD avoidance condition required in the final draft permit as a result.

4 Geographic Area

The existing Greensboro-Randolph Mega Site facility is located in Julian (near the town of Liberty), Randolph County, North Carolina (Figure 1). A one-mile radius was used to evaluate the local demographics and socioeconomics to appropriately include the surrounding community and help inform the Department's public outreach efforts. The one-mile buffer around the facility is in Guilford County and Randolph County.
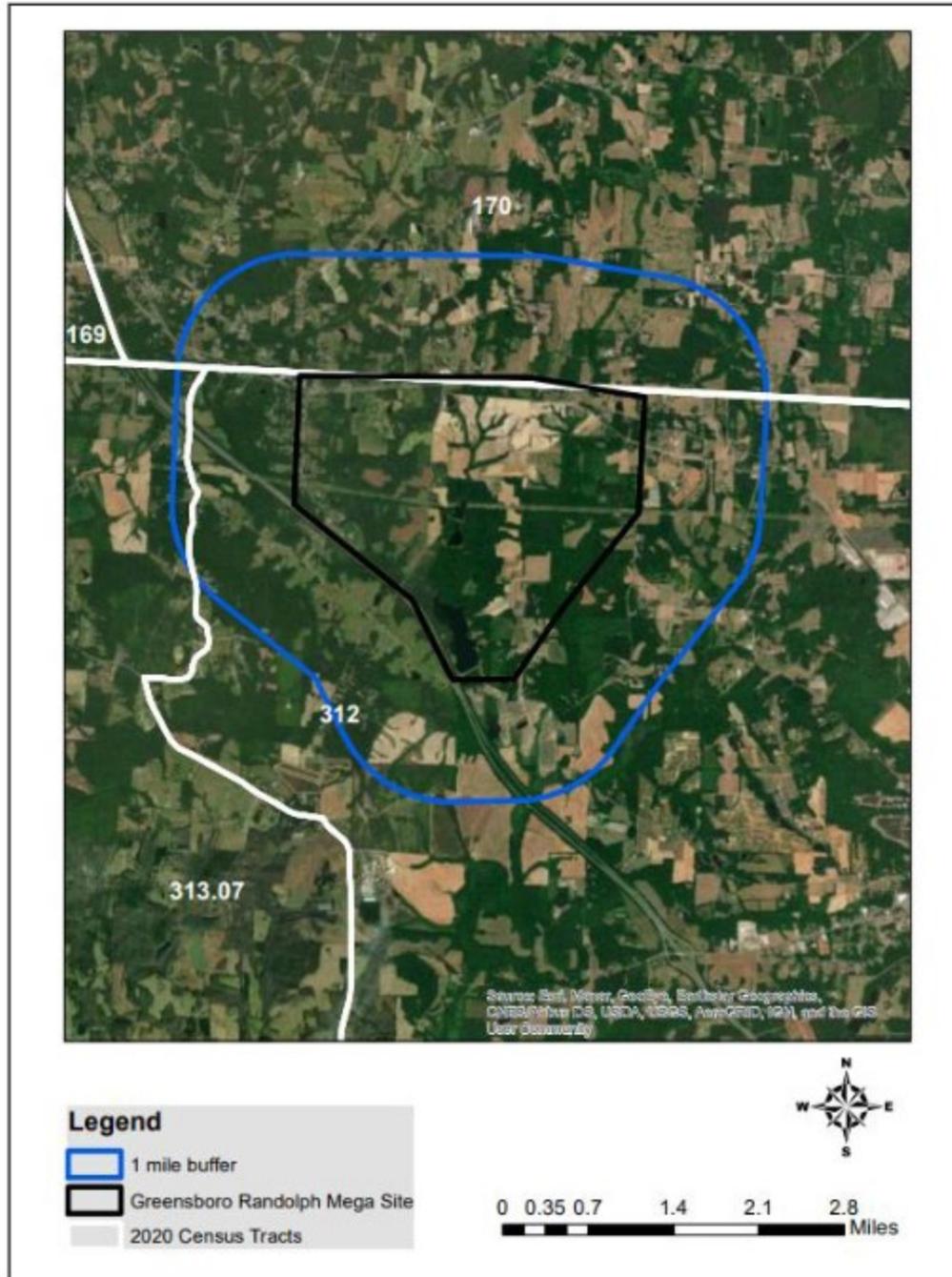
Figure 1. Facility location with the one-mile buffer.

Guilford and Randolph County are Tier 2 counties by the NC Department of Commerce 2022 rankings. According to the Department of Commerce, Tier 1 counties encompass the 40 most distressed counties based on average unemployment rate, median household income, percentage growth in population, and adjusted property tax per capita. Tier 2 counties encompass the next 40 counties based on this ranking system. The proposed facility location is in Census Tract 170 in Guilford County and Census Tract 312 and 313.07 in Randolph County (Figure 2). Census tracts are small, relatively permanent statistical subdivisions of a county with

a unique numeric code (US Census Bureau). Neither the counties nor the census tracts encompass land within a state-designated tribal statistical area; however, the Guilford Native American association is in Guilford County.
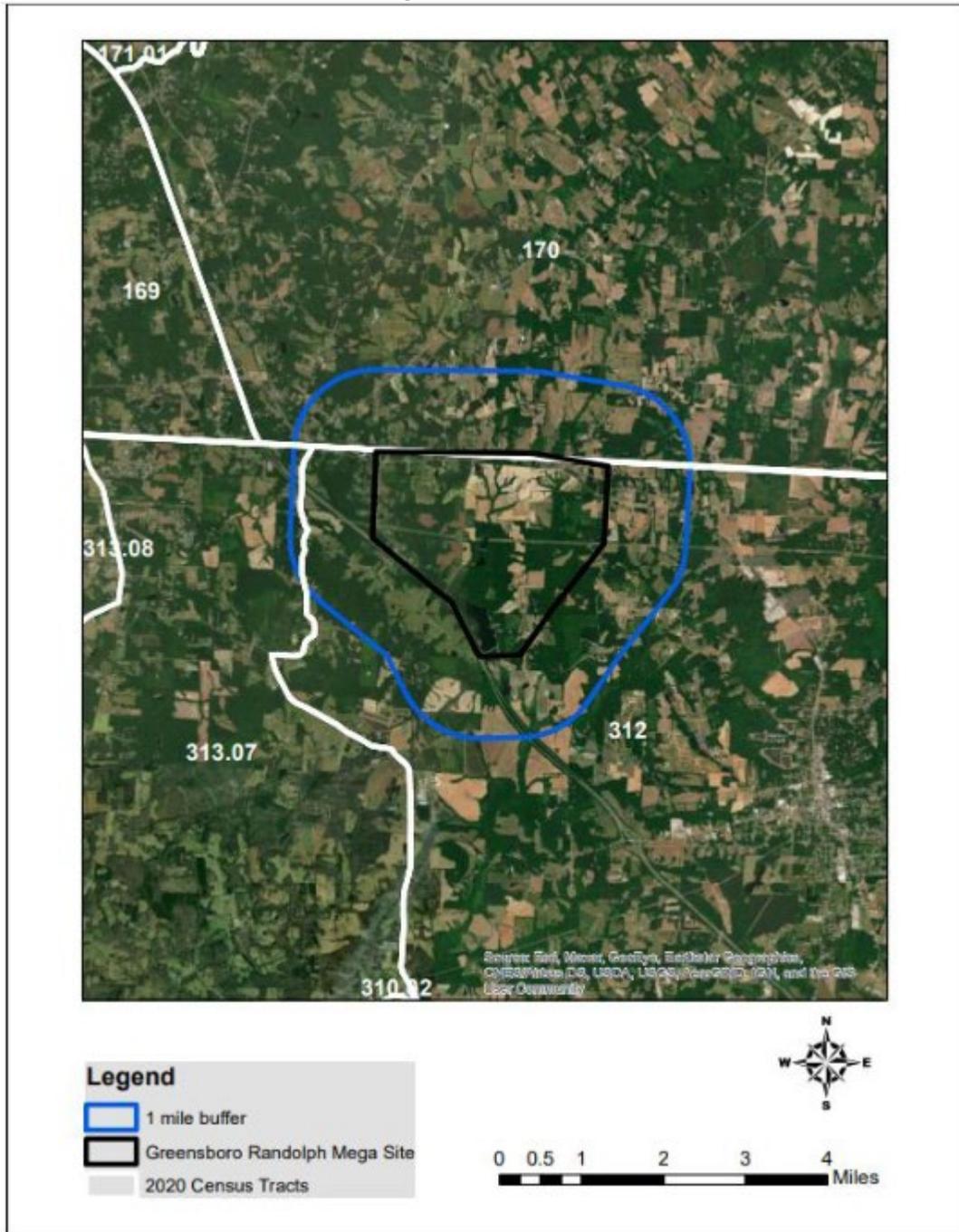
Figure 2. Census Tracts 170, 312, and 313.07 surrounding the facility location.

5 Regional and Local Settings

The following sections on race and ethnicity, age and sex, disability, poverty, household income, and Limited English Proficiency (LEP) populations are based on U.S. Census Bureau data, first at a state and county level (regional setting), and then at a census tract- and project-radius level (local setting). The surrounding census tracts included are those that overlap into the one-mile radius. Demographics of the county will be compared to the local level data to identify any disparities surrounding the project area. Using standard environmental justice guidelines from the EPA and NEPA documentation, the following conditions will be flagged as communities with the potential for environmental justice concerns:

1. 10% or more in comparison to the county or state average
2. 50% or more minority
3. 5% or more in comparison to the county or state average for poverty

For example, if a census tract has 35% of the population classified as low income but the county consists of 30% low income, the census tract would exceed the county average by 16.7% and thus be flagged as an area with the potential for having EJ concerns. For this report, census data from 2010, 2020 and census data estimates from 2011-2015 and 2019 were used. 2010 and 2020 Census Bureau data is real data gathered every ten years, whereas the estimates from the more recent years are modeled based on the real data. For the data gathered from the 2019 and 2011-2015 estimates, the margin of error (MOE) has been included. This value is a measure of the possible variation of the estimate around the population value (U.S. Census Bureau). The Census Bureau standard for the MOE is at the 90% confidence level and may be any number between 0 and the MOE value in either direction (indicated by +/-).

5.1 Race and Ethnicity

Regional Setting

According to the 2020 US Census Data Table P2: Hispanic or Latino, and Not Hispanic or Latino by Race, North Carolina's population totaled 10,439,388 individuals (Table 2). The three most common racial groups across the state were White (60.5%), Black or African American (20.2%), and Hispanic or Latino (of any race) (10.7%).

Guilford County had a total population of 541,299 individuals and Randolph County had a total population of 144,171 individuals (Table 2). The two most common racial or ethnic groups in Guilford County were White (not Hispanic or Latino) (47.2%) and Black or African American (33.1%). The population of Black or African American was greater than 10% different when compared to the state. The two most common racial or ethnic groups in Randolph County were White (not Hispanic or Latino) (75.2%) and Hispanic or Latino (of any race) (13.2%). The population of White (not Hispanic or Latino) and Hispanic or Latino (of any race) was greater than 10% different when compared to the state.

Table 2. Regional Setting - Race and Ethnicity

Race and Ethnicity	North Carolina		Guilford County		Randolph County	
	Number	Percent	Number	Percent	Number	Percent
Total Population	10,439,388	100.0	541,299	100.0	144,171	100.0
White	6,312,148	60.5	255,640	47.2	108,354	**75.2**
Black or African American	2,107,526	20.2	179,423	**33.1**	8,592	6.0
American Indian or Alaska Native	100,886	1.0	1,918	0.4	666	0.5
Asian	340,059	3.3	28,719	**5.3**	2,158	1.5
Native Hawaiian and Other Pacific Islander	6,980	0.1	216	0.0	10	0.0
Some other Race	46,340	0.4	2,850	**0.5**	412	0.3
Two or More Races	406,853	3.9	20,381	3.8	4,928	3.4
HISPANIC OR LATINO (of any race)	1,118,596	10.7	52,152	9.6	19,051	**13.2**

Source: US Census Bureau, 2020 Census,

All bolded and orange highlighted cells indicate a difference that is greater than 10% different when compared to the State.

Local Setting

According to the 2020 US Census Data Table P2: Hispanic or Latino, and Not Hispanic or Latino by race or ethnicity, the largest population within Census Tract 170 was White (not Hispanic or Latino) (89.1%) (Table 3). White (not Hispanic or Latino) was greater than 10% different compared to the state and the county, and Native Hawaiian and Other Pacific Islander was greater than 10% different when compared to the County.

The largest population within Census Tract 312 was White (not Hispanic or Latino) (68.4%) (Table 4). White (not Hispanic or Latino) and Hispanic or Latino (of any race) were greater than 10% different compared to the state, and Black or African American and American Indian or Alaska Native were greater than 10% different when compared to the County.

The largest population within Census Tract 313.07 was White (not Hispanic or Latino) (89.1%) (Table 4). White (not Hispanic or Latino) was greater than 10% different compared to the state and the county, and American Indian or Alaska Native was greater than 10% different when compared to the County.

Within the one-mile project radius, the largest population was White (not Hispanic or Latino) at 90.5%, which was greater than 10% different when compared to the state.

Table 3. Local Setting - Race and Ethnicity

	Project Area - 1 Mile		Census Tract 170	
Race and Ethnicity	**Number**	**Percent**	**Number**	**Percent**
Total Population	1,076	100.0	4,675	100.0
White	974	90.5	4,167	89.1
Black or African American	61	5.7	138	3.0
American Indian or Alaska Native	8	0.7	12	0.3
Asian	2	0.2	10	0.2
Native Hawaiian and Other Pacific Islander	1	0.1	4	0.1
Some other Race	2	0.2	21	0.4
Two or More Races	13	1.2	149	3.2
HISPANIC OR LATINO (of any race)	34	3.2	174	3.72
Source: US Census Bureau, 2020 Census; EJSCREEN Census 2010 (for Project Area - 1 mile) All **orange and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the state All **blue and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the state and the county All **green and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the county				

Table 4. Local Setting - Race and Ethnicity (cont'd)

Race and Ethnicity	Census Tract 312		Census Tract 313.07	
	Number	Percent	Number	Percent
Total Population	5,184	100.0	4,203	100
White	3,544	68.4	3,743	89.1
Black or African American	638	12.3	50	1.2
American Indian or Alaska Native	48	0.9	32	0.8
Asian	24	0.5	10	0.2
Native Hawaiian and Other Pacific Islander	2	0.0	0	0.0
Some other Race	17	0.3	0	0.0
Two or More Races	195	3.8	163	3.9
HISPANIC OR LATINO (of any race)	716	13.8	205	4.9

Source: US Census Bureau, 2020 Census,

All **orange and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the state

All **blue and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the state and the county

All **green and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the county

5.2 Age and Sex

Regional Setting

According to the 2010 US Census Data Table P 12: Sex by Age, and Table P13: Median Age, North Carolina had a total population of 9,535,483 individuals (Table 5)[1]. The median age for females (38.7) was slightly older than the median age for males (36).

Guilford County had a total population of 488,406 individuals. The median age for females (37.5) was slightly higher than the median age for males (35.1). The median age for females was older than the median age for the state.

Randolph County had a total population of 141,752 individuals. The median age for females (40.4) was slightly higher than the median age for males (38.6), both older than the median age for the state.

Table 5. Regional Setting - Age Groups and Sex

Age	North Carolina						Guilford County					
	Number			Percent			Number			Percent		
	Both sexes	Male	Female	Both sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Total Population	9,535,483	4,645,492	4,889,991	100%	49%	51%	488,406	232,483	255,923	100%	48%	52%
Median Age	37.4	36	38.7				36.3	35.1	37.5			
Source: US Census Bureau, 2010 Census												

Table 6. Regional Setting - Age Groups and Sex (cont'd)

Age	Randolph County					
	Number			Percent		
Total Population	Both Sexes	Male	Female	Both Sexes	Male	Female
Median Age	141,752	69,838	71,914	100%	49%	51%
	39.5	38.6	40.4			
Source: US Census Bureau, 2010 Census						

Local Setting

According to the 2010 US Census Data Table P 12: Sex by Age, and Table P13: Median Age, Census Tract 170 had a total population of 4,516 and a slightly older median ages than the state

---

[1] 2010 US Census Data was used for Age & Sex because 2020 US Census for Age & Sex are not yet available from the US Census Bureau.

and Guilford County (Table 7). Census Tract 312 had a total population of 5,336 and a slightly older median ages than the state and Randolph County (Table 8).[2]

Table 7. Local Setting - Age Groups and Sex

Age	Census Tract 170					
	Number			Percent		
	Both sexes	Male	Female	Both sexes	Male	Female
Total Population	4,516	2,303	2,213	100%	51%	49%
Median Age	45.6	44.5	46.7			
Source: US Census Bureau, 2010 Census						

Table 8. Local Setting - Age Groups and Sex (cont'd)

Age	Census Tract 312					
	Number			Percent		
	Both sexes	Male	Female	Both sexes	Male	Female
Total Population	5,336	2,640	2,696	100%	49%	51%
Median Age	41.6	40.1	43.2			
Source: US Census Bureau, 2010 Census						

---

[2] The census tract boundaries in this area are slightly different when comparing 2010 and 2020. Census Tract 313.06 was split into two census tracts—313.08 and 313.07—in 2020 due to changes in population from 2010 to 2020. Census Tract 313.07 did not exist in 2010 and is therefore missing from Local setting – Age Groups and Sex section.

Project Buffer

EJSCREEN identified a population of 1,178 individuals within the one-mile buffer surrounding the facility. There was a slightly higher percentage of males than females in this area. EJSCREEN data does not provide the median age (Table 9).

Table 9. Project Radius - Age Groups and Sex

| Age | Project Area - 1 Miles | | | | | |
| | Number | | | Percent | | |
	Both sexes	Male	Female	Both sexes	Male	Female
Total Population	1,178	599	579	100%	51%	49%
Source: US Census Bureau, 2010 Census. Obtained through EJSCREEN 2.0						

5.3 Disability

Regional Setting

According to the 2020 American Community Survey 5-Year Estimates, Table S1810 Disability Characteristics from the US Census Bureau, the state of North Carolina had an estimated total population of 10,178,084 noninstitutionalized citizens. Of those individuals, an estimated 13.4% (MOE +/- 0.1%) had a disability. American Indian and Alaskan Native had the highest estimated disability rate of 18.3% (MOE +/- 0.8%). Black or African American and White (not Hispanic or Latino) had the next highest population estimates with disabilities in North Carolina, both at 14.4% (MOE +/-0.2%) and 14.4% (MOE +/- 0.1%), respectively (Table 10).

Guilford County had an estimated total population of 528,715 noninstitutionalized citizens. Of those, an estimated 11.4% (MOE +/- 0.3%) had a disability. The largest population of disabled civilians was American Indian and Alaska Native (15.3%, MOE 4.3%), followed by White (not Hispanic or Latino) (12.4%, MOE +/- 0.5%). None of the race and ethnicity brackets were greater than 10% different when compared to the state (Table 10).

Randolph County had an estimated total population of 142,110 noninstitutionalized citizens. Of those, an estimated 17.0% (MOE +/- 1.0%) had a disability. The largest population of disabled civilians was Black or African American (20.9%, MOE 3.7%), followed by White (not Hispanic or Latino) (18.4%, MOE +/- 1.2%). White (not Hispanic or Latino), Black or African American, Asian, and Hispanic or Latino were greater than 10% different when compared to the state (Table 11).

Table 10. Regional Setting – Disability

Subject	North Carolina						Guilford County					
	Total		With a Disability		Percent with a Disability		Total		With a Disability		Percent with a Disability	
	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-
Total civilian noninstitutionalized population	10,178,084	2,246	1,363,146	10,334	13.4	0.1	528,715	745	60,239	1,764	11.4	0.3
RACE AND HISPANIC OR LATINO ORIGIN												
White (not Hispanic or Latino)	6,384,673	4,026	920,335	7,716	14.4	0.1	262,176	698	32,488	1243	12.4	0.5
Black or African American	2,162,727	5,667	312,089	5,124	14.4	0.2	180,862	1,517	21,784	1288	12	0.7
American Indian and Alaska Native	117,165	2,329	21,497	933	18.3	0.8	2,516	469	385	123	15.3	4.3
Asian	305,567	2,316	16,107	1,164	5.3	0.4	27,368	535	1,553	312	5.7	1.1
Native Hawaiian and Other Pacific Islander	6,715	771	620	185	9.2	2.8	211	166	10	19	4.7	9.0
Some other Race	330,447	8,082	21,840	1,304	6.6	0.4	13,870	1,914	786	272	5.7	2.0
Two or more races	368,363	7,303	38,115	1,947	10.3	0.5	18,207	1,770	1,784	402	9.8	2.1
Hispanic or Latino	968,502	1,000	63,943	2,301	6.6	0.2	43,257	72	2,620	401	6.1	0.9
Type of Disability												
With a hearing difficulty	(X)	(X)	379973	5120	3.7	0.1	(X)	(X)	14,598	917	2.8	0.2
With a vision difficulty	(X)	(X)	263954	5052	2.6	0.1	(X)	(X)	10,166	867	1.9	0.2
With a cognitive difficulty	(X)	(X)	515673	7341	5.4	0.1	(X)	(X)	23,885	1,365	4.8	0.3
With an ambulatory difficulty	(X)	(X)	711995	6660	7.4	0.1	(X)	(X)	30,816	1,312	6.2	0.3

Source: US Census Data, 2020 ACS 5-Year Estimates
All **bolded and orange** highlighted cells indicate a difference that is greater than 10% when compared to the State

Table 11. Regional Setting - Disability (cont'd)

Subject	Randolph County					
	Total		With a Disability		Percent with a Disability	
	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-
Total civilian noninstitutionalized population	142,110	238	24,187	1,366	**17.0**	1.0
RACE AND HISPANIC OR LATINO ORIGIN						
White (not Hispanic or Latino)	111,689	340	20,552	1,287	**18.4**	1.2
Black or African American	8,651	602	1,812	354	**20.9**	3.7
American Indian and Alaska Native	435	138	68	52	15.6	11.5
Asian	1763	251	273	140	**15.5**	7.5
Native Hawaiian and Other Pacific Islander	95	106	0	31	0.0	32.9
Some other Race	7187	1199	394	139	5.5	1.9
Two or more races	4433	760	494	165	11.1	4.0
Hispanic or Latino	16694	48	1,282	322	**7.7**	1.9
Type of Disability						
With a hearing difficulty	(X)	(X)	6,788	662	**4.8**	0.5
With a vision difficulty	(X)	(X)	4,507	587	**3.2**	0.4
With a cognitive difficulty	(X)	(X)	10,000	1,012	**7.5**	0.8
With an ambulatory difficulty	(X)	(X)	12,180	904	**9.1**	0.7

Source: US Census Data, 2020 ACS 5-Year Estimates
All **bolded and orange** highlighted cells indicate a difference that is greater than 10% when compared to the State

Local Setting

According to the 2020 American Community Survey 5-Year Estimates, Table S1810 Disability Characteristics from the US Census Bureau, Census Tract 170 had an estimated total population of 4,449 noninstitutionalized citizens (Table 12). Of those individuals, an estimated 10.7% (MOE +/- 3.1%) had a disability. The subjects with the largest population of disabled civilians were Black or African American (47.4%, MOE +/- 24.1%), followed by White at 10.2% (MOE +/- 3.2%). Black or African American and some other race were greater than 10% different compared to the state and the county.

Census Tract 312 had an estimated total population of 5,107 noninstitutionalized citizens (Table 13). Of those individuals, an estimated 21.8% (MOE +/- 6.7%) had a disability. The subjects with the largest population of disabled civilians were Asian (29.4%, MOE +/- 13.8%), followed by White at 25.5% (MOE +/- 8.9%). American Indian and Alaska Native and some other race were greater than 10% different compared to the state. The total population with a disability, White (not Hispanic or Latino), Asian, and Hispanic or Latino were greater than 10% different compared to the state and the county.

Census Tract 313.07 had an estimated total population of 4,093 noninstitutionalized citizens (Table 14). Of those individuals, an estimated 14.5% (MOE +/- 4.2%) had a disability. The subjects with the largest population of disabled civilians were total civilian noninstitutionalized population (47.4%, MOE +/- 4.2%), followed by White (not Hispanic or Latino) at 14.4% (MOE +/- 4.3%). Hispanic or Latino was greater than 10% different compared to the county.

Table 12. Local Setting - Disability

Subject	Census Tract 170					
	Total		With a Disability		Percent with a Disability	
	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-
Total civilian noninstitutionalized population	4,449	596	475	111	10.7	3.1
RACE AND HISPANIC OR LATINO ORIGIN						
White (not Hispanic or Latino)	3,506	427	356	101	10.2	3.2
Black or African American	154	91	73	56	47.4	24.1
American Indian and Alaska Native	0	13	0	13	-	**
Asian	24	37	0	13	0	67.2
Native Hawaiian and Other Pacific Islander	0	13	0	13	-	**
Some other Race	186	172	15	21	8.1	6.5
Two or more races	450	470	31	40	6.9	13.8
Hispanic or Latino	622	480	15	21	2.4	3.8
Type of Disability						
With a hearing difficulty	(X)	(X)	199	74	4.5	1.9
With a vision difficulty	(X)	(X)	56	39	1.3	0.9
With a cognitive difficulty	(X)	(X)	177	85	4.2	2.1
With an ambulatory difficulty	(X)	(X)	265	87	6.3	2.2

Source: US Census Data, 2020 ACS 5-Year Estimates,
All **bolded and orange** highlighted cells indicate a difference that is greater than 10% when compared to the state
All **blue and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the state and the county

All **green and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the county

Table 13. Local Setting - Disability (cont'd)

Subject	Census Tract 312					
	Total		With a Disability		Percent with a Disability	
	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-
Total civilian noninstitutionalized population	5,107	540	1,113	411	**21.8**	6.7
RACE AND HISPANIC OR LATINO ORIGIN						
White (not Hispanic or Latino)	3,579	608	912	410	**25.5**	8.9
Black or African American	606	156	102	50	**16.8**	7.8
American Indian and Alaska Native	30	26	0	19	0.0	60.1
Asian	17	23	5	7	**29.4**	13.8
Native Hawaiian and Other Pacific Islander	0	19	0	19	-	**
Some other Race	484	297	92	71	**19.0**	11.2
Two or more races	291	285	2	5	0.7	1.9
Hispanic or Latino	789	376	92	71	**11.7**	8.2
Type of Disability						
With a hearing difficulty	(X)	(X)	270	149	**5.3**	3.0
With a vision difficulty	(X)	(X)	209	107	**4.1**	2.1
With a cognitive difficulty	(X)	(X)	222	114	4.5	2.4
With an ambulatory difficulty	(X)	(X)	773	382	**15.8**	6.7

Source: US Census Data, 2020 ACS 5-Year Estimates,
All **bolded and orange** highlighted cells indicate a difference that is greater than 10% when compared to the state
All **blue and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the state and the county

All **green and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the county

Table 14. Local Setting - Disability (cont'd)

Subject	Census Tract 313.07					
	Total		With a Disability		Percent with a Disability	
	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-
Total civilian noninstitutionalized population	4,093	573	595	180	14.5	4.2
RACE AND HISPANIC OR LATINO ORIGIN						
White (not Hispanic or Latino)	3,829	579	550	175	14.4	4.3
Black or African American	1	2	0	13	0.0	100.0
American Indian and Alaska Native	26	37	0	13	0.0	64.5
Asian	0	13	0	13	-	**
Native Hawaiian and Other Pacific Islander	0	13	0	13	-	**
Some other Race	54	84	0	13	0.0	44.8
Two or more races	0	13	0	13	-	**
Hispanic or Latino	237	268	45	65	**19.0**	12.3
Type of Disability						
With a hearing difficulty	(X)	(X)	102	75	2.5	1.8
With a vision difficulty	(X)	(X)	82	84	2.0	2.1
With a cognitive difficulty	(X)	(X)	134	88	3.5	2.1
With an ambulatory difficulty	(X)	(X)	336	134	8.7	3.6

Source: US Census Data, 2020 ACS 5-Year Estimates,
All **bolded and orange** highlighted cells indicate a difference that is greater than 10% when compared to the state
All **blue and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the state and the county

All **green and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the county

5.4 Poverty

Regional Setting

According to the Census Table S1701, Poverty Status in the Past 12 Months, 2020 American Community Survey 5-Year Estimates, from the US Census Bureau, North Carolina had an estimated population of 10,098,330, with 14.0% (MOE +/- 0.2%) below the poverty level (Table 15). Across all subjects, Some Other Race had the highest percent living below the poverty level at 25.0% (MOE +/- 1.5%). The next three subjects with the highest poverty level were American Indian and Alaska Native at 24.1% (MOE +/- 1.2%), Hispanic or Latino at 23.9% (MOE +/- 0.6%), and Native Hawaiian and Pacific Islander at 22.8% (MOE +/- 5.8%). Households below 200 percent of the federal poverty level[3] are calculated by multiplying the percentage point by the poverty level for the number of individuals in that household. For example, to calculate 200% of the poverty level for a household of four in 2021[4], that would be $53,000 (2.0 x $26,500).

Guildford County had an estimated population of 513,209 with 15.3% (MOE +/- 0.80%) living below the poverty level (Table 15). Across all subjects, Native Hawaiian and Other Pacific Islander had the highest percent living below the poverty level at 76.3% (MOE +/- 25.8%), followed by American Indian and Alaska Native (27.9%, MOE +/- 11.7%), and some other race (26.5%, MOE +/- 6.0%). All populations except for White (not Hispanic or Latino) and two or more races had estimates greater than 10% different when compared to the state.

Randolph County had an estimated population of 141,686 with 14.6% (MOE +/- 1.30%) living below the poverty level. Across all subjects, Black or African American had the highest percent living below the poverty level at 26.8% (MOE +/- 6.5%), followed some other race (25.9%, MOE +/- 7.0%), and two or more races (24.7%, MOE +/- 9.6). White (not Hispanic or Latino), Black or African American, Asian and two or more races had estimates greater than 10% different when compared to the state (Table 16).

---

[3] https://www.thebalance.com/federal-poverty-level-definition-guidelines-chart-3305843

[4] The poverty level for a household of four in 2021 is an annual income of $26,500. To calculate the poverty level for larger families, add $4,540 for each additional person in the household. For smaller families, subtract $4,540 per person.

Table 15. Regional Setting – Poverty

Subject	North Carolina						Guilford County					
	Total		Below poverty level		Percent below poverty level		Total		Below poverty level		Percent below poverty level	
	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-
Population for whom poverty status is determined	10,098,330	2,221	1,411,939	17,543	14	0.2	513,209	1,237	78,408	4,087	**15.3**	0.80
RACE AND HISPANIC OR LATINO ORIGIN												
White	6,344,815	4,042	622,712	11,804	9.8	0.2	256,531	961	21068	1562	8.2	0.60
Black or African American	2,132,832	6,025	456,894	7,600	21.4	0.4	172,542	1,665	39,837	2,945	**23.1**	1.70
American Indian and Alaska Native	116,785	2,358	28,165	1,550	24.1	1.2	2492	469	696	346	**27.9**	11.70
Asian	301,700	2,467	30,354	2,417	10.1	0.8	27,185	536	3,898	890	**14.3**	3.20
Native Hawaiian and Other Pacific Islander	6,653	762	1,516	343	22.8	5	194	162	148	139	**76.3**	25.80
Some other Race	328,061	8,018	82,109	5,279	25	1.5	13,360	1,850	3,540	908	**26.5**	6.00
Two or more races	365,189	7,058	70,845	3,951	19.4	1	17,769	1,773	3,419	807	19.2	4.00
Hispanic or Latino	966,330	1,407	230,691	6,016	23.9	0.6	42,170	355	10,701	1,340	**25.4**	3.20
All individuals below:												
200 percent of poverty level	3,331,937	25,024					175,998	4,874				

Source: US Census Data, 2020 ACS 5-Year Estimates
All **bolded and orange** highlighted cells indicate a difference that is greater than 5% when compared to the State

Table 16. Regional Setting – Poverty (cont'd)

| Subject | Randolph County | | | | | |
| | Total | | Below poverty level | | Percent below poverty level | |
	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-
Population for whom poverty status is determined	141,686	362	20,714	1,806	14.6	1.30
RACE AND HISPANIC OR LATINO ORIGIN						
White	111,560	363	13459	1513	**12.1**	1.40
Black or African American	8,493	624	2,274	585	**26.8**	6.50
American Indian and Alaska Native	435	138	85	45	19.5	9.10
Asian	1,763	251	259	163	**14.7**	9.00
Native Hawaiian and Other Pacific Islander	95	106	-	31	0.0	32.90
Some other Race	7,160	1,192	1,858	644	25.9	7.00
Two or more races	4,344	761	1,074	510	**24.7**	9.60
Hispanic or Latino	16,673	59	3,952	903	23.7	5.40
All individuals below:						
200 percent of poverty level	54,778	2,557				
Source: US Census Data, 2020 ACS 5-Year Estimates All **bolded and orange** highlighted cells indicate a difference that is greater than 5% when compared to the State						

Local Setting

According to the Census Table S1701, Poverty Status in the Past 12 Months, 2020 American Community Survey 5-Year Estimates, from the US Census Bureau, Census Tract 170 had an estimated population of 4,449 with 12.3% (MOE +/- 5.2%) living below the poverty level (Table 17). Some other race and Hispanic or Latino had poverty levels higher than 5% different when compared to the county and the state.

Census Tract 312 had an estimated population of 5,107 with 18.6% (MOE +/- 7.0%) living below the poverty level (Table 18). All subjects except, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, and two or more race had poverty levels higher than 5% different when compared to the county and the state.

Census Tract 313.07 had an estimated population of 4,903 with 2.6% (MOE +/- 2.2%) living below the poverty level (Table 19). Black or African American had poverty levels higher than 5% different when compared to the county and the state.

Table 17. Local Setting- Poverty

Subject	Census Tract 170					
	Total		Below poverty level		Percent below poverty level	
	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-
Population for whom poverty status is determined	4,449	596	546	223	12.3	5.2
RACE AND HISPANIC OR LATINO ORIGIN						
White	3,506	427	248	168	7.1	4.7
Black or African American	154	91	28	32	18.2	21.4
American Indian and Alaska Native	0	13	0	13	-	**
Asian	24	37	-	13	0.0	67.2
Native Hawaiian and Other Pacific Islander	-	13	-	13	-	**
Some other Race	186	172	149	161	**80.1**	27.9
Two or more races	450	470	49	56	10.9	20.7
Hispanic or Latino	622	480	221	170	**35.5**	34.9
All individuals below:						
200 percent of poverty level	1,455	592				
Source: US Census Data, 2020 ACS 5-Year Estimates All **bolded and orange** highlighted cells indicate a difference that is greater than 5% when compared to the State All **bolded and blue** cells indicate a difference that is greater than 5% when compared to the county and the State						

Table 18. Local Setting- Poverty (cont'd)

Subject	Census Tract 312					
	Total		Below poverty level		Percent below poverty level	
	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-
Population for whom poverty status is determined	5,107	540	948	356	**18.6**	7.0
RACE AND HISPANIC OR LATINO ORIGIN						
White	3,579	608	546	288	**15.3**	7.5
Black or African American	606	156	148	77	**24.4**	13.0
American Indian and Alaska Native	30	26	6	9	20.0	32.5
Asian	17	23	-	19	0.0	79.8
Native Hawaiian and Other Pacific Islander	-	19	-	19	-	**
Some other Race	484	297	186	203	**38.4**	32.5
Two or more races	291	285	50	74	17.2	32.4
Hispanic or Latino	789	376	204	203	**25.9**	23.7
All individuals below:						
200 percent of poverty level	2,422	593				
Source: US Census Data, 2020 ACS 5-Year Estimates All **bolded and orange** highlighted cells indicate a difference that is greater than 5% when compared to the State All **bolded and blue** cells indicate a difference that is greater than 5% when compared to the county and the State						

Table 19. Local Setting- Poverty (cont'd)

Subject	Total		Below poverty level		Percent below poverty level	
	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-
	Census Tract 313.07					
Population for whom poverty status is determined	4,093	573	106	90	2.6	2.2
RACE AND HISPANIC OR LATINO ORIGIN						
White	3,829	579	105	90	2.7	2.4
Black or African American	1	2	1	2	**100.0**	100.0
American Indian and Alaska Native	26	37	0	13	0.0	64.5
Asian	-	13	-	13	-	**
Native Hawaiian and Other Pacific Islander	-	13	-	13	-	**
Some other Race	54	84	-	13	0.0	44.8
Two or more races	-	13	-	13	-	**
Hispanic or Latino	237	268	-	13	0.0	15.5
All individuals below:						
200 percent of poverty level	1,196	485				
Source: US Census Data, 2020 ACS 5-Year Estimates All **bolded and orange** highlighted cells indicate a difference that is greater than 5% when compared to the State All **bolded and blue** cells indicate a difference that is greater than 5% when compared to the county and the State						

5.5 Household Income

Regional Setting

The following table (Table 20) was compiled using data from the Census Table S1901, Income in the Past 12 Months (in 2020 Inflation-Adjusted Dollars) 2020 American Community Survey 5-Year Estimates for North Carolina. The North Carolina household income range with the highest percent was for $50,000 to $74,999, at 18.0%. The state median household income was $56,642 and the mean income was $79,620.

The household income range for Guilford County with the highest percent was $50,000 to $74,999 at 17.1% (MOE +/- 0.6%). The median income was $54,794 and the mean income was $78,738, both lower than that of the state. None of the household income ranges were greater than 10% higher when compared to the state.

The household income range for Randolph County with the highest percent was $50,000 to $74,999 at 19.9% (MOE +/- 1.5%). The median income was $48,984 and the mean income was $62,117, both lower than that of the state. All of the household income ranges from $10,000 to $74,999 were greater than 10% higher when compared to the state.

Table 20. Regional Setting - Household Income

Subject	North Carolina Households		Guilford County Households		Randolph County Households	
	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-
Total	4,031,592	8,480	208,234	1253	56,790	603
Less than $10,000	6.2	0.1	6.6	0.6	6.4	1
$10,000 to $14,999	4.8	0.1	4.8	0.4	**5.4**	0.8
$15,000 to $24,999	9.7	0.1	10.1	0.6	**11.8**	1.1
$25,000 to $34,999	10.0	0.1	10.7	0.6	**11.7**	1.1
$35,000 to $49,999	13.6	0.2	13.9	0.7	**15.9**	1.4
$50,000 to $74,999	18.0	0.1	17.1	0.6	**19.9**	1.5
$75,000 to $99,999	12.6	0.2	12.3	0.7	12.5	1.1
$100,000 to $149,999	13.7	0.1	13.6	0.6	11.2	1.2
$150,000 to $199,999	5.4	0.1	5.1	0.3	3.5	0.6
$200,000 or more	6.0	0.1	5.8	0.4	1.8	0.4
Median income (dollars)	56,642	280	54,794	1,163	48,984	1,524
Mean income (dollars)	79,620	412	78,738	1,545	62,117	1,883
Per Capita Income	31,993	182	31,798	618	25,246	747
Source: US Census, 2020 ACS 5-Year Estimates. All orange and bolded highlighted cells indicate a difference that is greater than 10% when compared to the state						

Local Setting

The household income range for Census Tract 170 with the highest percent $50,000 to $74,999 at 26.6% (MOE +/- 6.6%) (Table 21). The median income was $64,773 and the mean income was $72,296. The income ranges $10,000 to $149,999 had a greater than 10% difference when compared to the county.

The household income range for Census Tract 312 with the highest percent $15,000 to $24,999 at 15.6% (MOE +/- 8.8%) (Table 21). The median income was $37,583 and the mean income was $56,474. The income ranges less than $10,000 to $34,999 had a greater than 10% difference when compared to the county and the state. The income ranges $75,000 to $99,999 had a greater than 10% difference when compared to the state. The income ranges $150,000 to $199,999 had a greater than 10% difference when compared to the county.

The household income range for Census Tract 313.07 with the highest percent $35,000 to $49,999 at 28.3% (MOE +/- 11.7%) (Table 21). The median income was $55,347 and the mean income was $74,401. The income ranges $35,000 to $99,999 and income ranges had a greater than $200,000 or more were 10% difference when compared to either the county or the state, or both.

The household income range for the one-mile radius with the highest percent was $75,000+ at 34%. EJSCREEN data provides different income ranges that cannot be readily compared in the same manner (Table 22).

Table 21. Local Setting - Household Income

Subject	Census Tract 170 Households		Census Tract 312 Households		Census Tract 313.07 Households	
	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-
Total	1,724	167	2,093	279	1,577	195
Less than $10,000	3.5	2.9	**9.6**	4.7	2.2	2.5
$10,000 to $14,999	3.9	2.8	**9.1**	6.7	1.8	1.6
$15,000 to $24,999	8.8	4.8	**15.6**	8.8	5.3	5.3
$25,000 to $34,999	10.8	4.6	**15.1**	5.5	8.2	5.2
$35,000 to $49,999	9.5	4	8.8	3.4	**28.3**	11.7
$50,000 to $74,999	**26.6**	6.6	11.1	3.8	**21.5**	9
$75,000 to $99,999	**14.1**	7.2	**14.2**	4.3	**16.3**	7.3
$100,000 to $149,999	**15.7**	4.9	10.3	4.6	11.8	7
$150,000 to $199,999	4.1	1.9	**5.4**	3.7	1.8	2.1
$200,000 or more	3.1	2	0.8	1.3	**2.9**	2.9
Median income (dollars)	64,773	5,307	37,583	17,765	55,347	13,591
Mean income (dollars)	72,296	5,922	56,474	9,130	74,401	14,427
Per Capita Income	28,125	3,191	23,263	2,882	29,279	6,290

Source: US Census, 2020 ACS 5-Year Estimates.
All **orange and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the state
All **blue and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the state and the county
All **green and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the county

Table 22. Project Radius - Household Income

Subject	1 mile		
	Number	Percent	MOE
Number of Households	486	100%	
Per Capita Income (dollars)	28,201		
Household Income			
<$15,000	74	15%	102
$15,000-$25,000	53	11%	98
$25,000-$50,000	121	25%	119
$50,000-$75,000	73	15%	103
$75,000+	164	34%	178
Source: EJSCREEN 2019			

Per Capita Income

Per Capita Income data was obtained through the Census Table B19301, Per Capita Income in the Past 12 Months (In 2020 Inflation-Adjusted Dollars), 2020 American Community Survey 5-Year Estimates. The North Carolina per capita income estimate was $31,993. The estimate for Guildford County was $31,798. The estimate for Randolph County was $25,246. The estimate for Census Tract 170 was $28,125. The estimate for Census Tract 312 was $23,263. The estimate for Census Tract 313.07 was $29,279.

The EJSCREEN analysis also provided the Per Capita Income estimate for the one-mile radius surrounding facility site, which was $28,201. All Per Capita Income estimates were lower than that of the state.

6 Limited English Proficiency (LEP)

Per the Safe Harbor Guidelines, should an LEP Group be identified during the permit application process, written translations of vital documents for each eligible LEP language group that constitutes 5% or includes 1,000 members (whichever is less) of the population of persons eligible to be served or likely to be affected or encountered. If there are fewer than 50 persons in a language group that reaches the 5% trigger, then DEQ will not translate vital written materials, but instead will provide written notice in the primary language of the LEP language group of the right to receive competent oral interpretation of those written materials, free of cost. The safe harbor provisions apply to the translation of written documents only. Safe harbor guidelines are based on EPA guidance for LEP persons and implemented by DEQ when deemed appropriate. All 3 census tracts had a population that was greater than 5% Limited English proficiency that spoke Spanish (Table 23 & 24).

Table 23. Limited English Proficiency

LANGUAGE SPOKEN AT HOME	Census Tract 170			
	Estimate	**Margin of Error**	**Percent**	**Margin of Error**
Total (population 5 years and over):	**4,240**	**582**	**(X)**	**(X)**
Speak only English	3,750	393	88.4	9.9
Spanish or Spanish Creole	490	466	**11.6**	9.9
Other Indo-European languages	0	13	0	0.9
Asian and Pacific Island languages	0	13	0	0.9

Table 24. Limited English Proficiency (cont'd)

LANGUAGE SPOKEN AT HOME	Census Tract 312				Census Tract 313.07			
	Estimate	**Margin of Error**	**Percent**	**Margin of Error**	**Estimate**	**Margin of Error**	**Percent**	**Margin of Error**
Total (population 5 years and over):	**4,885**	**541**	**(X)**	**(X)**	**3,875**	**575**	**(X)**	**(X)**
Speak only English	4,224	656	86.5	7.2	3,615	577	93.3	6.8
Spanish or Spanish Creole	633	341	**13**	7.2	260	269	**6.7**	6.8
Other Indo-European languages	13	18	0.3	0.4	0	13	0	1
Asian and Pacific Island languages	15	21	0.3	0.4	0	13	0	1

7 Educational Attainment

Regional Setting

The following data was obtained through the US Census Bureau Table S1501, American Community Survey 2020 5-Year Estimates (Table 25). Guilford County had lower percentages across all subjects when compared to the state. Randolph County had higher percentages of individuals who had attained a less than 9th grade, 9th to 12th grade, no diploma, and high school graduate (includes equivalency) when compared to the state (Table 26).

Table 25. Regional Setting- Educational Attainment (above 25 years old)

Subject	North Carolina				Guilford County			
	Number		Percent		Number		Percent	
	Estimate	MOE +/-	Estimate	MOE +/-	Estimate	MOE +/-	Estimate	MOE +/-
Total Above 25	7,096,773	1,493			356,145	156	(X)	(X)
Less than 9th grade	301,823	5,184	4.5	0.1	13,806	976	3.9	0.3
9th to 12th grade, no diploma	513,393	7,840	7.7	0.1	23,230	1,405	6.5	0.4
High school graduate (includes equivalency)	1,806,403	11,352	25.7	0.2	83,781	2,467	23.5	0.7
Bachelor's degree or higher	2,273,890	16,159	31.3	0.2	83,397	2,386	23.4	0.7

Source: US Census, 2020 ACS 5-Year Estimates.
All **orange and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the state

Table 26. Regional Setting- Educational Attainment (above 25 years old) (cont'd)

Subject	Randolph County			
	Number		Percent	
	Estimate	MOE +/-	Estimate	MOE +/-
Total Above 25	99,703	79	(X)	(X)
Less than 9th grade	6,045	796	**6.1**	0.8
9th to 12th grade, no diploma	10,948	969	**11**	1
High school graduate (includes equivalency)	34,295	1,331	**34.4**	1.3
Bachelor's degree or higher	16,071	961	16.1	1

Source: US Census, 2020 ACS 5-Year Estimates.
All **orange and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the state

Local Setting

The following data was obtained through the US Census Bureau Table S1501, American Community Survey 2020 5-year Estimates. Census Tract 170 had a higher percentage of individuals who had attained 9th to 12th grade (no diploma) when compared to the county and high school graduate (includes equivalency) when compared to the county and the state (Table 27). The percentage of individuals who attained a bachelor's degree or higher was lower when compared to the state.

Census Tract 312 had a higher percentage of individuals who had attained less than 9th grade education, 9th to 12th grade (no diploma), and high school graduate (includes equivalency) when compared to the state or both the county and the state (Table 27). The percentage of individuals who attained a bachelor's degree or higher was lower when compared to the state.

Census Tract 313.07 had a higher percentage of individuals who had attained High school graduate (includes equivalency) when compared to the county and the state (Table 28).

The educational attainment within the project radius had a higher percentage of individuals who were a high school graduate (includes equivalency) when compared to both the county and the state (Table 28).

Table 27. Local Setting- Educational Attainment (above 25 years old)

Subject	Census Tract 170				Census Tract 312			
	Number		Percent		Number		Percent	
	Estimate	MOE +/-	Estimate	MOE +/-	Estimate	MOE +/-	Estimate	MOE +/-
Total Above 25	3,204	371	(X)	(X)	3,593	508	(X)	(X)
Less than 9th grade	46	36	1.4	1.1	283	171	**7.9**	4.9
9th to 12th grade, no diploma	259	138	**8.1**	3.9	340	90	**9.5**	2.6
High school graduate (includes equivalency)	1,276	269	**39.8**	6.3	1,509	473	**42**	8.3
Bachelor's degree or higher	810	194	25.3	6	449	143	12.5	4.1

Source: US Census, 2020 ACS 5-Year Estimates
All **orange and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the state
All **blue and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the state and the county
All **green and bolded** highlighted cells indicate a difference that is greater than 10% when compared to the county

Table 28. Local Setting- Educational Attainment (above 25 years old) (cont'd)

Subject	Census Tract 313.07				Project Radius			
	Number		Percent		Number		Percent	
	Estimate	MOE +/-	Estimate	MOE +/-	Estimate	MOE +/-	Estimate	MOE +/-
Total Above 25	2,966	454	(X)	(X)	785	328		
Less than 9th grade	146	109	4.9	3.7	7	45	1.0	
9th to 12th grade, no diploma	152	111	5.1	3.6	33	110	4.0	
High school graduate (includes equivalency)	1,160	281	**39.1**	7	363	214	**46.0**	
Bachelor's degree or higher	455	155	15.3	5.9	158	141	2.0	
Source: US Census, 2020 ACS 5-Year Estimates and EJSCREEN 2019 All orange and bolded highlighted cells indicate a difference that is greater than 10% when compared to the state All blue and bolded highlighted cells indicate a difference that is greater than 10% when compared to the state and the county								

8 County Health

The University of Wisconsin Population Health Institute, in collaboration with the Robert Wood Johnson Foundation, calculated County Health Rankings for all the States in the United States (www.countyhealthrankings.org). This ranking is based on health outcomes (such as lifespan and self-reported health status) and health factors (such as environmental, social, and economic conditions). According to this 2022 report, out of all 100 counties in North Carolina (with 1 indicating the healthiest), Guildford County ranks 30th in health outcomes and 25th in health factors. Randolph County ranks 52nd in health outcomes and 49th in health factors.
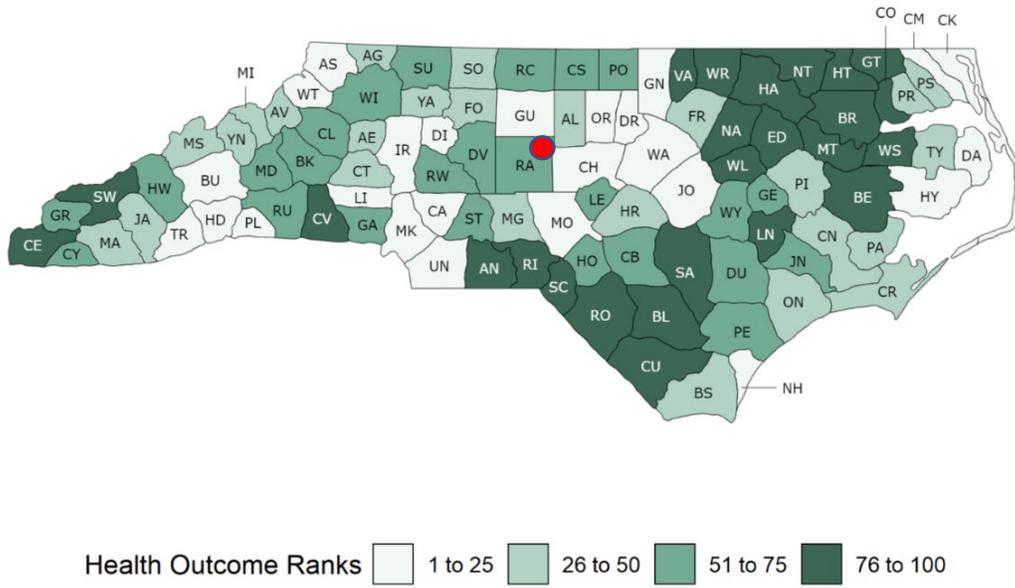
Figure 3. County Health Rankings for Health Factors in North Carolina provided by University of Wisconsin Public Health Institute.

In Guilford County, according to the NC DEQ Community Mapping System Environmental Justice Tool, the health outcomes for causes of death were higher than the state except for stroke. The hospitalizations due to asthma in this area is 177 per 100,000 individuals, as compared to the state at 90 per 100,000 individuals. In Randolph County, the hospitalizations due to asthma in this area is 157 per 100,000 individuals, as compared to the state at 90 per 100,000 individuals. The number of primary care physicians in this area (5.84 per 10,000 residents) is higher than the state average (4.812 per 10,000 residents) (Table 30).

Table 29. Health Outcomes

Cause of Death	Randolph County	Guilford County	North Carolina
Cancer	164.9	179.871	169.1
Heart Disease	157.8	168.6	163.7
Stroke	42.84	43.086	43.1
Cardiovascular Disease	214.12	227.671	221.9
Diabetes	22.22	25.686	22.8
Source: CMS EJ Tool 2020			

9 Local Sensitive Receptors

The U.S. Environmental Protection Agency suggests that sensitive receptors include, but are not limited to, hospitals, schools, daycare facilities, elderly housing, and convalescent facilities. These are areas where the occupants are more susceptible to the adverse effects of exposure to toxic chemicals, pesticides, and other pollutants. Extra care must be taken when dealing with contaminants and pollutants in close proximity to areas recognized as sensitive receptors. For instance, children and the elderly may have a

higher risk of developing asthma from elevated levels of certain air pollutants than healthy individuals aged between 18 and 64.

Within and near the one-mile radius surrounding the facility location, the following sensitive receptors were identified (Figure 4):

- Shiloh United Methodist Church

- Julian Hill Church

- Julian United Methodist Church

- Randolph Church

- Macedonia Church

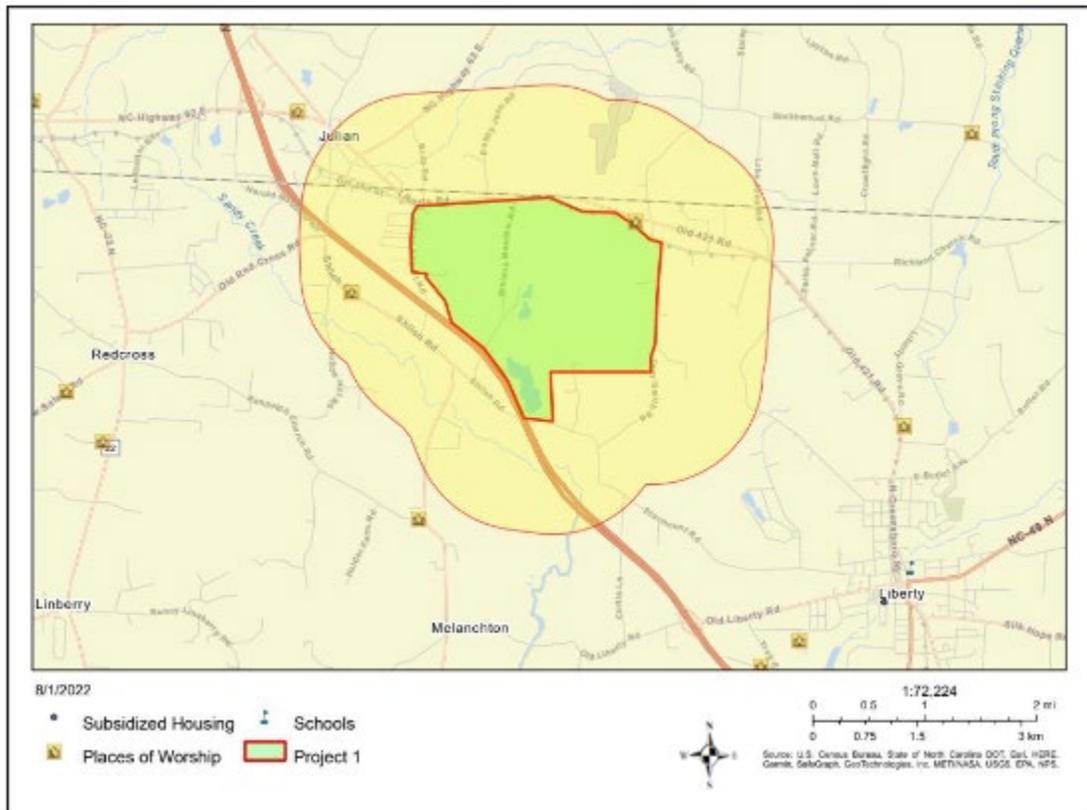Additional sensitive receptors may be identified during the remainder of the permit application process.

Figure 4. Sensitive receptors surrounding the proposed facility.

10 Local Industrial Sites

According to the NC CMS/EJ Tool, within the one-mile radius of the facility, there are 7 permits or incidents (as of August 2, 2022) (Figure 5).

- 1 Air Quality Permit Site
- 4 Underground Storage Tank Incidents
- 1 Above Ground Storage Tank Incidents
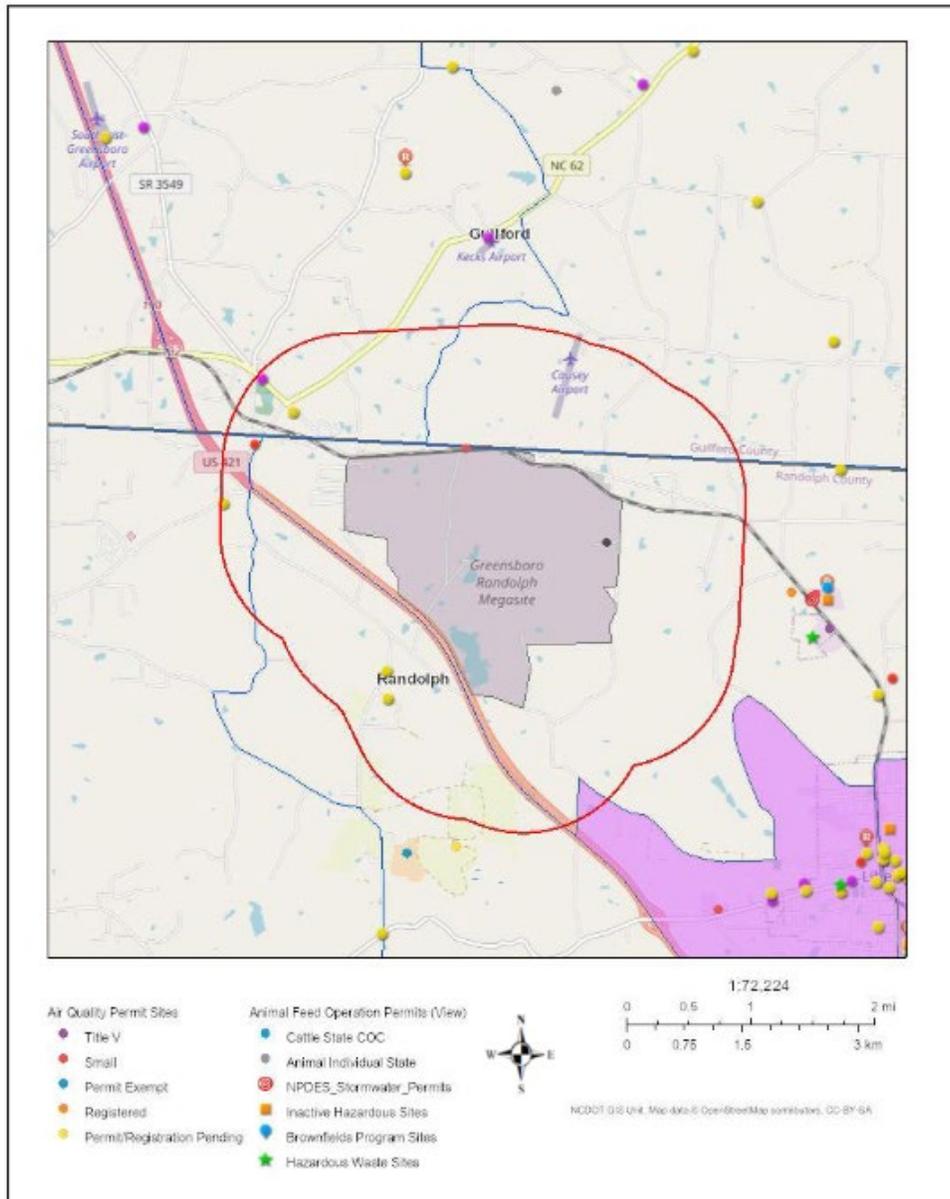- 1 Underground Storage Tank Active Facilities

Figure 5. Permitted facilities and incidents with the one-mile radius surrounding the facility.

11 Conclusion

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies (US EPA). This EJ report examined the demographic and environmental conditions in North Carolina and the one-mile radius around Toyota Battery Manufacturing at Greensboro-Randolph Mega Site encompassing Census Tract 170 in Guilford County and Census Tracts 312 and 313.07 in Randolph County. It is important to keep in mind that based on the available data, the following limitations of this report: census data is from 2020—2010 for age & sex—and may be outdated; the American Community Survey data through 2020 are estimates; EJSCREEN does not provide all of the data categories that were used in this analysis so the census tract and county data cannot be compared to the radius used surrounding the facility boundary for all criteria; census tracts can still be large areas and do not allow for exact locations of each population; and the Department cannot determine which populations are in that small amount of overlap around the facility.

The Department assessed the available demographic and socioeconomic data of the community surrounding the Toyota Battery Manufacturing at Greensboro-Randolph Mega Site regarding its permit application. The counties, the project area data from the radius used, and the census tract were generally 10% or greater than the state estimates for multiple datasets. All three census tracts had a population that was greater than 5% Limited English proficiency that spoke Spanish. Neither the counties nor the census tracts encompass land within a state-designated tribal statistical area; however, the Guilford Native American Association is in Guilford County.

Guildford County ranks 30th in health outcomes and 25th in health factors. Randolph County ranks 52nd in health outcomes and 49th in health factors. There were 7 permits or incidents recorded within one mile of Toyota Battery Manufacturing at Greensboro-Randolph Mega Site.

Based on this EJ Report, the following outreach was conducted:

- Translation services were considered in accordance with the Department LEP-Language Access Plan.
- The public notice was provided in the Asheboro Courier-Tribune, Greensboro News & Record, and DEQ's website.
- One-page flyer was generated.
- The list of sensitive receptors was consulted while considering additional outreach options that may best fit this community's needs.
- A call-in option was provided for people to leave comments on a voicemail line in case of lack of internet.
- Project information was provided to officials in Guildford, Randolph, the town of Liberty, and the Guilford Native American Association.
- Known community leaders were consulted for additional outreach options and recommendations.

- Translated fact sheet and press release was provided to sensitive receptors and post to website.
- Translated Spanish press release was advertised in Que Pasa print and web media.
- Translated materials were provided to ITT contact list.
- Information about the public comment period was shared on social media (Facebook/Twitter) in English and Spanish.