# ACTIVE ENERGY RENEWABLE POWER Environmental Justice Report 

North Carolina Department of Environmental Quality
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## Contents

1 Introduction ..... 4
2 Environmental Justice Evaluation. ..... 4
3 Proposed Project ..... 5
4 Geographic Area ..... 7
5 Regional and Local Settings: ..... 8
5.1 Race and Ethnicity ..... 9
Regional Setting ..... 9
Local Setting ..... 10
5.2 Age and Sex. ..... 13
Regional Setting ..... 13
Local Setting ..... 14
5.3 Disability ..... 16
Regional Setting ..... 16
Local Setting ..... 18
5.4 Poverty ..... 22
Regional Setting ..... 22
Local Setting ..... 24
5.5 Household Income ..... 28
Regional Setting ..... 28
Local Setting ..... 29
Per Capita Income ..... 31
6 Limited English Proficiency (LEP) ..... 32
7 Health ..... 34
9 Local Sensitive Receptors ..... 35
8 Local Industrial Sites ..... 37
10 Conclusion ..... 39
Figure 1. Facility Location within a two-mile radius. ..... 7
Figure 2. Census tracts and counties around facility location ..... 8
Figure 3. County health rankings ..... 34
Figure 4. Sensitive receptors surrounding the facility ..... 36
Figure 5. Permits surrounding the facility ..... 38
Table 1. Facility Emissions Overview ..... 6
Table 2. Toxic Pollutant Emissions Overview. ..... 6
Table 5-1. Regional Setting- Race and Ethnicity ..... 10
Table 5-2. Local Setting-Race and Ethnicity ..... 12
Table 5-3. Regional Setting- Age Groups and Sex ..... 13
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 ..... 19
Table 5-8. Regional Setting- Poverty ..... 23
Table 5-9. Local Setting- Poverty ..... 25
Table 5-10. Regional Setting- Household Income ..... 28
Table 5-11. Local Setting- Household Income ..... 30
Table 5-12. Project Radius- Household Income ..... 30
Table 5-13. Per Capita Income ..... 31
Table 6-1.Limited English Proficiency ..... 33
Table 7-1. Health Outcomes ..... 34

## 1 Introduction

Environmental justice (EJ) 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 Robeson County, as well as the surrounding census tracts, and the two-mile radius around the property boundary of the Active Energy Renewable Power facility. 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. Public comments received were considered in the preparation of this full EJ Report.

## 2 Environmental Justice Evaluation

The North Carolina Department of Environmental Quality (NCDEQ) has assessed the permit application and the potential impact on communities surrounding the requested permit application. The assessment of potential impacts included:

- Permit application submitted by Active Energy Renewable Power
- Emissions 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 both county and statewide census data
- County health assessment
- Surrounding sensitive receptors
- Local industrial sites (using the NCDEQ Community Mapping System https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=1eb0fbe2bcfb4cccb3 cc212af8a0b8c8).

Demographics for Robeson County will be compared to the local (census tracts 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, 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

Active Energy Renewable Power submitted a permit application for a new facility located in Lumberton, North Carolina. The facility proposes to process wood chips to produce "black" wood pellets, which are produced by pressurizing chipped wood with steam. The process consists of a $20 \mathrm{mmBtu} / \mathrm{hr}$ natural gas-fired boiler, a steam-fed pressure cooker with condenser emission control, a screw press, pellet press, and a $4 \mathrm{mmBtu} / \mathrm{hr}$ natural gas-fired dryer. There are no emission controls on the screw press, pellet press, and dryer. The cooker process uses steam explosion to separate the cellulosic materials from the hemicellulosic materials and turpene chemicals in the wood, then the resultant solids are formed into pellets.

The Steam Explosion method of wood fiber pretreatment involves exposing the material to saturated steam. The steam temperature and pressure, and the time in the reaction vessel, determines how much of the hemicellulose degrades, and what fraction of the feedstock matter is converted into volatiles and biochemical compounds. The subsequent steam explosion is the rapid release of pressure. This explosive expansion of water in the cell walls of lignocellulosic feedstocks causes a breakdown of the wood fibers into very small particles. The severity of the steam treatment is controlled such that the cellulose and lignin are minimally affected, while the hemicellulose is partially degraded. When compared to white pellets, the resulting material, after densification in a pellet press, has a higher specific energy content measured in gigajoules per cubic meter ( $\mathrm{G} / \mathrm{m}^{3}$ ), improved grindability, is hard and produces fewer fines, and its affinity to water is changed from hygroscopic to hydrophobic.

The steam explosion process causes the lignin to emerge on the surface of the fine wood fibers in the form of small beads. When the fiber is densified in the pellet press, these beads form a film-like surface coating of the broken-down wood fibers, and results in hard, highly water-resistant pellets that produce almost no fines.

The water vapor and volatile compounds from the steam explosion process are captured using a condenser. The organic fraction is separated from the water and sold as a separate product from the pellets. Water is sent to the plant's wastewater treatment facility, then to the Lumberton Wastewater Treatment plant. Solids from the cooker are sent through a screw press to remove excess moisture and organic liquids, then sent to a pellet press to produce the "black" pellets. The pellets are then sent to the dryer to remove any residual moisture and then sent to finished product storage.

Table 1. Facility Emissions Overview

| Pollutant | Expected Actual <br> Emissions <br> (tons/yr) | Potential Emissions <br> Before Controls <br> (tons/yr) | Potential Emissions <br> After Controls <br> (tons/yr) |
| :---: | :---: | :---: | :---: |
| PM | 0.05 | 0.05 | 0.05 |
| $\mathrm{PM}_{10}$ | 0.05 | 0.05 | 0.05 |
| $\mathrm{PM}_{2.5}$ | 0.05 | 0.05 | 0.05 |
| $\mathrm{SO}_{2}$ | 0.05 | 0.05 | 0.05 |
| NOx | 9.41 | 10.31 | 10.31 |
| CO | 7.91 | 8.65 | 8.65 |
| VOC | 23.63 | 49.48 | 25.87 |
| Highest Individual HAP <br> (Acetaldehyde) | $1,479 \mathrm{lbs} / \mathrm{yr}$ | $1,619 \mathrm{lbs} / \mathrm{yr}$ | $1,619 \mathrm{lbs} / \mathrm{yr}$ |
| Total HAP | $4,963 \mathrm{lbs} / \mathrm{yr}$ | $5,435 \mathrm{lbs} / \mathrm{yr}$ | $5,435 \mathrm{lbs} / \mathrm{yr}$ |

Toxic pollutant emissions from the facility operations are detailed in the table below. There are no toxic pollutant emissions that exceed the toxic air pollutant permitting emissions rates (TPERs). Therefore, no air dispersion modeling demonstration is required. There will be a 02Q . 0711 toxics condition in the permit, but there is not a 02D .1100 toxics condition in the permit ${ }^{1}$.

Table 2. Toxic Pollutant Emissions Overview

| Pollutant | Expected Actual Emissions <br> After Controls | TPER <br> $(02 Q .0711(\mathrm{~b}))$ | Exceed TPER? |
| :---: | :---: | :---: | :---: |
| Acetaldehyde | $0.074 \mathrm{lb} / \mathrm{hr}$ | $28.43 \mathrm{lb} / \mathrm{hr}$ | No |
| Acrolein | $4.23 \mathrm{E}-07 \mathrm{lb} / \mathrm{hr}$ | $0.02 \mathrm{lb} / \mathrm{hr}$ | No |
| Ammonia | $0.0752 \mathrm{lb} / \mathrm{hr}$ | $2.84 \mathrm{lb} / \mathrm{hr}$ | No |
| Benzene | $0.433 \mathrm{lb} / \mathrm{yr}$ | $11.069 \mathrm{lb} / \mathrm{yr}$ | No |
| Benzo(a)pyrene | $2.5 \mathrm{E}-04 \mathrm{lb} / \mathrm{yr}$ | $3.044 \mathrm{lb} / \mathrm{yr}$ | No |
| Formaldehyde | $0.064 \mathrm{lb} / \mathrm{hr}$ | $0.16 \mathrm{lb} / \mathrm{hr}$ | No |
| n-hexane | $0.93 \mathrm{lb} / \mathrm{day}$ | $46.3 \mathrm{lb} / \mathrm{day}$ | No |
| Toluene | $1.8 \mathrm{E}-04 \mathrm{lb} / \mathrm{day}$ | $197.96 \mathrm{lb} / \mathrm{day}$ | No |
|  | $8.0 \mathrm{E}-05 \mathrm{lb} / \mathrm{hr}$ | $58.94 \mathrm{lb} / \mathrm{hr}$ | No |

[^0]
## 4 Geographic Area

The proposed facility location is 1885 Alamac Road, Lumberton NC 28358 (Robeson County). The highest off-site ambient air impacts will occur at the plant fence line. Although ambient impacts are expected to be minimal, a two-mile radius was used to evaluate the local demographics and socioeconomics to ensure that the surrounding community was appropriately included (Figure 1).


Figure 1. Facility location with two-mile radius.

Robeson County is designated as a Tier 1 county by the NC 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. The two-mile radius used in this analysis is fully within Robeson County and is encompassed by five census tracts: 9608.01, 9608.02, 9610, 9611 and 9616.01 (Figure 2). The proposed facility location is in Census Tract 9608.02. Census tracts are small, relatively permanent statistical subdivisions of a country with a unique numeric code (US Census Bureau). The census tracts encompass land within the state designated tribal statistical area for the Lumbee tribe.

The Lumbee Tribe is the largest tribe in North Carolina, as well as the largest tribe east of the Mississippi and takes their name from the Lumber River. There are over 55,000 members of the Lumbee Tribe reside primarily in Robeson, Hoke, Cumberland, and Scotland counties. (https://ncadmin.nc.gov/citizens/american-indians/nc-tribal-communities).


Figure 2. Census tracts surrounding 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 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 two-mile radius. Demographics of Robeson 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 potential communities of concern:

1. $10 \%$ or more in comparison to the county average
2. $50 \%$ or more minority
3. $5 \%$ or more in comparison to the county 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\%.

Robeson County had a total population of 134,168 individuals (Table 5-1). The three most common racial groups within the county were American Indian or Alaska Native (38.4\%), White (29.0\%), and Black or African American (24.3\%). The Black or African American population (24.3\%) was greater than $10 \%$ different when compared to the state ( $21.5 \%$ ), as was the American Indian or Alaska Native population (38.4\% vs $1.3 \%$ ), the population identifying as some other race ( $5.0 \%$ vs $4.3 \%$ ), or two or more races ( $2.5 \%$ vs. $2.2 \%$ ), and the Mexican population ( $6.4 \%$ vs. $5.1 \%$ ).

Table 5-1. Regional Setting - Race and Ethnicity

| Race and Ethnicity | North Carolina |  | Robeson County |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent |
| Total Population | $9,535,483$ | 100.0 | 134,168 | 100.0 |
| White | $6,528,950$ | 68.5 | 38,877 | 29.0 |
| Black or African American | $2,048,628$ | 21.5 | 32,637 | 24.3 |
| American Indian or Alaska Native | 122,110 | 1.3 | 51,502 | 38.4 |
| Asian | 208,962 | 2.2 | 993 | 0.7 |
| Native Hawaiian and Other Pacific Islander | 6,604 | 0.1 | 86 | 0.1 |
| Some other Race | 414,030 | 4.3 | 6,672 | 5.0 |
| Two or More Races | 206,199 | 2.2 | 3,401 | $\mathbf{2 . 5}$ |
|  |  |  |  |  |
| HISPANIC OR LATINO (of any race) | 800,120 | 8.4 | 10,932 | 8.1 |
| Mexican | 486,960 | 5.1 | 8,616 | 6.4 |
| Puerto Rican | 71,800 | 0.8 | 629 | 0.5 |
| Cuban | 18,079 | 2.3 | 80 | 0.1 |
| Other Hispanic or Latino |  |  |  |  |
| 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, the largest population within Census Tract 9608.01 was Black or African American, with a population of 2,859 ( $63.1 \%$ ) (Table 5-2). The next largest populations were American Indian or Alaska Native (19.9\%) and White (12.7\%). Black or African American populations were greater than $10 \%$ different when compared to both county and state populations at $63.1 \%$ for the census tract compared to $24.3 \%$ in Robeson County and $21.5 \%$ for the state population. The American Indian or Alaska Native population was greater than $10 \%$ different when compared to state populations at $19.9 \%$ in the census tract and $1.3 \%$ in the state. The Other Hispanic or Latino population (2.5\%) was greater than $10 \%$ different when compared to state (2.3\%) and county (1.2\%) populations.

The largest population within Census Tract 9608.02 is Black or African American at 1,542 individuals and $78.2 \%$. The next largest populations were American Indian or Alaska Native (10.8\%) and White (8.5\%). The Black or African American population (78.2\%) was greater than $10 \%$ different when compared to the state ( $21.5 \%$ ) and county population ( $24.3 \%$ ). The American Indian or Alaska Native population was greater than $10 \%$ different when compared to state populations at $10.8 \%$ in the census tract at $1.3 \%$ in the state.

The largest population within Census Tract 9610 is White with 1,037 individuals and $48.3 \%$, followed by Black or African American at $27.3 \%$ and American Indian and Alaska Native at $11.9 \%$. The Black or African American population was greater than $10 \%$ different when compared to the state and county population at $27.3 \%$ compared to $21.5 \%$ in the state and $24.3 \%$ in the county. The Asian population at $4.3 \%$ also is greater than $10 \%$ different compared
to the state $(2.2 \%)$ and county ( $0.7 \%$ ), as is the Native Hawaiian and other Pacific Islander population ( $0.5 \%$ vs. $0.1 \%$ in the state and $0.1 \%$ in the county), and Other Hispanic or Latino ( $2.6 \%$ vs. $2.3 \%$ in the state and $1.2 \%$ in the county). The American Indian or Alaska Native population was greater than $10 \%$ different when compared to the state population (11.9\% vs. $1.3 \%$ ), as was the population of some other race ( $5.2 \%$ vs. $4.3 \%$ ) and two or more races $(2.5 \%$ vs. $2.2 \%$ ).

The largest population within Census Tract 9611 is White with 865 individuals and $42.2 \%$, followed by Black or African American (31.6\%) and American Indian or Alaska Native (15.9\%). The Black or African American population (31.6\%) was greater than $10 \%$ different when compared to the state ( $21.5 \%$ ) and county ( $24.3 \%$ ) population, as was the Native Hawaiian and other Pacific Islander population (.3\% vs. . $1 \%$ in the state and $.1 \%$ in the county), the population of some other race ( $5.5 \%$ vs. $2.2 \%$ in the state and $2.5 \%$ in the county), two or more races $(3.3 \%$ vs. $2.2 \%$ in the state and $2.5 \%$ in the county), Hispanic ( $11.0 \%$ vs $8.4 \%$ in the state and $8.1 \%$ in the county), Mexican ( $7.2 \%$ vs. $5.1 \%$ in the state and $6.4 \%$ in the county), and other Hispanic or Latino ( $3.0 \%$ vs. $2.3 \%$ in the state and $1.2 \%$ in the county). The American Indian or Alaska Native population was greater than $10 \%$ when compared to the state ( $15.9 \%$ vs $1.3 \%$ ).

The largest population within Census Tract 9616.01 is White with 2,254 individuals and $58.5 \%$ followed by Black or African American (21.5\%) and American Indian or Alaska Native (16.7\%). The American Indian or Alaska Native population was greater than $10 \%$ different when compared to the state population ( $16.7 \%$ vs. $1.3 \%$ ).

Within the two-mile project area, the largest population is Black or African American at 56\% and approximately 4,503 individuals, followed by White (25\%), and American Indian or Alaska Native (13\%). The Black or African American population was greater than 10\% different when compared to the state (21.5\%) and county (24.3\%). The American Indian or Alaska Native population was greater than $10 \%$ different when compared to the state (1.3\%).

Table 5-2. Local Setting - Race and Ethnicity

|  | Project Area - 2 Miles |  | $\begin{gathered} \hline \text { Census Tract } \\ 9608.01 \end{gathered}$ |  | $\begin{gathered} \hline \text { Census Tract } \\ 9608.02 \end{gathered}$ |  | Census Tract 9610 |  | Census Tract 9611 |  | $\begin{gathered} \hline \text { Census Tract } \\ 9616.01 \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Race and Ethnicity | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Total Population | 8,015 | 100 | 4,529 | 100 | 1,971 | 100 | 2,147 | 100 | 2,050 | 100 | 3,856 | 100 |
| White | 2,024 | 25 | 576 | 12.7 | 168 | 8.5 | 1,037 | 48.3 | 865 | 42.2 | 2,254 | 58.5 |
| Black or African American | 4,503 | 56 | 2,859 | 63.1 | 1,542 | 78.2 | 586 | 27.3 | 653 | 31.6 | 829 | 21.5 |
| American Indian or Alaska Native | 1,042 | 13 | 901 | 19.9 | 213 | 10.8 | 256 | 11.9 | 325 | 15.9 | 645 | 16.7 |
| Asian | 49 | 1 | 12 | 0.3 | 3 | 0.2 | 92 | 4.3 | 20 | 1.0 | 13 | 0.3 |
| Native Hawaiian and Other Pacific Islander | 9 | - | 1 | 0.0 | 1 | 0.1 | 11 | 0.5 | 7 | 0.3 | - | 0.0 |
| Some other Race | 191 | 2 | 91 | 2.0 | 17 | 0.9 | 111 | 5.2 | 112 | 5.5 | 28 | 0.7 |
| Two or More Races | 198 | 2 | 89 | 2.0 | 27 | 1.4 | 54 | 2.5 | 68 | 3.3 | 87 | 2.3 |
| HISPANIC OR LATINO (of any race) | 399 | 5 | 192 | 4.2 | 47 | 2.4 | 155 | 7.2 | 225 | 11.0 | 89 | 2.3 |
| Mexican |  |  | 53 | 1.2 | 23 | 1.2 | 89 | 4.1 | 148 | 7.2 | 55 | 1.4 |
| Puerto Rican |  |  | 25 | 0.6 | 18 | 0.9 | 10 | 0.5 | 13 | 0.6 | 29 | 0.8 |
| Cuban |  |  | 1 | 0.0 | - | 0.0 | 1 | 0.0 | 2 | 0.1 | - | 0.0 |
| Other Hispanic or Latino |  |  | 113 | 2.5 | 6 | 0.3 | 55 | 2.6 | 62 | 3.0 | 5 | 0.1 |

Source: US Census Bureau, 2010 Census
All bolded and orange highlighted cells indicate a difference that is greater than $10 \%$ when compared to the State
All bolded and blue highlighted cells indicate a difference that is greater than $10 \%$ when compared to the County and 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 (63.13\%) was between the ages of 18 and 64, followed by under 18 years ( $23.93 \%$ ), and 65 years and older (13.61\%).

Robeson County has a total population of 134,168 individuals. The largest percentage of the total population ( $61.98 \%$ ) was between the ages of 18 and 64 , followed by under 18 years $(26.78 \%)$ and 65 years and older (11.72). For both male and female subgroups, as well as the population overall, the population of under 5 years and under 18 years is greater than $10 \%$ different when compared to the state. This indicates the population in Robeson County trends younger than the state.

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

|  | North Carolina |  | Robeson County |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent |
| Total Population: | 9,535,483 | 100.00 | 134,168 | 100.00 |
| Under 5 years: | 632,040 | 6.63 | 10,222 | 7.62 |
| Under 18 years: | 2,281,635 | 23.93 | 35,927 | 26.78 |
| 18 to 64 years: | 6,019,769 | 63.13 | 83,163 | 61.98 |
| 65 years and older: | 1,297,652 | 13.61 | 15,721 | 11.72 |
| Male: | 4,645,492 | 100.00 | 65,243 | 100.00 |
| Under 5 years: | 322,871 | 6.95 | 5,243 | 8.04 |
| Under 18 years: | 1,167,303 | 25.13 | 18,453 | 28.28 |
| 18 to 64 years: | 2,954,233 | 63.59 | 40,537 | 62.13 |
| 65 years and older: | 523,956 | 11.28 | 6,253 | 9.58 |
| Female: | 4,889,991 | 100.00 | 68,925 | 100.00 |
| Under 5 years: | 309,169 | 6.32 | 4,979 | 7.22 |
| Under 18 years: | 1,114,332 | 22.79 | 17,474 | 25.35 |
| 18 to 64 years: | 3,251,345 | 66.49 | 45,568 | 66.11 |
| 65 years and older: | 710,123 | 14.52 | 8,825 | 12.80 |

Source: US Census Bureau, 2010 Census
All bolded and orange highlighted 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 9608.01 had a population of 4,529 (Table 5-4). The largest population was between 18 and 64 years of age, at $66.5 \%$. The under 5 years population ( $8.79 \%$ ) was greater than $10 \%$ different when compared to the state ( $6.63 \%$ ) and the county ( $7.62 \%$ ).

Census Tract 9608.02 had a population of 1,971 individuals. The largest population was between 18 and 64 years of age, at $56.37 \%$. The under 5 years population ( $9.08 \%$ ) was greater than $10 \%$ different when compared to the state ( $6.63 \%$ ) and the county $(7.62 \%)$. In addition, the under 18 years population (30.44\%) was greater than $10 \%$ different when compared to the state ( $23.93 \%$ ) and the county ( $26.78 \%$ ).

Census Tract 9610 had a population of 2,147 . The largest population was between 18 and 64 years of age, at 64.79\%.

Census Tract 9611 had a population of 2,050 . The largest population was between 18 and 64 years of age, at $60.78 \%$. The under 5 years population ( $9.32 \%$ ) was greater than $10 \%$ different when compared to the state (6.63\%) and the county (7.62\%). In addition, the under 18 years population (29.46\%) was greater than $10 \%$ different when compared to the state ( $23.93 \%$ ) and the county ( $26.78 \%$ ).

Census Tract 9616.01 had a population of 3,856 . The largest population was between 18 and 64 years of age, at $62.71 \%$. The under 5 years population ( $7.88 \%$ ) was greater than $10 \%$ different when compared to the state (6.63\%). In addition, the under 18 years population (27.72\%) was greater than $10 \%$ different when compared to the state (23.93\%).

EJSCREEN identified an approximate population of 9.593 in the 2-miles surrounding the facility (Table 5-5). The under 5 years population (9\%) was greater than $10 \%$ different when compared to the state (6.63\%) and the county (7.62\%).

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

|  | Census Tract 9608.01 |  | Census Tract 9608.02 |  | Census Tract 9610 |  | Census Tract 9611 |  | Census Tract 9616.01 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Total Population: | 4,529 | 100.00 | 1,971 | 100.00 | 2,147 | 100.00 | 2,050 | 100.00 | 3,856 | 100.00 |
| Under 5 years: | 398 | 8.79 | 179 | 9.08 | 141 | 6.57 | 191 | 9.32 | 304 | 7.88 |
| Under 18 years: | 1,151 | 25.41 | 600 | 30.44 | 493 | 22.96 | 604 | 29.46 | 1,069 | 27.72 |
| 18 to 64 years: | 3,012 | 66.50 | 1,111 | 56.37 | 1,391 | 64.79 | 1,246 | 60.78 | 2,418 | 62.71 |
| 65 years and older: | 384 | 8.48 | 272 | 13.80 | 273 | 12.72 | 209 | 10.20 | 373 | 9.67 |
| Male: | 2,543 | 100.00 | 894 | 100.00 | 1,083 | 100.00 | 982 | 100.00 | 1,870 | 100.00 |
| Under 5 years: | 200 | 7.86 | 104 | 11.63 | 72 | 6.65 | 97 | 9.88 | 165 | 8.82 |
| Under 18 years: | 592 | 23.28 | 312 | 34.90 | 259 | 23.92 | 303 | 30.86 | 571 | 30.53 |
| 18 to 64 years: | 1,801 | 70.82 | 475 | 53.13 | 724 | 66.85 | 599 | 61.00 | 1,130 | 60.43 |
| 65 years and older: | 150 | 5.90 | 107 | 11.97 | 100 | 9.23 | 80 | 8.15 | 169 | 9.04 |
| Female: | 1,986 | 100.00 | 1,077 | 100.00 | 1,064 | 100.00 | 1,068 | 100.00 | 1,986 | 100.00 |
| Under 5 years: | 198 | 9.97 | 75 | 6.96 | 69 | 6.48 | 94 | 8.80 | 139 | 7.00 |
| Under 18 years: | 559 | 28.15 | 288 | 26.74 | 234 | 21.99 | 301 | 28.18 | 498 | 25.08 |
| 18 to 64 years: | 1,284 | 64.65 | 687 | 63.79 | 701 | 65.88 | 685 | 64.14 | 1,371 | 69.03 |
| 65 years and older: | 216 | 10.88 | 153 | 14.21 | 163 | 15.32 | 120 | 11.24 | 200 | 10.07 |

Source: US Census Bureau, 2010 Census
All bolded and orange highlighted cells indicate a difference that is greater than $10 \%$ when compared to the State
All bolded and blue highlighted cells indicate a difference that is greater than $10 \%$ when compared to the County and State.

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

|  | 2-mile facility radius |  |
| :---: | ---: | ---: |
|  | Number | Percent |
| Total Population: | 593 | 100.00 |
| Under 5 years: | 756 | $\mathbf{9}$ |
| Under 18 years: | 2364 | 29 |
| 18 years + | 5651 | 71 |
| 65 years + | 822 | 10 |

Source: US Census Bureau, 2010 Census
All bolded and orange highlighted cells indicate a difference that is greater than $10 \%$ when compared to the State
All bolded and blue highlighted cells indicate a difference that is greater than $10 \%$ when compared to the County and State.

### 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 (Table 5-6). 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 and older population 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 +/- $3 \%$ ), respectively.

Robeson County had an estimated total population of 132,407 noninstitutionalized citizens. Of those an estimated, $16.6 \%$ (MOE $+/-.6 \%$ ) had a disability. The largest population of disabled civilians were 75 years and over ( $62 \%$, MOE +/- $3.1 \%$ ) followed by 65 years and older ( $41.2 \%$, MOE $+/-2.5 \%$ ). By race, White residents had the highest estimated disability rate ( $18.3 \%$, MOE 1.1\%) followed by Black or African American, American Indian and Alaska Native alone, and two or more races, at $17.4 \%$ (MOE +/-1.3\%), $16.9 \%$ (MOE +/- .9\%), and $14.1 \%$ (MOE +/- 4\%). All populations, excluding American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Hispanic or Latino, Some other race alone, Under 5 years, 5 to 17 years, and 18 to 34 years displayed estimates that were greater than $10 \%$ different when compared to the state.

Table 5-6. Regional Setting- Disability

| Subject | North Carolina |  |  |  |  |  | Robeson 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 | 9,845,238 | 1,883 | 1,344,677 | 9,296 | 13.70\% | 0.1 | 132,407 | 248 | 22,033 | 774 | 16.60\% | 0.6 |
| SEX |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 4,734,744 | 2,356 | 644,157 | 5,756 | 13.60\% | 0.1 | 63,426 | 174 | 10,167 | 463 | 16.00\% | 0.7 |
| Female | 5,110,494 | 1,611 | 700,520 | 5,791 | 13.70\% | 0.1 | 68,981 | 163 | 11,866 | 547 | 17.20\% | 0.8 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |  |  |  |  |  |  |
| White alone | 6,805,260 | 7,679 | 950,044 | 7,928 | 14.00\% | 0.1 | 38,036 | 704 | 6,956 | 402 | 18.30\% | 1.1 |
| Black or African American alone | 2,101,735 | 5,025 | 316,325 | 4,035 | 15.10\% | 0.2 | 31,635 | 236 | 5,500 | 402 | 17.40\% | 1.3 |
| American Indian and Alaska Native alone | 114,961 | 1,802 | 20,994 | 862 | 18.30\% | 0.7 | 52,041 | 463 | 8,781 | 480 | 16.90\% | 0.9 |
| Asian alone | 266,672 | 1,954 | 13,149 | 763 | 4.90\% | 0.3 | 878 | 55 | 99 | 47 | 11.30\% | 5.2 |
| Native Hawaiian and Other Pacific Islander alone | 5,842 | 533 | 678 | 170 | 11.60\% | 3 | 55 | 50 | 0 | 28 | 0.00\% | 40 |
| Some other race alone | 306,809 | 7,341 | 15,461 | 1,136 | 5.00\% | 0.3 | 6,610 | 736 | 252 | 104 | 3.80\% | 1.5 |
| Two or more races | 243,959 | 5,401 | 28,026 | 1,407 | 11.50\% | 0.5 | 3,152 | 492 | 445 | 145 | 14.10\% | 4 |
| Hispanic or Latino | 895,338 | 953 | 53,910 | 1,944 | 6.00\% | 0.2 | 11,350 | 47 | 573 | 145 | 5.00\% | 1.3 |
| AGE |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 5 years | 603,917 | 730 | 5,099 | 590 | 0.80\% | 0.1 | 9,219 | 8 | 44 | 35 | 0.50\% | 0.4 |
| 5 to 17 years | 1,682,039 | 807 | 95,840 | 2,124 | 5.70\% | 0.1 | 25,035 | 43 | 1,279 | 195 | 5.10\% | 0.8 |
| 18 to 34 years | 2,190,572 | 2,241 | 144,807 | 3,125 | 6.60\% | 0.1 | 30,663 | 102 | 2,200 | 285 | 7.20\% | 0.9 |
| 35 to 64 years | 3,894,704 | 2,076 | 560,147 | 6,001 | 14.40\% | 0.2 | 49,646 | 158 | 9,801 | 522 | 19.70\% | 1.1 |
| 65 to 74 years | 895,249 | 1,047 | 243,488 | 2,801 | 27.20\% | 0.3 | 11,339 | 138 | 4,673 | 294 | 41.20\% | 2.5 |
| 75 years and over | 578,757 | 1,013 | 295,296 | 2,759 | 51.00\% | 0.5 | 6,505 | 183 | 4,036 | 213 | 62.00\% | 3.1 |
| Source: US Census Bureau, ACS 5-year Estimates (2013-2017) <br> All bolded and orange highlighted cells indicate a difference that is greater than $10 \%$ when compared to the $S$ |  |  |  |  |  |  |  |  |  |  |  |  |

## Local Setting

Census Tract 9608.01 had an estimated total population of 3,324 noninstitutionalized citizens. Of those individuals, an estimated $18.3 \%$ (MOE+/-4\%) had a disability (Table 5-7). The largest population of disabled civilians were 75 years and over ( $59.7 \%$, MOE +/-20.8\%). By race, Asian had the highest estimated disability rate of 100\% (MOE +/- 69.9\%). The following population groups had a greater than $10 \%$ difference when compared to the state and county: total civilian noninstitutionalized population, female, white alone, Asian alone, 18 to 34 years, 35 to 64 years, 35 to 64 years, 65 to 74 years. The following populations had a greater than $10 \%$ difference when compared to the state only: male, Black or African American, 75 years and older.

Census Tract 9608.02 had an estimated total population of 1,709 noninstitutionalized citizens. Of those individuals, an estimated $17.5 \%$ (MOE+/- 4\%) had a disability. The largest population of disabled civilians were 75 years and over ( $69.6 \%$, MOE +/- 15.3\%). By race, White alone had the highest estimated disability rate of $18.4 \%$ (MOE $+/-12.5 \%$ ). The following population groups had a greater than $10 \%$ difference when compared to the state and county: female, some other race alone, two or more races, Hispanic or Latino, 35 to 64 years, 75 years and over. The following populations had a greater than $10 \%$ difference when compared to the state only: total civilian noninstitutionalized population, male, white alone, Black or African American alone.

Census Tract 9610 had an estimated total population of 2,107 noninstitutionalized citizens. Of those individuals, an estimated $16.8 \%$ (MOE $+/-3.7 \%$ ) had a disability. The largest population of disabled civilians were 75 years and over ( $62.8 \%$, MOE +/- 18\%). By race, Asian alone had the highest estimated disability rate of $28.6 \%$ (MOE $+/-25.8 \%$ ). The following population groups had a greater than $10 \%$ difference when compared to the state and county: white alone, Asian alone, 18 to 34 years. The following populations had a greater than $10 \%$ difference when compared to the state only: total civilian noninstitutionalized population, male, female, 35 to 64 years, 75 years and older.

Census Tract 9611 had an estimated total population of 2,025 noninstitutionalized citizens. Of those individuals, an estimated $13.6 \%$ (MOE+/- $3.7 \%$ ) had a disability. The largest population of disabled civilians were 65 to 74 years and over ( $36.8 \%$, MOE +/- 15.5\%). By race, American Indian and Alaska Native had the highest estimated disability rate of $27.5 \%$ (MOE +/-14.2\%). The following population groups had a greater than 10\% difference when compared to the state and county: white alone, American Indian and Alaska Native alone, Asian alone, two or more races, 5 to17 years and 18 to 34 years. The following populations had a greater than $10 \%$ difference when compared to the state only: female, 35 to 64 years, and 65 to 74 years.

Census Tract 9616.01 had an estimated total population of 3,756 noninstitutionalized citizens. Of those individuals, an estimated $11.1 \%$ (MOE $+/-2.5 \%$ ) had a disability. The largest population of disabled civilians were 75 years and over ( $47.3 \%$, MOE +/- 15\%). By race, White alone had the highest estimated disability rate of $17 \%$ (MOE +/- $4.4 \%$ ) which is greater than $10 \%$ when compared to the state .EJSCREEN does not provide data on disability, so was not included for the two-mile radius

## Table 5-7. Local Setting-Disability

| Subject | Census Tract 9608.01 |  |  |  |  |  | Census Tract 9608.02 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 3,324 | 315 | 607 | 137 | 18.30\% | 4 | 1,709 | 185 | 299 | 75 | 17.50\% | 4 |
| SEX |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 1,443 | 199 | 235 | 79 | 16.30\% | 5.6 | 842 | 101 | 128 | 42 | 15.20\% | 4.6 |
| Female | 1,881 | 199 | 372 | 106 | 19.80\% | 5.2 | 867 | 122 | 171 | 52 | 19.70\% | 5.5 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |  |  |  |  |  |  |
| White alone | 276 | 137 | 102 | 79 | 37.00\% | 26.4 | 163 | 57 | 30 | 24 | 18.40\% | 12.5 |
| Black or African American alone | 2,325 | 297 | 403 | 116 | 17.30\% | 4.9 | 1,337 | 169 | 231 | 70 | 17.30\% | 4.7 |
| American Indian and Alaska Native alone | 663 | 160 | 84 | 48 | 12.70\% | 6.6 | 129 | 59 | 23 | 19 | 17.80\% | 14.7 |
| Asian alone | 18 | 24 | 18 | 24 | 100.00\% | 69.9 | 8 | 13 | 0 | 12 | 0.00\% | 100 |
| Native Hawaiian and Other Pacific Islander alone | 0 | 12 | 0 | 12 | - | ** | 0 | 12 | 0 | 12 | - | ** |
| Some other race alone | 1 | 3 | 0 | 12 | 0.00\% | 100 | 57 | 64 | 7 | 10 | 12.30\% | 16.7 |
| Two or more races | 41 | 46 | 0 | 12 | 0.00\% | 46.3 | 15 | 21 | 8 | 11 | 53.30\% | 13 |
| Hispanic or Latino | 91 | 121 | 0 | 12 | 0.00\% | 29.2 | 57 | 64 | 7 | 10 | 12.30\% | 16.7 |
| AGE |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 5 years | 413 | 128 | 0 | 12 | 0.00\% | 7.6 | 132 | 50 | 0 | 12 | 0.00\% | 21.6 |
| 5 to 17 years | 662 | 130 | 40 | 48 | 6.00\% | 7.3 | 431 | 79 | 21 | 19 | 4.90\% | 4.3 |
| 18 to 34 years | 901 | 162 | 79 | 51 | 8.80\% | 5.3 | 265 | 73 | 18 | 18 | 6.80\% | 6.8 |
| 35 to 64 years | 976 | 138 | 269 | 75 | 27.60\% | 6.4 | 654 | 78 | 160 | 51 | 24.50\% | 6.5 |
| 65 to 74 years | 218 | 83 | 127 | 76 | 58.30\% | 18.5 | 112 | 25 | 20 | 15 | 17.90\% | 11.8 |
| 75 years and over | 154 | 52 | 92 | 36 | 59.70\% | 20.8 | 115 | 39 | 80 | 33 | 69.60\% | 15.3 |
| Source: US Census Bureau, American Community Survey (5-year estimates) <br> All bolded and orange highlighted cells indicate a difference that is greater than $10 \%$ when compared to the State <br> All bolded and blue highlighted cells indicate a difference that is greater than $10 \%$ when compared to the County and State. |  |  |  |  |  |  |  |  |  |  |  |  |

Table 5-7. Local Setting- Disability (cont'd)

| Subject | Census Tract 9610 |  |  |  |  |  | Census Tract 9611 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 2,107 | 225 | 354 | 85 | 16.80\% | 3.7 | 2,025 | 186 | 276 | 73 | 13.60\% | 3.7 |
| SEX |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 1,105 | 135 | 180 | 58 | 16.30\% | 5.1 | 1,026 | 113 | 163 | 48 | 15.90\% | 4.7 |
| Female | 1,002 | 139 | 174 | 53 | 17.40\% | 4.5 | 999 | 125 | 113 | 37 | 11.30\% | 3.8 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |  |  |  |  |  |  |
| White alone | 1,051 | 195 | 216 | 65 | 20.60\% | 5.4 | 733 | 128 | 117 | 40 | 16.00\% | 6 |
| Black or African American alone | 581 | 136 | 85 | 43 | 14.60\% | 6.9 | 657 | 136 | 51 | 29 | 7.80\% | 4.7 |
| American Indian and Alaska Native alone | 321 | 119 | 45 | 37 | 14.00\% | 9.9 | 316 | 102 | 87 | 58 | 27.50\% | 14.2 |
| Asian alone | 14 | 16 | 4 | 6 | 28.60\% | 25.8 | 8 | 12 | 1 | 3 | 12.50\% | 41 |
| Native Hawaiian and Other Pacific Islander alone | 0 | 12 | 0 | 12 | - | ** | 0 | 12 | 0 | 12 | - | ** |
| Some other race alone | 106 | 57 | 0 | 12 | 0.00\% | 25.9 | 236 | 110 | 0 | 12 | 0.00\% | 12.8 |
| Two or more races | 34 | 30 | 4 | 8 | 11.80\% | 18.2 | 75 | 81 | 20 | 22 | 26.70\% | 20.6 |
| Hispanic or Latino | 166 | 99 | 10 | 15 | 6.00\% | 10 | 332 | 126 | 6 | 9 | 1.80\% | 2.8 |
| AGE |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 5 years | 141 | 61 | 0 | 12 | 0.00\% | 20.4 | 232 | 76 | 0 | 12 | 0.00\% | 13 |
| 5 to 17 years | 345 | 79 | 10 | 12 | 2.90\% | 3.2 | 406 | 87 | 32 | 23 | 7.90\% | 5.6 |
| 18 to 34 years | 557 | 110 | 71 | 47 | 12.70\% | 8 | 575 | 105 | 52 | 35 | 9.00\% | 6.4 |
| 35 to 64 years | 781 | 87 | 150 | 50 | 19.20\% | 6 | 633 | 74 | 130 | 40 | 20.50\% | 6.1 |
| 65 to 74 years | 162 | 39 | 47 | 20 | 29.00\% | 9.7 | 133 | 26 | 49 | 22 | 36.80\% | 15.5 |
| 75 years and over | 121 | 43 | 76 | 36 | 62.80\% | 18 | 46 | 23 | 13 | 11 | 28.30\% | 27.5 |

Table 5-7. Local Setting- Disability (cont'd)

| Subject | Census Tract 9616.01 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total |  | With a Disability |  | Percent with a Disability |  |
|  | Estimate | Margin of Error (+/-) | Estimate | Margin of Error (+/-) | Estimate | Margin of Error (+/-) |
| Total civilian noninstitutionalized population | 3,756 | 370 | 416 | 96 | 11.10\% | 2.5 |
| SEX |  |  |  |  |  |  |
| Male | 1,778 | 220 | 202 | 66 | 11.40\% | 3.6 |
| Female | 1,978 | 221 | 214 | 70 | 10.80\% | 3.5 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |
| White alone | 1,908 | 257 | 324 | 89 | 17.00\% | 4.4 |
| Black or African American alone | 968 | 206 | 20 | 20 | 2.10\% | 2.1 |
| American Indian and Alaska Native alone | 638 | 245 | 72 | 49 | 11.30\% | 6.3 |
| Asian alone | 0 | 12 | 0 | 12 | - | ** |
| Native Hawaiian and Other Pacific Islander alone | 0 | 12 | 0 | 12 | - | ** |
| Some other race alone | 213 | 165 | 0 | 12 | 0.00\% | 14.1 |
| Two or more races | 29 | 37 | 0 | 12 | 0.00\% | 55.1 |
| Hispanic or Latino | 310 | 209 | 17 | 24 | 5.50\% | 6.7 |
| AGE |  |  |  |  |  |  |
| Under 5 years | 218 | 98 | 0 | 12 | 0.00\% | 13.8 |
| 5 to 17 years | 861 | 195 | 35 | 37 | 4.10\% | 4.2 |
| 18 to 34 years | 803 | 147 | 0 | 12 | 0.00\% | 4 |
| 35 to 64 years | 1,366 | 156 | 199 | 70 | 14.60\% | 5.2 |
| 65 to 74 years | 246 | 75 | 58 | 36 | 23.60\% | 13.2 |
| 75 years and over | 262 | 77 | 124 | 52 | 47.30\% | 15 |

### 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 +/- $0.6 \%$ ), followed by 18 to 64 (15.3\%, MOE +/- 0.2\%).

Robeson County had an estimated population of 130,706 with $29.2 \%$ (MOE +/-1.3\%) living below the poverty level. Across all subjects, Some Other race had the highest percent living below the poverty level at $44.1 \%$ (MOE $+/-7.4 \%$ ). The next three subjects with the highest poverty level were Under 18 at $42.1 \%$ (MOE 2.2\%), Hispanic or Latino at $41.6 \%$ (MOE +/- $4.7 \%$ ), and Black or African American at 36.7 (MOE $+/-2 \%$ ). All subject groups had a greater than $5 \%$ difference when compared to the state, excluding Native Hawaiian and Other Pacific Islander.

## Table 5-8. Regional Setting- Poverty

| Subject | North Carolina |  |  |  |  |  | Robeson 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 | 9,783,738 | 1,751 | 1,579,871 | 17,833 | 16.10\% | 0.2 | 130,706 | 623 | 38,182 | 1,667 | 29.20\% | 1.30 |
| AGE |  |  |  |  |  | 0.4 |  |  |  |  |  |  |
| Under 18 | 2,256,186 | 1,865 | 516,821 | 9,185 | 22.90\% | 0.6 | 33,707 | 183 | 14,202 | 758 | 42.10\% | 2.20 |
| 18 to 64 | 6,053,546 | 1,090 | 923,859 | 9,663 | 15.30\% | 0.2 | 79,155 | 598 | 20,769 | 1,062 | 26.20\% | 1.30 |
| 65 years and over | 1,474,006 | 881 | 139,191 | 2,754 | 9.40\% | 0.2 | 17,844 | 239 | 3,211 | 256 | 18.00\% | 1.40 |
| SEX |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 4,733,269 | 2,259 | 694,126 | 9,539 | 14.70\% | 0.2 | 62,722 | 282 | 17,208 | 921 | 27.40\% | 1.40 |
| Female | 5,050,469 | 2,443 | 885,745 | 10,217 | 17.50\% | 0.2 | 67,984 | 419 | 20,974 | 928 | 30.90\% | 1.30 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 6,766,691 | 7,591 | 845,573 | 13,639 | 12.50\% | 0.2 | 37,263 | 839 | 7,741 | 781 | 20.80\% | 1.90 |
| Black or African American | 2,077,559 | 4,736 | 517,071 | 8,162 | 24.90\% | 0.4 | 30,958 | 373 | 11,351 | 661 | 36.70\% | 2.00 |
| American Indian and Alaska Native | 114,751 | 1,804 | 30,017 | 1,757 | 26.20\% | 1.5 | 51,937 | 468 | 14,967 | 1,079 | 28.80\% | 2.00 |
| Asian | 262,596 | 1,970 | 33,282 | 2,248 | 12.70\% | 0.9 | 874 | 55 | 284 | 123 | 32.50\% | 13.80 |
| Native Hawaiian and Other Pacific Islander | 5,886 | 537 | 1,097 | 297 | 18.60\% | 4.9 | 55 | 50 | - | 28 | 0.00\% | 40.00 |
| Some other Race | 305,431 | 7,334 | 97,609 | 5,276 | 32.00\% | 1.4 | 6,516 | 730 | 2,971 | 621 | 44.10\% | 7.40 |
| Two or more races | 240,824 | 5,455 | 55,222 | 2,570 | 22.90\% | 1 | 3,103 | 495 | 968 | 258 | 31.20\% | 6.40 |
| Hispanic or Latino | 894,810 | 1,312 | 268,985 | 7,035 | 30.10\% | 0.8 | 11,197 | 83 | 4,653 | 526 | 41.60\% | 4.70 |
| All individuals below: |  |  |  |  |  |  |  |  |  |  |  |  |
| 50 percent of poverty level | 688,118 | 10,757 |  |  |  |  | 17,199 | 1,351 |  |  |  |  |
| 125 percent of poverty level | 2,094,292 | 20,441 |  |  |  |  | 48,025 | 1,615 |  |  |  |  |
| 150 percent of poverty level | 2,596,452 | 22,139 |  |  |  |  | 56,948 | 1,637 |  |  |  |  |
| 185 percent of poverty level | 3,291,075 | 23,713 |  |  |  |  | 68,119 | 1,805 |  |  |  |  |
| 200 percent of poverty level | 3,571,557 | 25,056 |  |  |  |  | 72,223 | 1,891 |  |  |  |  |

## Local Setting

Census Tract 9608.01 had an estimated population of 3,331. Of this population, $56.30 \%$ (MOE $+/-7.3 \%$ ) were estimated to be below the poverty level. The largest age group living under the poverty level was Under 18, at $77.1 \%$ (MOE 8.9\%). The Asian population (MOE 69.9\%), some other race (MOE +/- 100\%), and two or more races (MOE +/- 43.6) all had estimates of 100\% living under the poverty level. All population groups, except for Native Hawaiian and other Pacific Islander had an estimate that was greater than $5 \%$ different when compared to both state and county estimates (Table 5-9).

Census Tract 9608.02 had an estimated population of 1678. Of this population, $41.2 \%$ (MOE $7.5 \%$ ) were estimated to be below the poverty level. The largest age group living under the poverty level was under 18, at $58.8 \%$ (MOE +/-12\%). The largest racial group was Asian at 100\% (MOE +/-100\%). The following groups were greater than $5 \%$ different when compared to both the county and the state: overall population, under 18 years, 18 to 64 years, male, female, white, Black or African American, American Indian and Alaska Native, Asian. 65 years and older was greater than $5 \%$ different when compared just to the state.

Census Tract 9610 had an estimated population of 2,066. Of this population, 34.1\% (MOE $6.8 \%$ ) were estimated to be below the poverty level. The largest age group living under the poverty level was under 18, at $44.3 \%$ (MOE +/-14.4\%). The largest racial group was Asian at $78.6 \%$ (MOE +/- 45.4\%). The following groups were greater than 5\% different when compared to both the county and the state: overall population, 18-64, female, White, American Indian and Alaska Native, Asian, some other race, two or more races. The following groups were greater than $5 \%$ different when compared just to the state: under 18, 65 years and older, male, Black or African American, Hispanic or Latino.

Census Tract 9611 had an estimated population of 2,025. Of this population, $46 \%$ (MOE +/$8.1 \%$ ) were estimated to be below the poverty level. The largest age group living under the poverty level was Under 18, at $65.2 \%$ (MOE 11.8\%). The largest racial group was Black or African American at $62.7 \%$ (MOE +/- 12.3\%). All population groups, except for American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, and two or more races had an estimate that was greater than $5 \%$ different when compared to both state and county estimates.

Census Tract 9616.01 had an estimated population of 3,736. Of this population, 29.7\% (MOE $8 \%)$ were estimated to be below the poverty level. The largest age group living under the poverty level was $18-64$, at $42.5 \%$ (MOE +/-15.6\%). The largest racial group was American Indian and Alaska Native at $49.7 \%$ (MOE +/- 21.4\%). The following groups were greater than $5 \%$ different when compared to both the county and the state: 65 years and over, White, American Indian and Alaska native The following groups were greater than $5 \%$ different when compared just to the state: overall population, under 18, 18 to 64 , male, female, some other race.

Table 5-9. Local Setting- Poverty

| Subject | Census Tract 9608.01 |  |  |  |  |  | Census Tract 9608.02 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 <br> +/- | Estimate | Margin of Error +/- |
| Population for whom poverty status is determined | 3,331 | 314 | 1874 | 287 | 56.30\% | 7.3 | 1678 | 187 | 692 | 146 | 41.20\% | 7.5 |
| AGE |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 18 | 1,075 | 172 | 829 | 164 | 77.10\% | 8.9 | 532 | 100 | 313 | 89 | 58.80\% | 12 |
| 18 to 64 | 1,884 | 219 | 956 | 192 | 50.70\% | 8.6 | 919 | 110 | 337 | 74 | 36.70\% | 7.3 |
| 65 years and over | 372 | 95 | 89 | 50 | 23.90\% | 11.8 | 227 | 41 | 42 | 22 | 18.50\% | 9.8 |
| SEX |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 1,450 | 199 | 839 | 185 | 57.90\% | 9.3 | 811 | 100 | 301 | 78 | 37.10\% | 9 |
| Female | 1,881 | 199 | 1035 | 162 | 55.00\% | 7.6 | 867 | 122 | 391 | 96 | 45.10\% | 8.6 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 276 | 137 | 158 | 112 | 57.20\% | 23.6 | 146 | 52 | 44 | 22 | 30.10\% | 13.5 |
| Black or African American | 2,332 | 296 | 1269 | 259 | 54.40\% | 10.0 | 1330 | 169 | 556 | 139 | 41.80\% | 8.8 |
| American Indian and Alaska Native | 663 | 160 | 387 | 139 | 58.40\% | 15.7 | 122 | 57 | 84 | 54 | 68.90\% | 23.9 |
| Asian | 18 | 24 | 18 | 24 | 100.0\% | 69.90 | 8 | 13 | 8 | 13 | 100.0\% | 100.0 |
| Native Hawaiian and Other Pacific Islander | 0 | 12 | 0 | 12 | 0.00\% | 0 | 0 | 12 | 0 | 12 | 0.00\% | 0.0 |
| Some other Race | 1 | 3 | 1 | 3 | 100.0\% | 100.0 | 57 | 64 | 0 | 12 | 0.00\% | 39.3 |
| Two or more races | 41 | 46 | 41 | 46 | 100.0\% | 43.6 | 15 | 21 | 0 | 12 | 0.00\% | 76.6 |
| Hispanic or Latino | 91 | 121 | 89 | 121 | 97.80\% | 6.6 | 57 | 64 | 0 | 12 | 0.00\% | 39.3 |
| All individuals below: |  |  |  |  |  |  |  |  |  |  |  |  |
| 50 percent of poverty level | 1,083 | 228 |  |  |  |  | 254 | 91 |  |  |  |  |
| 125 percent of poverty level | 2,141 | 301 |  |  |  |  | 831 | 156 |  |  |  |  |
| 150 percent of poverty level | 2,439 | 323 |  |  |  |  | 912 | 156 |  |  |  |  |
| 185 percent of poverty level | 2,652 | 304 |  |  |  |  | 1079 | 189 |  |  |  |  |
| 200 percent of poverty level | 2,656 | 303 |  |  |  |  | 1108 | 188 |  |  |  |  |

Source: US Census, 2013-2017 ACS 5-Year Estimates. All orange and bolded highlighted cells indicate a difference that is greater than 5\% when compared to the state.
All bolded and blue highlighted cells indicate a difference that is greater than $5 \%$ when compared to the county and the state.

| Subject | Census Tract 9610 |  |  |  |  |  | Census Tract 9611 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 2066 | 215 | 704 | 175 | 34.10\% | 6.8 | 2025 | 186 | 931 | 212 | 46.00\% | 8.1 |
| AGE |  |  |  |  |  |  |  |  |  |  |  |  |
| Under 18 | 445 | 99 | 197 | 78 | 44.30\% | 14.4 | 638 | 112 | 416 | 119 | 65.20\% | 11.8 |
| 18 to 64 | 1338 | 150 | 459 | 120 | 34.30\% | 7.1 | 1208 | 132 | 468 | 123 | 38.70\% | 8.4 |
| 65 years and over | 283 | 49 | 48 | 26 | 17.00\% | 7.9 | 179 | 32 | 47 | 21 | 26.30\% | 10.8 |
| SEX |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 1082 | 130 | 323 | 95 | 29.90\% | 7.4 | 1026 | 113 | 445 | 105 | 43.40\% | 8.6 |
| Female | 984 | 130 | 381 | 94 | 38.70\% | 7.3 | 999 | 125 | 486 | 129 | 48.60\% | 8.6 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 1032 | 189 | 301 | 135 | 29.20\% | 9.9 | 733 | 128 | 319 | 121 | 43.50\% | 13.1 |
| Black or African American | 563 | 128 | 152 | 76 | 27.00\% | 10.4 | 657 | 136 | 412 | 133 | 62.70\% | 12.3 |
| American Indian and Alaska Native | 317 | 115 | 144 | 93 | 45.40\% | 19.3 | 316 | 102 | 83 | 42 | 26.30\% | 10.8 |
| Asian | 14 | 16 | 11 | 15 | 78.60\% | 45.4 | 8 | 12 | 0 | 12 | 0.005 | 100.0 |
| Native Hawaiian and Other Pacific Islander | 0 | 12 | 0 | 12 | 0.0\% | 0.0 | 0 | 12 | 0 | 12 | 0.00\% | 0.0 |
| Some other Race | 106 | 57 | 71 | 48 | 69.00\% | 25.5 | 236 | 110 | 117 | 95 | 49.605 | 28.2 |
| Two or more races | 34 | 30 | 25 | 25 | 73.50\% | 38.1 | 75 | 81 | 0 | 12 | 0.00\% | 33.5 |
| Hispanic or Latino | 166 | 99 | 64 | 53 | 38.60\% | 28.7 | 332 | 126 | 169 | 111 | 50.90\% | 23.1 |
| All individuals below: |  |  |  |  |  |  |  |  |  |  |  |  |
| 50 percent of poverty level | 189 | 78 |  |  |  |  | 318 | 109 |  |  |  |  |
| 125 percent of poverty level | 818 | 182 |  |  |  |  | 1065 | 201 |  |  |  |  |
| 150 percent of poverty level | 1047 | 215 |  |  |  |  | 1217 | 191 |  |  |  |  |
| 185 percent of poverty level | 1108 | 222 |  |  |  |  | 1399 | 212 |  |  |  |  |
| 200 percent of poverty level | 1177 | 219 |  |  |  |  | 1404 | 210 |  |  |  |  |

Table 5-9. Local Setting- Poverty, Cont'd

| Subject | Census Tract 9616.01 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 3,736 | 358 | 1,110 | 315 | 29.70 | 8.00 |
| AGE |  |  |  |  |  |  |
| Under 18 | 1,059 | 212 | 450 | 191 | 42.50 | 15.60 |
| 18 to 64 | 2,169 | 224 | 538 | 152 | 24.80 | 7.00 |
| 65 years and over | 508 | 77 | 122 | 61 | 24.00 | 11.90 |
| SEX |  |  |  |  |  |  |
| Male | 1,768 | 213 | 498 | 172 | 28.20 | 9.10 |
| Female | 1,968 | 215 | 612 | 179 | 31.10 | 8.40 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |
| White | 1898 | 250 | 479 | 168 | 25.2 | 7.6 |
| Black or African American | 968 | 206 | 218 | 135 | 22.5 | 13.6 |
| American Indian and Alaska Native | 628 | 238 | 312 | 163 | 49.7 | 21.4 |
| Asian | 0 | 12 | 0 | 12 | 0.0 | 0.0 |
| Native Hawaiian and Other Pacific Islander | 0 | 12 | 0 | 12 | 0.0 | 0.0 |
| Some other Race | 213 | 165 | 101 | 105 | 47.4 | 35.9 |
| Two or more races | 29 | 37 | 0 | 12 | 0.0 | 55.1 |
| Hispanic or Latino | 310 | 209 | 101 | 105 | 32.6 | 33.3 |
| All individuals below: |  |  |  |  |  |  |
| 50 percent of poverty level | 552 | 228 |  |  |  |  |
| 125 percent of poverty level | 1,544 | 365 |  |  |  |  |
| 150 percent of poverty level | 1,702 | 358 |  |  |  |  |
| 185 percent of poverty level | 2,145 | 369 |  |  |  |  |
| 200 percent of poverty level | 2,225 | 375 |  |  |  |  |

### 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 Robeson County with the highest percent was $\$ 15,000$ to $\$ 24,999$ at $15.2 \%$. The median income was $\$ 32,407$ and the mean income was $\$ 46,080$. All income ranges less than $\$ 35,000$ had percentages that were more than $10 \%$ higher than the state ranges.

Table 5-10. Regional Setting- Household Income

| Subject | North Carolina |  | Robeson County Households |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Households |  |  |  |
|  | Estimate | Margin of Error (+/-) | Estimate | Margin of Error (+/-) |
| Total | 3,874,346 | 8,789 | 46,163 | 427 |
| Less than \$10,000 | 7.30\% | 0.1 | 14.50\% | 0.9 |
| \$10,000 to \$14,999 | 5.80\% | 0.1 | 9.90\% | 0.7 |
| \$15,000 to \$24,999 | 11.10\% | 0.1 | 15.20\% | 0.9 |
| \$25,000 to \$34,999 | 11.00\% | 0.1 | 13.40\% | 0.8 |
| \$35,000 to \$49,999 | 14.50\% | 0.1 | 14.90\% | 0.8 |
| \$50,000 to \$74,999 | 18.10\% | 0.1 | 14.70\% | 0.9 |
| \$75,000 to \$99,999 | 11.80\% | 0.1 | 8.80\% | 0.7 |
| \$100,000 to \$149,999 | 11.70\% | 0.1 | 6.00\% | 0.6 |
| \$150,000 to \$199,999 | 4.40\% | 0.1 | 1.50\% | 0.3 |
| \$200,000 or more | 4.30\% | 0.1 | 1.20\% | 0.2 |
|  |  |  |  |  |
| Median income (dollars) | 50,320 | 204 | 32,407 | 916 |
| Mean income (dollars) | 70,523 | 287 | 46,080 | 1,625 |
| 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

In Census Tract 9608.01, the household income range with the highest percent was less than $\$ 10,000$ at $35.3 \%$ (MOE +/- $6.7 \%$ ). The median household income was \$18,014 and the mean income was $\$ 25,523$. The less than $\$ 10,000$ income range was greater than $10 \%$ different compared to the county and the state. The \$10,000 to \$14,999 and \$15,000 to \$24,999 income ranges were greater than $10 \%$ different compared to the state (Table 5-11).

In Census Tract 9608.02, the household income range with the highest percent was less than $\$ 10,000$ at $24.2 \%$ (MOE +/- $6.2 \%$ ). The median household income was $\$ 25,926$ and the mean income was $\$ 45,330$. The less than $\$ 10,000$ and $\$ 10,000$ to $\$ 14,999$ income range was greater than $10 \%$ different compared to the county and the state. The $\$ 15,000$ to $\$ 24,999$ and $\$ 25,000-$ $\$ 34,999$ income ranges were greater than $10 \%$ different compared to the state.

In Census Tract 9610, the household income range with the highest percent was between $\$ 15,000$ and $\$ 24,999$ at $16.0 \%$ (MOE +/- $6.5 \%$ ). The median household income was $\$ 32,019$ and the mean income was $\$ 53,651$. The $\$ 10,000$ to $\$ 14,999$ and $\$ 25,000$ to $\$ 34,999$ income ranges were greater than $10 \%$ different compared to the county and the state. The less than $\$ 10,000$ and $\$ 15,000$ to $\$ 24,999$ income ranges were greater than $10 \%$ different compared to the state.

In Census Tract 9611, the household income range with the highest percent was between $\$ 15,000$ and $\$ 24,999$ at $20.7 \%$ (MOE $+/-5.3 \%$ ). The median household income was $\$ 26,435$ and the mean income was $\$ 32,185$. The $\$ 10,000$ to $\$ 14,999, \$ 15,000$ to $\$ 24,999$, and $\$ 25,000$ to $\$ 34,999$ income ranges were greater than $10 \%$ different compared to the county and the state. The less than $\$ 10,000$ income range was greater than $10 \%$ different compared to the state.

In Census Tract 9616.01, the household income range with the highest percent was between $\$ 50,000$ and $\$ 74,999$ at $18.3 \%$ (MOE +/- 5.8\%). The median household income was $\$ 26,435$ and the mean income was $\$ 32,185$. The $\$ 10,000$ to $\$ 14,999, \$ 15,000$ to $\$ 24,999$, and $\$ 25,000$ to $\$ 34,999$ income ranges were greater than $10 \%$ different compared to the county and the state. The less than $\$ 10,000$ income range was greater than $10 \%$ different compared to the state.

In the two-mile facility radius, the household income range with the highest percent was less than $\$ 15,000$, at $35 \%$, followed by $\$ 25,000-\$ 50,000$ at $26 \%$ (Table 5-12).

Table 5-11. Local Setting- Household Income

| Subject | Census Tract 9608.01 |  | Census Tract 9608.02 |  | Census Tract 9610 |  | Census Tract 9611 |  | Census Tract 9616.01 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Households |  | Households |  | Households |  | Households |  | Households |  |
|  | Estimate | Margin of Error (+/-) | Estimate | Margin of Error (+/-) | Estimate | Margin of Error (+/-) | Estimate | Margin of Error (+/-) | Estimate | Margin of Error (+/-) |
| Total | 1,089 | 98 | 616 | 55 | 744 | 48 | 653 | 48 | 1,362 | 89 |
| Less than \$10,000 | 35.30\% | 6.7 | 24.20\% | 6.2 | 10.90\% | 3.5 | 15.60\% | 4.5 | 12.40\% | 4.6 |
| \$10,000 to \$14,999 | 10.50\% | 4.3 | 11.40\% | 4.3 | 12.50\% | 4.5 | 11.30\% | 4.2 | 11.70\% | 4.1 |
| \$15,000 to \$24,999 | 16.30\% | 5.4 | 12.80\% | 5.2 | 16.00\% | 6.5 | 20.70\% | 5.3 | 17.80\% | 5.2 |
| \$25,000 to \$34,999 | 7.30\% | 4.3 | 13.50\% | 5.1 | 14.80\% | 5.4 | 17.30\% | 5.4 | 15.60\% | 4.9 |
| \$35,000 to \$49,999 | 15.70\% | 5.2 | 14.30\% | 4.9 | 12.90\% | 4.4 | 14.50\% | 4.3 | 14.90\% | 4.7 |
| \$50,000 to \$74,999 | 9.50\% | 3.7 | 14.60\% | 4.9 | 10.30\% | 4.3 | 13.90\% | 4.1 | 18.30\% | 5.8 |
| \$75,000 to \$99,999 | 4.10\% | 2.6 | 2.90\% | 2.8 | 7.30\% | 3.2 | 4.10\% | 2.8 | 3.30\% | 2.6 |
| \$100,000 to \$149,999 | 1.50\% | 1.7 | 3.60\% | 2.7 | 12.10\% | 4.2 | 2.50\% | 2.1 | 6.00\% | 3.1 |
| \$150,000 to \$199,999 | 0.00\% | 2.9 | 1.00\% | 1.4 | 1.70\% | 2 | 0.00\% | 4.9 | 0.00\% | 2.4 |
| \$200,000 or more | 0.00\% | 2.9 | 1.80\% | 1.9 | 1.50\% | 1.5 | 0.00\% | 4.9 | 0.00\% | 2.4 |
| Median income (dollars) | 18,014 | 3,153 | 25,926 | 4,946 | 32,019 | 4,703 | 26,435 | 3,433 | 31,853 | 2,846 |
| Mean income (dollars) | 25,523 | 3,121 | 45,330 | 16,277 | 53,651 | 11,429 | 32,185 | 2,826 | 38,063 | 4,400 |

Source: US Census, 2013-2017 ACS 5-Year Estimates.
All orange and bolded highlighted cells indicate a difference that is greater than $10 \%$ when compared to the state.
All bolded and blue highlighted cells indicate a difference that is greater than $10 \%$ when compared to the county and the state.

Table 5-12. Project Radius- Household Income

|  | 2-mile facility radius |  |  |
| :--- | :---: | :---: | :---: |
| Subject | Estimate | MOE | Percent |
| Total: | 2,643 | 82 | 100 |
| Less than $\$ 15,000$ | 935 | 86 | 35 |
| $\$ 15,000-\$ 25,000$ | 424 | 55 | 16 |
| $\$ 25,000-\$ 50,000$ | 699 | 75 | 26 |
| $\$ 50,000-\$ 75,000$ | 357 | 70 | 14 |
| $\$ 75,000$ or more | 228 | 55 | 9 |
| 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 Robeson County estimate is $\$ 17,161$. The estimates for the census tracts are: $\$ 7,756$ ( 9608.01 ), $\$ 17,366$ ( 9608.02 ), $\$ 20,267$ ( 9610 ), $\$ 11,566$ ( 9611 ), and $\$ 14,687$ ( 9616.01 ). Both the county and the census tracts had a significantly lower Per Capita Income compared to the state (Table 5-13).

The EJSCREEN analysis also provided per capita income estimates for the two-mile buffer surrounding the Active Energy Renewable Power site. The buffer had an estimate of $\$ 12,856$. This is significantly lower than the state and the county.

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 |
| Robeson County | Per Capita Income | Estimate | 17,161 |
|  |  | Margin of Error +/- | 621 |
| Census Tract 9608.01 | Per Capita Income | Estimate | 7,756 |
|  |  | Margin of Error +/- | 977 |
| Census Tract 9608.02 | Per Capita Income | Estimate | 17,366 |
|  |  | Margin of Error +/- | 5,923 |
| Census Tract 9610 | Per Capita Income | Estimate | 20,267 |
|  |  | Margin of Error +/- | 4188 |
| Census Tract 9611 | Per Capita Income | Estimate | 11,566 |
|  |  | Margin of Error +/- | 1,344 |
| Census Tract 9616.01 | Per Capita Income | Estimate | 14,687 |
|  |  | Margin of Error +/- | 1743 |
| Two Miles | Per Capita Income | Estimate | 12,856 |
|  |  | Margin of Error +/- | - |
| Source: US Census, 2013-2017 ACS 5-Year Estimates |  |  |  |

## 6 Limited English Proficiency (LEP)

The following table (Table 6-1) was completed using data from Census Table B16001, Language Spoken at Home by Ability to Speak English for the population 5 years and over, 2011-2015 American Community Survey 5-Year Estimates. 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: Spanish or Spanish Creole, French, Hindi, Vietnamese, Other Asian languages, Other Pacific Island languages, and Arabic. However, none of the language groups identified reached the $5 \%$ threshold. No larger LEP groups were identified during the site visit or specific translation requests were received.

Table 6-1. Limited English Proficiency


## 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).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), Robeson County ranks $100^{\text {th }}$ in health factors and $100^{\text {th }}$ in health outcomes (Figure 3).


Figure 3. County Health Rankings for Health Factors in North Carolina provided by University of Wisconsin Health Institute.

According to the NC DEQ Community Mapping System Environmental Justice Tool, all causes of death (per 100,000 deaths) identified showed a higher rate across Robeson County than the state (Table 7-1).

Table 7-1. Health Outcomes

| Cause of Death | Robeson County | North Carolina |
| :--- | :---: | :---: |
| Cancer | 191.7 | 169.1 |
| Heart Disease | 218.1 | 163.7 |
| Stroke | 48.1 | 43.1 |
| Cardiovascular Disease | 281.7 | 221.9 |
| Diabetes | 46.5 | 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 two-mile project radius, the following potential sensitive receptors were identified (Figure 4):

- WH Knuckles Elementary School
- Janie C Hargrove Elementary School
- Sandy Grove Baptist Church
- Mc Cormick Chapel AME
- Housing Authority of the City of Lumberton (multiple Public Housing complexes)
- Sandhill Church
- Sandhill Baptist Church
- Thompson Chapel Baptist Church
- Christian Faith Center- Lumberton
- Faith Community Christian Center
- Cromartie Temple of Praise
- First Baptist Homes
- Lumberton Junior High School
- Parkview Terrace Apartments
- Holly Ridge Apartments
- Lumber River Baptist Association
- Islamic Center of Lumberton
- Robeson County Public Library
- First Pentecostal Church
- Kingdom Place
- Fountain of Deliverance
- Vertical Church Lumberton
- East Lumberton Baptist Church
- East Lumberton Church of God
- Church of God Parsonage
- Tabernacle Baptist Church
- Ashbury United Methodist Church
- New Light Apostolic Church
- New Point Baptist Church

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


Figure 4. Sensitive receptors surrounding Active Energy facility.

## 9 Local Industrial Sites

Within the 2-mile radius, there are 133 facility permits or incident reports (as of February 12, 2019). The 133 facility permits and incident reports include:

- 33 NPDES stormwater permits
- 6 NPDES wastewater treatment facility permits
- 2 coal ash structural fills
- 2 permitted solid waste landfills
- 5 inactive hazardous sites
- 1 pre-regulatory landfill site
- 2 brownfield program sites
- 2 hazardous waste sites
- 42 underground storage tank incidents
- 9 aboveground storage tank incidents
- 20 underground storage tank active facilities
- 9 land use restrictions or notices

It is important to note that there may be multiple permits associated with one facility and incidents vary in size, significance, and timeframe.


Figure 5. Permitted facilities and incidents with the 2-mile radius surrounding the Active Energy Renewable Power facility

## 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, Robeson County, census tracts 9808.01, 9608.02, 9610, 9611, 9616.01, and the two-mile radius around the Active Energy Renewable Power 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 two-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 the Active Energy facility in regard to its permit application. The racial composition of the immediate area shows a significantly larger proportion of Black or African American residents ( $58 \%$ in two-mile buffer) when compared to the county and the state and a significantly larger proportion of American Indian or Alaska Native residents (13\% in the twomile buffer) compared to the state. The census tracts and county also show a higher proportion of Black or African American and American Indian or Alaska Native residents when compared to the state, and in many cases, the county as well.

In addition, disability estimates for almost every population group at the census tract level are significantly higher than the state, and in many cases, the county rates as well. Poverty status is high in most surrounding census tract levels, with census tracts displaying overall levels of $56.3 \%$ ( 9608.01 ), $41.2 \%$ ( 9608.02 ), $34.1 \%$ ( 9610 ), $46 \%$ ( 9611 ), $29.7 \%$ ( 9616.01 ) compared to $16.1 \%$ in the state and $29.2 \%$ in Robeson County. Household income analysis found that in all census tracts, as well as Robeson County, there are significantly more people in the bottom four income brackets when compared to the state. Analysis of the two-mile buffer area around the facility showed that the majority of households have an income below $\$ 25,000$. For per capita income, the state average is $\$ 28,123$, whereas the two-mile buffer area average is $\$ 12,856$. From a health perspective, out of all 100 counties in North Carolina (with 1 indicating the healthiest), Robeson County ranks $100^{\text {th }}$ in health factors and $100^{\text {th }}$ in health outcomes and demonstrates a higher rate of all causes of death than the state.

Based on the results from the EJ Snapshot, this EJ Report, and community concerns raised, the Department provided the following to ensure meaningful engagement from this community:

- Held a public hearing (required by the Division Director based on significant public interest);
- Extended the public comment period to a total of 133 days;
- Postponed the original hearing date from March 16, 2020, to June 22, 2020;
- Communicated by phone or virtually with community leaders, local tribal officials, and community based organizations;
- Created a PowerPoint presentation with important information regarding the proposed facility's draft air quality permit and making the presentation available on the DAQ website;
- Created and posted a video to the DAQ website sharing the material in the PowerPoint; and
- Prepared a frequently asked questions document describing the proposed facility and the draft air quality permit.

| Under |  |  | $\Delta(9),$ |
| :---: | :---: | :---: | :---: |
| Location: User-specified polygonal location <br> Ring (buffer): 2-miles radius <br> Description: Active Energy |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Summary of ACS Estimates |  |  | 2013-2017 |
| Population |  |  | 7,839 |
| Population Density (per sq. mile) |  |  | 583 |
| Minority Population |  |  | 5,981 |
| \% Minority |  |  | 76\% |
| Households |  |  | 2,643 |
| Housing Units |  |  | 3,319 |
| Housing Units Built Before 1950 |  |  | 395 |
| Per Capita Income |  |  | 12,856 |
| Land Area (sq. miles) (Source: SF1) |  |  | 13.44 |
| \% Land Area |  |  | 100\% |
| Water Area (sq. miles) (Source: SF1) |  |  | 0.04 |
| \% Water Area |  |  | 0\% |
|  | $\begin{array}{r} \text { 2013-2017 } \\ \text { ACS Estimates } \end{array}$ | Percent | MOE ( $\pm$ ) |
| Population by Race |  |  |  |
| Total | 7,839 | 100\% | 304 |
| Population Reporting One Race | 7,721 | 98\% | 810 |
| White | 2,078 | 27\% | 203 |
| Black | 4,314 | 55\% | 238 |
| American Indian | 885 | 11\% | 157 |
| Asian | 26 | 0\% | 24 |
| Pacific Islander | 0 | 0\% | 12 |
| Some Other Race | 418 | 5\% | 176 |
| Population Reporting Two or More Races | 118 | 2\% | 72 |
| Total Hispanic Population | 672 | 9\% | 220 |
| Total Non-Hispanic Population | 7,167 |  |  |
| White Alone | 1,859 | 24\% | 208 |
| Black Alone | 4,314 | 55\% | 238 |
| American Indian Alone | 883 | 11\% | 157 |
| Non-Hispanic Asian Alone | 26 | 0\% | 24 |
| Pacific Islander Alone | 0 | 0\% | 12 |
| Other Race Alone | 0 | 0\% | 12 |
| Two or More Races Alone | 86 | 1\% | 42 |
| Population by Sex |  |  |  |
| Male | 3,857 | 49\% | 188 |
| Female | 3,983 | 51\% | 189 |
| Population by Age |  |  |  |
| Age 0-4 | 813 | 10\% | 81 |
| Age 0-17 | 2,429 | 31\% | 158 |
| Age 18+ | 5,410 | 69\% | 211 |
| Age 65+ | 800 | 10\% | 85 |

[^1]
## EJSCREEN ACS Summary Report

Location: User-specified polygonal location
Ring (buffer): 2-miles radius
Description: Active Energy

|  | $\begin{array}{r} \text { 2013-2017 } \\ \text { ACS Estimates } \end{array}$ | Percent | MOE ( $\pm$ ) |
| :---: | :---: | :---: | :---: |
| Population 25+ by Educational Attainment |  |  |  |
| Total | 4,469 | 100\% | 195 |
| Less than 9th Grade | 395 | 9\% | 70 |
| 9th - 12th Grade, No Diploma | 810 | 18\% | 98 |
| High School Graduate | 1,625 | 36\% | 112 |
| Some College, No Degree | 1,259 | 28\% | 124 |
| Associate Degree | 334 | 7\% | 69 |
| Bachelor's Degree or more | 380 | 8\% | 63 |
| Population Age 5+ Years by Ability to Speak English |  |  |  |
| Total | 7,026 | 100\% | 293 |
| Speak only English | 6,547 | 93\% | 253 |
| Non-English at Home ${ }^{1+2+3+4}$ | 479 | 7\% | 133 |
| ${ }^{1}$ Speak English "very well" | 236 | 3\% | 83 |
| ${ }^{2}$ Speak English "well" | 93 | 1\% | 65 |
| ${ }^{3}$ Speak English "not well" | 112 | 2\% | 59 |
| ${ }^{4}$ Speak English "not at all" | 38 | 1\% | 32 |
| ${ }^{3+4}$ Speak English "less than well" | 150 | 2\% | 60 |
| ${ }^{2+3+4}$ Speak English "less than very well" | 243 | 3\% | 80 |
| Linguistically Isolated Households* |  |  |  |
| Total | 58 | 100\% | 65 |
| Speak Spanish | 44 | 75\% | 64 |
| Speak Other Indo-European Languages | 14 | 25\% | 12 |
| Speak Asian-Pacific Island Languages | 0 | 0\% | 12 |
| Speak Other Languages | 0 | 0\% | 12 |
| Households by Household Income |  |  |  |
| Household Income Base | 2,643 | 100\% | 82 |
| < \$15,000 | 935 | 35\% | 86 |
| \$15,000-\$25,000 | 424 | 16\% | 55 |
| \$25,000-\$50,000 | 699 | 26\% | 75 |
| \$50,000-\$75,000 | 357 | 14\% | 70 |
| \$75,000 + | 228 | 9\% | 55 |
| Occupied Housing Units by Tenure |  |  |  |
| Total | 2,643 | 100\% | 82 |
| Owner Occupied | 1,097 | 41\% | 86 |
| Renter Occupied | 1,547 | 59\% | 66 |
| Employed Population Age 16+ Years |  |  |  |
| Total | 5,685 | 100\% | 217 |
| In Labor Force | 2,745 | 48\% | 164 |
| Civilian Unemployed in Labor Force | 371 | 7\% | 123 |
| Not In Labor Force | 2,941 | 52\% | 185 |

[^2]Location: User-specified polygonal location
Ring (buffer): 2-miles radius
Description: Active Energy

|  | 2013-2017 <br> ACS Estimates | Percent | MOE ( $\pm$ ) |
| :---: | :---: | :---: | :---: |
| Population by Language Spoken at Home* |  |  |  |
| Total (persons age 5 and above) | 4,754 | 100\% | 296 |
| English | 4,360 | 92\% | 287 |
| Spanish | 350 | 7\% | 96 |
| French | 12 | 0\% | 12 |
| French Creole | N/A | N/A | N/A |
| Italian | N/A | N/A | N/A |
| Portuguese | N/A | N/A | N/A |
| German | 0 | 0\% | 12 |
| Yiddish | N/A | N/A | N/A |
| Other West Germanic | N/A | N/A | N/A |
| Scandinavian | N/A | N/A | N/A |
| Greek | N/A | N/A | N/A |
| Russian | N/A | N/A | N/A |
| Polish | N/A | N/A | N/A |
| Serbo-Croatian | N/A | N/A | N/A |
| Other Slavic | N/A | N/A | N/A |
| Armenian | N/A | N/A | N/A |
| Persian | N/A | N/A | N/A |
| Gujarathi | N/A | N/A | N/A |
| Hindi | N/A | N/A | N/A |
| Urdu | N/A | N/A | N/A |
| Other Indic | N/A | N/A | N/A |
| Other Indo-European | 3 | 0\% | 15 |
| Chinese | 0 | 0\% | 12 |
| Japanese | N/A | N/A | N/A |
| Korean | 1 | 0\% | 12 |
| Mon-Khmer, Cambodian | N/A | N/A | N/A |
| Hmong | N/A | N/A | N/A |
| Thai | N/A | N/A | N/A |
| Laotian | N/A | N/A | N/A |
| Vietnamese | 4 | 0\% | 24 |
| Other Asian | 4 | 0\% | 12 |
| Tagalog | 0 | 0\% | 12 |
| Other Pacific Island | N/A | N/A | N/A |
| Navajo | N/A | N/A | N/A |
| Other Native American | N/A | N/A | N/A |
| Hungarian | N/A | N/A | N/A |
| Arabic | 20 | 0\% | 96 |
| Hebrew | N/A | N/A | N/A |
| African | N/A | N/A | N/A |
| Other and non-specified | 0 | 0\% | 12 |
| Total Non-English | 394 | 8\% | 412 |

Data Note: Detail may not sum to totals due to rounding. Hispanic popultion can be of any race.
N/A meansnot available. Source: U.S. Census Bureau, American Community Survey (ACS) 2013-2017.
*Population by Language Spoken at Home is available at the census tract summary level and up.

Location: User-specified polygonal location
Ring (buffer): 2-miles radius
Description: Active Energy

| Summary |  | Census 2010 |
| :---: | :---: | :---: |
| Population |  | 8,015 |
| Population Density (per sq. mile) |  | 596 |
| Minority Population |  | 6,106 |
| \% Minority |  | 76\% |
| Households |  | 3,051 |
| Housing Units |  | 3,396 |
| Land Area (sq. miles) |  | 13.44 |
| \% Land Area |  | 100\% |
| Water Area (sq. miles) |  | 0.04 |
| \% Water Area |  | 0\% |
| Population by Race | Number | Percent |
| Total | 8,015 | ------- |
| Population Reporting One Race | 7,817 | 98\% |
| White | 2,024 | 25\% |
| Black | 4,503 | 56\% |
| American Indian | 1,042 | 13\% |
| Asian | 49 | 1\% |
| Pacific Islander | 9 | 0\% |
| Some Other Race | 191 | 2\% |
| Population Reporting Two or More Races | 198 | 2\% |
| Total Hispanic Population | 399 | 5\% |
| Total Non-Hispanic Population | 7,616 | 95\% |
| White Alone | 1,909 | 24\% |
| Black Alone | 4,457 | 56\% |
| American Indian Alone | 1,020 | 13\% |
| Non-Hispanic Asian Alone | 47 | 1\% |
| Pacific Islander Alone | 8 | 0\% |
| Other Race Alone | 7 | 0\% |
| Two or More Races Alone | 168 | 2\% |
| Population by Sex | Number | Percent |
| Male | 3,810 | 48\% |
| Female | 4,205 | 52\% |
| Population by Age | Number | Percent |
| Age 0-4 | 756 | 9\% |
| Age 0-17 | 2,364 | 29\% |
| Age 18+ | 5,651 | 71\% |
| Age 65+ | 822 | 10\% |
| Households by Tenure | Number | Percent |
| Total | 3,051 |  |
| Owner Occupied | 1,219 | 40\% |
| Renter Occupied | 1,832 | 60\% |

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, Census 2010 Summary File 1.


[^0]:    ${ }^{1}$ As of July 31, 2020

[^1]:    Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.
    N/A meansnot available. Source: U.S. Census Bureau, American Community Survey (ACS) 2013-2017

[^2]:    Data Note: Datail may not sum to totals due to rounding. Hispanic population can be of anyrace
    N/A means not available. Source: U.S. Census Bureau, American Community Survey (ACS)
    *Households in which no one 14 and over speaks English "very well" or speaks English only.

