# Automated Solutions 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 Iredell County, census tracts 604, 605, 610.03, and 611.02, and the one-mile radius around the property boundary of the Automated Solutions facility. Finally, the demographics of the entire state of North Carolina are also considered as they compare to the county and the local census tract and radius settings.

The primary goal of this 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:

- Pertinent permit application information submitted by Automated Solutions
- 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 in the surrounding area
- Local industrial sites (using the NCDEQ Community Mapping System:
https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=1eb0fbe2bcfb4cccb3cc 212af8a0b8c8)
- Outreach recommendations

Demographics for Iredell 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 for having the potential for environmental justice concerns using criteria set out in more detail in Section 5, Regional and Local Settings.

## 3 Proposed Project

Automated Solutions, LLC - Plant \#3 submitted permit application No. 4900339.21A for a new facility located in Statesville, Iredell County, North Carolina. The application was complete on October 20, 2021, and the facility requested a 2 -step processing procedure per North Carolina

Rule 15A NCAC 02Q .0501(b)(2). The permit will require the submittal of a first time Title V application within 12 months of startup.

Automated Solutions has applied for the installation and operation of a polyethylene (PE) foam extruder with a scrap reprocessing operation. The PE foam is used to protect packaged items such as furniture and/or used in the construction industry. Manufacture of PE foam involves melting PE in an extruder. A blowing agent is injected into the melted PE and mixed in the extruder. At the exit end of the extruder is a die. When the PE blowing agent mixture exits the die, the mixture rapidly expands creating PE foam. Any PE scrap is recycled back into the PE foam extruder.

The facility will be a minor source for Prevention of Significant Deterioration (PSD) for all criteria pollutants and will be a minor source of Hazardous Air Pollutants (HAPs) for any single HAP and a minor source for combined HAPs. The facility will have a facility-wide VOC emission limitation of less than 250 tons per year to avoid PSD. The majority of VOC emissions result from when the blowing agent mixture is released at the exit of the die where the mixture rapidly expands creating the foam. The facility conservatively assumed that all (100\%) of the blowing agent is released as VOCs.

Table 1. Estimated Potential Emissions

| Emission <br> Scenario | CO <br> (tpy) | $\mathbf{N O}_{\mathbf{x}}$ <br> (tpy) | VOC <br> (tpy) | PM <br> (tpy) | $\mathbf{P M}_{10}$ <br> (tpy) | $\mathbf{P M}_{\mathbf{2} .5}$ <br> (tpy) | $\mathbf{S O}_{\mathbf{2}}$ <br> (tpy) | Total <br> HAPs <br> (tpy) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Proposed <br> Potential To <br> Emit | 1.5 | 5.1 | $<250$ | 2.1 | 1.0 | 1.0 | 0.3 | 1.0 |

Additional technical discussion is available in the permit review as well as the application.

## 4 Geographic Area

As proposed, Automated Solutions will be located at 2020 West Front Street, Statesville, NC 28677 (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 entirely within Iredell County.


Figure 1. Facility location with the one-mile radius.
Iredell County is designated as a Tier 3 county 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 Automated Solutions facility is located within Census Tract 604 and the one-mile radius enters census tracts 605, 610.03, and 611.02 (Figure 2). Census tracts are small, relatively permanent statistical subdivisions of a county with a unique numeric code (US Census Bureau). Neither the county nor the census tracts encompass land within a state-designated tribal statistical area.


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, 2020 and census data estimates from 2011-2015 and 2019 were used. 2010 and 2020 Census Bureau data is real data gathered every ten years, whereas the estimates from the more recent years are modeled based on the real data. For the data gathered from the 2019 and 2011-2015 estimates, the margin of error (MOE) has been included. This value is a measure of the possible variation of the estimate around the population value (U.S. Census Bureau). The Census Bureau standard for the MOE is at the $90 \%$ confidence level and may be any number between 0 and the MOE value in either direction (indicated by +/-).

### 5.1 Race and Ethnicity

## Regional Setting

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

Iredell County had a total population of 186,693 individuals (Table 2). The two most common racial or ethnic groups in Iredell County were White (not Hispanic or Latino) (73.1\%) and Black or African American (11.4\%). The population of White (not Hispanic or Latino) was greater than $10 \%$ different when compared to the state.

Table 2. Regional Setting - Race and Ethnicity

| Race and Ethnicity | North Carolina |  | Iredell County |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent |
| Total Population | $10,439,388$ | $100.0 \%$ | 186,693 | $100.0 \%$ |
| White (not Hispanic or Latino) | $6,312,148$ | $60.5 \%$ | 136,393 | $73.1 \%$ |
| Black or African American | $2,107,526$ | $20.2 \%$ | 21,255 | $11.4 \%$ |
| American Indian or Alaska Native | 100,886 | $1.0 \%$ | 437 | $0.2 \%$ |
| Asian | 340,059 | $3.3 \%$ | 4,718 | $2.5 \%$ |
| Native Hawaiian and Other Pacific <br> Islander | 6,980 | $0.1 \%$ | 58 | $0.0 \%$ |
| Some other Race | 46,340 | $0.4 \%$ | 656 | $0.4 \%$ |
| Two or More Races | 406,853 | $3.9 \%$ | 7,399 | $4.0 \%$ |
|  |  |  |  |  |
| HISPANIC OR LATINO (of any race) | $1,118,596$ | $10.7 \%$ | 15,777 | $8.5 \%$ |
| Soure: US Cer Bur |  |  |  |  |

Source: US Census Bureau, 2020 Census,
All bolded and orange highlighted cells indicate a difference that is greater than $10 \%$ different when compared to the State.

## Local Setting

According to the 2020 US Census Data Table 9: Hispanic or Latino, and Not Hispanic or Latino by race or ethnicity, the largest population within Census Tract 604 was Black or African American (43.8\%). Black or African American was greater than 10\% different when compared to the county and the state (Table 3). The largest population within Census Tract 605 was White (not Hispanic or Latino) at $55.4 \%$. Black or African American and Some other Race were greater than $10 \%$ different when compared to the county and the state. The largest population within Census Tract 610.03 was White (not Hispanic or Latino) at $74.5 \%$, which was greater than $10 \%$ different compared to the state. The largest population within Census Tract 611.02 was White (not Hispanic or Latino) at $74.3 \%$, which was greater than $10 \%$ different compared to the state. Asian was greater than $10 \%$ different when compared to the county and the state.

Within the one-mile project radius, the largest population was White (not Hispanic or Latino) at $48 \%$. Black or African American and Some other Race were greater than $10 \%$ different when compared to the county and the state.

Table 3. Local Setting - Race and Ethnicity

| Race and Ethnicity | Project Area - 1 Mile |  | Census Tract 604 |  | Census Tract 605 |  | Census Tract 610.03 |  | Census Tract 611.02 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Total Population | 3,616 | 100.0\% | 4,042 | 100.0\% | 4,342 | 100.0\% | 3,848 | 100.0\% | 3,329 | 100.0\% |
| White (not Hispanic or Latino) | 1,739 | 48.0\% | 1,495 | 37.0\% | 2,404 | 55.4\% | 2,868 | 74.5\% | 2,474 | 74.3\% |
| Black or African American | 1,435 | 40.0\% | 1,771 | 43.8\% | 1,286 | 29.6\% | 506 | 13.1\% | 288 | 8.7\% |
| American Indian or Alaska Native | 8 | 0.0\% | 15 | 0.4\% | 6 | 0.1\% | 10 | 0.3\% | 6 | 0.2\% |
| Asian | 23 | 1.0\% | 30 | 0.7\% | 42 | 1.0\% | 52 | 1.4\% | 152 | 4.6\% |
| Native Hawaiian and Other Pacific Islander | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 2 | 0.1\% |
| Some other Race | 7 | 0.0\% | 11 | 0.3\% | 26 | 0.6\% | 10 | 0.3\% | 13 | 0.4\% |
| Two or More Races | 74 | 2.0\% | 153 | 3.8\% | 180 | 4.1\% | 144 | 3.7\% | 118 | 3.5\% |
| HISPANIC OR LATINO (of any race) | 329 | 9.0\% | 567 | 14.0\% | 398 | 9.2\% | 258 | 6.7\% | 276 | 8.3\% |

Source: US Census Bureau, 2020 Census; EJSCREEN Census 2010 (for Project Area - 1 mile)
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

### 5.2 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 older than the median age for males (36).

Iredell Country had a total population of 159,437 individuals. The median age for females (39.9) was slightly higher than the median age for males (37.8), both older than the median age for the state.

Table 4. Regional Setting - Age Groups and Sex

| Age | North Carolina |  |  |  |  |  | Iredell County |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number |  |  | Percent |  |  | Number |  |  | Percent |  |  |
|  | Both sexes | Male | Female | Both sexes | Male | Female | Both Sexes | Male | Female | Both Sexes | Male | Female |
| Total Population | 9,535,483 | 4,645,492 | 4,889,991 | 100\% | 49\% | 51\% | 159,437 | 78,491 | 80,946 | 100\% | 49\% | 51\% |
| Median Age | 37.4 | 36 | 38.7 |  |  |  | 38.9 | 37.8 | 39.9 |  |  |  |

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 605, 610.03, and 611.02 all had slightly older median ages than the state and the county (Tables 5 and 6).

Table 5. Local Setting - Age Groups and Sex

| Age | Census Tract 604 |  |  |  |  |  | Census Tract 605 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number |  |  | Percent |  |  | Number |  |  | Percent |  |  |
|  | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| Total Population | 4,066 | 1,909 | 2,157 | 100\% | 47\% | 53\% | 4,103 | 2,032 | 2,071 | 100\% | 50\% | 50\% |
| Median Age | 36.4 | 34.7 | 37.9 |  |  |  | 38 | 35.5 | 41.2 |  |  |  |

Source: US Census Bureau, 2010 Census

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

| Age | Census Tract 610.03 |  |  |  |  |  | Census Tract 611.02 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number |  |  | Percent |  |  | Number |  |  | Percent |  |  |
|  | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| Total Population | 3,572 | 1,715 | 1,857 | 100\% | 48\% | 52\% | 3,085 | 1,535 | 1,550 | 100\% | 50\% | 50\% |
| Median Age | 40.7 | 39 | 42.7 |  |  |  | 40.5 | 39.2 | 41.6 |  |  |  |
| Source: US Census Bureau, 2010 Census |  |  |  |  |  |  |  |  |  |  |  |  |

## Project Radius

EJSCREEN identified a population of 3,616 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 7).

Table 7. Project Radius - Age Groups and Sex

| Age | Project Area - 1 Miles |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number |  |  |  |  | Percent |
|  | Both <br> sexes | Male | Female | Both <br> sexes | Male | Female |
| Total Population | 3,616 | 1,685 | 1,931 | $100 \%$ | $47 \%$ | $53 \%$ |
| 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) had the next highest population estimates with disabilities in North Carolina, at 14.6\% (MOE +/-0.2\%) and 14.5\% (MOE +/- 0.1\%), respectively (Table 8).

Iredell County had an estimated total population of 22,073 noninstitutionalized citizens. Of those, an estimated $12.7 \%$ (MOE +/- 0.6\%) had a disability. The largest population of disabled civilians was American Indian and Alaska Native (30.8\%, MOE 17.0\%), followed by Black or African American (13.7\%, MOE +/- 1.5\%). American Indian and Alaska Native, Some other Race, and Hispanic or Latino (of any race) were all greater than $10 \%$ different when compared to the state.

Table 8. Regional Setting - Disability

| Subject | North Carolina |  |  |  |  |  | Iredell 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 | 174,408 | 188 | 22,073 | 1,100 | 12.7\% | 0.6 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |  |  |  |  |  |  |
| White (not Hispanic or Latino) | 6,357,724 | 2,614 | 919,485 | 7,082 | 14.5\% | 0.1 | 132,589 | 254 | 17,484 | 920 | 13.2\% | 0.7 |
| Black or African American | 2,144,532 | 5,119 | 312,780 | 4,850 | 14.6\% | 0.2 | 21,145 | 466 | 2,897 | 328 | 13.7\% | 1.5 |
| American Indian and Alaska Native | 120,813 | 1,815 | 22,048 | 842 | 18.2\% | 0.8 | 425 | 214 | 131 | 114 | 30.8\% | 17.0 |
| Asian | 290,103 | 1,968 | 15,414 | 800 | 5.3\% | 0.3 | 4394 | 195 | 246 | 91 | 5.6\% | 2.0 |
| Native Hawaiian and Other Pacific Islander | 6,694 | 677 | 638 | 183 | 9.5\% | 2.7 | 125 | 173 | 0 | 29 | 0.0\% | 24.1 |
| Some other Race | 313,224 | 7,444 | 16,846 | 1,231 | 5.4\% | 0.4 | 2740 | 554 | 293 | 179 | 10.7\% | 5.9 |
| Two or more races | 265,791 | 6,168 | 29,353 | 1,430 | 11.0\% | 0.4 | 3803 | 576 | 388 | 127 | 10.2\% | 2.8 |
| Hispanic or Latino | 942,342 | 855 | 59,694 | 2,120 | 6.3\% | 0.2 | 13320 | 35 | 1,062 | 294 | 8.0\% | 2.2 |
| Disability Type |  |  |  |  |  |  |  |  |  |  |  |  |
| hearing difficulty | X | $X$ | 375,385 | 4,061 | 3.7\% | 0.1 | X | X | 6,441 | 488 | 3.7\% | 0.3 |
| vision difficulty | X | $X$ | 263,064 | 4,326 | 2.6\% | 0.1 | X | X | 4,173 | 567 | 2.4\% | 0.3 |
| cognitive difficulty | X | X | 511,243 | 5,636 | 5.4\% | 0.1 | X | X | 7,408 | 579 | 4.5\% | 0.4 |
| ambulatory difficulty | X | X | 716,908 | 6,389 | 7.6\% | 0.1 | X | X | 11,566 | 659 | 7.0\% | 0.4 |

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

## Local Setting

According to the 2019 American Community Survey 5-Year Estimates, Table S1810 Disability Characteristics from the US Census Bureau, Census Tract 604 had an estimated total population of 3,924 noninstitutionalized citizens (Table 10). Of those individuals, an estimated 16.3\% (MOE +/- 4.1\%) had a disability. The subjects with the largest population of disabled civilians were Asian (38.5\%, MOE +/- 20.0\%), followed by Two or more Races at 30.0\% (MOE +/- 27.7\%) and Black or African American at $18.6 \%$ (MOE +/- $6.5 \%$ ). White (not Hispanic or Latino) was greater than $10 \%$ different compared to the county. All other subjects with percentages were greater than $10 \%$ different compared to the county and the state.

Census Tract 605 had a total population of 3,632 noninstitutionalized citizens. Of those individuals, an estimated $14.5 \%$ (MOE +/- $3.5 \%$ ) had a disability. The subjects with the largest population of disabled civilians were White (not Hispanic or Latino) (17.4\%, MOE +/- 4.7\%), followed by Black or African American at 11.3\% (MOE +/- 6.0\%) and Hispanic or Latino at 11.0\% (MOE +/- 13.4\%). White (not Hispanic or Latino) and Hispanic or Latino were greater than $10 \%$ different compared to the county and the state.

Census Tract 610.03 had a total population of 4,120 noninstitutionalized citizens. Of those individuals, an estimated $14.3 \%$ (MOE +/- $4.3 \%$ ) had a disability (Table 11). The subject with the largest population of disabled civilians was American Indian and Alaska Native (59.7\%, MOE +/$12.0 \%$ ), followed by Hispanic or Latino at 16.9\% (MOE +/- 19.8\%), and White (not Hispanic or Latino) at $14.5 \%$ (MOE +/- $4.1 \%$ ). American Indian and Alaska Native and Hispanic or Latino were greater than $10 \%$ different compared to the county and the state.

Census Tract 611.02 had a total population of 3,347 noninstitutionalized citizens. Of those individuals, an estimated $10.6 \%$ (MOE +/- $3.8 \%$ ) had a disability. The subject with the largest population of disabled civilians was Two or more Races ( $63.6 \%$, MOE $+/-63.6 \%$ ), followed by White (not Hispanic or Latino) at 12.1\% (MOE +/- 4.4\%), and Black or African American at 9.5\% (MOE +/- $12.5 \%$ ). Two or more Races were greater than $10 \%$ different compared to the county and the state.

Table 9. Local Setting - Disability

| Subject | Census Tract 604 |  |  |  |  |  | Census Tract 605 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 3,924 | 358 | 641 | 144 | 16.3\% | 4.1 | 3,632 | 338 | 525 | 141 | 14.5\% | 3.5 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |  |  |  |  |  |  |
| White (not Hispanic or Latino) | 1,420 | 392 | 214 | 100 | 15.1\% | 7.7 | 2,130 | 245 | 370 | 103 | 17.4\% | 4.7 |
| Black or African American | 1,747 | 266 | 325 | 113 | 18.6\% | 6.5 | 1,147 | 308 | 130 | 75 | 11.3\% | 6.0 |
| American Indian and Alaska Native | 33 | 50 | 0 | 12 | 0.0\% | 53.6 | 0 | 12 | 0 | 12 | - | ** |
| Asian | 26 | 61 | 10 | 22 | 38.5\% | 20.0 | 0 | 12 | 0 | 12 | - | ** |
| Native Hawaiian and Other Pacific Islander | 0 | 12 | 0 | 12 | - | ** | 0 | 12 | 0 | 12 | - | ** |
| Some other Race | 344 | 247 | 51 | 56 | 14.8\% | 12.4 | 16 | 27 | 0 | 12 | 0.0\% | 76.9 |
| Two or more races | 80 | 63 | 24 | 31 | 30.0\% | 27.7 | 149 | 100 | 11 | 19 | 7.4\% | 12.4 |
| Hispanic or Latino | 596 | 263 | 55 | 54 | 9.2\% | 8.3 | 228 | 101 | 25 | 29 | 11.0\% | 13.4 |
| Disability Type |  |  |  |  |  |  |  |  |  |  |  |  |
| hearing difficulty | X | $X$ | 129 | 60 | 3.3\% | 1.5 | X | X | 110 | 53 | 3.0\% | 1.5 |
| vision difficulty | X | X | 113 | 67 | 2.9\% | 1.7 | X | X | 27 | 31 | 0.7\% | 0.8 |
| cognitive difficulty | X | X | 72 | 51 | 2.0\% | 1.4 | X | X | 175 | 86 | 5.1\% | 2.5 |
| ambulatory difficulty | X | X | 425 | 113 | 11.6\% | 3.4 | X | X | 326 | 113 | 9.5\% | 3.1 |

Source: US Census Data, 2019 ACS 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
All green and bolded highlighted cells indicate a difference that is greater than $10 \%$ when compared to the county

Table 10. Local Setting - Disability (cont'd)

| Subject | Census Tract 610.03 |  |  |  |  |  | Census Tract 611.02 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 4,120 | 265 | 590 | 168 | 14.3\% | 4.3 | 3,347 | 276 | 356 | 125 | 10.6\% | 3.8 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |  |  |  |  |  |  |
| White (not Hispanic or Latino) | 2,946 | 395 | 427 | 110 | 14.5\% | 4.1 | 2,474 | 436 | 299 | 111 | 12.1\% | 4.4 |
| Black or African American | 632 | 269 | 89 | 78 | 14.1\% | 13.2 | 453 | 238 | 43 | 52 | 9.5\% | 12.5 |
| American Indian and Alaska Native | 124 | 169 | 74 | 107 | 59.7\% | 12.0 | 0 | 12 | 0 | 12 | - | ** |
| Asian | 48 | 75 | 0 | 12 | 0.0\% | 44.4 | 221 | 187 | 0 | 12 | 0.0\% | 14.6 |
| Native Hawaiian and Other Pacific Islander | 0 | 12 | 0 | 12 | - | ** | 0 | 12 | 0 | 12 | - | ** |
| Some other Race | 194 | 202 | 0 | 12 | 0.0\% | 16.4 | 0 | 12 | 0 | 12 | - | ** |
| Two or more races | 52 | 63 | 0 | 12 | 0.0\% | 42.7 | 22 | 37 | 14 | 21 | 63.6\% | 63.6 |
| Hispanic or Latino | 437 | 325 | 74 | 107 | 16.9\% | 19.8 | 177 | 139 | 0 | 12 | 0.0\% | 17.8 |
| Disability Type |  |  |  |  |  |  |  |  |  |  |  |  |
| hearing difficulty | X | $X$ | 193 | 70 | 4.7\% | 1.7 | X | X | 62 | 48 | 1.9\% | 1.4 |
| vision difficulty | X | X | 64 | 55 | 1.6\% | 1.3 | X | X | 92 | 72 | 2.7\% | 2.1 |
| cognitive difficulty | X | X | 272 | 121 | 6.9\% | 3.1 | X | X | 92 | 66 | 2.9\% | 2.1 |
| ambulatory difficulty | X | X | 264 | 112 | 6.7\% | 2.9 | X | X | 205 | 105 | 6.4\% | 3.2 |

Source: US Census Data, 2019 ACS 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
All green and bolded highlighted cells indicate a difference that is greater than $10 \%$ when compared to the county

### 5.4 Poverty

Regional Setting
According to the Census Table S1701, Poverty Status in the Past 12 Months, 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 11). 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 $\$ 53,000(2.0 \times \$ 26,500)$.

Iredell County had an estimated population of 173,761 with $10.9 \%$ (MOE $+/-0.9 \%$ ) living below the poverty level. Across all subjects, Black or African American had the highest percent living below the poverty level at $23.7 \%$ (MOE +/- $2.9 \%$ ), followed by Hispanic or Latino ( $20.9 \%$, MOE $+/-5.7 \%$ ) and Some other Race ( $20.5 \%$, MOE +/- 8.5\%). Black or African American had estimates greater than $10 \%$ different when compared to the state (Table 12).

[^0]Table 11. Regional Setting - Poverty

| Subject | North Carolina |  |  |  |  |  | Iredell 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 | 173,761 | 316 | 18,982 | 1,544 | 10.9\% | 0.9 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 6,320,337 | 2,990 | 644,440 | 10,085 | 10.2\% | 0.2 | 132,209 | 308 | 10,393 | 1,083 | 7.9\% | 0.8 |
| Black or African American | 2,116,769 | 5,452 | 475,973 | 8,126 | 22.5\% | 0.4 | 21,133 | 463 | 5,013 | 609 | 23.7\% | 2.9 |
| American Indian and Alaska Native | 120,328 | 1,846 | 29,981 | 1,608 | 24.9\% | 1.3 | 425 | 214 | - | 29 | 0.0\% | 7.9 |
| Asian | 285,786 | 2,021 | 30,707 | 2,034 | 10.7\% | 0.7 | 4,394 | 195 | 382 | 238 | 8.7\% | 5.4 |
| Native Hawaiian and Other Pacific Islander | 6,630 | 675 | 1,360 | 332 | 20.5\% | 4.6 | 125 | 173 | - | 29 | 0.0\% | 24.1 |
| Some other Race | 311,206 | 7,397 | 84,699 | 4,639 | 27.2\% | 1.2 | 2,683 | 524 | 550 | 262 | 20.5\% | 8.5 |
| Two or more races | 262,580 | 6,121 | 54,627 | 2,414 | 20.8\% | 0.8 | 3,764 | 571 | 536 | 252 | 14.2\% | 5.9 |
| Hispanic or Latino | 940,295 | 1,251 | 248,474 | 6,013 | 26.4\% | 0.6 | 13,104 | 185 | 2,745 | 754 | 20.9\% | 5.7 |
| All individuals below: |  |  |  |  |  |  |  |  |  |  |  |  |
| 200 percent of poverty level | 3,420,476 | 24,183 |  |  |  |  | 49,366 | 1,928 |  |  |  |  |
| Source: US Census Data, 2019 ACS 5-Year Estimates All bolded and orange highlighted cells indicate a difference that is greater than $5 \%$ when compared to the State |  |  |  |  |  |  |  |  |  |  |  |  |

## Local Setting

According to the Census Table S1701, Poverty Status in the Past 12 Months, 2019 American Community Survey 5-Year Estimates, from the US Census Bureau, Census Tract 604 had an estimated population of 1,079 with $27.5 \%$ (MOE +/- $8.5 \%$ ) living below the poverty level (Table 12). The total population for whom poverty status is determined as well as Black or African American, Asian, and Some other Race had poverty levels higher than $5 \%$ different when compared to both the county and the state.

Census Tract 605 had an estimated population of 3,632 individuals, with $8.6 \%$ (MOE +/- 4.0\%) living below the poverty level. None of the estimates in this census tract had poverty levels higher than $5 \%$ different when compared to the county nor the state.

Census Tract 610.03 had an estimated population of 4,120 individuals, with $12.5 \%$ (MOE +/$4.4 \%$ ) living below the poverty level (Table 13). The total population for whom poverty status is determined as well as Hispanic or Latino had poverty levels higher than 5\% different when compared to the county. Black or African American, and Some other Race had poverty levels higher than 5\% different when compared to both the county and the state.

Census Tract 611.02 had an estimated population of 3,339 individuals, with $9.7 \%$ (MOE +/$6.2 \%$ ) living below the poverty level. Asian, and Hispanic or Latino had poverty levels higher than 5\% different when compared to both the county and the state.

Table 12. Local Setting- Poverty

| Subject | Census Tract 604 |  |  |  |  |  | Census Tract 605 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 3,924 | 358 | 1,079 | 323 | 27.5\% | 8.5 | 3,632 | 338 | 314 | 148 | 8.6\% | 4.0 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 1,420 | 392 | 65 | 50 | 4.6\% | 3.5 | 2,130 | 245 | 91 | 42 | 4.3\% | 2.0 |
| Black or African American | 1,747 | 266 | 866 | 292 | 49.6\% | 14.9 | 1,147 | 308 | 191 | 143 | 16.7\% | 11.6 |
| American Indian and Alaska Native | 33 | 50 | 0 | 12 | 0.0\% | 53.6 | 0 | 12 | 0 | 12 | - | ** |
| Asian | 26 | 61 | 26 | 61 | 100.0\% | 60.4 | - | 12 | - | 12 | - | ** |
| Native Hawaiian and Other Pacific Islander | - | 12 | - | 12 | - | ** | - | 12 | - | 12 | - | ** |
| Some other Race | 344 | 247 | 118 | 143 | 34.3\% | 35.9 | 16 | 27 | - | 12 | 0.0\% | 76.9 |
| Two or more races | 80 | 63 | 4 | 7 | 5.0\% | 10.6 | 149 | 100 | - | 12 | 0.0\% | 20.8 |
| Hispanic or Latino | 596 | 263 | 87 | 135 | 14.6\% | 22.8 | 228 | 101 | 32 | 54 | 14.0\% | 22.7 |
| All individuals below: |  |  |  |  |  |  |  |  |  |  |  |  |
| 200 percent of poverty level | 2,268 | 352 |  |  |  |  | 1,063 | 271 |  |  |  |  |
| Source: US Census Data, 2019 ACS 5-Year Estimates <br> All bolded and orange highlighted cells indicate a difference that is greater than $5 \%$ when compared to the State <br> All bolded and blue cells indicate a difference that is greater than $5 \%$ when compared to the county and the State. |  |  |  |  |  |  |  |  |  |  |  |  |

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

| Subject | Census Tract 610.03 |  |  |  |  |  | Census Tract 611.02 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 +/- | Estimate | Margin of Error +/- |
| Population for whom poverty status is determined | 4,120 | 265 | 517 | 191 | 12.5\% | 4.4 | 3,339 | 275 | 325 | 212 | 9.7\% | 6.2 |
| RACE AND HISPANIC OR LATINO ORIGIN |  |  |  |  |  |  |  |  |  |  |  |  |
| White | 2,946 | 395 | 112 | 102 | 3.8\% | 3.4 | 2,466 | 438 | 26 | 25 | 1.1\% | 1.0 |
| Black or African American | 632 | 269 | 291 | 184 | 46.0\% | 35.5 | 453 | 238 | - | 12 | 0.0\% | 7.4 |
| American Indian and Alaska Native | 124 | 169 | 0 | 12 | 0.0\% | 24.2 | 0 | 12 | 0 | 12 | - | ** |
| Asian | 48 | 75 | - | 12 | 0.0\% | 44.4 | 221 | 187 | 221 | 187 | 100.0\% | 14.6 |
| Native Hawaiian and Other Pacific Islander | - | 12 | - | 12 | - | ** | - | 12 | - | 12 | - | ** |
| Some other Race | 194 | 202 | 114 | 169 | 58.8\% | 53.7 | - | 12 | - | 12 | - | ** |
| Two or more races | 52 | 63 | - | 12 | 0.0\% | 42.7 | 22 | 37 | - | 12 | 0.0\% | 65.6 |
| Hispanic or Latino | 437 | 325 | 114 | 169 | 26.1\% | 32.9 | 177 | 139 | 78 | 91 | 44.1\% | 50.1 |
| All individuals below: |  |  |  |  |  |  |  |  |  |  |  |  |
| 200 percent of poverty level | 1,199 | 338 |  |  |  |  | 921 | 304 |  |  |  |  |
| Source: US Census Data, 2019 ACS 5-Year Estimates <br> All bolded and orange highlighted cells indicate a difference that is greater than $5 \%$ when compared to the state All bolded and blue cells indicate a difference that is greater than $5 \%$ when compared to the county and the state All green and bolded highlighted cells indicate a difference that is greater than $10 \%$ when compared to the county |  |  |  |  |  |  |  |  |  |  |  |  |

### 5.5 Household Income

## Regional Setting

The following table (Table 14) 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 Iredell County with the highest percent was $\$ 50,000$ to $\$ 74,999$ at $13.1 \%$ (MOE $+/-0.9 \%$ ). The median income was $\$ 60,955$ and the mean income was $\$ 85,338$, both higher than that of the state. Household income ranges above $\$ 150,000$ were greater than $10 \%$ different when compared to the state.

Table 14. Regional Setting - Household Income

| Subject | North Carolina |  | Iredell County |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Households |  | Households |  |
|  | Estimate | Margin of <br> Error +/-- | Estimate | Margin <br> of Erro <br> $+/-$ |
| Total | $3,965,482$ | 10,327 | 66,369 | 597 |
| Less than $\$ 10,000$ | $6.4 \%$ | 0.1 | $4.4 \%$ | 0.5 |
| $\$ 10,000$ to $\$ 14,999$ | $5.0 \%$ | 0.1 | $4.3 \%$ | 0.5 |
| $\$ 15,000$ to $\$ 24,999$ | $10.3 \%$ | 0.1 | $9.3 \%$ | 0.8 |
| $\$ 25,000$ to $\$ 34,999$ | $10.3 \%$ | 0.1 | $9.5 \%$ | 0.7 |
| $\$ 35,000$ to $\$ 49,999$ | $13.9 \%$ | 0.1 | $13.1 \%$ | 0.9 |
| $\$ 50,000$ to $\$ 74,999$ | $18.0 \%$ | 0.1 | $19.1 \%$ | 1 |
| $\$ 75,000$ to $\$ 99,999$ | $12.4 \%$ | 0.1 | $13.3 \%$ | 0.9 |
| $\$ 100,000$ to $\$ 149,999$ | $13.1 \%$ | 0.1 | $14.1 \%$ | 0.8 |
| $\$ 150,000$ to $\$ 199,999$ | $5.1 \%$ | 0.1 | $6.2 \%$ | 0.6 |
| $\$ 200,000$ or more | $5.4 \%$ | 0.1 | $6.6 \%$ | 0.5 |
|  |  |  |  |  |
| Median income <br> (dollars) | 54,602 | 231 | 60,955 | 1,578 |
| Mean income (dollars) | 76,940 | 352 | 85,338 | 2,024 |
|  |  |  |  |  |
| Per Capita Income | 30,783 | 154 | 33,194 | 806 |
| Source: US Census, 2019 ACS <br> All orange and bolded highlighted cells indicate a difference that is greater than <br> $10 \%$ when compared to the state |  |  |  |  |

## Local Setting

The household income range for Census Tract 604 with the highest percent was $\$ 35,000$ to $\$ 49,999$ at $16.0 \%$ (MOE +/- $5.8 \%$ ) (Table 15). The median income was $\$ 31,365$ and the mean income was $\$ 42,235$. The income range less than $\$ 10,000$ to $\$ 49,999$ had a greater than $10 \%$ difference when compared to both the county and the state.

The household income range for Census Tract 605 with the highest percent was $\$ 25,000$ to $\$ 34,999$ at $18.0 \%$ (MOE +/- $6.9 \%$ ). The median income was $\$ 44,149$ and the mean income was $\$ 63,428$. The income ranges $\$ 15,000$ to $\$ 34,999$ and $\$ 75,000$ to $\$ 99,999$ had a greater than $10 \%$ difference when compared to both the county and the state.

The household income range for Census Tract 610.03 with the highest percent was $\$ 50,000$ to $\$ 74,999$ at $23.8 \%$ (MOE +/- $6.7 \%$ ). The median income was $\$ 53,479$ and the mean income was $\$ 65,212$. The income ranges $\$ 10,000$ to $\$ 14,999$ and $\$ 35,000$ to $\$ 74,999$ had a greater than $10 \%$ difference when compared to both the county and the state.

The household income range for Census Tract 611.02 with the highest percent was $\$ 75,000$ to $\$ 99,999$ at $19.2 \%$ (MOE +/- 7.2\%). The median income was $\$ 49,853$ and the mean income was $\$ 65,526$. The income ranges $\$ 150,000$ to $\$ 199,999$ had a greater than $10 \%$ difference when compared to the state. The income ranges $\$ 15,000$ to $\$ 24,999$, $\$ 35,000$ to $\$ 49,999$, and $\$ 75,000$ to $\$ 99,999$ 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 $\$ 25,000$ to $\$ 50,000$ at $30 \%$. EJSCREEN data provides different income ranges that cannot be readily compared in the same manner (Table 16).

Table 15. Local Setting - Household Income

| Subject | Census Tract 604 |  | Census Tract 605 |  | Census Tract 610.03 |  | Census Tract 611.02 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Households |  | Households |  | Households |  | Households |  |
|  | Estimate | Margin of Error +/- | Estimate | Margin of Error +/- | Estimate | Margin of Error +/- | Estimate | Margin of Error +/- |
| Total | 1,691 | 118 | 1,727 | 136 | 1,621 | 113 | 1,296 | 107 |
| Less than \$10,000 | 15.2\% | 6.1 | 7.0\% | 3.2 | 3.4\% | 2.8 | 4.5\% | 3.6 |
| \$10,000 to \$14,999 | 10.2\% | 4.6 | 2.1\% | 2.7 | 5.9\% | 3.8 | 0.5\% | 0.8 |
| \$15,000 to \$24,999 | 11.5\% | 4.3 | 14.4\% | 6.4 | 8.0\% | 3.3 | 15.8\% | 6.8 |
| \$25,000 to \$34,999 | 14.8\% | 6 | 18.8\% | 6.9 | 7.5\% | 3 | 10.3\% | 4.8 |
| \$35,000 to \$49,999 | 16.0\% | 5.8 | 10.2\% | 4.5 | 20.8\% | 7.7 | 19.1\% | 7.8 |
| \$50,000 to \$74,999 | 15.6\% | 6.2 | 16.3\% | 6 | 23.8\% | 6.7 | 13.6\% | 4.9 |
| \$75,000 to \$99,999 | 11.8\% | 5 | 15.7\% | 5.1 | 12.5\% | 4.7 | 19.2\% | 7.2 |
| \$100,000 to \$149,999 | 2.7\% | 2.5 | 8.7\% | 4.1 | 12.4\% | 3.8 | 9.3\% | 4.9 |
| \$150,000 to \$199,999 | 2.2\% | 2.4 | 4.5\% | 2.9 | 3.3\% | 2.2 | 5.2\% | 6.1 |
| \$200,000 or more | 0.0\% | 2 | 2.3\% | 1.8 | 2.5\% | 1.8 | 2.4\% | 3.1 |
| Median income (dollars) | 31,365 | 9,662 | 44,149 | 11,343 | 53,479 | 5,245 | 49,853 | 8,412 |
| Mean income (dollars) | 42,235 | 5,568 | 63,428 | 6,923 | 65,212 | 6,441 | 65,526 | 7,714 |
| Per Capita Income | 19,460 | 2,439 | 28,557 | 3,193 | 26,376 | 2,481 | 26,200 | 3,445 |

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 16. Project Radius - Household Income

| Subject | 1 mile |  |  |
| :---: | :---: | :---: | :---: |
|  | Number | Percent | MOE |
| Number of Households | 1,519 | $100 \%$ | 120 |
| Per Capita Income <br> (dollars) | 20,773 |  |  |
| Household Income |  |  |  |
| $<\$ 15,000$ | 320 | $21 \%$ | 89 |
| $\$ 15,000-\$ 25,000$ | 220 | $14 \%$ | 73 |
| $\$ 25,000-\$ 50,000$ | 460 | $30 \%$ | 150 |
| $\$ 50,000-\$ 75,000$ | 268 | $18 \%$ | 97 |
| \$75,000+ | 251 | $16 \%$ | 79 |
| Source: EJSCREEN 2019 |  |  |  |

## Per Capita Income

Per Capita Income data was obtained through the Census Table B19301, Per Capita Income in the Past 12 Months (In 2018 Inflation-Adjusted Dollars), 2019 American Community Survey 5Year Estimates. The North Carolina per capita income estimate was $\$ 30,783$. The estimate for Iredell County was $\$ 33,194$. The estimate for Census Tract 604 was $\$ 19,460$, the estimate for Census Tract 605 was $\$ 28,557$, the estimate for Census Tract 610.03 was $\$ 26,376$, the estimate for Census Tract 611.02 was $\$ 26,200$.

The EJSCREEN analysis also provided the Per Capita Income estimate for the one-mile radius surrounding facility site, which was $\$ 20,773$. All Per Capita Income estimates-except for Iredell County-were lower than that of the state.

## 6 Limited English Proficiency (LEP)

Per the Safe Harbor Guidelines, should an LEP Group be identified during the permit application process, written translations of vital documents for each eligible LEP language group that constitutes $5 \%$ or includes 1,000 members (whichever is less) of the population of persons eligible to be served or likely to be affected or encountered. If there are fewer than 50 persons in a language group that reaches the $5 \%$ trigger, then DEQ will not translate vital written materials, but instead will provide written notice in the primary language of the LEP language group of the right to receive competent oral interpretation of those written materials, free of cost. The safe harbor provisions apply to the translation of written documents only. Safe harbor guidelines are based on EPA guidance for LEP persons and implemented by DEQ when deemed appropriate. Only languages where an estimated population of greater than 0 who reside in a Limited English-speaking household are included in this analysis. All census tracts had Limited English proficiency households that were less than 5\% of the total population (Table 17).

Table 17. Limited English Proficiency

| Household Language by Household Limited English Speaking Status | Census Tract 604 |  |  | Census Tract 605 |  |  | Census Tract 610.03 |  |  | Census Tract 611.02 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Estimate | Margin of Error +/- | Percent | Estimate | Margin of Error +/- | Percent | Estimate | Margin of Error +/- | Percent | Estimate | Margin of Error +/- | Percent |
| Total: | 1691 | 118 | 100.0\% | 1727 | 136 | 100.0\% | 1621 | 113 | 100.0\% | 1296 | 107 | 100.0\% |
| English only | 1434 | 149 | 84.8\% | 1587 | 151 | 91.9\% | 1495 | 117 | 92.2\% | 1106 | 141 | 85.3\% |
| Spanish: | 240 | 98 | 14.2\% | 131 | 82 | 7.6\% | 99 | 77 | 6.1\% | 144 | 73 | 11.1\% |
| Limited English speaking household | 77 | 70 | 4.6\% | 9 | 14 | 0.5\% | 60 | 67 | 3.7\% | 31 | 32 | 2.4\% |
| Not a limited English speaking household | 163 | 75 | 9.6\% | 122 | 81 | 7.1\% | 39 | 39 | 2.4\% | 113 | 74 | 8.7\% |
| Other Indo-European languages: | 0 | 12 | 0.0\% | 9 | 14 | 0.5\% | 12 | 17 | 0.0\% | 14 | 21 | 1.1\% |
| Limited English speaking household | 0 | 12 | 0.0\% | 0 | 12 | 0.0\% | 0 | 12 | 0.0\% | 0 | 12 | 0.0\% |
| Not a limited English speaking household | 0 | 12 | 0.0\% | 9 | 14 | 0.5\% | 12 | 17 | 0.0\% | 14 | 21 | 1.1\% |
| Asian and Pacific Island languages: | 17 | 23 | 0.0\% | 0 | 12 | 0.0\% | 15 | 24 | 0.9\% | 32 | 43 | 2.5\% |
| Limited English speaking household | 0 | 12 | 0.0\% | 0 | 12 | 0.0\% | 15 | 24 | 0.0\% | 32 | 43 | 2.5\% |
| Not a limited English speaking household | 17 | 23 | 0.0\% | 0 | 12 | 0.0\% | 0 | 12 | 0.0\% | 0 | 12 | 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 18). Iredell County had considerably 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 or higher when compared to the state (Table 18).

Table 18. Regional Setting- Educational Attainment (above 25 years old)

| Subject | North Carolina |  |  |  | Iredell County |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number |  | Percent |  | Number |  | Percent |  |
|  | Estimate | MOE +/- | Estimate | MOE +/- | Estimate | MOE +/- | Estimate | MOE +/- |
| Total Above 25 | 6,983,859 | 1,636 |  |  | 120,685 | 101 |  |  |
| Less than 9th grade | 314,545 | 4,322 | 4.5\% | 0.1 | 4,776 | 546 | 4.0\% | 0.5 |
| 9th to 12th grade, no diploma | 538,851 | 6,801 | 7.7\% | 0.1 | 8,191 | 667 | 6.8\% | 0.6 |
| High school graduate (includes equivalency) | 1,791,532 | 12,844 | 25.7\% | 0.2 | 34,094 | 1,040 | 28.3\% | 0.9 |
| Bachelor's degree or higher | 2,182,853 | 16,331 | 31.3\% | 0.2 | 34,306 | 1,109 | 28.4\% | 0.9 |

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 following data was obtained through the US Census Bureau Table S1501, American Community Survey 20195 -year Estimates. Census Tract 604 had a higher percentage of individuals who had attained less than $9^{\text {mh }}$ grade, $9^{\text {hn }}$ to $12^{\text {th }}$ grade (no diploma), and High school graduate (includes equivalency) when compared to the county and the state (Table 19). The percentage of individuals who attained a bachelor's degree or higher was considerably lower when compared to the county and the state.

Census Tract 605 had a higher percentage of individuals who had attained a $9^{\text {th }}$ to $12^{\text {th }}$ grade (no diploma) education when compared to the county and the state. The percentages for all other educational attainment subjects were lower when compared to the county and the state.

Census Tract 610.03 had a higher percentage of individuals who had attained a less than $9^{\text {th }}$ grade education when compared to both the county and the state. The percentages for all other educational attainment subjects were lower when compared to the county and the state.

Census Tract 611.02 had a higher percentage of individuals who had attained high school graduate (includes equivalency) when compared to both the county and the
state (Table 20). The percentages for all other educational attainment subjects were lower when compared to the state.

The educational attainment within the project radius had a higher percentage of individuals who had attained less than $9^{\text {th }}$ grade, $9^{\text {th }}$ to $12^{\text {th }}$ grade (no diploma), and high school graduate (includes equivalency) when compared to both the county and the state (Table 21). The percentage of individuals who had attained a bachelor's degree or higher was lower when compared to the county and the state.

Table 19. Local Setting- Educational Attainment (above 25 years old)

| Subject | Census Tract 604 |  |  |  | Census Tract 605 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number |  | Percent |  | Number |  | Percent |  |
|  | Estimate | MOE +/- | Estimate | MOE +/- | Estimate | MOE +/- | Estimate | MOE +/- |
| Total Above 25 | 2,740 | 274 |  |  | 2,846 | 253 |  |  |
| Less than 9th grade | 186 | 118 | 6.8\% | 4.2 | 84 | 64 | 3.0\% | 2.2 |
| 9th to 12th grade, no diploma | 489 | 111 | 17.8\% | 4.2 | 322 | 122 | 11.3\% | 4.1 |
| High school graduate (includes equivalency) | 1,041 | 236 | 38.0\% | 6.8 | 591 | 122 | 20.8\% | 4.6 |
| Bachelor's degree or higher | 138 | 69 | 5.0\% | 2.5 | 644 | 154 | 22.6\% | 4.9 |

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 20. Local Setting- Educational Attainment (cont'd)

| Subject | Census Tract 610.03 |  |  |  | Census Tract 611.02 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number |  | Percent |  | Number |  | Percent |  |
|  | Estimate | MOE +/- | Estimate | MOE +/- | Estimate | MOE +/- | Estimate | MOE +/- |
| Total Above 25 | 2,768 | 164 |  |  | 2,188 | 201 |  |  |
| Less than 9th grade | 177 | 82 | 6.4\% | 3 | 75 | 74 | 3.4\% | 3.3 |
| 9th to 12th grade, no diploma | 171 | 76 | 6.2\% | 2.7 | 150 | 72 | 6.9\% | 3.2 |
| High school graduate (includes equivalency) | 685 | 157 | 24.7\% | 5.3 | 853 | 159 | 39.0\% | 7.9 |
| Bachelor's degree or higher | 424 | 131 | 15.3\% | 4.6 | 327 | 143 | 14.9\% | 6 |

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

| Subject | Project Radius |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Number |  | Percent |  |
|  | Estimate | MOE +/- | Estimate | MOE +/- |
| Total Above 25 | 2,418 | 224 |  |  |
| Less than 9th grade | 149 | 78 | $6.0 \%$ |  |
| 9th to 12th grade, no diploma | 326 | 91 | $14.0 \%$ |  |
| High school graduate (includes <br> equivalency) | 846 | 179 | $35.0 \%$ |  |
| Bachelor's degree or higher | 306 | 115 | $13.0 \%$ |  |
| Source: EJSCREEN 2019 <br> All orange and bolded highlighted cells indicate a difference that is greater than $10 \%$ when <br> compared to the state <br> All blue and bolded highlighted cells indicate a difference that is greater than 10\% when <br> compared to the state and the county |  |  |  |  |

## 8 County Health

The University of Wisconsin Population Health Institute, in collaboration with the Robert Wood Johnson Foundation, calculated County Health Rankings for all the States in the United States (www.countyhealthrankings.org). This ranking is based on health outcomes (such as lifespan and self-reported health status) and health factors (such as environmental, social, and economic conditions). According to this 2021 report, out of all 100 counties in North Carolina (with 1 indicating the healthiest), Iredell County ranks $15^{\text {th }}$ in health outcomes and $17^{\text {th }}$ 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 location are higher than the state averages overall, except for diabetes, which is lower than the state average. The hospitalizations due to asthma in this area is 183 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 ( 8.136 per 10,000 residents) is higher than the state average (4.812 per 10,000 residents).

Table 22. Health Outcomes

| Cause of Death | Project Area | North <br> Carolina |
| :--- | :---: | :---: |
| Cancer | 172 | 169.1 |
| Heart Disease | 170.1 | 163.7 |
| Stroke | 52.4 | 43.1 |
| Cardiovascular Disease | 239.3 | 221.9 |
| Diabetes | 21.8 | 22.8 |
| Source: CMS EJ Tool 2020 |  |  |

## 9 Local Sensitive Receptors

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

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

- Statesville Housing Authority Public Housing: Oaktree Village
- N B Mills Elementary
- Statesville Housing Authority Public Housing: Summit Village
- First Church of the Nazarene
- Monticello Church
- Gospel Tabernacle
- Westminster Church of God
- South River Baptist Church at Bristol Drive
- Calvary Church
- Living with Hope Ministry
- Front Street Baptist Church

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


Figure 4. Sensitive receptors surrounding Automated Solutions.

## 10 Local Industrial Sites

According to the NC CMS/EJ Tool, within the one-mile radius of the facility, there are 67 permits or incidents (as of November 3, 2021) (Figure 5).

- 9 Air Quality Permitted sites (2 Synthetic Minors, 1 Registered, 1 Permit Exempt, 5 Small)
- 1 Land Clearing and Inert Debris (LCID) Notifications
- 4 Brownfields Program Sites
- 6 Hazardous Waste Site
- 29 Underground Storage Tank Incidents
- 8 Underground Storage Tank Active Facilities
- 10 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 Automated Solutions Facility encompassing Census Tracts 604, 605, 610.03, and 611.02 in Iredell 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-except for Race and Ethnicity data which is from 2020—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 Automated Solutions Facility regarding its permit application. The county, the project area data from the radius used, and the census tracts generally exceed the state estimates for Black and African American and Asian individuals present. The area also showed generally elevated poverty rates-except in census 605--when compared to the state and the county. All LEP groups identified were less than 5\% of the total population-in all census tracts.

Iredell County ranks $15^{\text {th }}$ in health outcomes and $17^{\text {th }}$ in health factors. The project area performed worse than the state average for all death rates-except diabetes-that are included in the DEQ EJ Tool. There were 67 permits or incidents recorded within one mile of the proposed facility.

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

- Consult the list of sensitive receptors while considering additional outreach options that may best fit this community's needs.
- Provide project information to officials in the Town of Statesville.
- Consult known community leaders for additional outreach options and recommendations.


[^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.

