



Carolina Sunrock, LLC.

Draft Environmental Justice Report

North Carolina Department of Environmental Quality  
August 10, 2020

## Contents

1	Introduction .....	4
2	Environmental Justice Evaluation.....	4
3	Proposed Project.....	5
4	Geographic Area .....	6
5	Regional and Local Settings:.....	10
5.1	Race and Ethnicity .....	10
	Regional Setting.....	10
	Local Setting.....	11
5.2	Age and Sex.....	13
	Regional Setting.....	13
	Local Setting.....	14
5.3	Disability .....	16
	Regional Setting.....	16
	Local Setting.....	19
5.4	Poverty.....	22
	Regional Setting.....	22
	Local Setting.....	25
5.5	Household Income .....	28
	Regional Setting.....	28
	Local Setting.....	29
	Per Capita Income.....	30
6	Limited English Proficiency (LEP) .....	31
7	Health.....	33
9	Local Sensitive Receptors .....	34
8	Local Industrial Sites .....	37
10	Conclusion .....	39
	Figure 1. Facility Location (Burlington North) with a one-mile radius.....	7
	Figure 2. Facility Location (Quarry and Distribution Center) with a one-mile radius.....	7
	Figure 3. Census tracts and counties around facility location.....	8
	Figure 4. County health rankings .....	33
	Figure 5. Sensitive receptors surrounding the Burlington North facility .....	35
	Figure 6. Sensitive receptors surrounding the Quarry and Distribution Center facility.....	36

Figure 7. Permitted facilities surrounding the Burlington North facility ..... 37  
Figure 8. Permitted facilities surrounding the Quarry and Distribution Center facility ..... 38

Table 1. Facility Emissions Overview (Burlington North)..... 5  
Table 2. Facility Emissions Overview (Quarry and Distribution Center) ..... 6  
Table 5-1. Regional Setting- Race and Ethnicity ..... 10  
Table 5-2a. Local Setting:Burlington North- Race and Ethnicity ..... 11  
Table 5-2b. Local Setting:Quarry and Distribution Center- Race and Ethnicity ..... 12  
Table 5-3. Regional Setting- Age Groups and Sex ..... 14  
Table 5-4. Local Setting- Age Groups and Sex..... 15  
Table 5-5. Project Radius- Age Groups and Sex..... 15  
Table 5-6. Regional Setting- Disability..... 17  
Table 5-7. Local Setting- Disability ..... 20  
Table 5-8. Regional Setting- Poverty ..... 23  
Table 5-9. Local Setting- Poverty ..... 26  
Table 5-10. Regional Setting- Household Income ..... 28  
Table 5-11. Local Setting- Household Income ..... 29  
Table 5-12. Project Radius- Household Income ..... 30  
Table 5-13. Per Capita Income ..... 31  
Table 6-1.Limited English Proficiency..... 32  
Table 7-1. Health Outcomes ..... 33

## 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 Caswell, Alamance and Person Counties, as well as census tracts 9306, 213 and 9206.01, and the one-mile radius around the property boundary of the proposed Carolina Sunrock LLC facilities. Finally, the demographics of the entire state of North Carolina are also considered as they compare to both the county and local census tract and radius settings.

An EJ Snapshot was conducted at the beginning of this application process. The Snapshot was distributed to interested community members (if known) and posted to the DEQ website with the relevant permit application. The primary goal of the Snapshot was to encourage comments and suggestions from the surrounding community, industry, and environmental groups throughout the comment period. The public hearing and associate comment period has been extended 3 times due to COVID-19, community concerns, and inclement weather. Public comments will be considered throughout the remainder of the comment period to inform the final version of this EJ Report.

## 2 Environmental Justice Evaluation

The Department has assessed the permit applications and the potential impact on communities surrounding the requested permit applications. This permit applicant has submitted two separate permit applications for two locations. To reduce the burden on the surrounding community, one comment period and public hearing was conducted because the applicant is the same and operations at both facilities would be related. Additionally, both facility locations have been included within this report. However, each locations demographic information has been analyzed separately. Accordingly, the Environmental Justice Report will include:

- Permit applications submitted by Carolina Sunrock, LLC (submitted for two separate locations)
- Facility emissions overview for both facility locations
- Study of area demographics for both locations [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 for each facility to both county and statewide census data
- County health assessment for all counties
- Surrounding sensitive receptors for both facilities
- Local industrial sites for both facilities (using the NCDEQ Community Mapping System <https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=1eb0fbe2bcfb4cccb3cc212af8a0b8c8>).

Demographics for Caswell, Person, and Alamance counties, as well as the state, will be

compared to the local (census tracts and project radius) level data to identify any disparities surrounding either of the project areas. Using standard environmental justice guidelines from the EPA and National Environmental Policy Act (NEPA) documentation, the following conditions will be flagged as potential communities of concern:

- 10% or more in comparison to the county or state average
- 50% or more minority
- 5% or more in comparison to the county or state average for poverty

### 3 Proposed Project

Carolina Sunrock, LLC. has submitted permit applications for two proposed sites in Caswell County, North Carolina. One is a hot mix asphalt and concrete batch plant, while the other is a quarry and distribution center. They are approximately 9 miles apart (Figure 3).

The first proposed site, Carolina Sunrock LLC- Burlington North, will include a hot mix asphalt plant and concrete batch plant. The proposed asphalt plant will include a 250 tons per hour maximum capacity drum-type dryer/mixer with an 80 million BTU per hour maximum heat input capacity burner capable of combusting propane, natural gas, and No. 2/4 fuel oils. Particulate matter emissions from the mixer will be controlled by a bagfilter.

The plant will include 5 hot mix asphalt storage silos, each with loadouts, and Recycled Asphalt Pavement (RAP) crushing, screening and conveying system. The concrete batch plant is a truck mix plant rated at 120 cubic yards per hour maximum production capacity. Particulate emissions from the plant will be controlled by a bagfilter.

Expected actual and potential emissions of criteria and hazardous air pollutants (after emissions controls and permit limits are taken into account) are shown in Table 1<sup>1</sup>.

**Table 1. Burlington North Asphalt Facility Emissions Overview**

Pollutant	Expected Actual Emissions (tons/year)	Potential Emissions (with controls and permit limits, tons/year)
PM	33.92	34.08
PM <sub>10</sub>	17.96	18.01
SO <sub>2</sub>	27.79	31.15
NO <sub>x</sub>	15.68	16.63
CO	33.61	33.85
VOC	12.05	12.06
HAP <sub>Total</sub>	2.58	2.59
HAP <sub>Highest</sub> (Formaldehyde)	0.80	0.80

<sup>1</sup> Accurate as of August 7, 2020. Values may change due to modifications to the permit throughout the permitting process.

The second proposed site, Carolina Sunrock LLC- Prospect Hill Quarry and Distribution Center, will include a rock quarry with associated stone processing equipment, hot mix asphalt plant, and concrete batch plant. The site also includes diesel and propane/natural gas-fired reciprocating internal combustion engine (RICEs) to power site equipment. The proposed quarry will include crushing, conveying and screening equipment, to be controlled by wet suppression. The proposed asphalt plant will include a 250 tons per hour maximum capacity drum-type dryer/mixer with an 80 million BTU per hour maximum heat input capacity burner capable of combusting propane, natural gas, and No. 2/4 fuel oils. Particulate matter emissions from the mixer will be controlled by a bagfilter. The plant will include 5 hot mix asphalt storage silos, asphalt truck loadouts, and a Recycled Asphalt Pavement (RAP) crushing, screening and conveying system. Primary site power will be provided by three natural/gas propane-fired generators equipped with catalytic oxidation systems. Additional diesel engines will provide mechanical energy for quarry equipment.

Potential emissions of criteria and hazardous air pollutants (after emissions controls and permit limits are taken into account) are shown in the table below<sup>2</sup>.

**Table 2. Prospect Hill Quarry and Distribution Center Facility Emissions Overview**

<b>Pollutant</b>	<b>Potential Emissions (with controls and permit limits, tons/year)</b>
PM	94.43
PM <sub>10</sub>	46.26
PM <sub>2.5</sub>	34.05
SO <sub>2</sub>	30.37
NO <sub>x</sub>	45.26
CO	99.56
VOC	43.95
HAP <sub>Total</sub>	9.78
HAP <sub>Highest</sub> (Formaldehyde)	7.21

## 4 Geographic Area

The first proposed facility, Carolina Sunrock LLC- Burlington North, is located at 12971 S NC Highway 62, Burlington, NC 27127 (Figure 1). The second proposed facility, Carolina Sunrock LLC- Prospect Hill Quarry and Distribution Center, is located at 1238 Wrenn Road Prospect Hill, NC 27314 (Figure 2). The highest off-site ambient air impacts will occur at the plant fence line for both facilities. A one-mile radius for each facility was used to evaluate the local demographics and socioeconomics to appropriately include the surrounding community and help inform public outreach efforts.

<sup>2</sup> Accurate as of August 7, 2020. Values may change due to modifications to the permit throughout the permitting process.



**Legend**  
[Red Outline] Carolina Sunrock LLC (Burlington North)

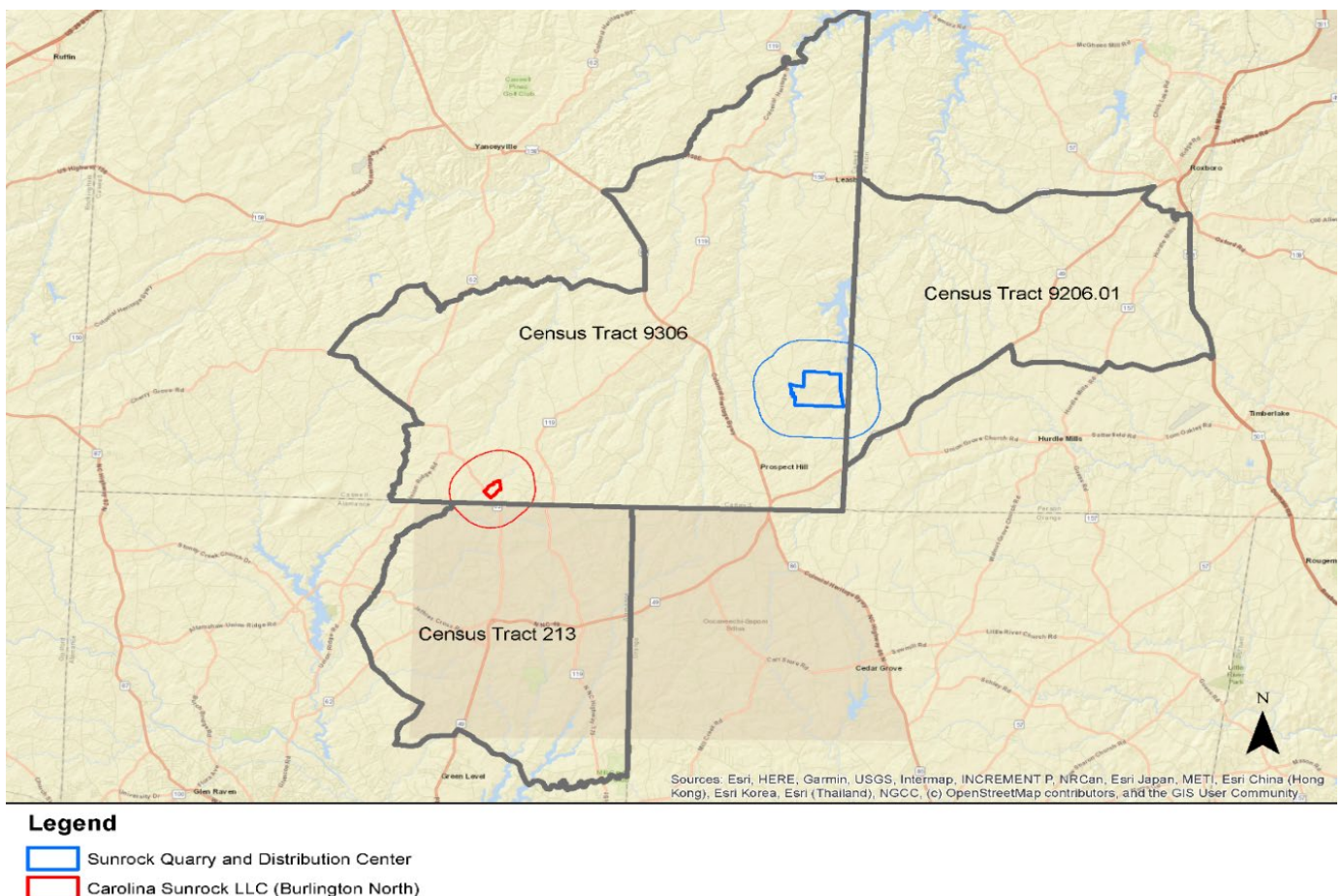
**Figure 1. Burlington North asphalt facility location with one-mile radius.**



**Legend**  
[Blue Outline] Sunrock Quarry and Distribution Center

**Figure 2. Quarry and Distribution Center facility location with one-mile radius.**

Both facilities are located in Caswell County. Caswell County is designated as a Tier 1 county by the NC Department of Commerce. The one-mile buffer of the Burlington North facility enters Alamance County, which is designated as Tier 2. The one-mile buffer of the Quarry and Distribution Center enters Person County, which is designated as Tier 2. 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 one-mile radiuses used in this analysis are encompassed by three census tracts. Both facility sites fall in census tract 9306 in Caswell County. The one-mile buffer for the Burlington North facility enters census tract 213 in Alamance County. The one-mile buffer for the Quarry and Distribution Center enters census tract 9206.01 in Person County (Figure 3). Census tracts are small, relatively permanent statistical subdivisions of a county with a unique numeric code (US Census Bureau). Census tract 213 in Alamance County encompasses land within the state designated tribal statistical area for the Occaneechi Band of the Saponi Nation.



**Figure 3. Census tracts surrounding both facility locations.**



## 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 US 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 will be any census tract that overlaps into the one-mile radius. Demographics of the counties 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 potential communities of concern:

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 a potential area of concern. For this report, census data from 2010 and census data estimates from 2011-2015 and 2013-2017 were used. 2010 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 2013-2017 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 (US 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 2010 US Census Data Table 9: Hispanic or Latino, and Not Hispanic or Latino By Race, North Carolina's population totaled 9,535,483 individuals (Table 5-1). The three most common racial groups across the state were White (68.5%), Black or African-American (21.5%) and Hispanic or Latino (of any race) at 8.4%.

Caswell County had a total population of 23,719 individuals (Table 5-1). Person County had a total population of 39,464 individuals, Alamance County had a total population of 151,131 individuals. The three most common racial or ethnic groups within all counties were White (62.5%, 68.3%, and 71.1%), Black or African American (33.8%, 27.0%, and 18.8%) and Hispanic or Latino (3.1%, 4.0%, and 11.0%). In Caswell County and Person County, the Black or African American Population (33.8% in Caswell, 27.0% in Person) were greater than 10% different when compared to the state (21.5). In Alamance County, the population of some other race (6.1%) and the Hispanic or Latino population (11.0%) was greater than 10% different when compared to the state (4.3% and 8.4%).

**Table 5-1. Regional Setting - Race and Ethnicity**

Race and Ethnicity	North Carolina		Caswell County (Both facilities)		Person County (Quarry and Distribution Center)		Alamance County (Burlington North)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Population	9,535,483	100	23,719	100.0	39,464	100.0	151,131	100.0
White	6,528,950	68.5	14,819	62.5	26,968	68.3	107,420	71.1
Black or African American	2,048,628	21.5	8,020	<b>33.8</b>	10,646	<b>27.0</b>	28,369	18.8
American Indian or Alaska Native	122,110	1.3	85	0.4	266	0.7	1,020	0.7
Asian	208,962	2.2	60	0.3	116	0.3	1,837	1.2
Native Hawaiian and Other Pacific Islander	6,604	0.1	4	0.0	4	0.0	58	0.0
Some other Race	414,030	4.3	350	1.5	868	2.2	9,291	<b>6.1</b>
Two or More Races	206,199	2.2	381	1.6	596	1.5	3,136	2.1
HISPANIC OR LATINO (of any race)	800,120	8.4	744	3.1	1,593	4.0	16,639	<b>11.0</b>
Mexican	486,960	5.1	607	2.6	1,195	3.0	11,664	<b>7.7</b>
Puerto Rican	71,800	0.8	42	0.2	94	0.3	861	0.6
Cuban	18,079	2.3	17	0.1	33	0.1	186	0.1
Other Hispanic or Latino	223,281	2.3	78	0.3	271	0.7	3,928	2.6

Source: US Census Bureau, 2010 Census  
 All **bolded and orange** cells indicate a difference that is greater than 10% when compared to the State

## Local Setting

According to the 2010 US Census Data Table 9: Hispanic or Latino, and Not Hispanic or Latino By race or ethnicity, the largest population within Census Tract 9306 in Caswell County is White at 70.3%, followed by Black or African American at 25.8% and Hispanic or Latino at 3.2%. The Black or African American Population (25.8%) is greater than 10% different compared to the state (21.5%). The largest population group within Census Tract 9206.01 in Person County is White at 68.5%, followed by Black or African American at 24.2% and Hispanic or Latino at 8.0%. The population of some other race (5.3%) is greater than 10% different when compared to the county (2.2%) and the state (4.3%). The largest population within Census Tract 213 in Alamance County is White at 61.8% followed by Black or African American (31.8%) and Hispanic or Latino (5.8%). The Black or African American population is greater than 10% different when compared to the county (18.8%) and the state (21.5%)

### Quarry and Distribution Center

The largest population in the one-mile radius surrounding the quarry and distribution center is White at 81.0% (which is greater than 10% when compared to the state at 68.5%), followed by Black or African American (15.0%) and Hispanic (3.0%).

Burlington North Facility

The one-mile radius surrounding the Burlington North facility is majority White (67.0%), followed by Black or African American (29.0%), and Hispanic or Latino (4.0%). The Black or African American population is greater than 10% different when compared to the state (21.5%) but not Person County.

**Table 5-2a. Local Setting: Burlington North – Race and Ethnicity**

Subject	Project Area 1-Mile		Census Tract 9306 Caswell County		Census Tract 213 Alamance County	
	Number	Percent	Number	Percent	Number	Percent
Total Population	310	100.0	4,790	100.0	6,057	100.0
White	206	67.0	3,367	70.3	3,743	61.8
Black or African American	89	<b>29.0</b>	1,238	<b>25.8</b>	1,925	<b>31.8</b>
American Indian or Alaska Native	3	1.0	20	0.2	65	1.1
Asian	0	0.0	8	0.2	15	0.2
Native Hawaiian and Other Pacific Islander	0	0.0	0	0.0	0	0.0
Some other Race	5	2.0	84	1.8	188	3.1
Two or More Races	6	2.0	73	1.5	121	2.0
<b>HISPANIC OR LATINO (of any race)</b>						
	11	4.0	151	3.2	353	5.8
Mexican			113	2.4	236	3.9
Puerto Rican			17	0.4	22	0.4
Cuban			0	0.0	7	0.1
Other Hispanic or Latino			21	0.4	88	1.5
Source: US Census Bureau, 2010 Census						
All <b>bolded and orange</b> cells indicate a difference that is greater than 10% when compared to the State						
All <b>bolded and blue</b> cells indicate a difference that is greater than 10% when compared to the county and the State						

**Table 5-2a. Local Setting: Quarry and Distribution Center – Race and Ethnicity**

Race and Ethnicity	Project Area-1 Mile		Census Tract 9306 Caswell County		Census Tract 9206.01 Person County	
	Number	Percent	Number	Percent	Number	Percent
Total Population	183	100.0	4,790	100.0	5,133	100.0
White	149	<b>81.0</b>	3,367	70.3	3,518	68.5
Black or African American	27	15.0	1,238	<b>25.8</b>	1,243	<b>24.2</b>
American Indian or Alaska Native	0	0.0	20	0.2	25	0.5
Asian	0	0.0	8	0.2	6	0.1
Native Hawaiian and Other Pacific Islander	0	0.0	0	0.0	0	0.0
Some other Race	4	2.0	84	1.8	270	<b>5.3</b>
Two or More Races	2	1.0	73	1.5	71	1.4
<b>HISPANIC OR LATINO (of any race)</b>						
	6	3.0	151	3.2	413	8.0
Mexican			113	2.4	360	7.0
Puerto Rican			17	0.4	13	0.3
Cuban			0	0.0	2	0.0
Other Hispanic or Latino			21	0.4	38	0.7
Source: US Census Bureau, 2010 Census						
All <b>bolded and orange</b> cells indicate a difference that is greater than 10% when compared to the State						
All <b>bolded and blue</b> cells indicate a difference that is greater than 10% when compared to the county and the State						

## 5.2 Age and Sex

### Regional Setting

According to the 2010 US Census Data Table P 12: Sex by Age, North Carolina had a total population of 9,535,483 individuals (Table 5-3). The largest percentage of the total state population (63.1%) was between the ages of 18 and 64, followed by under 18 years (23.93%), and 65 years and older (12.94%).

Caswell County has a total population of 23,719 individuals. The largest percentage of the total population (63.56%) was between the ages of 18 and 64, followed by under 18 years (20.61%) and 65 years and older (15.83%).

Person County has a total population of 39,464 individuals. The largest percentage of the total population (61.72%) was between the ages of 18 and 64, followed by under 18 years (23.09%) and 65 years and older (15.19%).

Alamance County has a total population of 151,131 individuals. The largest percentage of the total population (61.94%) was between the ages of 18 and 64, followed by under 18 years (23.45%) and 65 years and older (14.61%).

In all three counties, for both male and female subgroups, as well as the population overall, the population of 65 years and older is greater than 10% different when compared to the state.

**Table 5-3. Regional Setting- Age Groups and Sex**

	North Carolina		Caswell County (Both facilities)		Person County (Quarry and Distribution Center)		Alamance County (Burlington North)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Population:	9,535,483	100	23,719	100	39,464	100	151,131	100
Under 5 years:	632,040	6.63	1,181	4.98	2,369	6	9,524	6.3
Under 18 years:	2,281,635	23.93	4,889	20.61	9,114	23.09	35,443	23.45
18 to 64 years:	6,019,769	63.13	15,075	63.56	24,357	61.72	93,607	61.94
65 years and older:	1,234,079	12.94	3,755	<b>15.83</b>	5,993	<b>15.19</b>	22,081	<b>14.61</b>
Male:	4,645,492	100	12,074	100	19,137	100	71,890	100
Under 5 years:	322,871	6.95	602	4.99	1,186	6.2	4,846	6.74
Under 18 years:	1,167,303	25.13	2,537	21.01	4,662	24.36	18,109	25.19
18 to 64 years:	2,954,233	63.59	7,935	65.72	11,946	62.42	44,687	62.16
65 years and older:	523,956	11.28	1,602	<b>13.27</b>	2,529	<b>13.22</b>	9,094	<b>12.65</b>
Female:	4,889,991	100	11,645	100	20,327	100	79,241	100
Under 5 years:	309,169	6.32	579	4.97	1,183	5.82	4,678	5.9
Under 18 years:	1,114,332	22.79	2,352	20.2	4,452	21.9	17,334	21.88
18 to 64 years:	3,065,536	62.69	7,140	61.31	12,411	61.06	48,920	61.74
65 years and older:	710,123	14.52	2,153	<b>18.49</b>	3,464	<b>17.04</b>	12,987	<b>16.39</b>

Source: US Census Bureau, 2010 Census

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

## Local Setting

According to the 2010 US Census Data Table P 12: Sex by Age, Census Tract 9306 had a total population of 4,790 individuals (Table 5-4). The largest percentage of the total population (62.78%) was between the ages of 18 and 64, followed by under 18 years (20.63%), and 65 years and older (16.60%). The total population, as well as the female subgroup have a population of 65 years and older that is greater than 10% different than the state. The male subgroup has a population of 65 years and older that is greater 10% different than the county and the state.

Census Tract 9206.01 had a total population of 5,133 individuals. The largest percentage of the total population (60.84%) was between the ages of 18 and 64, followed by under 18 years (23.51%), and 65 years and older (15.64%). The total population, as well as the male and female subgroups have a population of 65 years and older that is greater than 10% different than the state

Census Tract 213 had a total population of 6,057 individuals. The largest percentage of the total population (61.94%) was between the ages of 18 and 64, followed by under 18 years (23.39%), and 65 years and older (14.66%). The total population, as well as the male and female subgroups have a population of 65 years and older that is greater than 10% different than the state.

**Table 5-4. Local Setting- Age Groups and Sex**

Subject	Census Tract 9306, Caswell County (Both facilities)		Census Tract 9206.01 Person County (Quarry and Distribution Center)		Census Tract 213, Alamance County (Burlington North)	
	Number	Percent	Number	Percent	Number	Percent
Total Population:	4,790	100	5,133	100	6,057	100
Under 5 years:	246	5.14	365	7.11	306	5.05
Under 18 years:	988	20.63	1,207	23.51	1,417	23.39
18 to 64 years:	3,007	62.78	3,123	60.84	3,752	61.94
65 years and older:	795	<b>16.6</b>	803	<b>15.64</b>	888	<b>14.66</b>
Male:	2,407	100	2,431	100	2,950	100
Under 5 years:	132	5.48	181	7.45	145	4.92
Under 18 years:	535	22.23	582	23.94	707	23.97
18 to 64 years:	1,511	62.78	1,525	62.73	1,854	62.85
65 years and older:	361	<b>15</b>	324	<b>13.33</b>	389	<b>13.19</b>
Female:	2,383	100	2,702	100	3,107	100
Under 5 years:	114	4.78	184	6.81	161	5.18
Under 18 years:	453	19.01	625	23.13	710	22.85
18 to 64 years:	1,496	62.78	1,598	59.14	1,898	61.09
65 years and older:	434	<b>18.21</b>	479	<b>17.73</b>	499	<b>16.06</b>

Source: US Census Bureau, 2010 Census

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

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

### Burlington North Facility

EJSCREEN identified an approximate population of 372 in the 1-mile surrounding the Burlington North facility. The largest population was 18+ years, at 78%, followed by 0-17 years at 22% (Table 5-5).

### Quarry and Distribution Center

EJSCREEN identified an approximate population of 225 in the 1-mile surrounding the Quarry and Distribution Center facility. The largest population was 18+ years, followed by 0-17 years at 21% (Table 5-5).

**Table 5-5. Project Radius- Age Groups and Sex**

Subject	1-mile (Burlington North)		1-mile (Quarry and Distribution Center)	
	Number	Percent	Number	Percent
Total Population	372	100	225	100
0-4 years	18	6	9	5
0-17 years	64	22	38	21
18+ years	243	78	145	79
65+ years	47	15	33	18
Source: US Census Bureau, 2010 Census				

## 5.3 Disability

### Regional Setting

According to the 2013-2017 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 9,845,238 noninstitutionalized citizens. Of those individuals, an estimated 13.7% (MOE +/- 0.1%) had a disability. The largest population of disabled civilians were 75 years and over (51.0%, MOE +/- 0.5%). The second largest population was the 65 years to 74 years at 27.2% (MOE +/- 0.3%). By race, American Indian and Alaskan Native had the highest estimated disability rate of 18.3% (MOE +/- 0.7%). Black or African-American, White, and Native Hawaiian and Other Pacific Islander were the next three highest population estimates with disabilities in North Carolina, at 15.1% (MOE +/-0.2%, 14.0% (MOE +/- 0.1%), and 11.6% (MOE +/- 0.6%), respectively (Table 5-6).

Caswell County had an estimated total population of 21,970 noninstitutionalized citizens. Of those an estimated, 19.7% (MOE +/- 2%) had a disability. The largest population of disabled civilians were 75 years and over (60.9%, MOE +/- 7.2%) followed by 65 years to 74 years (32.4%, MOE +/-6%). By race, residents of two or more races had the highest estimated disability rate (50.9%, MOE +/-31%). All populations, excluding American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, some other race, Hispanic or Latino, and 5

to 17 years, displayed estimates that were greater than 10% different when compared to the state.

Person County had an estimated total population of 38,813 noninstitutionalized citizens. Of those an estimated, 19.1% (MOE +/-0.7%) had a disability. The largest population of disabled civilians were 75 years and over (66.3%, MOE +/- 5.7%) followed by 65 years to 74 years (25.3, MOE +/-5.6%). By race, Black or African American residents had the highest estimated disability rate (23.6%, MOE +/-3.3%). The following population groups displayed estimates that were greater than 10% different when compared to the state: total civilian noninstitutionalized, male, female, white alone, Black or African American alone, American Indian and Alaska Native alone, two or more races, 18-34 years, 35 to 64 years, 75 years and older.

Alamance County had an estimated total population of 156,660 noninstitutionalized citizens. Of those an estimated, 14.6% (MOE +/- .6%) had a disability. The largest population of disabled civilians were 75 years and over (50.1%, MOE +/- 2.8%) followed by 65 years to 74 years (28.4, MOE +/-2.3%). By race, Native Hawaiian and Other Pacific Islander residents had the highest estimated disability rate (28.4%, MOE +/-17.1%). The following population groups displayed estimates that were greater than 10% different when compared to the state: Black or African American, Native Hawaiian and other Pacific Islander, Two or more races, under 5 years, 5-17 years.



**Table 5-6. Regional Setting- Disability**

Subject	North Carolina						Caswell County (Both facilities)					
	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	9,845,238	1,883	1,344,677	9,296	13.70%	0.1	21,970	136	4,339	445	19.70%	2
SEX												
Male	4,734,744	2,356	644,157	5,756	13.60%	0.1	10,738	191	2,216	264	20.60%	2.5
Female	5,110,494	1,611	700,520	5,791	13.70%	0.1	11,232	96	2,123	275	18.90%	2.4
RACE AND HISPANIC OR LATINO ORIGIN												
White alone	6,805,260	7,679	950,044	7,928	14.00%	0.1	13,885	214	2,594	350	18.70%	2.5
Black or African American alone	2,101,735	5,025	316,325	4,035	15.10%	0.2	7,202	228	1,573	257	21.80%	3.7
American Indian and Alaska Native alone	114,961	1,802	20,994	862	18.30%	0.7	23	26	0	22	0.00%	61.8
Asian alone	266,672	1,954	13,149	763	4.90%	0.3	130	22	35	32	26.90%	24.5
Native Hawaiian and Other Pacific Islander alone	5,842	533	678	170	11.60%	3	32	38	0	22	0.00%	52.4
Some other race alone	306,809	7,341	15,461	1,136	5.00%	0.3	429	184	0	22	0.00%	7.3
Two or more races	243,959	5,401	28,026	1,407	11.50%	0.5	269	163	137	106	50.90%	31
Hispanic or Latino (of any race)	895,338	953	53,910	1,944	6.00%	0.2	806	27	10	15	1.20%	1.9
AGE												
Under 5 years	603,917	730	5,099	590	0.80%	0.1	1,080	35	22	33	2.00%	3.1
5 to 17 years	1,682,039	807	95,840	2,124	5.70%	0.1	3,253	38	169	71	5.20%	2.2
18 to 34 years	2,190,572	2,241	144,807	3,125	6.60%	0.1	4,018	103	300	110	7.50%	2.8
35 to 64 years	3,894,704	2,076	560,147	6,001	14.40%	0.2	9,350	140	2,003	321	21.40%	3.4
65 to 74 years	895,249	1,047	243,488	2,801	27.20%	0.3	2,651	47	859	155	32.40%	6
75 years and over	578,757	1,013	295,296	2,759	51.00%	0.5	1,618	56	986	122	60.90%	7.2

**Table 5-6. Regional Setting- Disability cont'd**

Subject	Person County (Quarry and Distribution Center)						Alamance County (Burlington North)					
	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	38,813	147	7,419	656	<b>19.10%</b>	0.7	156,660	231	22,895	988	14.60%	0.6
SEX												
Male	18,759	134	3,824	445	<b>20.40%</b>	2.4	74,611	185	10,661	650	14.30%	0.9
Female	20,054	145	3,595	436	<b>17.90%</b>	2.2	82,049	200	12,234	601	14.90%	0.7
RACE AND HISPANIC OR LATINO ORIGIN												
White alone	26,437	313	4,730	512	<b>17.90%</b>	1.9	110,346	1,242	16,922	862	15.30%	0.8
Black or African American alone	10,488	293	2,471	363	<b>23.60%</b>	3.3	29,705	417	4,837	466	<b>16.30%</b>	1.6
American Indian and Alaska Native alone	322	80	66	37	<b>20.50%</b>	13	529	196	96	49	18.10%	7.5
Asian alone	60	51	2	4	3.30%	7.4	2,378	216	103	63	4.30%	2.7
Native Hawaiian and Other Pacific Islander alone	18	32	0	25	0.00%	69.9	67	23	19	15	<b>28.40%</b>	17.1
Some other race alone	722	317	19	28	2.60%	4.5	9,594	1,250	285	161	3.00%	1.6
Two or more races	766	279	131	81	<b>17.10%</b>	10.8	4,041	621	633	219	<b>15.70%</b>	4.8
Hispanic or Latino (of any race)	1,611	22	47	51	2.90%	3.2	19,423	35	772	249	4.00%	1.3
AGE												
Under 5 years	2,147	106	17	27	0.80%	1.3	9,226	50	104	70	<b>1.10%</b>	0.8
5 to 17 years	6,352	108	358	138	5.60%	2.2	26,696	60	1,801	367	<b>6.70%</b>	1.4
18 to 34 years	7,049	115	685	191	<b>9.70%</b>	2.7	34,324	73	2,178	358	6.30%	1
35 to 64 years	16,480	126	3,558	456	<b>21.60%</b>	2.8	61,661	101	9,487	603	15.40%	1
65 to 74 years	4,140	64	1,048	235	25.30%	5.6	14,165	159	4,021	327	28.40%	2.3
75 years and over	2,645	103	1,753	164	<b>66.30%</b>	5.7	10,588	167	5,304	291	50.10%	2.8
Source: US Census Bureau, ACS 5-year Estimates (2013-2017)												
All <b>bolded</b> and <b>orange</b> highlighted cells indicate a difference that is greater than 10% when compared to the State												

## Local Setting

According to the 2013-2017 American Community Survey 5-Year Estimates, Table S1810 Disability Characteristics from the US Census Bureau, Census Tract 9306 in Caswell County had an estimated total population of 5,005 noninstitutionalized citizens (Table 5-7). Of those individuals, an estimated 15.4% (MOE +/- 4.2%) had a disability. The largest population of disabled civilians were 75 years and over (69.2%, MOE +/- 20.8%). The second largest population was the 65 years to 74 years at 35.5% (MOE +/- 14%). By race, Black or African American residents had the highest estimated disability rate of 19.6% (MOE +/- 12%). The following population groups had estimates that were greater than 10% when compared to the state: total civilian noninstitutionalized population, male, Black or African American alone, 35-64 years, and 65-74 years. The population group 75 years and older had an estimate that was greater than 10% when compared to the county and to the state.

Census Tract 9206.01 in Person County had an estimated total population of 5,346 noninstitutionalized citizens. Of those individuals, an estimated 24% (MOE +/- 6.3%) had a disability. The largest population of disabled civilians were 75 years and over (78.5%, MOE +/- 12.2%). The second largest population was Black or African American at 33.9% (MOE +/- 13.8%). The population group 18-34 years had an estimate that was greater than 10% different when compared to the state. The following population groups had estimates that were greater than 10% when compared to the state and the county: total civilian noninstitutionalized population, male, female, White, Black or African American, 5-17 years, 35-64 years, 75 years and over.

Census Tract 213 in Alamance County had an estimated total population of 6,073 noninstitutionalized citizens. Of those individuals, an estimated 15% (MOE +/- 1.7%) had a disability. The largest population of disabled civilians were 75 years and over (52.1%, MOE +/- 7.1%). The second largest population was the American Indian and Alaska Native population at 33.3% (MOE +/- 16.9%). The female subgroup had an estimate that was greater than 10% different when compared to the state. The following population groups had estimates that were greater than 10% when compared to the state and the county: Black or African American alone, American Indian and Alaska native, Asian, and 18-34 years.

**Table 5-7. Local Setting- Disability**

Subject	Census Tract 9306, Caswell County (Both facilities)						Census Tract 9206.01, Person County (Quarry and Distribution Center)					
	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	5,005	493	769	227	15.40%	4.2	5,346	644	1,285	284	24.00%	6.3
SEX												
Male	2,556	270	436	142	17.10%	5.5	2,542	341	690	178	27.10%	7.5
Female	2,449	286	333	123	13.60%	4.5	2,804	392	595	190	21.20%	7.5
RACE AND HISPANIC OR LATINO ORIGIN												
White alone	3,697	377	517	199	14.00%	5.3	3,525	580	832	208	23.60%	7.5
Black or African American alone	1,289	312	252	165	19.60%	12	1,275	301	432	200	33.90%	13.8
American Indian and Alaska Native alone	0	17	0	17	-	**	0	17	0	17	-	**
Asian alone	8	16	0	17	0.00%	100	0	17	0	17	-	**
Native Hawaiian and Other Pacific Islander alone	0	17	0	17	-	**	0	17	0	17	-	**
Some other race alone	0	17	0	17	-	**	358	338	0	17	0.00%	8.7
Two or more races	11	22	0	17	0.00%	89.4	188	177	21	33	11.20%	23.5
Hispanic or Latino (of any race)	33	39	0	17	0.00%	51.6	557	311	0	17	0.00%	5.7
AGE												
Under 5 years	324	93	0	17	0.00%	9.5	343	162	0	17	0.00%	9
5 to 17 years	854	199	25	28	2.90%	3.4	824	307	68	74	8.30%	8
18 to 34 years	1,094	209	30	47	2.70%	4.3	1,027	212	78	69	7.60%	6.7
35 to 64 years	1,959	270	378	150	19.30%	7.2	2,062	267	620	228	30.10%	11
65 to 74 years	592	135	210	104	35.50%	14	495	146	52	66	10.50%	14
75 years and over	182	69	126	65	69.20%	20.8	595	143	467	145	78.50%	12.2

**Table 5-7. Local Setting- Disability cont'd**

Subject	Census Tract 213, Alamance County (Burlington North)					
	Total		With a Disability		Percent with a Disability	
	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)
Total civilian noninstitutionalized population	6,073	266	912	113	15.00%	1.7
SEX						
Male	2,972	153	430	72	14.50%	2.1
Female	3,101	176	482	68	<b>15.50%</b>	2.1
RACE AND HISPANIC OR LATINO ORIGIN						
White alone	3,867	203	550	86	14.20%	2
Black or African American alone	1,741	175	323	62	<b>18.60%</b>	2.7
American Indian and Alaska Native alone	42	23	14	8	<b>33.30%</b>	16.9
Asian alone	60	49	4	5	<b>6.70%</b>	8.7
Native Hawaiian and Other Pacific Islander alone	6	10	0	17	0.00%	100
Some other race alone	188	85	7	8	3.70%	4.5
Two or more races	169	58	14	16	8.30%	8.8
Hispanic or Latino (of any race)	324	103	10	9	3.10%	2.7
AGE						
Under 5 years	266	58	0	17	0.00%	11.5
5 to 17 years	1,100	117	50	20	4.50%	1.7
18 to 34 years	881	102	65	25	<b>7.40%</b>	2.7
35 to 64 years	2,772	141	426	81	15.40%	2.7
65 to 74 years	653	72	162	44	24.80%	5.9
75 years and over	401	64	209	41	52.10%	7.1
Source: US Census Bureau, American Community Survey (5-year estimates)						
All <b>bolded</b> and <b>orange</b> highlighted cells indicate a difference that is greater than 10% when compared to the State						
All <b>bolded</b> and <b>blue</b> highlighted cells indicate a difference that is greater than 10% when compared to the County and State						

## 5.4 Poverty

### Regional Setting

According to the Census Table S1701, Poverty Status in the Past 12 Months, 2013-2017 American Community Survey 5-Year Estimates, from the US Census Bureau, North Carolina had an estimated population of 9,783,738, with 16.1% (MOE +/- 0.2%) below the poverty level (Table 5-8). Across all subjects, Some Other Race had the highest percent living below the poverty level at 32.0% (MOE +/- 1.4%). The next three subjects with the highest poverty level were Hispanic or Latino at 30.1% (MOE +/- .8%), American Indian and Alaska Native at 26.2%

(MOE +/- 1.5%), and Black or African-American at 24.9% (MOE +/- .4%). The age group with the highest population below poverty was under 18 (22.9%, MOE +/- 0.4%), followed by 18 to 64 (15.3%, MOE +/- 0.2%).

Caswell County had an estimated population of 21,870 with 21.3% (MOE +/-2.9%) living below the poverty level. Across all subjects, two or more races had the highest percent living below the poverty level at 65.4% (MOE +/- 7.4%). The next subjects with the highest poverty level were some other race at 59.2% (MOE +/- 32.2%), and Hispanic or Latino at 56.1% (MOE +/- 19.9%). All subject groups had a greater than 5% difference when compared to the state, excluding Native Hawaiian and Other Pacific Islander and American Indian and Alaska Native.

Person County had an estimated population of 38,697 with 18.1% (MOE +/-2.6%) living below the poverty level. Across all subjects, some other race had the highest percent living below the poverty level at 68.7% (MOE +/- 26.2%). The next subjects with the highest poverty level were Hispanic or Latino at 37.8% (MOE +/- 19.8%), and under 18 at 29.1% (MOE +/- 5.6%). The following subject groups had a greater than 5% difference when compared to the state: overall population, under 18, 65 years and over, male, female, Black or African American, some other race, Hispanic or Latino.

Alamance County had an estimated population of 153,649 with 17.6% (MOE +/-1%) living below the poverty level. Across all subjects, some other race had the highest percent living below the poverty level at 37% (MOE +/- 7.4%). The next subjects with the highest poverty level were American Indian and Alaska Native at 35% (MOE +/- 20.5%) and Hispanic or Latino at 32.2% (MOE +/- 5.2%). The following subject groups had a greater than 5% difference when compared to the state: overall population, under 18, female, Black or African American, American Indian and Alaska Native, some other race, and two or more races.

**Table 5-8. Regional Setting- Poverty**

Subject	North Carolina						Caswell County (Both facilities)					
	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	9,783,738	1,751	1,579,871	17,833	16.10	0.2	21,870	156	4,666	650	21.30	2.9
AGE												
Under 18	2,256,186	1,865	516,821	9,185	22.90	0.6	4,233	76	1,449	312	34.20	7.2
18 to 64	6,053,546	1,090	923,859	9,663	15.30	0.4	13,368	144	2,471	395	18.50	2.9
65 years and over	1,474,006	881	139,191	2,754	9.40	0.2	4,269	56	746	199	17.50	4.6
SEX												
Male	4,733,269	2,259	694,126	9,539	14.70	0.2	10,709	189	2,255	378	21.10	3.5
Female	5,050,469	2,443	885,745	10,217	17.50	0.2	11,161	115	2,411	368	21.60	3.3
RACE AND HISPANIC OR LATINO ORIGIN												
White	6,776,691	7,591	845,573	13,639	12.50	0.2	13,814	220	2,263	503	16.40	3.7
Black or African American	2,077,559	4,736	517,071	8,162	24.90	0.4	7,188	227	1,950	365	27.10	5.1
American Indian and Alaska Native	114,751	1,804	30,017	1,757	26.20	1.5	23	26	4	7	17.40	36.9
Asian	262,596	1,970	33,282	2,248	12.70	0.9	130	22	29	41	22.30	31.8
Native Hawaiian and Other Pacific Islander	5,886	537	1,097	297	18.60	4.9	32	38	0	22	0.00	52.4
Some other race	305,431	7,334	97,609	5,276	32.00	1.4	429	184	254	204	59.20	32.2
Two or more races	240,824	5,455	55,222	2,570	22.90	1	254	162	166	165	65.40	43.5
Hispanic or Latino	894,810	1,312	268,985	7,035	30.10	0.8	806	27	452	160	56.10	19.9
All individuals below:												
50 percent of poverty level	688,118	10,757					1,965	538				
125 percent of poverty level	2,094,292	20,441					5,709	679				
150 percent of poverty level	2,596,452	22,139					6,652	697				
185 percent of poverty level	3,291,075	23,334					8,328	753				
200 percent of poverty level	3,571,557	25,056					9,398	764				

**Table 5-8. Regional Setting- Poverty cont'd**

Subject	Person County (Quarry and Distribution Center)						Alamance County (Burlington North)					
	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	38,697	190	6,998	992	<b>18.10</b>	2.6	153,649	450	26,996	1,473	17.60	1
AGE												
Under 18	8,342	118	2,429	466	<b>29.10</b>	5.6	35,598	152	9,296	798	<b>26.10</b>	2.3
18 to 64	23,570	99	3,793	620	16.10	2.6	93,298	383	15,152	932	16.20	1
65 years and over	6,785	132	776	200	<b>11.40</b>	2.9	24,753	194	2,548	338	10.30	1.4
SEX												
Male	18,680	138	3,045	548	<b>16.30</b>	2.9	73,579	326	11,355	838	15.40	1.1
Female	20,017	155	3,953	598	<b>19.70</b>	3	80,070	333	15,641	895	<b>19.50</b>	1.1
RACE AND HISPANIC OR LATINO ORIGIN												
White	26,330	313	3,397	836	12.90	3.1	107,948	1,261	14,381	1,398	13.30	1.3
Black or African American	10,515	298	2,950	613	<b>28.10</b>	5.8	29,487	432	7,707	794	26.10	2.6
American Indian and Alaska Native	322	80	30	41	9.30	11.5	525	195	184	158	<b>35.00</b>	20.5
Asian	60	51	0	25	0.00	38.3	2,202	227	95	80	4.30	3.7
Native Hawaiian and Other Pacific Islander	0	25	0	25	-	**	61	23	1	2	1.60	3.2
Some other race	722	317	496	330	<b>68.70</b>	26.2	9,498	1,226	3,518	794	<b>37.00</b>	7.4
Two or more races	748	282	125	96	16.70	13	3,928	617	1,110	412	<b>28.30</b>	8.6
Hispanic or Latino	1,605	31	607	319	<b>37.80</b>	19.8	19,127	109	6,157	1,007	32.20	5.2
All individuals below:												
50 percent of poverty level	2,537	659					10,201	1,191				
125 percent of poverty level	9,575	1,029					36,793	1,785				
150 percent of poverty level	11,526	1,005					44,823	1,900				
185 percent of poverty level	14,694	1,196					57,083	1,664				
200 percent of poverty level	15,165	1,233					61,966	1,721				

Source: American Community Survey 5-year Estimates, 2013-2017

All **bolded and orange** 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, 2013-2017 American Community Survey 5-Year Estimates, from the US Census Bureau, Census Tract 9306 in Caswell County had an estimated population of 4,956 with 22.3% (MOE +/-7.5%) living below the poverty level (Table 5-9). Across all subjects, Asian (100%, MOE +/- 100%) and two or more races (100% MOE +/- 89.4%) had the highest percent living under the poverty level. The next subjects with the highest poverty level were Hispanic or Latino at 69.7% (MOE +/- 50.5%), and under 18 at 39.8% (MOE +/- 17.2%). The following subject groups had a greater than 5% difference when compared to the county and the state: under 18, male, white, Black or African American, American Indian and Alaska Native, Asian, Two or more races, and Hispanic or Latino. The following groups had a greater than 5% difference when compared to the state: total population, 18 to 64 years, female.

Census Tract 9206.01 in Person County had an estimated population of 5,264 with 24.4% (MOE +/-9.1%) living below the poverty level. Across all subjects, some other race had the highest percent living below the poverty level at 76.3% (MOE +/- 48%). The next subjects with the highest poverty level were under 18 at 59.4% (MOE +/- 19.5%), and Hispanic or Latino at 49% (MOE +/- 48.7%). The following subject groups had a greater than 5% difference when compared to the county and state: total population, under 18, 18 to 64, male, female, white, some other race, and Hispanic or Latino. The population of Black or African American residents had a greater than 5% difference when compared to the state.

Census Tract 213 in Alamance County had an estimated population of 6,076 with 14.1% (MOE +/-2.4%) living below the poverty level. Across all subjects, some other race had the highest percent living below the poverty level at 37.2% (MOE +/- 25.7%). The next subjects with the highest poverty level were Hispanic or Latino at 25.3% (MOE +/- 16.9%), and under 18 at 21.4% (MOE +/- 6%). The following subject groups had a greater than 5% difference when compared to the state: Asian and Native Hawaiian and other Pacific Islander.

**Table 5-9. Local Setting- Poverty**

Subject	Census Tract 9306, Caswell County (Both facilities)						Census Tract 9206.01, Person County (Quarry and Distribution Center)					
	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	4,956	496	1,106	401	22.30	7.5	5,264	587	1,283	556	24.40	9.1
AGE												
Under 18	1,129	210	449	239	39.80	17.2	1,085	335	644	321	59.40	19.5
18 to 64	3,053	354	587	224	19.20	6.9	3,089	367	549	292	17.80	8.8
65 years and over	774	124	70	59	9.00	7.6	1,090	154	90	66	8.30	6.3
SEX												
Male	2,556	270	616	289	24.10	10.6	2,491	322	572	237	23.00	8.2
Female	2,400	293	490	191	20.40	7.4	2,773	365	711	353	25.60	11.1
RACE AND HISPANIC OR LATINO ORIGIN												
White	3,648	380	705	303	19.30	8	3,443	526	643	401	18.70	10.4
Black or African American	1,289	312	382	261	29.60	17.5	1,275	301	367	233	28.80	14.2
American Indian and Alaska Native	0	17	0	17	-	**	0	17	0	17	-	**
Asian	8	16	8	16	100.00	100	0	17	0	17	-	**
Native Hawaiian and Other Pacific Islander	0	17	0	17	-	**	0	17	0	17	-	**
Some other race	0	17	0	17	-	**	358	338	273	341	76.30	48
Two or more races	11	22	11	22	100.00	89.4	188	177	0	17	0.00	15.8
Hispanic or Latino	33	39	23	32	69.70	50.5	557	311	273	341	49.00	48.7
All individuals below:												
50 percent of poverty level	414	250					549	380				
125 percent of poverty level	1,148	402					1,675	550				
150 percent of poverty level	1,238	413					1,784	554				
185 percent of poverty level	1,418	430					2,285	540				
200 percent of poverty level	1,862	515					2,348	536				

**Table 5-9. Local Setting- Poverty cont'd**

Census Tract 213. Alamance County (Burlington North)						
Subject	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	6,076	268	857	156	14.10	2.4
AGE						
Under 18	1,365	126	292	90	21.40	6
18 to 64	3,657	179	433	80	11.80	2.1
65 years and over	1,054	77	132	41	12.50	4
SEX						
Male	2,975	154	412	90	13.80	2.9
Female	3,101	176	445	86	14.40	2.5
RACE AND HISPANIC OR LATINO ORIGIN						
White	3,871	204	439	97	11.30	2.5
Black or African American	1,740	175	319	92	18.30	4.5
American Indian and Alaska Native	42	23	0	17	0.00	45.8
Asian	60	49	9	8	<b>15.00</b>	15.8
Native Hawaiian and Other Pacific Islander	6	10	1	2	<b>16.70</b>	43.4
Some other race	188	85	70	65	37.20	25.7
Two or more races	169	58	19	16	11.20	8.5
Hispanic or Latino	324	103	82	66	25.30	16.9
All individuals below:						
50 percent of poverty level	329	78				
125 percent of poverty level	1,212	172				
150 percent of poverty level	1,502	193				
185 percent of poverty level	1,851	208				
200 percent of poverty level	2,053	213				
Source: American Community Survey 5-year Estimates, 2013-2017						
All <b>bolded and orange</b> cells indicate a difference that is greater than 5% when compared to the State						
All <b>bolded and blue</b> 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 5-10) was compiled using data from the Census Table S1901, Income in the Past 12 Months (in 2017 Inflation-Adjusted Dollars) 2013-2017 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 18.1%. The median household income was \$50,320 and the mean income was \$70,523.

The household income range for Caswell County with the highest percent was \$50,000 to \$74,999 at 16.7% (MOE +/- 2.6%). The median income was \$39,428 and the mean income was \$52,548. All income ranges less than \$50,000 had percentages that were more than 10% higher than the state ranges. The household income range for Person County with the highest percent was \$50,000 to \$74,999 at 18.00% (MOE +/- 2.3%). The median income was \$44,921 and the mean income was \$58,792. The income range \$15,000 to \$34,999 had percentages that were more than 10% higher than the state ranges. The household income range for Alamance County with the highest percent was \$50,000 to \$74,999 at 16.6% (MOE +/- 1%). The median income was \$44,281 and the mean income was \$61,661. The income range \$15,000 to \$34,999 had percentages that were more than 10% higher than the state ranges

**Table 5-10. Regional Setting- Household Income**

Subject	North Carolina		Caswell County (Both facilities)		Person County (Quarry and Distribution Center)		Alamance County (Burlington North)	
	Households		Households		Households		Households	
	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)
Total	3,874,346	8,789	9,160	276	15,772	340	63,035	641
Less than \$10,000	7.30%	0.1	<b>9.10%</b>	2	7.60%	1.8	7.40%	0.7
\$10,000 to \$14,999	5.80%	0.1	<b>10.20%</b>	2.5	5.90%	1.4	5.80%	0.7
\$15,000 to \$24,999	11.10%	0.1	<b>13.50%</b>	2.3	<b>15.20%</b>	2.2	<b>14.20%</b>	0.9
\$25,000 to \$34,999	11.00%	0.1	<b>12.10%</b>	2.2	<b>12.20%</b>	1.9	<b>12.20%</b>	0.8
\$35,000 to \$49,999	14.50%	0.1	<b>16.60%</b>	2.7	14.30%	2.1	15.80%	1.1
\$50,000 to \$74,999	18.10%	0.1	16.70%	2.6	18.00%	2.3	16.60%	1
\$75,000 to \$99,999	11.80%	0.1	10.40%	2.1	12.70%	1.6	11.30%	0.8
\$100,000 to \$149,999	11.70%	0.1	7.10%	1.7	10.10%	1.7	11.30%	0.7
\$150,000 to \$199,999	4.40%	0.1	2.40%	1.2	2.50%	0.9	3.20%	0.4
\$200,000 or more	4.30%	0.1	1.90%	1.1	1.50%	0.8	2.20%	0.4
Median income (dollars)	50,320	204	39,428	2,039	44,921	2,487	44,281	1,192
Mean income (dollars)	70,523	287	52,548	3,820	58,792	4,201	61,661	1,701

Source: US Census, ACS 5-year Estimates 2013-2017. All **orange and bolded** cells indicate a difference of greater than 10% increase when compared to the state.

### Local Setting

The household income range for Census Tract 9306 in Caswell County with the highest percent was \$50,000 to \$74,999 at 19.1% (MOE +/- 7.2%). The median income was \$55,975 and the mean income was \$62,498 (Table 5-11). The income range \$10,000 to \$14,999 had percentages that were more than 10% higher than the state ranges. The household income range for Census Tract 9206.01 in Person County with the highest percent was \$50,000 to \$74,999 at 21.6% (MOE +/- 7.3%). The median income was \$42,927 and the mean income was \$56,516. The income range \$15,000 to \$24,999 and \$50,000 to \$74,999 had percentages that were more than 10% higher than the state and county averages. The household income range for Census Tract 213 in Alamance County with the highest percent was \$50,000 to \$74,999 at 19.8% (MOE +/- 2.7%). The median income was \$51,098 and the mean income was \$67,798. The income range \$25,000 to \$34,999 had an estimate that was more than 10% greater than the state estimate. The income ranges \$50,000 to \$74,999 and \$100,000 to \$149,999 had estimates that were greater than 10% different from the state and the county.

**Table 5-11. Local Setting- Household Income**

Subject	Census Tract 9306, Caswell County (Both facilities)		Census Tract 9206.01, Person County (Quarry and Distribution Center)		Census Tract 213, Alamance County (Burlington North)	
	Households		Households		Households	
	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)
Total	1,821	190	2,088	150	2,344	98
Less than \$10,000	6.00%	6.2	2.20%	2.1	7.00%	1.5
\$10,000 to \$14,999	<b>9.60%</b>	5.4	5.30%	4.5	5.80%	1.4
\$15,000 to \$24,999	12.00%	4.8	<b>24.80%</b>	7	9.80%	1.7
\$25,000 to \$34,999	9.30%	4.6	10.80%	5.8	<b>12.30%</b>	2.6
\$35,000 to \$49,999	11.40%	5.1	14.50%	5.5	14.40%	2.3
\$50,000 to \$74,999	19.10%	7.2	<b>21.60%</b>	7.3	<b>19.80%</b>	2.7
\$75,000 to \$99,999	15.50%	7.1	12.90%	5.7	9.60%	1.9
\$100,000 to \$149,999	10.80%	5.4	4.70%	4.1	<b>13.90%</b>	2.4
\$150,000 to \$199,999	3.50%	3.8	1.70%	2.3	4.50%	1.6
\$200,000 or more	2.70%	3.4	1.40%	1.6	3.10%	1.3
Median income (dollars)	55,795	15,776	42,927	12,697	51,098	4,760
Mean income (dollars)	62,498	10,639	56,516	10,442	67,798	3,746
Source: US Census, 2013-2017 ACS 5-Year Estimates.						
All <b>orange and bolded</b> highlighted cells indicate a difference that is greater than 5% when compared to the state.						
All <b>bolded and blue</b> highlighted cells indicate a difference that is greater than 5% when compared to the county and the state.						

### Burlington North Facility

In the one-mile Burlington North facility radius, the household income range with the highest percent was less than \$75,000+, at 33%, followed by \$25,000-\$50,000 at 25% (Table 5-12).

### Quarry and Distribution Center

In the one-mile Quarry and Distribution Center facility radius, the household income range with the highest percent was less than \$75,000+, at 38%, followed by \$50,000-\$75,000 at 20% (Table 5-12).

**Table 5-12. Project Radius- Household Income**

Subject	1-mile (Burlington North)		1-mile (Quarry and Distribution Center)	
	Households		Households	
	Estimate	Percent	Estimate	Percent
Total	93	100.00%	70	100.00%
Less than \$15,000	13	14.00%	9	12.00%
\$15,000 to \$25,000	13	14.00%	8	12.00%
\$25,000 to \$50,000	24	25.00%	13	18.00%
\$50,000 to \$75,000	12	13.00%	14	20.00%
\$75,000+	31	33.00%	27	38.00%

Source: EJSCREEN. US Census, 2013-2017 ACS 5-year Estimates

### Per Capita Income

Per Capita Income data was obtained through the Census Table B19301, Per Capita Income in the Past 12 Months (In 2017 Inflation-Adjusted Dollars), 2013-2017 American Community Survey 5-Year Estimates. The North Carolina per capita income estimate was \$28,123. The estimates for the counties are: \$21,692 in Caswell County, \$24,477 in Person County, and \$25,157 in Alamance County. The estimates for the census tracts are: \$22,753 (9306), \$22,621 (9206.01), and \$26,427 (213). Both the county and the census tracts had a lower Per Capita Income compared to the state (Table 5-13).

### Burlington North Facility

The EJSCREEN analysis also provided per capita income estimates for the one-mile buffer surrounding facility sites. The Burlington North facility has an estimated per capita income of \$21,076.

### Quarry and distribution Center

The EJSCREEN analysis also provided per capita income estimates for the one-mile buffer surrounding facility sites. The buffer around the Quarry and Distribution Center has an estimated per capita income of \$30, 248.

**Table 5-13. Per Capita Income**

Location	Subject	Per Capita Income in Last 12 Months (Dollars)	
North Carolina	Per Capita Income	Estimate	\$28,123
		Margin of Error +/-	130
Caswell County (Both facilities)	Per Capita Income	Estimate	\$21,692
		Margin of Error +/-	1,521
Person County (Quarry and Distribution Center)	Per Capita Income	Estimate	\$24,477
		Margin of Error +/-	1,776
Alamance County (Burlington North)	Per Capita Income	Estimate	\$25,157
		Margin of Error +/-	738
Census Tract 9306 Caswell County	Per Capita Income	Estimate	\$22,753
		Margin of Error +/-	3,182
Census Tract 9206.01 Person County	Per Capita Income	Estimate	\$22,621
		Margin of Error +/-	4,352
Census Tract 213 Alamance County	Per Capita Income	Estimate	\$26,427
		Margin of Error +/-	1,538
Project Area 1-mile Quarry and Distribution Center	Per Capita Income	Estimate	\$30,148
		Margin of Error +/-	***
Project Area 1-mile Burlington North	Per Capita Income	Estimate	\$21,076
		Margin of Error +/-	***
Source: American Community Survey 5-year Estimates, 2013-2017			

## 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 five percent 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 five percent 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 per the EPA guidance for LEP persons, and implemented by DEQ when deemed appropriate. Seven potential LEP language groups were identified during this initial screening of demographic data (Table 6-1). However, none of the language groups identified reached the 5% threshold. If larger LEP groups are identified during the site visit or specific translation requests are received, then DEQ will revisit the Safe Harbor Guidelines.

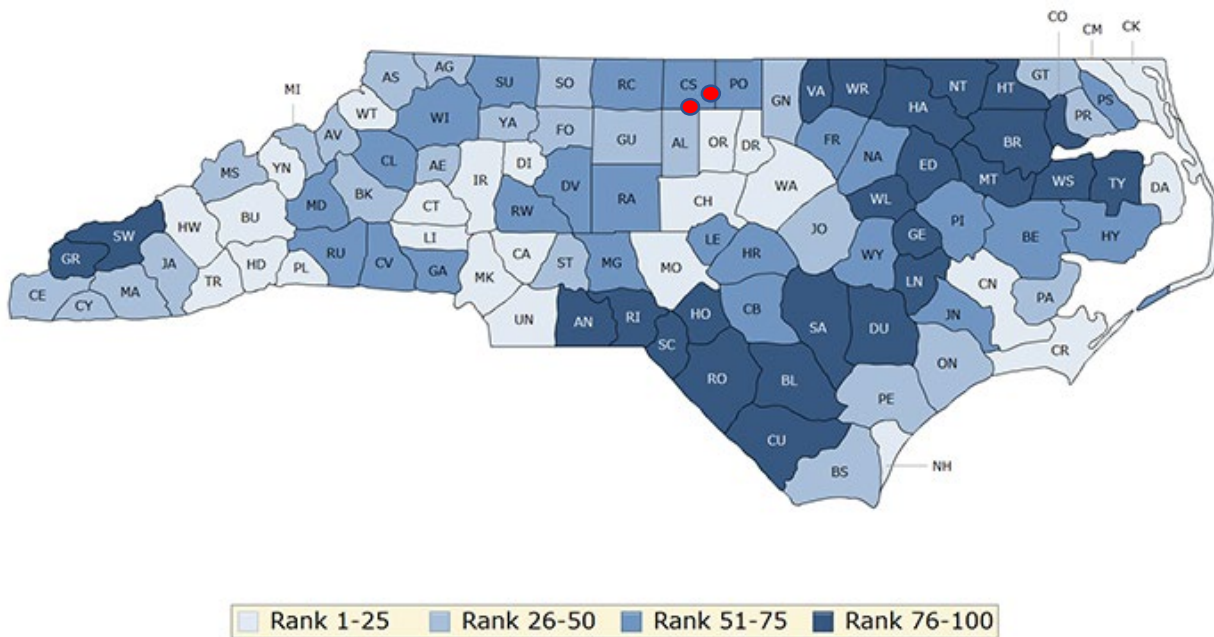
**Table 6-1. Limited English Proficiency**

Language Spoken at Home	Census Tract 9306, Caswell County (Both facilities)		Census Tract 9206.01, Person County (Quarry and Distribution Center)		Census Tract 213, Alamance County (Burlington North)	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	4,576	+/-420	4,682	+/-465	5,720	+/-287
Speak only English	4,536	+/-407	4,306	+/-413	5,301	+/-251
Spanish or Spanish Creole:	40	+/-59	321	+/-239	330	+/-99
Speak English "very well"	14	+/-22	219	+/-158	237	+/-75
Speak English less than "very well"	26	+/-56	102	+/-110	93	+/-44
German:	0	+/-12	0	+/-12	47	+/-51
Speak English "very well"	0	+/-12	0	+/-12	17	+/-18
Speak English less than "very well"	0	+/-12	0	+/-12	30	+/-34
Vietnamese:	0	+/-12	0	+/-12	7	+/-8
Speak English "very well"	0	+/-12	0	+/-12	3	+/-4
Speak English less than "very well"	0	+/-12	0	+/-12	4	+/-5
Tagalog:	0	+/-12	0	+/-12	11	+/-11
Speak English "very well"	0	+/-12	0	+/-12	8	+/-10
Speak English less than "very well"	0	+/-12	0	+/-12	3	+/-6
Source: American Community Survey 5-year Estimates, 2011-2015						



## 7 County Health

The University of Wisconsin Population Health Institute, in collaboration with the Robert Wood Johnson Foundation, calculated a County Health Rankings system for all the States in the United States ([www.countyhealthrankings.org](http://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 2019 report, out of all 100 counties in North Carolina (with 1 indicating the healthiest), Caswell County ranks 71<sup>th</sup> in health factors and 64<sup>th</sup> in health outcomes. Person County ranks 51<sup>st</sup> in health factors and 51<sup>st</sup> in health outcomes. Alamance County ranks 53<sup>rd</sup> in health factors and 33<sup>rd</sup> in health outcomes.



**Figure 5. County Health Rankings for Health Factors in North Carolina provided by University of Wisconsin Public Health Institute**

According to the NC DEQ Community Mapping System Environmental Justice Tool, these are the rates of death in the counties surrounding the facility, as compared to the state average.

**Table 7-1. Health Outcomes**

Cause of Death	Caswell	Person	Alamance	North Carolina
Cancer	198.7	178.5	175.1	169.1
Heart Disease	169.6	155.6	164.2	163.7
Stroke	37.6	33.2	41.8	43.1
Cardiovascular Disease	218.8	200.9	223.7	221.9
Diabetes	27.9	29	22.9	22.8
Source: NCDEQ 2020 EJ Tool				

## 8 Local Sensitive Receptors

The 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 a healthy individual aged between 18 and 64.

Within the one-mile project radius from the Burlington North facility, the following potential sensitive receptors were identified (Figure 5):

- Bethel United Church of Christ
- Living Home Church




Within the one-mile project radius from the Quarry and Distribution Center, the following potential sensitive receptors were identified (Figure 6)

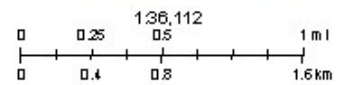
- Bethel United Methodist Church
- Lea Bethel Baptist Church

Additional sensitive receptors may be identified during the permit application process, such as during the field reconnaissance visit or through public comment.



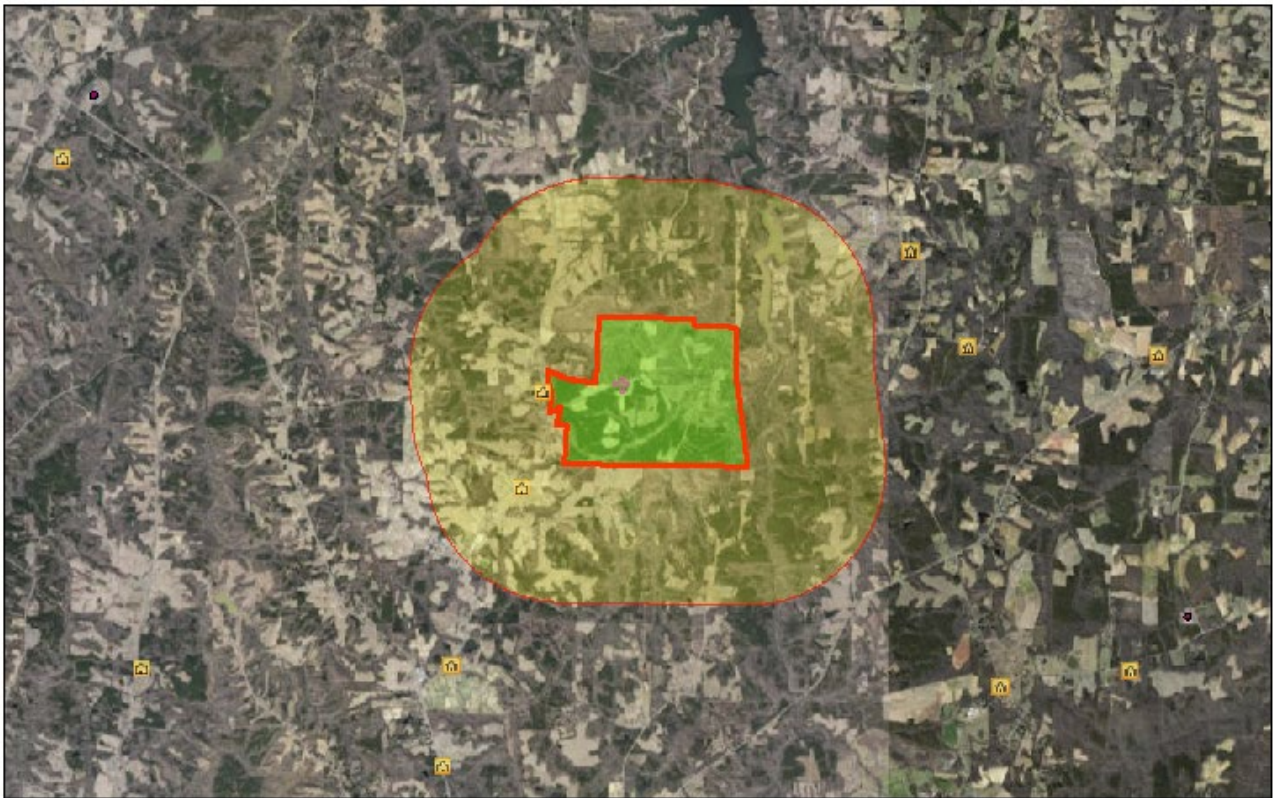
February 20, 2020

-  Churches
-  Burlington North
-  Hospitals



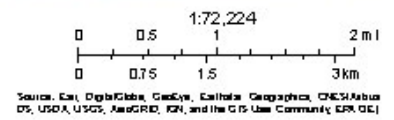
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

**Figure 6. Sensitive receptors surrounding Burlington North facility**



February 25, 2020

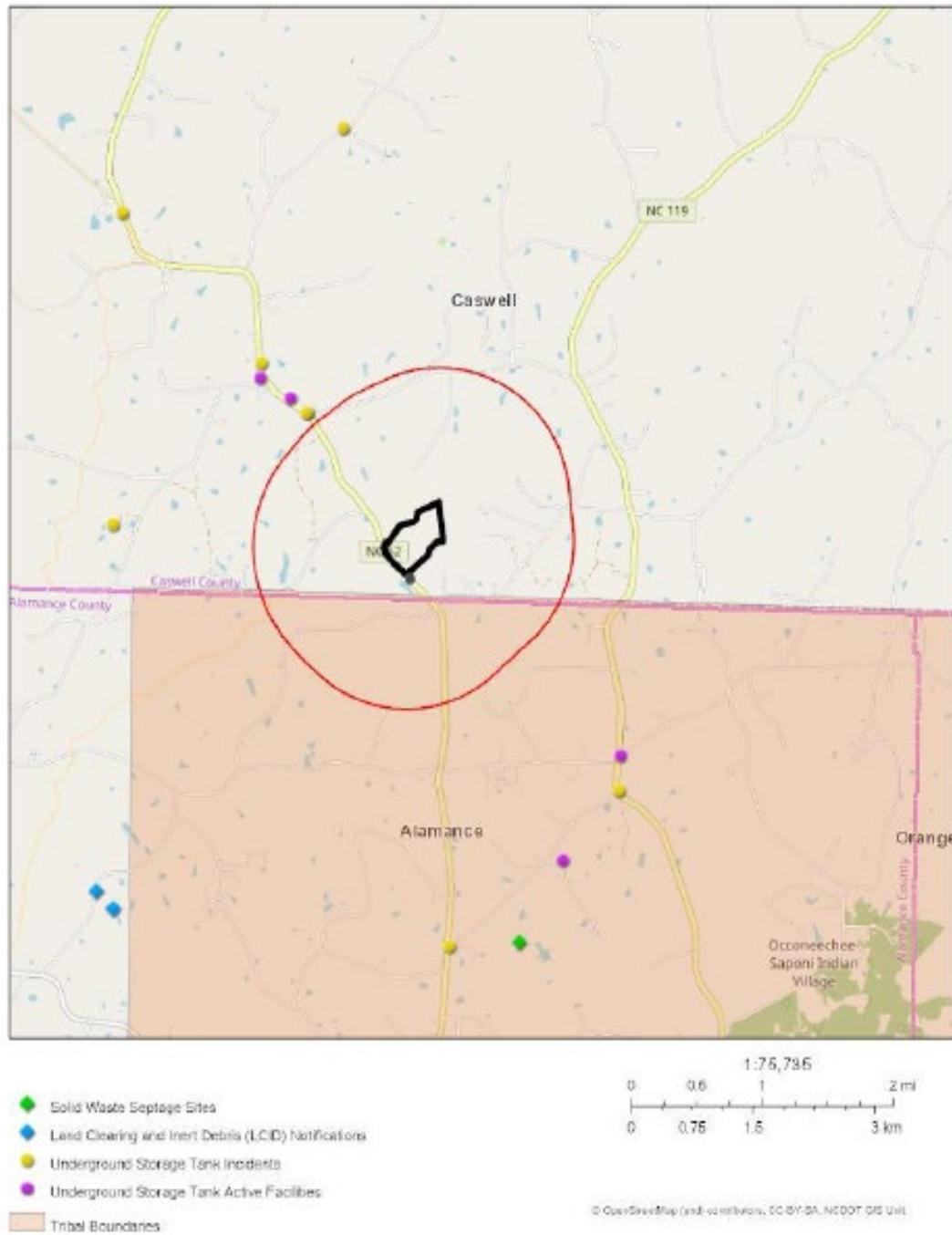
- Schools
- Churches
- Quarry and Distribution Center
- ✚ Search Result (point)



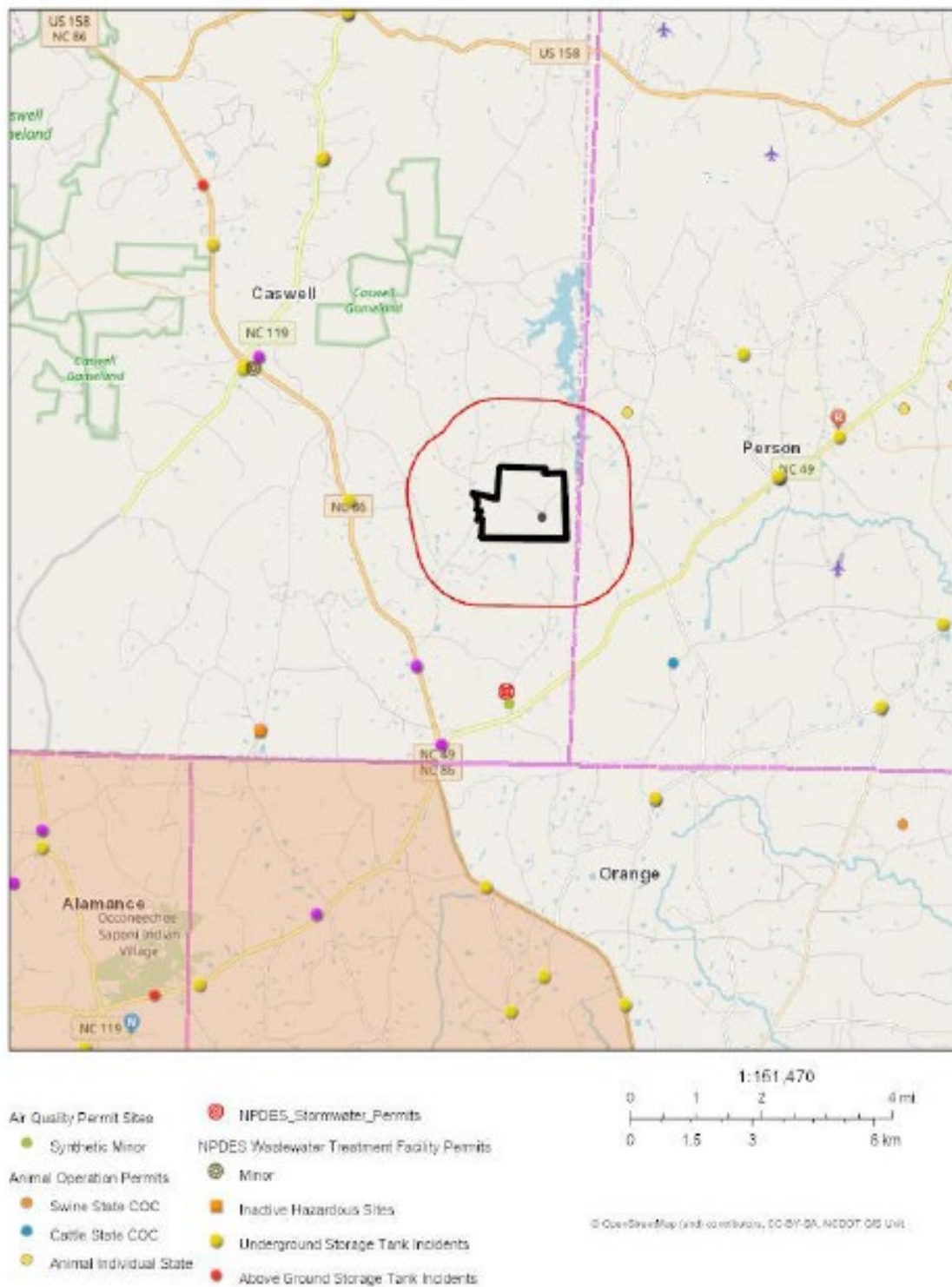
**Figure 7. Sensitive receptors surrounding Quarry and Distribution Center**

## 9 Local Industrial Sites

Within both of the one-mile radiuses, there are no other facility permits or incident reports (as of February 25, 2020).



**Figure 8. Permitted facilities and incidents with the one-mile radius surrounding the Burlington North facility**



**Figure 9. Permitted facilities and incidents with the one-mile radius surrounding the Quarry and Distribution Center**

## 10 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 report examined the demographic and environmental conditions in North Carolina, Caswell County, Person County, Alamance County, census tracts 213, 9306, and 9206.01, and the one-mile radius around both Carolina Sunrock LLC, proposed facilities facility. Potential emissions rates outlined in the permit application and county level health data were also included, as well as data from the NCDEQ Community Mapping System.

It is important to keep in mind that based on the available data, the following limitations of this report: census data is from 2010 and may be outdated; the more recent census data through 2017 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; some of the census tracts slightly overlap with the one-mile radius; 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 communities surrounding both of the Carolina Sunrock LLC facilities regarding its permit application. The project area data from the radiuses and the census tracts generally do not deviate from state estimates for race and ethnicity, except the census tracts and the one-mile radius surrounding the Burlington North facility display slightly higher percentages of Black or African American populations. However, the census tract data for the census tracts surrounding the Burlington North facility for African American populations do differ significantly from state and county estimates, as well as from the census tract and radius data. The surrounding census tracts display a population of individuals over 65 years old that is higher than the state average. One of the surrounding census tracts displays an overall disability estimate that is greater than 10% different from the state, and another census tract displays an overall disability estimate that is greater than 10% different from the state and county.

Two of the census tracts, including the one that encompasses both facilities and the one that encompasses only the Quarry and Distribution center display overall poverty estimates that are greater than 10% different that the state and the county. All three census tracts have the largest population within the \$50,000 to \$74,900 income bracket for household income. The two project radius estimates have the largest population falling in the \$75,000+ income bracket. All three census tracts display a per capita income lower than the state, and slightly lower than the county. The one-mile radius surrounding the Quarry and Distribution Center displays a per capita income estimate higher than the state, while the Burlington North facility displays one moderately lower than the state.

Caswell County ranks 71<sup>th</sup> in health factors and 64<sup>th</sup> in health outcomes. Person County ranks 51<sup>st</sup> in health factors and 51<sup>st</sup> in health outcomes. Alamance County ranks 53<sup>rd</sup> in health factors and 33<sup>rd</sup> in health outcomes

There were no permitted facilities or incidents within one-mile from either proposed facility.

Additional outreach will be conducted with the Occaneechi Band of the Saponi Nation to keep them informed throughout the permitting process. Extra attention will also be given to ensure language data is accurate and that translation or interpretation will be considered if more LEP populations are identified at any point throughout the process. Finally, the list of sensitive receptors will be consulted while considering additional outreach options that may best fit this community's needs.