# Domtar Paper Company, LLC <br> Draft Environmental Justice Report 

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## 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 Martin, Washington, and Bertie Counties, census tracts 9701, 9502, and 9604, and the one-mile radius around the property boundary of the Domtar Paper Company, LLC. Finally, the demographics of the entire state of North Carolina are also considered as they compare to both the county and the local census tract and radius settings.

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

## 2 Environmental Justice Evaluation

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

- Permit application submitted by Domtar Paper Company, LLC
- Facility 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 the county and statewide census data
- County health assessment
- Sensitive receptors surrounding the area
- Local industrial sites (using the NCDEQ Community Mapping System:
https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=1eb0fbe2bcfb4cccb3cc 212af8a0b8c8)
- Outreach recommendations

Demographics for Martin County, Bertie County, and Washington County and the state are 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. Certain areas will be flagged as having the potential for environmental justice concerns using criteria set out in more detail in Section 5, Regional and Local Settings.

## 3 Proposed Project

Domtar Paper Company, LLC submitted a permit application for modification to the existing paper mill located near Plymouth, Martin County, North Carolina. The facility is classified as a major source for Title V ; prevention of significant deterioration (PSD); and hazardous air pollutants (HAPs). This application is a major PSD construction and operation air permit modification request for a proposed project to reconfigure the facility's Lignin Solids Removal Plant (LSRP). Domtar is proposing the following changes:

- Redesign the system to route a portion of process gases (Main Sources) to a new twophase packed bed caustic scrubber.
- Reduce corrosion and avoiding over pressurization of the existing high-volume lowconcentration (HVLC) system to improve operation of the plant by replacing select tanks.
- Add a dust collection system, including a wet cyclone to control acidic dust created when "wetcake" is dropped from the No. 2 Lignin Filter onto the No. 2 Lignin Filter Horizontal Conveyor during LSRP operation.

Table 1. Overview of LSRP Project Emissions Increases

| Pollutant | Post-Project <br> Emissions <br> (tons/yr) | Project Emission <br> Increases <br> (tons/yr) | PSD Significant <br> Emission Rates <br> (tons/yr) |
| :---: | :---: | :---: | :---: |
| TRS | 52.7 | 36.1 | 10 |
| $\mathrm{H}_{2} \mathrm{~S}$ | 31.1 | 18.2 | 10 |

The projected increased emissions of Total Reduced Sulfur (TRS) and Hydrogen Sulfide (H2S) shown in Table 1 required an evaluation of the best available control technologies (BACT). Domtar conducted the required BACT analysis, including effects on soils, vegetation, and visibility as part of the application. Additional technical discussion is available in the permit review as well as the application.

## 4 Geographic Area

Domtar Paper Company, LLC is located at 1375 NC-149, Plymouth, NC 27962 (Figure 1). The highest off-site ambient air impacts will occur at the plant fence line. A one-mile radius was used to evaluate the local demographics and socioeconomics to appropriately include the surrounding community and help inform the DAQ's public outreach efforts. The one-mile buffer around the facility is located within Martin County, Bertie County, and Washington Counties.


Figure 1. Facility location with the one-mile radius.
Martin, Bertie and Washington Counties are all designated as Tier 1 counties by the NC Department of Commerce 2021 rankings. According to the Department of Commerce, Tier 1 counties encompass the 40 most distressed counties based on average unemployment rate, median household income, percentage growth in population, and adjusted property tax per capita. Tier 2 counties encompass the next 40 counties based on this ranking system. The Domtar Paper company, LLC facility is located within census tract 9701, in Martin County, and the one-mile radius enters into census tracts 9502 and 9604 (Figure 2). Census tracts are small, relatively permanent statistical subdivisions of a county with a unique numeric code (US Census Bureau). Bertie County is identified by the N.C. Commission of Indian Affairs as a country in which the state recognized Meherrin Tribe resides.


Figure 2. Census Tracts surrounding the facility location.

## 5 Regional and Local Settings

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

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

For example, if a census tract has $35 \%$ of the population classified as low income but the county consists of $30 \%$ low income, the census tract would exceed the county average by $16.7 \%$ and thus be flagged as a potential area of concern. For this report, census data from 2010 and census data estimates from 2011-2015 and 2019 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 2019 and 2011-2015 estimates, the margin of error (MOE) has been included. This value is a measure of the possible variation of the estimate around the population value (U.S. Census Bureau). The Census Bureau standard for the MOE is at the $90 \%$ confidence level and may be any number between 0 and the MOE value in either direction (indicated by $+/-$ ).

### 5.1 Race and Ethnicity

## Regional Setting

According to the 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 2). The three most common racial groups across the state were White (65.3\%), Black or African American (21.2\%), and Hispanic or Latino (of any race) at $8.4 \%$.

Martin County had a total population of 24,505 individuals (Table 2). The two most common racial or ethnic groups in Martin County were White (52.2\%) and Black or African American (43.3\%). Black or African American was greater than 10\% different when compared to the state.

Bertie County had a total population of 21,282 individuals (Table 2). The two most common racial or ethnic groups in Bertie County were Black or African American (62.2\%) and White (34.7\%). Black or African American was greater than 10\% different when compared to the state.

Washington County had a total population of 13,228 individuals (Table 2). The two most common racial or ethnic groups in Washington County were Black or African American (49.6\%) and White (45.3\%). Black or African American was greater than 10\% different when compared to the state.

Table 2. Regional Setting - Race and Ethnicity

| Race and Ethnicity | North Carolina |  | Martin County |  | Bertie County |  | Washington County |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Total Population | 9,535,483 | 100.0\% | 24,505 | 100.0\% | 21,282 | 100.0\% | 13,228 | 100.0\% |
| White | 6,223,995 | 65.3\% | 12,790 | 52.2\% | 7,393 | 34.7\% | 5,998 | 45.3\% |
| Black or African American | 2,019,854 | 21.2\% | 10,601 | 43.3\% | 13,252 | 62.2\% | 6,567 | 49.6\% |
| American Indian or Alaska Native | 108,829 | 1.1\% | 65 | 0.3\% | 88 | 0.4\% | 21 | 0.2\% |
| Asian | 206,579 | 2.2\% | 71 | 0.3\% | 103 | 0.5\% | 38 | 0.3\% |
| Native Hawaiian and Other Pacific Islander | 5,259 | 0.1\% | 5 | 0.0\% | 0 | 0.0\% | 1 | 0.0\% |
| Some other Race | 15,088 | 0.2\% | 10 | 0.0\% | 6 | 0.0\% | 14 | 0.1\% |
| Two or More Races | 155,759 | 1.6\% | 194 | 0.8\% | 173 | 0.8\% | 123 | 0.9\% |
|  |  |  |  |  |  |  |  |  |
| HISPANIC OR LATINO (of any race) | 800,120 | 8.4\% | 769 | 3.1\% | 267 | 1.3\% | 466 | 3.5\% |

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

## Local Setting

According to the 2010 US Census Data Table 9: Hispanic or Latino, and Not Hispanic or Latino by race or ethnicity, the largest population within Census Tract 9701 was White ( $69.9 \%$ ). Black or African American was greater than 10\% different when compared with the state (Table 3). The largest population within Census Tract 9604 was Black or African American at $64.3 \%$. Black
or African American was greater than $10 \%$ different compared to the state. The largest population within Census Tract 9502 was Black or African American at 58.4\%. Black or African American was greater than 10\% different compared to the state.

Within the one-mile project radius, the largest population was Black or African American at 64\%. Black or African American and Hispanic or Latino (of any race) were greater than $10 \%$ different when compared to the state.

Table 3. Local Setting - Race and Ethnicity

| Race and Ethnicity | Project Area-1 Mile |  | Census Tract 9701 |  | Census Tract 9604 |  | Census Tract 9502 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Total Population | 1,299 | 100.0\% | 4,183 | 100.0\% | 7,985 | 100.0\% | 6,623 | 100.0\% |
| White | 323 | 25.0\% | 2,924 | 69.9\% | 2,537 | 31.8\% | 2,492 | 37.6\% |
| Black or African American | 831 | 64.0\% | 1,068 | 25.5\% | 5,138 | 64.3\% | 3,868 | 58.4\% |
| American Indian or Alaska Native | 0 | 0.0\% | 29 | 0.7\% | 49 | 0.6\% | 17 | 0.3\% |
| Asian | 0 | 0.0\% | 3 | 0.0\% | 84 | 1.1\% | 29 | 0.4\% |
| Native Hawaiian and Other Pacific Islander | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 1 | 0.0\% |
| Some other Race | 0 | 0.0\% | 1 | 0.0\% | 2 | 0.0\% | 5 | 0.0\% |
| Two or More Races | 0 | 0.0\% | 44 | 1.0\% | 96 | 1.2\% | 48 | 0.7\% |
| HISPANIC OR LATINO (of any race) | 145 | 11.0\% | 114 | 2.7\% | 79 | 1.0\% | 163 | 2.5\% |

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

### 5.2 Age and Sex

## Regional Setting

According to the 2010 US Census Data Table P 12: Sex by Age, and Table P13: Median Age, North Carolina had a total population of $9,535,483$ individuals (Table 4). The median age for females (38.7) was slightly higher than the median age for males (36).

Martin County had a total population of 24,505 individuals. The median age for females (45.1) was slightly higher than the median age for males (42.7) and were both higher than the median age for the state. Bertie County had a total population of 21,282 individuals. The median age for females was higher than the median age for males (39.5), and both were higher than the median age for the state. Washington County had a total population of 13,228 individuals. The median age for females (44.9) was slightly higher than the median age for males (42.8), and both were higher than the median age for the state.

Table 4. Regional Setting - Age Groups and Sex

|  | North Carolina |  |  |  |  |  | Martin County |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number |  |  | Percent |  |  | Number |  |  | Percent |  |  |
| Age | Both sexes | Male | Female | Both sexes | Male | Female | Both Sexes | Male | Female | Both Sexes | Male | Female |
| Total Population | 9,535,483 | 4,645,492 | 4,889,991 | 100\% | 49\% | 51\% | 24,505 | 11,433 | 13,072 | 100\% | 47\% | 53\% |
| Median Age | 37.4 | 36.0 | 38.7 |  |  |  | 44.0 | 42.7 | 45.1 |  |  |  |

Source: US Census Bureau, 2010 Census

| Age | Bertie County |  |  |  |  |  | Washington County |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number |  |  | Percent |  |  | Number |  |  | Percent |  |  |
|  | Both Sexes | Male | Female | Both Sexes | Male | Female | Both <br> Sexes | Male | Female | Both <br> Sexes | Male | Female |
| Total Population | 21,282 | 10,534 | 10,748 | 100\% | 50\% | 50\% | 13,228 | 6,221 | 7,007 | 100\% | 47\% | 53\% |
| Median Age | 42.9 | 39.5 | 45.7 |  |  |  | 44.0 | 42.8 | 44.9 |  |  |  |
| Source: US Census Bureau, 2010 Census |  |  |  |  |  |  |  |  |  |  |  |  |

## Local Setting

According to the 2010 US Census Data Table P 12: Sex by Age, and Table P13: Median Age, Census Tracts 9701, 9604, and 9502 all had slightly older median ages than the state, though all were younger than their respective counties (Table 5).

Table 5. Local Setting - Age Groups and Sex

| Age | Census Tract 9701 |  |  |  |  |  | Census Tract 9604 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number |  |  | Percent |  |  | Number |  |  | Percent |  |  |
|  | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| Total Population | 4,183 | 2,048 | 2,135 | 100\% | 49\% | 51\% | 7,985 | 4,211 | 3,774 | 100\% | 53\% | 47\% |
| Median Age | 43.2 | 42.3 | 43.9 |  |  |  | 41.9 | 37 | 47 |  |  |  |
| Source: US Census Bureau, 2010 Census |  |  |  |  |  |  |  |  |  |  |  |  |


|  | Census Tract 9502 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number |  |  | Percent |  |  |
|  | Both <br> sexes | Male | Female | Both <br> sexes | Male | Female |
| Total Population | 6,623 | 3,000 | 3,623 | $100 \%$ | $45 \%$ | $55 \%$ |
| Median Age | 41.9 | 39.8 | 42.9 |  |  |  |
| Source: US Census Bureau, 2010 Census |  |  |  |  |  |  |

## Project Radius

EJSCREEN identified a population of 1,299 individuals within the one-mile radius surrounding the facility. There was a slightly lower percentage of males than females in this area. EJSCREEN data does not provide the median age (Table 6).

Table 6. Project Radius - Age Groups and Sex

|  | Project Area - 1 Miles |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number |  |  | Percent |  |  |
|  | Both <br> sexes | Male | Female | Both <br> sexes | Male | Female |
| Total Population | 1,299 | 635 | 664 | $100 \%$ | $49 \%$ | $51 \%$ |
| Median Age |  |  |  |  |  |  |
| Source: US Census Bureau, 2010 Census. Obtained through EJSCREEN 2019 |  |  |  |  |  |  |

### 5.3 Disability

## Regional Setting

According to the 2019 American Community Survey 5-Year Estimates, Table S1810 Disability Characteristics from the US Census Bureau, the state of North Carolina had an estimated total population of 10,060,249 noninstitutionalized citizens. Of those individuals, an estimated 13.4\% (MOE +/- 0.1\%) had a disability. American Indian and Alaskan Native had the highest estimated disability rate of $18.2 \%$ (MOE +/- 0.8\%). Black or African American and White (not Hispanic or Latino) were the next highest population estimates with disabilities in North Carolina, at 14.6\% (MOE +/-0.2\%) and 14.5\% (MOE +/- 0.1\%), respectively (Table 7).

Martin County had an estimated total population of 22,698 noninstitutionalized citizens. Of those, an estimated $19.0 \%$ (MOE +/- $1.6 \%$ ) had a disability. The largest population of disabled civilians was American Indian and Alaska Native (33.3\%, MOE 44.3\%), followed by Two or more races (23.3\%, MOE +/- 16.9\%). American Indian and Alaska Native, Two or more races, and Hispanic or Latino (of any race) were all greater than $10 \%$ different when compared to the state.

Bertie County had an estimated total population of 18,105 noninstitutionalized citizens. Of those, an estimated $22.4 \%$ (MOE +/- 1.9\%) had a disability. The largest population of disabled civilians was American Indian and Alaska Native (25.5\%, MOE 9.9\%), followed by Black or African American (23.5\%, MOE +/- 2.5\%). American Indian and Alaska Native, Two or more races, and Hispanic or Latino (of any race) were all greater than $10 \%$ different when compared to the state.

Washington County had an estimated total population of 11,759 noninstitutionalized citizens. Of those, an estimated $21.7 \%$ (MOE +/- 2.8\%) had a disability. The largest population of disabled civilians was American Indian and Alaska Native ( $25.0 \%$, MOE 17.3\%), followed by Black or African American (15.0\%, MOE +/- 1.1\%). American Indian and Alaska Native, Two or more races, and Hispanic or Latino (of any race) were all greater than $10 \%$ different when compared to the state.

Table 7. Regional Setting - Disability

| Subject | North Carolina |  |  |  |  |  | Martin County |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total |  | With a Disability |  | Percent with a Disability |  | Total |  | With a Disability |  | Percent with a Disability |  |
|  | Estimate | Margin of Error +/- | Estimate | Margin of Error +/- | Estimate | Margin of Error +/- | Estimate | Margin of Error +/- | Estimate | Margin of Error +/- | Estimate | Margin of Error +/- |
| Total civilian noninstitutionalized population | 10,060,249 | 2,163 | 1,352,783 | 8,378 | 13.4\% | 0.1 | 22,698 | 65 | 4,306 | 367 | 19.0\% | 1.6 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |  |  |  |  |  |  |
| White (not Hispanic or Latino) | 6,357,724 | 2,614 | 919,485 | 7,082 | 14.5\% | 0.1 | 11,761 | 75 | 2,470 | 285 | 21.0\% | 2.4 |
| Black or African American | 2,144,532 | 5,119 | 312,780 | 4,850 | 14.6\% | 0.2 | 9,608 | 153 | 1,723 | 227 | 17.9\% | 2.3 |
| American Indian and Alaska Native | 120,813 | 1,815 | 22,048 | 842 | 18.2\% | 0.8 | 54 | 54 | 18 | 28 | 33.3\% | 44.3 |
| Asian | 290,103 | 1,968 | 15,414 | 800 | 5.3\% | 0.3 | 139 | 10 | 0 | 23 | 0.0\% | 22.0 |
| Native Hawaiian and Other Pacific Islander | 6,694 | 677 | 638 | 183 | 9.5\% | 2.7 | 77 | 85 | 0 | 23 | 0.0\% | 34.6 |
| Some other Race | 313,224 | 7,444 | 16,846 | 1,231 | 5.4\% | 0.4 | 237 | 154 | 0 | 23 | 0.0\% | 13.7 |
| Two or more races | 265,791 | 6,168 | 29,353 | 1,430 | 11.0\% | 0.4 | 257 | 132 | 60 | 46 | 23.3\% | 16.9 |
| Hispanic or Latino | 942,342 | 855 | 59,694 | 2,120 | 6.3\% | 0.2 | 911 | 4 | 41 | 43 | 4.5\% | 4.7 |
| Source: US Census Bureau, ACS 2019 5-year Estimates <br> All bolded and orange highlighted cells indicate a difference that is greater than $10 \%$ when compared to the State |  |  |  |  |  |  |  |  |  |  |  |  |


| Subject | Bertie County |  |  |  |  |  | Washington 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 | 18,105 | 187 | 4,054 | 352 | 22.4\% | 1.9 | 11,759 | 86 | 2,553 | 334 | 21.7\% | 2.8 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |  |  |  |  |  |  |
| White (not Hispanic or Latino) | 6,383 | 97 | 1,394 | 222 | 21.8\% | 3.4 | 5,245 | 59 | 1,356 | 261 | 25.9\% | 5.0 |
| Black or African American | 11,103 | 202 | 2,611 | 289 | 23.5\% | 2.5 | 5,551 | 251 | 1,124 | 226 | 20.2\% | 4.1 |
| American Indian and Alaska Native | 98 | 53 | 25 | 17 | 25.5\% | 9.9 | 26 | 38 | 18 | 30 | 69.2\% | 59.4 |
| Asian | 135 | 19 | 11 | 14 | 8.1\% | 10.3 | 26 | 43 | 15 | 25 | 57.7\% | 16.0 |
| Native Hawaiian and Other Pacific Islander | 1 | 2 | 0 | 19 | 0.0\% | 100.0 | 0 | 19 | 0 | 19 | 0.0\% | ** |
| Some other Race | 147 | 101 | 0 | 19 | 0.0\% | 21.0 | 230 | 203 | 15 | 32 | 6.5\% | 15.0 |
| Two or more races | 154 | 104 | 13 | 23 | 8.4\% | 15.5 | 526 | 347 | 12 | 17 | 2.3\% | 3.6 |
| Hispanic or Latino | 325 | 48 | 53 | 36 | 16.3\% | 10.8 | 615 | 10 | 30 | 46 | 4.9\% | 7.5 |
| Source: US Census Bureau, ACS 2019 5-year Estimates <br> All bolded and orange highlighted cells indicate a difference that is greater than $10 \%$ when compared to the State |  |  |  |  |  |  |  |  |  |  |  |  |

## Local Setting

According to the 2019 American Community Survey 5-Year Estimates, Table S1810 Disability Characteristics from the US Census Bureau, Census Tract 9701 had an estimated total population of 4,494 noninstitutionalized citizens (Table 8). Of those individuals, an estimated $17.8 \%$ (MOE +/-3.8\%) had a disability. The subject with the largest population of disabled civilians was Two or more Races ( $40.3 \%$, MOE +/- $36.1 \%$ ), followed by Black or African American at $18.7 \%$ (MOE +/- $7.8 \%$ ) and White at $17.2 \%$ (MOE +/- 4.9).

Census Tract 9604 had a total population of 5,266 noninstitutionalized citizens. Of those individuals, an estimated $23.4 \%$ (MOE +/- 4.0) had a disability. The subject with the largest population of disabled civilians was Hispanic or Latino (42.2\%, MOE +/-57.8\%), followed by American Indian and Alaskan Native at 29.6\% (MOE +/- 7.4\%) and Black or African American at $26.4 \%$ ( $\mathrm{MOE}+/-6.3$ ).

Census Tract 9502 had a total population of 2,125 noninstitutionalized citizens. Of those individuals, an estimated $26.4 \%$ (MOE +/- 7.5) had a disability. The subject with the largest population of disabled civilians was Two or more Races (29.4\%, MOE +/- 20.0), followed by White at $27.6 \%$ (MOE +/- 7.6) and Black or African American at 22.8\% (MOE +/- 6.8).

In all tracts, the percentage of the population with a disability had a greater than $10 \%$ difference when compared to the State with Census Tract 9502 having a greater than 10\% difference when compared to both the County and the State. Additionally, across all tracts, of the segments of the population that had a percentage of people with a disability, all had a greater than 10\% difference when compared to the State with many having a greater than $10 \%$ difference when compared to both the County and the State.

Table 8. Local Setting - Disability

| Subject | Census Tract 9701 |  |  |  |  |  | Census Tract 9604 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 4,494 | 302 | 798 | 176 | 17.8\% | 3.8 | 5,266 | 448 | 1,233 | 217 | 23.4\% | 4.0 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |  |  |  |  |  |  |
| White (not Hispanic or Latino) | 2952 | 294 | 507 | 155 | 17.2\% | 4.9 | 1,762 | 233 | 343 | 99 | 19.5\% | 5.3 |
| Black or African American | 1325 | 276 | 248 | 123 | 18.7\% | 7.8 | 3,240 | 436 | 855 | 207 | 26.4\% | 6.3 |
| American Indian and Alaska Native | 26 | 42 | 0 | 12 | 0.0\% | 60.4 | 81 | 53 | 24 | 17 | 29.6\% | 7.4 |
| Asian | 0 | 12 | 0 | 12 | 0.0\% | ** | 108 | 41 | 11 | 14 | 10.2\% | 11.8 |
| Native Hawaiian and Other Pacific Islander | 0 | 12 | 0 | 12 | 0.0\% | ** | 0 | 17 | 0 | 17 | 0.0\% | ** |
| Some other Race | 23 | 30 | 0 | 12 | 0.0\% | 64.2 | 0 | 17 | 0 | 17 | 0.0\% | ** |
| Two or more races | 72 | 52 | 29 | 26 | 40.3\% | 36.1 | 49 | 233 | 343 | 99 | 19.5\% | 5.3 |
| Hispanic or Latino | 125 | 104 | 20 | 28 | 16.0\% | 22.9 | 45 | 46 | 19 | 31 | 42.2\% | 57.8 |
| Source: US Census Bureau, ACS 2019 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 both the County and the State |  |  |  |  |  |  |  |  |  |  |  |  |


| Subject | Census Tract 9502 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total |  | With a Disability |  | Percent with a Disability |  |
|  | Estimate | Margin of Error +/- | Estimate | Margin of Error +/- | Estimate | Margin of Error +/- |
| Total civilian noninstitutionalized population | 2,126 | 297 | 562 | 158 | 26.4\% | 7.5 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |
| White (not Hispanic or Latino) | 2,036 | 272 | 562 | 158 | 27.6\% | 7.6 |
| Black or African American | 3,296 | 367 | 752 | 230 | 22.8\% | 6.8 |
| American Indian and Alaska Native | 0 | 17 | 0 | 17 | 0.0\% | ** |
| Asian | 0 | 17 | 0 | 17 | 0.0\% | ** |
| Native Hawaiian and Other Pacific Islander | 0 | 17 | 0 | 17 | 0.0\% | ** |
| Some other Race | 33 | 57 | 0 | 17 | 0.0\% | 53.6 |
| Two or more races | 34 | 55 | 10 | 16 | 29.4\% | 20.0 |
| Hispanic or Latino | 90 | 127 | 0 | 17 | 0.0\% | 31.1 |

Source: US Census Bureau, ACS 2019 5-year Estimates
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 both the County and the State

### 5.4 Poverty

## Regional Setting

According to the Census Table S1701, Poverty Status in the Past 12 Months, 2019 American Community Survey 5 -Year Estimates, from the US Census Bureau, North Carolina had an estimated population of $9,984,891$, with $14.7 \%$ (MOE +/- $0.2 \%$ ) below the poverty level (Table 9). Across all subjects, Some Other Race had the highest percent living below the poverty level at $27.2 \%$ ( $\mathrm{MOE}+/-1.2 \%$ ). The next three subjects with the highest poverty level were Hispanic or Latino at $26.4 \%$ (MOE +/- 0.6\%), American Indian and Alaska Native at $24.9 \%$ (MOE +/$1.3 \%$ ), and Black or African American at 22.5\% (MOE +/- 0.4\%). Households below 200 percent of the federal poverty level ${ }^{1}$ are calculated by multiplying the percentage point by the poverty level for the number of individuals in that household. For example, to calculate 200\% of the poverty level for a household of four in 2021, ${ }^{2}$ that would be $\$ 53,000(2.0 \times \$ 26,500)$.

Martin County had an estimated population of 22,599 with $19.7 \%$ (MOE +/-3.1\%) living below the poverty level. Across all subjects, Hispanic or Latino had the highest percent living below the poverty level at $42.0 \%$ (MOE +/- 22.7\%), followed by American Indian and Alaskan Native (33.3\%) and Black or African American (23.7\%). White, American Indian or Alaska Native, and Hispanic or Latino all had estimates greater than $10 \%$ different when compared to the state values.

Bertie County had an estimated population of 18,058 with 23.2\% (MOE +/-3.6\%) living below the poverty level. Across all subjects, Some other Race had the highest percent living below the poverty level at $40.8 \%$ (MOE +/- 40.9\%). Some other Race, Black or African American, and Hispanic or Latino all had estimates greater than $10 \%$ different when compared to the state values (Table 10).

Washington County had an estimated population of 11,727 with $22.3 \%$ (MOE +/- $4.2 \%$ ) living below the poverty level. Across all subjects, Some other Race had the highest percent living below the poverty level at 48.3\% (MOE +/- 48.6\%). The total population for whom poverty status is determined, Black or African American and Some other Race all had estimates greater than $10 \%$ different when compared to the state values.

[^0]Table 9. Regional Setting - Poverty

| Subject | North Carolina |  |  |  |  |  | Martin 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 | 9,984,891 | 1,988 | 1,467,591 | 17,844 | 14.7\% | 0.2 | 22,599 | 96 | 4,463 | 701 | 19.7\% | 3.10 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 6,320,337 | 2,990 | 644,440 | 10,085 | 10.2\% | 0.2 | 11,748 | 76 | 1,775 | 508 | 15.1\% | 4.30 |
| Black or African American | 2,116,769 | 5,452 | 475,973 | 8,126 | 22.5\% | 0.4 | 9,522 | 160 | 2,256 | 448 | 23.7\% | 4.60 |
| American Indian and Alaska Native | 120,328 | 1,846 | 29,981 | 1,608 | 24.9\% | 1.3 | 54 | 54 | 18 | 28 | 33.3\% | 44.30 |
| Asian | 285,786 | 2,021 | 30,707 | 2,034 | 10.7\% | 0.7 | 139 | 10 | 7 | 13 | 5.0\% | 9.80 |
| Native Hawaiian and Other Pacific Islander | 6,630 | 675 | 1,360 | 332 | 20.5\% | 4.6 | 77 | 85 | 0 | 23 | 0.0\% | 34.60 |
| Some other Race | 311,206 | 7,397 | 84,699 | 4,639 | 27.2\% | 1.2 | 237 | 154 | 56 | 78 | 23.6\% | 28.80 |
| Two or more races | 262,580 | 6,121 | 54,627 | 2,414 | 20.8\% | 0.8 | 257 | 132 | 53 | 52 | 20.6\% | 19.00 |
| Hispanic or Latino | 940,295 | 1,251 | 248,474 | 6,013 | 26.4\% | 0.6 | 991 | 4 | 383 | 207 | 42.0\% | 22.70 |
| All individuals below: |  |  |  |  |  |  |  |  |  |  |  |  |
| 200 percent of poverty level | 3,420,476 | 24,183 |  |  |  |  | 9,819 | 766 |  |  |  |  |
| Source: American Community Survey 5-year Estimates, 2019 <br> All bolded and orange cells indicate a difference that is greater than $5 \%$ when compared to the State |  |  |  |  |  |  |  |  |  |  |  |  |

Table 10. Regional Setting - Poverty (cont'd)

| Subject | Bertie County |  |  |  |  |  | Washington 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 | 18,058 | 200 | 4,181 | 662 | 23.2\% | 3.60 | 11,727 | 121 | 2,612 | 491 | 22.3\% | 4.20 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 6,383 | 97 | 583 | 179 | 9.1\% | 2.80 | 5,173 | 129 | 607 | 265 | 11.7\% | 5.00 |
| Black or African American | 11,056 | 213 | 3,505 | 617 | 31.7\% | 5.60 | 5,593 | 238 | 1,877 | 394 | 33.6\% | 7.30 |
| American Indian and Alaska Native | 98 | 53 | 0 | 19 | 0.0\% | 29.20 | 26 | 38 | 0 | 19 | 0.0\% | 60.40 |
| Asian | 135 | 19 | 0 | 19 | 0.0\% | 22.60 | 26 | 43 | 0 | 19 | 0.0\% | 60.40 |
| Native Hawaiian and Other Pacific Islander | 1 | 2 | 0 | 19 | 0.0\% | 100.00 | 0 | 19 | 0 | 19 | 0.0\% | ** |
| Some other Race | 147 | 101 | 60 | 81 | 40.8\% | 40.90 | 230 | 203 | 111 | 145 | 48.3\% | 48.60 |
| Two or more races | 154 | 104 | 33 | 53 | 21.4\% | 28.50 | 524 | 347 | 4 | 8 | 0.8\% | 2.10 |
| Hispanic or Latino | 325 | 48 | 79 | 84 | 24.3\% | 25.90 | 613 | 12 | 128 | 157 | 20.9\% | 25.40 |
| All individuals below: |  |  |  |  |  |  |  |  |  |  |  |  |
| 200 percent of poverty level | 8,668 | 731 |  |  |  |  | 5,549 | 684 |  |  |  |  |
| Source: American Community Survey 5-year Estimates, 2019 <br> 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, 2019 American Community Survey 5-Year Estimates, from the US Census Bureau, Census Tract 9701 had an estimated population of 4,436 with $24.3 \%$ (MOE +/-7.9\%) living below the poverty level (Table 11). The total population for whom poverty status is determined as well as White and Black or African American had poverty levels higher than $5 \%$ different when compared to both the county and state.

Census Tract 9604 had an estimated population of 5,266 individuals, with $27.9 \%$ (MOE $+/-5.1 \%$ ) living below the poverty level. The total population for whom poverty status is determined as well as Black or African American had poverty levels higher than 5\% different when compared to both the county and state.

Census Tract 9502 had an estimated population of 5,459 individuals, with $27.6 \%$ (MOE $+/-8.3 \%$ ) living below the poverty level. The total population for whom poverty status is determined as well as Black or African American had poverty levels higher than 5\% different when compared to both the county and state.

Table 11. Local Setting- Poverty

| Subject | Census Tract 9701 |  |  |  |  |  | Census Tract 9604 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 4,436 | 290 | 1,076 | 373 | 24.3\% | 7.90 | 5,266 | 448 | 1,467 | 334 | 27.9\% | 5.10 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 2,915 | 293 | 564 | 348 | 19.3\% | 11.20 | 1,762 | 233 | 106 | 56 | 6.0\% | 3.10 |
| Black or African American | 1,304 | 265 | 506 | 211 | 38.8\% | 13.90 | 3,240 | 436 | 1,361 | 337 | 42.0\% | 7.50 |
| American Indian and Alaska Native | 26 | 42 | 0 | 12 | 0.0\% | 60.40 | 81 | 53 | 0 | 17 | 0.0\% | 33.50 |
| Asian | 0 | 12 | 0 | 12 | 0.0\% | ** | 108 | 41 | 0 | 17 | 0.0\% | 27.10 |
| Native Hawaiian and Other Pacific Islander | 0 | 12 | 0 | 12 | 0.0\% | ** | 0 | 17 | 0 | 17 | 0.0\% | ** |
| Some other Race | 23 | 30 | 0 | 12 | 0.0\% | 64.20 | 0 | 17 | 0 | 17 | 0.0\% | ** |
| Two or more races | 72 | 52 | 6 | 9 | 8.3\% | 14.90 | 49 | 64 | 0 | 17 | 0.0\% | 44.00 |
| Hispanic or Latino | 125 | 104 | 6 | 9 | 4.8\% | 8.30 | 45 | 46 | 19 | 31 | 42.2\% | 57.80 |
| All individuals below: |  |  |  |  |  |  |  |  |  |  |  |  |
| 200 percent of poverty level | 1,885 | 389 |  |  |  |  | 2,612 | 442 |  |  |  |  |
| Source: American Community Survey 5-year Estimates, 2019 <br> All bolded and blue cells indicate a difference that is greater than $5 \%$ when compared to the county and the State. |  |  |  |  |  |  |  |  |  |  |  |  |


| Subject | Census Tract 9502 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total |  | Below poverty level |  | Percent below poverty level |  |
|  | Estimate | Margin of Error +/- | Estimate | Margin of Error +/- | Estimate | Margin of Error +/- |
| Population for whom poverty status is determined | 5,459 | 410 | 1,506 | 432 | 27.6\% | 8.30 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |
| White | 1,964 | 281 | 221 | 130 | 11.3\% | 6.70 |
| Black or African American | 3,338 | 364 | 1,285 | 403 | 38.5\% | 11.80 |
| American Indian and Alaska Native | 0 | 17 | 0 | 17 | 0.0\% | ** |
| Asian | 0 | 17 | 0 | 17 | 0.0\% | ** |
| Native Hawaiian and Other Pacific Islander | 0 | 17 | 0 | 17 | 0.0\% | ** |
| Some other Race | 33 | 57 | 0 | 17 | 0.0\% | 53.60 |
| Two or more races | 34 | 55 | 0 | 17 | 0.0\% | 52.80 |
| Hispanic or Latino | 90 | 127 | 0 | 17 | 0.0\% | 31.10 |
| All individuals below: |  |  |  |  |  |  |
| 200 percent of poverty level | 2,679 | 494 |  |  |  |  |
| Source: American Community Survey 5-year Estimates, 2019 <br> All bolded and blue cells indicate a difference that is greater than $5 \%$ when compared to the county and the State. |  |  |  |  |  |  |

### 5.5 Household Income

## Regional Setting

The following table (Table 12) was compiled using data from the Census Table S1901, Income in the Past 12 Months (in 2019 Inflation-Adjusted Dollars) 2019 American Community Survey 5Year Estimates for North Carolina. The North Carolina household income range with the highest percent was for $\$ 50,000$ to $\$ 74,999$, at $18.0 \%$. The state median household income was $\$ 54,602$ and the mean income was $\$ 76,940$.

The household income range for Martin County with the highest percent was $\$ 35,000$ to $\$ 49,999$ at $17.9 \%$ (MOE $+/-2.6 \%$ ). The median income was $\$ 40,090$ and the mean income was $\$ 55,603$, both lower than that of the state. All income ranges below $\$ 49,999$ were all greater than $10 \%$ different when compared to the state.

The household income range for Bertie County with the highest percent was $\$ 15,000$ to $\$ 24,999$ at $16.6 \%$ (MOE $+/-2.9 \%$ ). The median income was $\$ 35,527$ and the mean income was $\$ 55,018$, both lower than that of the state. All income ranges below $\$ 49,999$ were all greater than $10 \%$ different when compared to the state.

The household income range for Washington County with the highest percent was $\$ 50,000$ to $\$ 74,999$ at $20.8 \%$ ( $\mathrm{MOE}+/-4.2 \%$ ). The median income was $\$ 35,979$ and the mean income was $\$ 48,062$, both lower than that of the state. The income ranges below $\$ 24,999$ and between $\$ 35,000$ and $\$ 74,999$ were all greater than $10 \%$ different when compared to the state.

Table 12. Regional Setting - Household Income

| Subject | North Carolina |  | Martin County |  | Bertie County |  | Washington County |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Households |  | Households |  | Households |  | Households |  |
|  | Estimate | Margin of Error +/- | Estimate | Margin of Error +/- | Estimate | Margin of Error +/- | Estimate | Margin of Error +/- |
| Total | 3,965,482 | 10,327 | 9,378 | 286 | 7,909 | 321 | 4,977 | 293 |
| Less than \$10,000 | 6.4\% | 0.1 | 9.3\% | 2.2 | 11.7\% | 2.8 | 18.4\% | 4.4 |
| \$10,000 to \$14,999 | 5.0\% | 0.1 | 7.3\% | 1.9 | 9.5\% | 2.3 | 6.3\% | 2.4 |
| \$15,000 to \$24,999 | 10.3\% | 0.1 | 13.6\% | 2.2 | 16.6\% | 2.9 | 14.8\% | 4.7 |
| \$25,000 to \$34,999 | 10.3\% | 0.1 | 14.3\% | 2.7 | 11.5\% | 2.7 | 8.7\% | 2.5 |
| \$35,000 to \$49,999 | 13.9\% | 0.1 | 17.9\% | 2.6 | 15.1\% | 3.1 | 16.6\% | 3.4 |
| \$50,000 to \$74,999 | 18.0\% | 0.1 | 15.5\% | 2.4 | 16.2\% | 2.7 | 20.8\% | 4.2 |
| \$75,000 to \$99,999 | 12.4\% | 0.1 | 12.0\% | 2.2 | 6.9\% | 1.7 | 9.3\% | 3 |
| $\begin{gathered} \$ 100,000 \text { to } \\ \$ 149,999 \end{gathered}$ | 13.1\% | 0.1 | 5.7\% | 1.3 | 6.0\% | 1.4 | 3.1\% | 1.2 |
| $\begin{gathered} \$ 150,000 \text { to } \\ \$ 199,999 \end{gathered}$ | 5.1\% | 0.1 | 1.9\% | 0.9 | 4.3\% | 1.6 | 0.6\% | 0.7 |
| \$200,000 or more | 5.4\% | 0.1 | 2.4\% | 1.1 | 2.4\% | 1.3 | 1.4\% | 1.2 |
| Median income (dollars) | 54,602 | 231 | 40,090 | 2,822 | 35,527 | 2,262 | 35,979 | 5,671 |
| Mean income (dollars) | 76,940 | 352 | 55,603 | 5,612 | 55,018 | 6,638 | 48,062 | 8,294 |
| Per Capita Income | 30,783 | 154 | 23,575 | 2,099 | 22,947 | 2,469 | 23,431 | 4,351 |

Source: US Census, 2019 ACS 5-Year Estimates.
All orange and bolded highlighted cells indicate a difference that is greater than $10 \%$ when compared to the state

## Local Setting

The household income range for Census Tract 9701 with the highest percent was $\$ 50,000$ to $\$ 74,999$ at $17.4 \%$ (MOE +/- $5.5 \%$ ). The median income was $\$ 45,963$ and the mean income was $\$ 61,469$ (Table 13). The income ranges from $\$ 10,000$ to $\$ 24,999$ had percentages that were more than $10 \%$ greater than either the state or county. The income ranges from $\$ 10,000$ to \$24,999 had a greater than $10 \%$ difference when compared to the State, with \$10,000 to \$14,999 having a greater than $10 \%$ difference when compared to both the County and the State.

The household income range for Census Tract 9604 with the highest percent was $\$ 10,000$ to $\$ 14,999$ at $16.0 \%$ (MOE +/- 4.9\%). The median income was $\$ 32,770$ and the mean income was $\$ 55,249$. The income ranges less than $\$ 34,999$ all had a greater than $10 \%$ difference when compared to the state, with $\$ 10,000$ to $\$ 14,999$ having a greater than $10 \%$ difference when compared to both the County and the State.

The household income range for Census Tract 9502 with the highest percent Less than $\$ 10,000$ at $24.1 \%$ (MOE +/- 7.3\%). The median income was $\$ 29,760$ and the mean income was $\$ 43,753$. The income ranges Less than $\$ 10,000$ and $\$ 15,000$ to $\$ 24,999$ had a greater than $10 \%$ difference when compared to both the County and the State.

The household income range for the one-mile radius with the highest percent was Less than $\$ 15,000$ at $41.0 \%$. EJSCREEN data provides different income ranges that cannot be compared in the same manner. (Table 14).

Table 13. Local Setting - Household Income

| Subject | Census Tract 9701 |  | Census Tract 9604 |  | Census Tract 9502 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Households |  | Households |  | Households |  |
|  | Estimate | Margin of Error +/- | Estimate | Margin of Error +/- | Estimate | Margin of Error +/- |
| Total | 1,739 | 137 | 2,446 | 242 | 2,592 | 239 |
| Less than \$10,000 | 6.2\% | 3.6 | 11.7\% | 3.8 | 24.1\% | 7.3 |
| \$10,000 to \$14,999 | 8.5\% | 4.3 | 16.0\% | 4.9 | 5.2\% | 3.4 |
| \$15,000 to \$24,999 | 13.0\% | 4.8 | 14.2\% | 5.6 | 16.9\% | 6.6 |
| \$25,000 to \$34,999 | 11.2\% | 4.1 | 12.1\% | 5.3 | 5.9\% | 2.9 |
| \$35,000 to \$49,999 | 14.5\% | 3.8 | 10.7\% | 4.6 | 12.4\% | 4.4 |
| \$50,000 to \$74,999 | 17.4\% | 5.5 | 15.0\% | 4.8 | 20.5\% | 6.9 |
| \$75,000 to \$99,999 | 13.3\% | 5.1 | 8.0\% | 2.9 | 11.7\% | 5.4 |
| $\begin{gathered} \$ 100,000 \text { to } \\ \$ 149,999 \end{gathered}$ | 8.5\% | 3.4 | 5.9\% | 3 | 1.6\% | 1.4 |
| $\begin{gathered} \$ 150,000 \text { to } \\ \$ 199,999 \end{gathered}$ | 5.6\% | 3.7 | 4.8\% | 2.9 | 0.0\% | 1.3 |
| \$200,000 or more | 1.8\% | 1.7 | 1.6\% | 1.4 | 1.7\% | 1.9 |
| Median income (dollars) | 45,963 | 6,459 | 32,770 | 4,785 | 29,760 | 13,156 |
| Mean income (dollars) | 61,469 | 7,952 | 55,249 | 10,917 | 43,753 | 9,172 |
| Per Capita Income | 24,683 | 3,070 | 21,680 | 3,954 | 24,736 | 5,029 |

Source: US Census, 2019 ACS 5-Year Estimates.
All orange and bolded highlighted cells indicate a difference that is greater than $10 \%$ when compared to the state
All blue and bolded highlighted cells indicate a difference that is greater than $10 \%$ when compared to the state and the county

Table 14. Project Radius - Household Income

| Subject | 1 mile |  |  |
| :---: | :---: | :---: | :---: |
|  | Number | Percent | MOE |
| Number of <br> Households | 513 | $100 \%$ |  |
| Per Capita Income <br> (dollars) | 22,648 |  |  |
| Household Income |  |  |  |
| $<\$ 15,000$ | 209 | $41.0 \%$ | 154 |
| $\$ 15,000-\$ 25,000$ | 71 | $14.0 \%$ | 127 |
| $\$ 25,000-\$ 50,000$ | 104 | $20.0 \%$ | 116 |
| $\$ 50,000-\$ 75,000$ | 64 | $12.0 \%$ | 53 |
| $\$ 75,000+$ | 65 | $13.0 \%$ | 76 |
| Source: EJSCREEN 2019 |  |  |  |

## Per Capita Income

The following table (Table 12) was compiled using data from the Census Table S1901, Income in the Past 12 Months (in 2019 Inflation-Adjusted Dollars) 2019 American Community Survey 5Year Estimates for North Carolina. The North Carolina household income range with the highest percent was for $\$ 50,000$ to $\$ 74,999$, at $18.0 \%$. The state median household income was $\$ 54,602$ and the mean income was $\$ 76,940$.

The household income range for Martin County with the highest percent was $\$ 35,000$ to $\$ 49,999$ at $17.9 \%$ (MOE $+/-2.6 \%$ ). The median income was $\$ 40,090$ and the mean income was $\$ 55,603$, both lower than that of the state. All income ranges below $\$ 49,999$ were greater than $10 \%$ different when compared to the state.

The household income range for Bertie County with the highest percent was \$15,000 to \$24,999 at $16.6 \%$ (MOE +/- $2.9 \%$ ). The median income was $\$ 35,527$ and the mean income was $\$ 55,018$, both lower than that of the state. All income ranges below $\$ 49,999$ were greater than $10 \%$ different when compared to the state.

The household income range for Washington County with the highest percent was \$50,000 to $\$ 74,999$ at $20.8 \%$ (MOE +/- $4.2 \%$ ). The median income was $\$ 35,979$ and the mean income was $\$ 48,062$, both lower than that of the state. The income ranges below $\$ 24,999$ and between $\$ 35,000$ and $\$ 74,999$ were greater than $10 \%$ different when compared to the state.

## 6 Limited English Proficiency (LEP)

Per the Safe Harbor Guidelines, should an LEP Group be identified during the permit application process, written translations of vital documents for each eligible LEP language group that constitutes $5 \%$ or includes 1,000 members (whichever is less) of the population of persons eligible to be served or likely to be affected or encountered. If there are fewer than 50 persons in a language group that reaches the $5 \%$ trigger, then DEQ will not translate vital written materials, but instead will provide written notice in the primary language of the LEP language group of the right to receive competent oral interpretation of those written materials, free of cost. The safe harbor provisions apply to the translation of written documents only. Safe harbor guidelines are based on EPA guidance for LEP persons and implemented by DEQ when deemed appropriate. Only languages where an estimated population of greater than 0 who speak English less than "very well" are included in this analysis. The population 5 years and over who speak English less than "very well" for Spanish in Census Tract 9701 was greater than 5\% (8.3\%).

Table 15. Limited English Proficiency

| LANGUAGE <br> SPOKEN AT <br> HOME | Census Tract 9701 |  | Census Tract 9604 |  | Census Tract 9502 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Estimate | Margin of <br> Error | Estimate | Margin of <br> Error | Estimate | Margin of <br> Error |
| Total (population 5 <br> years and over): | 4,391 | 421 | 7,519 | 500 | 5,967 | 416 |
| Speak only English | 4,095 | 413 | 7,044 | 489 | 5,881 | 382 |
| Spanish or Spanish <br> Creole: | 294 | 190 | 403 | 126 | 86 | 147 |
| Speak English <br> "very well" | 72 | 58 | 247 | 140 | 86 | 147 |
| Speak English less <br> than "very well" | 222 | 192 | 156 | 83 | 0 | 17 |
| Chinese: | 0 | 0 | 27 | 33 | 0 | 0 |
| Speak English "very <br> well" | 0 | 0 | 13 | 16 | 0 | 0 |
| Speak English less <br> than "very well" | 0 | 0 | 14 | 17 | 0 | 0 |
| Thai: | 0 | 0 | 5 | 7 | 0 | 0 |
| Speak English "very <br> well" | 0 | 0 | 0 | 17 | 0 | 0 |
| Speak English less <br> than "very well" | 0 | 0 | 5 | 7 | 0 | 0 |
| Laotian: | 0 | 0 | 5 | 8 | 0 | 0 |
| Speak English "very <br> well" | 0 | 0 | 0 | 17 | 0 | 0 |
| Speak English less <br> than "very well" | 0 | 0 | 5 | 8 | 0 | 0 |
| Vietnamese: | 0 | 0 | 8 | 16 | 0 | 0 |
| Speak English "very <br> well" | 0 | 0 | 0 | 17 | 0 | 0 |
| Speak English less <br> than "very well" | 0 | 0 | 8 | 16 | 0 | 0 |
| Tagalog: | 0 | 0 | 19 | 31 | 0 | 0 |
| Speak English "very <br> well" | 0 | 0 | 0 | 17 | 0 | 0 |
| Speak English less <br> than "very well" | 0 | 0 | 19 | 31 | 0 | 0 |
| Source: US Census, ACS 5-Year | estimates $2011-2015$ |  | 0 | 0 |  |  |

## 7 Educational Attainment

## Regional Setting

The following data was obtained through the US Census Bureau Table S1501, American Community Survey 20195 -year Estimates (Table 16). Martin County, Bertie County, and Washington County had very higher percentages of individuals who graduated from high school (or equivalent) while also having considerably lower percentages of individuals who had attained a Bachelor's degree when compared to the state.

Table 16. Regional Setting- Educational Attainment (above 25 years old)

| Subject |  | North Carolina |  |  |  | Martin County |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number |  | Percent |  | Number |  | Percent |  |  |
|  | Estimate | MOE +/- | Estimate | MOE +/- | Estimate | MOE +/- | Estimate | MOE +/- |  |
| Total Above 25 | $6,983,859$ | 1,636 |  |  | 16,495 | 77 |  |  |  |
| Less than 9th grade | 314,545 | 4,322 | $4.5 \%$ | 0.1 | 963 | 191 | $5.8 \%$ | 1.2 |  |
| 9th to 12th grade, no diploma | 538,851 | 6,801 | $7.7 \%$ | 0.1 | 1,782 | 275 | $10.8 \%$ | 1.7 |  |
| High school graduate <br> (includes equivalency) | $1,791,532$ | 12,844 | $25.7 \%$ | 0.2 | 5,590 | 478 | $33.9 \%$ | 2.9 |  |
| Bachelor's degree or higher | $2,182,853$ | 16,331 | $31.3 \%$ | 0.2 | 2,705 | 384 | $16.4 \%$ | 2.3 |  |

Source: US Census, ACS 5-Year estimates 2019

| Subject |  | Bertie County |  |  |  | Washington County |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number |  | Percent |  | Number |  | Percent |  |  |
|  | Estimate | MOE +/- | Estimate | MOE +/- | Estimate | MOE +/- | Estimate | MOE +/- |  |
| Total Above 25 | 14,396 | 69 |  |  | 8,175 | 188 |  |  |  |
| Less than 9th grade | 901 | 196 | $6.3 \%$ | 1.4 | 723 | 279 | $8.8 \%$ | 3.4 |  |
| 9th to 12th grade, no diploma | 2,212 | 310 | $15.3 \%$ | 2.1 | 610 | 199 | $7.5 \%$ | 2.4 |  |
| High school graduate <br> (includes equivalency) | 5,487 | 435 | $38.1 \%$ | 3.1 | 3,059 | 320 | $37.4 \%$ | 4 |  |
| Bachelor's degree or higher | 1,964 | 376 | $13.6 \%$ | 2.6 | 941 | 246 | $11.5 \%$ | 2.9 |  |

Source: US Census, ACS 5-Year estimates 2019

## Local Setting

The following data was obtained through the US Census Bureau Table S1501, American Community Survey 20195 -year Estimates. All Census Tracts had similar percentages of high school graduates (or equivalent) and Bachelor's degree attainment to their respective counties (Table 17). Both census tracts and the one-mile radius also had higher percentages of individuals with a $9^{\text {th }}$ to $12^{\text {th }}$ grade education, but no diploma. Additionally, the percentage of individuals with a Bachelor's degree or higher are significantly lower for the project radius (Table 18) when compared to the local and regional settings.

Table 17. Local Setting- Educational Attainment (above 25 years old)

| Subject | 9701 Census Tract |  |  |  | 9604 Census Tract |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number |  | Percent |  | Number |  | Percent |  |
|  | Estimate | MOE +/- | Estimate | MOE +/- | Estimate | MOE +/- | Estimate | MOE +/- |
| Total Above 25 | 3,126 | 223 |  |  | 4,907 | 301 |  |  |
| Less than 9th grade | 106 | 58 | $3.4 \%$ | 1.8 | 330 | 119 | $6.7 \%$ | 2.5 |
| 9th to 12th grade, no diploma | 265 | 121 | $8.5 \%$ | 3.7 | 881 | 201 | $18.0 \%$ | 3.9 |
| High school graduate <br> (includes equivalency) | 1,078 | 179 | $34.5 \%$ | 5.5 | 1,501 | 240 | $30.6 \%$ | 4.4 |
| Bachelor's degree or higher | 581 | 163 | $18.6 \%$ | 4.8 | 743 | 190 | $15.1 \%$ | 3.8 |
| Source: US Census ACS 2019 5-year estimates |  |  |  |  |  |  |  |  |


| Subject | 9502 Census Tract |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Number |  | Percent |  |
|  | Estimate | MOE +/- | Estimate | MOE +/- |
| Total Above 25 | 3,932 | 300 |  |  |
| Less than 9th grade | 475 | 215 | $12.1 \%$ | 5.3 |
| 9th to 12th grade, no diploma | 281 | 147 | $7.1 \%$ | 3.9 |
| High school graduate <br> (includes equivalency) | 1,350 | 211 | $34.3 \%$ | 4.9 |
| Bachelor's degree or higher | 490 | 184 | $12.5 \%$ | 4.3 |

Source: US Census ACS 2019 5-year estimates

Table 18. Project Radius - Educational Attainment (above 25 years old)

| Subject | Project Radius |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Number |  | Percent |  |  |
|  | Estimate | MOE +/- | Estimate | MOE +/- |  |
| Total Above 25 | 920 | 100 |  |  |  |
| Less than 9th grade | 264 | 199 | $29.0 \%$ |  |  |
| 9th to 12th grade, no diploma | 79 | 83 | $9.0 \%$ |  |  |
| High school graduate <br> (includes equivalency) | 233 | 146 | $25.0 \%$ |  |  |
| Bachelor's degree or higher | 64 | 107 | $7.0 \%$ |  |  |
| Source: EJSCREEN 2019 |  |  |  |  |  |

## 8 County Health

The University of Wisconsin Population Health Institute, in collaboration with the Robert Wood Johnson Foundation, calculated County Health Rankings for all the States in the United States (www.countyhealthrankings.org). This ranking is based on health outcomes (such as lifespan and self-reported health status) and health factors (such as environmental, social and economic conditions). According to this 2021 report, out of all 100 counties in North Carolina (with 1 indicating the healthiest), Martin County ranks $88^{\text {th }}$ in health outcomes and $76^{\text {th }}$ in health factors. Bertie County ranks $87^{\text {th }}$ in both health outcomes and health factors. Washington County ranks $91^{\text {st }}$ in health outcomes and $88^{\text {th }}$ in health factors.


Figure 3. 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, the health outcome causes of death in this particular intersection of Martin County, Bertie County, and Washington County overall are considerably higher than the state averages except for stroke, which is similar to the state average. However, the hospitalizations due to asthma in this area is 43 (per 100,000 individuals), as compared to the state at 90 (per 100,000 individuals). Finally, the number of primary care physicians in this area (3.831 per 10,000 residents) is slightly lower than the state average ( 4.812 per 10,000 residents).

Table 19. Health Outcomes

| Cause of Death | Martin County | Bertie County | Washington <br> County | North Carolina |
| :--- | :---: | :---: | :---: | :---: |
| Cancer | 190.7 | 166.5 | 172.8 | 169.1 |
| Heart Disease | 241.4 | 179.1 | 219.9 | 163.7 |
| Stroke | 48.6 | 43.9 | 37.2 | 43.1 |
| Cardiovascular Disease | 306.8 | 254.2 | 285.7 | 221.9 |
| Diabetes | 41.7 | 57.7 | 21.5 | 22.8 |

Source: NCDEQ 2020 EJ Tool

## 9 Local Sensitive Receptors

The U.S. Environmental Protection Agency suggests that sensitive receptors include, but are not limited to, hospitals, schools, daycare facilities, elderly housing, and convalescent facilities. These are areas where the occupants are more susceptible to the adverse effects of exposure to toxic chemicals, pesticides, and other pollutants. Extra care must be taken when dealing with contaminants and pollutants in close proximity to areas recognized as sensitive receptors. For instance, children and the elderly may have a higher risk of developing asthma from elevated levels of certain air pollutants than a healthy individual aged between 18 and 64.

Just beyond the one-mile radius surrounding the facility location, the following sensitive receptors were identified (Figure 4):

- Plymouth Methodist Church
- Grace Church
- Temple of Christ Church
- Ministry of Power and Evangelism
- Church of God
- Plymouth Church - The Nazarene
- Gospel Light Church
- Ware Chapel
- Promised Land Church of Christ
- Plymouth Housing Authority - Public Housing Complex
- Washington Regional Medical Center
- Roanoke Landing Nursing and Rehabilitation Center

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


Figure 4. Sensitive receptors surrounding Domtar Paper Company, LLC

## 10 Local Industrial Sites

Within the one-mile radius of the facility, there are 23 permits or incidents (as October 4, 2021) (Figure 5).

- 3 Air Quality Permitted sites
- 1 NPDES Wastewater Treatment Facility
- 4 Permitted Solid Waste Landfills
- 1 Inactive Hazardous Site
- 1 Hazardous Waste Site
- 5 Underground Storage Tank Incidents
- 5 Above Ground Storage Tank Incidents
- 3 Land Use Restriction and/or Notices


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

## 11 Conclusion

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies (US EPA). This Draft EJ report examined the demographic and environmental conditions in North Carolina and the one-mile radius around the Domtar Paper Company facility encompassing Census Tract 9701 in Martin County, Census Tract 9604 in Bertie County, and Census Tract 9502 in Washington County. Potential emissions rates outlined in the permit application and county level health data are 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 2019 are estimates; EJSCREEN does not provide all of the data categories that were used in this analysis so the census tract and county data cannot be compared to the radius used surrounding the facility boundary for all criteria; census tracts can still be large areas and do not allow for exact locations of each population; and the Department cannot determine which populations are in that small amount of overlap around the facility.

The Department assessed the available demographic and socioeconomic data of the community surrounding the Domtar Paper Company Facility regarding its permit application. All three counties, the project area data from the radius used, and the census tracts generally exceed the state estimates for Black and African American individuals present. The area also showed higher percentages of individuals earning the lowest income ranges and elevated poverty rates (as compared to the State and County). One LEP group was identified (Spanish or Spanish Creole) in Census Tract 9701.

Martin County ranks $88^{\text {th }}$ in health outcomes and $76^{\text {th }}$ in health factors. Bertie County ranks $87^{\text {th }}$ in both health outcomes and health factors. Washington County ranks $91^{\text {st }}$ in health outcomes and $88^{\text {th }}$ in health factors. All three counties performed worse than the state average for most death rates that are included in the DEQ EJ Tool. There were 10 permits or incidents recorded within one mile of the facility, though several incidents were recorded just outside the one-mile radius.

Based on this Draft EJ Report, the following outreach is recommended:

- Translation services will be considered in accordance with the Department LEPLanguage Access Plan.
- The list of sensitive receptors should be consulted while considering additional outreach options that may best fit this community's needs.
- Project information should be provided to officials in the Town of Plymouth as well as all 3 counties included in the project radius
- The Meherrin Tribe will be informed of the permit application information
- Known community leaders should be consulted for additional outreach options.


[^0]:    ${ }^{1}$ https://www.thebalance.com/federal-poverty-level-definition-guidelines-chart-3305843
    ${ }^{2}$ The poverty level for a household of four in 2021 is an annual income of $\$ 26,500$. To calculate the poverty level for larger families, add $\$ 4,540$ for each additional person in the household. For smaller families, subtract $\$ 4,540$ per person.

