DRAFT Memorandum

To: Jes Conz

City of Williston

From: SRF Consulting Group

Date: December 28, 2023

Subject: P334 Task 2.4 – Transportation Equity Review

Task 2.4: Transportation Equity Review

Introduction

The consideration of equity is a critical component of the Safe Streets and Roads for All (SS4A) guidance for safety action plans, published[1] by the U.S. Department of Transportation (USDOT).

Figure 1. One of the Action Plan Components (source: USDOT)
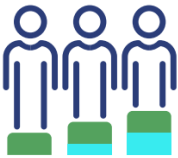
Equity Considerations

Plan development using inclusive and representative processes. Underserved communities* are identified through data and other analyses in collaboration with appropriate partners. Analysis includes both population characteristics and initial equity impact assessments of the proposed projects and strategies.

Some of the first questions related to equity the consultant project team was asked by City of Williston Engineering staff were:

- ***What does USDOT mean by 'underserved communities?'***
  - The definition as referenced by the SS4A Grant Program's Notice of Funding Opportunity (NOFO) comes from the Office of Management and Budget's Interim Guidance for the Justice40 Initiative. See the Justice40 Initiative Guidance and Policy section below for more details.

- ***Does this apply to Williston, North Dakota?***
  - Yes. North Dakota has populations considered to be disadvantaged, vulnerable, and/or underserved however, this looks a lot different in North Dakota than in major cities on the coasts, or other places in the U.S.

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[1] *SS4A Action Plan Components*. USDOT.

The Transportation Equity Review examines vulnerable populations in the City of Williston. Vulnerable populations are people more susceptible to impacts caused by the transportation system. In Williston for example, a family with no vehicle or dependent-aged residents who cannot drive may face higher risk walking or biking across an intersection or street, just to go about their daily lives or meet essential needs. The equity review identifies several key indicators of vulnerability and disadvantage within the City of Willison, introduces a prioritization process based on equity considerations, and summarizes how transportation safety improvement projects will positively impact vulnerable populations.

Guidance and Policy

The Transportation Equity Review is guided by local and federal policy. Considering equity in the safety action plan development builds off existing local policy and follows federal policy guidance. Performing a strong equity review and equitable public engagement to develop Williston's safety action plan will result in more competitive SS4A implementation grant applications and the ultimate funding of critical multimodal transportation safety improvements for Williston residents and visitors from all walks of life.

Local

City of Williston Title VI Policy
The City of Williston is committed to compliance with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, and all associated regulations and statutes. In May 2017, Williston adopted an official Title VI and Non-Discrimination Policy Statement:

> No person or group(s) of persons shall, on the grounds of race, color, sex, age, national origin, disability/handicap, and income status, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any and all programs, services, or activities administered by the [City], regardless of whether those programs and activities are federally funded or not.

The policy statement goes on to state "that every effort will be made to prevent discrimination through the impacts of its programs, policies, and activities on minority and low-income populations."

City of Williston Limited English Proficiency (LEP) Plan
Adopted in June 2017, the City's LEP plan addresses Williston's responsibilities as a recipient of federal financial assistance as it relates to individuals with LEP language skills.

Aligning to Executive Order 13166, *Improving Access to Services for Persons with Limited English Proficiency*, the City's LEP Plan provides guidance for language assistance to persons with limited English proficiency who wish to access services provided by the City. The Williston LEP Plan framework is built by a four-factor analysis including:
- The number or proportion of LEP persons who may be served by the City.
- The frequency with which LEP persons come into contact with City services.

- The nature and importance of services provided by the City to LEP populations.
- The interpretation services available to the City and overall cost to provide LEP assistance.

Federal

Justice40 Initiative

The Justice40 Initiative stems from Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*, which was signed by the President on January 27, 2021. The Justice40 Initiative is a goal of the federal government to invest 40 percent of certain federal investments in disadvantaged communities that are marginalized, underserved, and overburdened by pollution.

The Office of Management and Budget's Interim Guidance on the Justice40 Initiative defines underserved or disadvantaged communities through a combination of variables including, but not limited to the following:

- Low income, high and/or persistent poverty
- High unemployment and underemployment
- Racial and ethnic residential segregation, particularly where the segregation stems from discrimination by government entities
- Linguistic isolation
- High housing cost burden and substandard housing
- Distressed neighborhoods
- High transportation cost burden and/or low transportation access
- Disproportionate environmental stressor burden and high cumulative impacts
- Limited water and sanitation access and affordability
- Disproportionate impacts from climate change
- High energy cost burden and low energy access
- Jobs lost through the energy transition
- Access to healthcare
- Tribal jurisdictions

Infrastructure Investment and Jobs Act (IIJA) / Bipartisan Infrastructure Law (BIL)

The IIJA, also known as BIL was signed into law November 15, 2021. BIL is a reauthorization of the surface transportation bill or highway bill, providing five years of federal investment for surface transportation through September 30, 2026. The new legislation provides significantly more funding for surface transportation projects than its predecessor, the Fixing America's Surface Transportation (FAST) Act, the 2015 highway bill. With the additional federal funding appropriation of BIL, nearly every existing surface transportation program area received a boost in funds and over 12 new funding programs were created.

SS4A is one of the new programs and contains appropriations for planning grants (safety action plan) and implementation grants (project construction). Following the heels of the Justice40 Initiative, BIL and subsequently SS4A outline strong considerations of equity and identifying disadvantaged communities to further safety for people most vulnerable to impacts from the

transportation system. This has resulted in explicit equity criteria for SS4A implementation grants, and USDOT is asking how agencies have considered and addressed equity in safety action plans and implementation projects.

How can the City of Williston Analyze Equity?

There are several ways for the City to analyze equity. Below is a robust equity analysis framework, which is based off current practices from various agencies around the U.S.:

Define Key Population Groups and Population Variables

Various population groups and variables are included in the equity analysis for the safety action plan. Information on said groups is pulled from Census data and federal screening resources. Key population groups in the equity analysis may include, but are not limited to:

- Minority or non-white population
- Low-income population
- Dependent aged population (person age 65 and older, and age 17 or younger)
- LEP population
- Disabled population
- Households with zero vehicles
- Veteran status
- Single parent families
- Median household income
- Poverty rate
- Housing cost burden

Spatial or Geographic-Based Variables

The City of Williston is considering all users of the transportation system, including those who use alternative modes of transportation such as people walking and people biking. Geographic variables supplement the population-based variables in the equity analysis. The safety action plan project team has identified critical geographic-variables which include proximity to:

- High-Injury Network including road segments and intersections
- Public facilities such as schools, parks, and biking and walking trails
- Other community facilities
- Land uses including commercial, industrial, residential, etc.

Establish Numerical Thresholds

A critical step for the City and project team is to set thresholds that define concentrations of population groups. In some cases, the City may consider high concentrations of population anything over the Williston, Williams County, or North Dakota averages for the same groups. Thresholds are not critical to the equity analysis however, as summarized in the Prioritization Consideration section below, thresholds will help prioritize safety projects that may have the largest positive impact on disadvantaged or underserved populations.

North Dakota Threshold Guidance

The North Dakota Department of Transportation (NDDOT) provides specific thresholds for minority and low-income populations in the Agency's published Environmental Justice Analysis Guidance. NDDOT advises comparison of the study area to the percentages of minority and low-income populations to the city or county percentages, if the study area percentage is 10 percentage points higher than the city or county average, or greater than 50 percent in the study area, NDDOT considers there to be a strong indicator of an environmental justice community. The City of Williston should consider NDDOT guidelines and can set thresholds similarly or differently, there is no mandated requirement for the safety action plan.

Analysis Level

The analysis level is the application of granularity of the equity analysis itself. Analysis levels can include:

- Project
- Program
- Corridor
- Local (City or County)
- Regional
- Statewide

The most granularity of analysis is found at the project level, the least level at the statewide level. For Williston's safety action plan, the analysis level falls somewhere between program, corridor, and local; therefore, a fine granular equity assessment is unnecessary and typical geographic units of analysis can be utilized as described below. Where the Williston equity analysis becomes more granular is in the spatial or geographic-based variables, which have yet to be established.

Geographic Unit of Analysis

Equity analyses typically fall into traditional transportation planning-related geographies:

- Census Block Groups
- Census Blocks (rarely)
- Census Tracts
- Transportation Analysis Zones (TAZs)

For the safety action plan, a combination of Census Block Groups and Census Tracts is used.

Categorical Analysis

Most of the indicators of disadvantaged or underserved communities fall into various categories associated with the transportation equity review. The varying indicators align with different categories of analysis, combining to paint a comprehensive picture of how Williston's transportation system impacts disadvantaged or vulnerable populations. Indicators are broken down into categories for the safety action plan and include data available through the Census

and federally published indices. Indicators and categories are interrelated, and the following may be affected by Williston's multimodal transportation system:

Accessibility

A measure of people's ability to access the locations needed to go about their daily lives. Accessibility equity indicators point to populations that may have accessibility challenges affected by the transportation system. For example, populations who cannot, or may no longer be able to drive a personal vehicle. Indicators include:

- Proximity to curb ramps and sidewalks compliant with Americans with Disabilities Act (ADA)
- Dependent aged population (person age 65 and older, and age 17 or younger)
- Disabled population
- Households with zero vehicles
- Transportation access (USDOT ETC Explorer. Please see below for further detail)

Affordability

A measure of people's ability to afford and sustain their quality of life. Affordability indicators point to populations that may have affordability challenges affected by the transportation system. For example, personal-vehicle operations and maintenance costs may require alternative, lower-cost transportation modes such as walking, biking, and/or transit. Indicators include:

- Low-income population
- Median household income
- Poverty rate
- Areas of Persistent Poverty (APP)
- Housing cost burden
- 200% poverty line (USDOT ETC Explorer)
- Transportation cost burden (USDOT ETC Explorer)

Connectivity

A measure of people's ability to connect to their community. Connectivity equity indicators point to populations that may have a more difficult time getting where they need to go through the transportation system, or the transportation system itself presents a barrier. For example, a multi-lane, high-speed roadway may be a barrier to populations needing to connect to essential needs or employment, depending upon how they travel. Indicators include:

- Transportation access (USDOT ETC Explorer)
- Qualitative analysis

Efficiency

A measure of efficiency. Efficiency equity indicators point to areas of the community or transportation system that may be operating inefficiently. For example, poor traffic operations may cause congestion and backups, leading to inefficient travel through Williston. Indicators include:

- Transportation access (USDOT ETC Explorer)
- Qualitative analysis

Environment

A measure of Williston's environmental quality. Williston's multimodal transportation system is just one component that can affect people's environment and their community. For example, traffic congestion can contribute to lower air quality. Indicators include:

- Anticipated changes in extreme weather (USDOT ETC Explorer)
- Annualized disaster losses (USDOT ETC Explorer)
- Impervious surfaces (USDOT ETC Explorer)
- Ozone level (USDOT ETC Explorer)
- PM 2.5 level (USDOT ETC Explorer)
- Diesel PM level (USDOT ETC Explorer)
- Air toxics cancer risk (USDOT ETC Explorer)
- Hazardous sites proximity (USDOT ETC Explorer)
- Toxics release sites proximity (USDOT ETC Explorer)
- Treatment & disposal facility proximity (USDOT ETC Explorer)
- Risk management sites proximity (USDOT ETC Explorer)
- Coal mine proximity (USDOT ETC Explorer)
- Lead mine proximity (USDOT ETC Explorer)
- Pre-1980s housing (USDOT ETC Explorer)
- High-volume road proximity (USDOT ETC Explorer)
- Railways proximity (USDOT ETC Explorer)
- Airports proximity (USDOT ETC Explorer)
- Ports proximity (USDOT ETC Explorer)
- Impaired surface water (USDOT ETC Explorer)
- Endemic inequality (USDOT ETC Explorer)

Health

A measure of people's physical health. Health equity indicators point to populations that may have underlying health diagnoses resulting in more susceptibility to impacts from the transportation system. For example, populations with asthma are more susceptible to air pollution and air quality. Indicators include:

- Asthma prevalence (USDOT ETC Explorer)
- Cancer prevalence (USDOT ETC Explorer)
- High blood pressure prevalence (USDOT ETC Explorer)
- Diabetes prevalence (USDOT ETC Explorer)
- Low mental health prevalence (USDOT ETC Explorer)
- Housing cost burden
- Low-income households
- Transportation cost burden (USDOT ETC Explorer)

Housing

A measure of where and how people live. Housing equity indicators point to populations who may not have the ability to chose housing location or typology. For example, low-income households are subject to market affordability or subsidized housing locations and housing types. Indicators include:

- House tenure (USDOT ETC Explorer)
- Housing cost burden
- Transportation cost burden (USDOT ETC Explorer)
- Mobile homes (USDOT ETC Explorer)
- Low-income households
- 200% poverty line (USDOT ETC Explorer)
- Areas of Persistent Poverty (APP)

Jobs

A measure of people's ability to acquire and sustain a job. Jobs equity indicators point to populations who may have more of a challenge accessing and/or connecting to employment. For example, a person with limited English proficiency language skills or no access to a vehicle, may be limited by employment sector and/or employment location. Indicators include:

- Unemployment (USDOT ETC Explorer)
- No high school diploma (USDOT ETC Explorer)
- Uninsured
- Lack of internet access
- Dependent-aged population (person age 65 and older, and age 17 or younger)
- Disabled population
- LEP population
- Average commute time
- Transportation access (USDOT ETC Explorer)

Mobility

A measure of people's ease of access and connection to their community. Mobility equity indicators point to populations identified through both accessibility and connectivity equity indicators, with an emphasis on ease of travel. For example, transit-dependent riders in Williston may have a much more challenging time traveling throughout their community. Indicators include:

- Dependent aged population (person age 65 and older, and age 17 or younger)
- Households with zero vehicles
- Transportation access (USDOT ETC Explorer)

Safety

A measure of people's physical risk and safety. Safety equity indicators point to locations that are unsafe for travelers of different modes. For example, the Crash Analysis and High-Injury Network identifies high crash locations by travel mode, and a person walking or biking may be less safe traveling in certain locations. Indicators include:

- Transportation safety (USDOT ETC Explorer)
- Crash Analysis & High-Injury Network Analysis

Travel Time
A measure of the ability to move throughout Williston within a reasonable amount of time. Travel Time equity indicators point to locations which may experience more congestion and decreased mobility. For example, lane configuration and/or traffic control at a major intersection may cause delay or congestion during peak hours or school drop-off/pick-up. Indicators include:
- Commute time
- Transportation access (USDOT ETC Explorer)

City of Williston Disadvantaged Community Indicators and Vulnerable Populations

Federal Datasets

Climate and Economic Justice Screening Tool
The White House published tool provided to screen for Justice40 disadvantaged communities, provides an interactive web application utilizing Census Tract geographies and data to present cumulative disadvantages and vulnerabilities. There are eight components tracked by the Climate and Economic Justice Screening Tool:

- Climate change
- Energy
- Health
- Housing

- Legacy pollution
- Transportation
- Water and wastewater
- Workforce Development

The components listed above are comprised of several indicators and each Census Tract's percentile rank compared to national results. The Climate and Economic Justice Screening Tool is not used in the transportation equity review, as the USDOT tool described below, is tailored specifically for SS4A application. However, the Climate and Economic Justice Screening Tool is a good reference to have for other projects and discretionary federal grant opportunities the City may be pursuing.

USDOT Equitable Transportation Community (ETC) Explorer
The USDOT ETC Explorer provides an interactive web application utilizing Census Tract geographies and data to present cumulative disadvantages and vulnerabilities. There are five components tracked by USDOT ETC Explorer:

- Transportation Insecurity
- Climate and Disaster Risk Burden
- Environmental Burden

- Health Vulnerability
- Social Vulnerability

ETC Explorer components listed above are comprised of numerous indicators. Components and indicators are percentile ranked against other Census Tracts nationally or in a particular state. The transportation equity review includes national results from the ETC Explorer.

Table 1. Williston ETC Explorer Component Results

ETC Explorer Components	Williston Census Tract Percentile (National Results)					
	9535	9536	9537*	9538	9539	9541
Climate & Disaster Risk Burden	1%	2%	11%	**80%**	60%	34%
Environmental Burden	2%	3%	28%	42%	56%	39%
Health Vulnerability	8%	17%	5%	**87%**	**66%**	**66%**
Social Vulnerability	49%	38%	**75%**	51%	36%	34%
Transportation Insecurity	**99.8%**	**99.7%**	**99.5%**	72%	**83%**	**82%**
Overall, Disadvantaged Community? (Yes/No)[1]	No	No	No	**Yes**	**Yes**	**Yes**

Bold percentiles indicate component is over the disadvantaged threshold (greater than 65 percent).

1 Considered disadvantaged when overall index score is greater than 65 percent threshold.

*ETC Explorer geographies have not updated to reflect Census Tract 9537 which has since been split to 9537.01 & 9537.02 as shown in Figures 2 & 3 below.

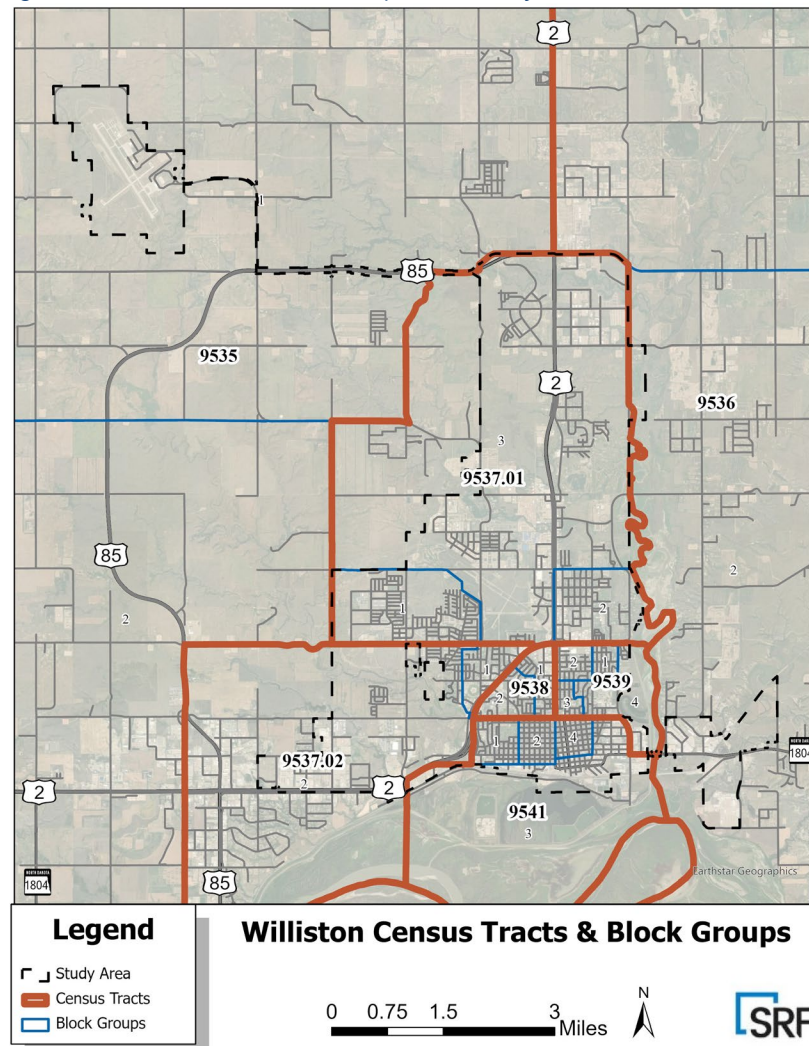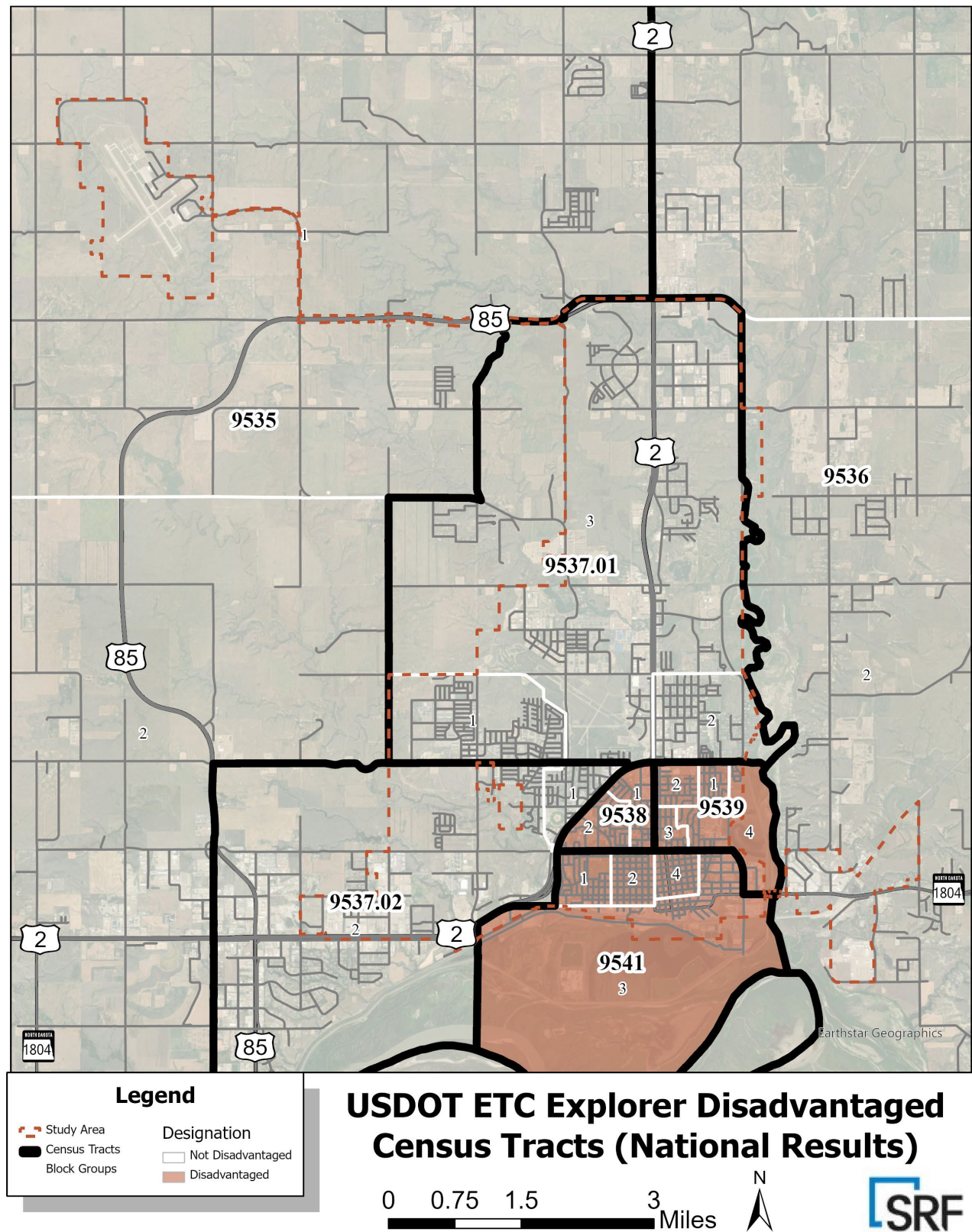*Figure 2. Census Tracts & Block Groups in the Study Area*

Williston Census Tracts & Block Groups

Figure 3. USDOT ETC Explorer Disadvantaged Status

Legend

Study Area

Census Tracts

Block Groups

Designation

Not Disadvantaged

Disadvantaged

USDOT ETC Explorer Disadvantaged Census Tracts (National Results)

0   0.75   1.5   3   Miles

N

Areas of Persistent Poverty and Historically Disadvantaged Community

Areas of Persistent Poverty (APP) and Historically Disadvantaged Community (HDC) are defined by the federal government.

APPs are defined as:
- Any County with consistently greater than or equal to 20 percent of the population living in poverty during the last 30-year period.
- Any Census Tract with a poverty rate of at least 20 percent (Census ACS 2014-2018 five-year data)
- U.S. Territories

HDCs are defined as:
- Certain qualifying Census Tracts
- Tribal land
- U.S. Territories

There are no locations within the safety action plan study area (Williams County or Census Tracts) designated as APP or HDC. In nearly all USDOT discretionary grant programs, the consideration and identification of APP and HDC is required. Future federal grant submittals may specifically ask if projects or portions thereof are in these designated areas however, there is no eligibility/ineligibility resulting for projects outside of an APP or HDC.

Census Data

Outside of the federal screening tools such as ETC Explorer, the project team utilizes the U.S. Census Bureau's American Community Survey (ACS) 2019-2022 5-year dataset. Tables 2 & 3 below summarize the key indicators analyzed in the transportation equity review by Census Tract and Block Group.

Table 2. Census Tract Indicators

|	Pop	HHs	% 0 Vehicle HHs	% Disabled	Housing Cost Burden	% 20+ Minute Work Commute
State of North Dakota	776,874	320,038	5.2%	15.5%	22.8%	**29.6%**
Williams County	39,076	15,599	6.5%	19.2%	20.9%	24.9%
City of Williston	27,783	11,410	**7.9%**	**22.1%**	**23.2%**	16.7%
Census Tract 9535	3,269	1,313	2.1%	13.2%	12.9%	**52.2%**
Census Tract 9536	6,740	1,250	0.5%	9.5%	19.2%	**50.4%**
Census Tract 9537.01	4,061	4,402	**10.8%**	10.5%	**28.5%**	17.8%
Census Tract 9537.02	1,731	2,404	5.7%	7.1%	19.2%	23.1%
Census Tract 9538	4,610	1,159	**8.1%**	17.4%	**33.8%**	21.5%
Census Tract 9539	1,191	1,634	2.4%	13.9%	21.1%	12.1%
Census Tract 9541	1,325	2,313	6.9%	6.1%	10.7%	16.6%

Bold – Indicator rate higher than the highest rate of comparison (State, County, or City).

Zero-Vehicle Households - *Accessibility Equity, Mobility Equity*

The City of Williston rate of households with zero-vehicles is 7.9 percent, higher than both the State (5.2 percent) and County (6.5 percent). Within the study area, there are two Census Tracts with a higher rate of zero-vehicle households than the City (highest rate of comparison): Census Tracts 9537.01 (10.8 percent) and 9538 (8.1 percent).

The transportation system may negatively impact zero-vehicle households' accessibility and mobility, as household members do not have direct access to a personal-vehicle to get around. These populations in Williston must rely on alternative transportation modes such as walking, biking, and/or taking transit.

Figure 4. Zero-Vehicle Households
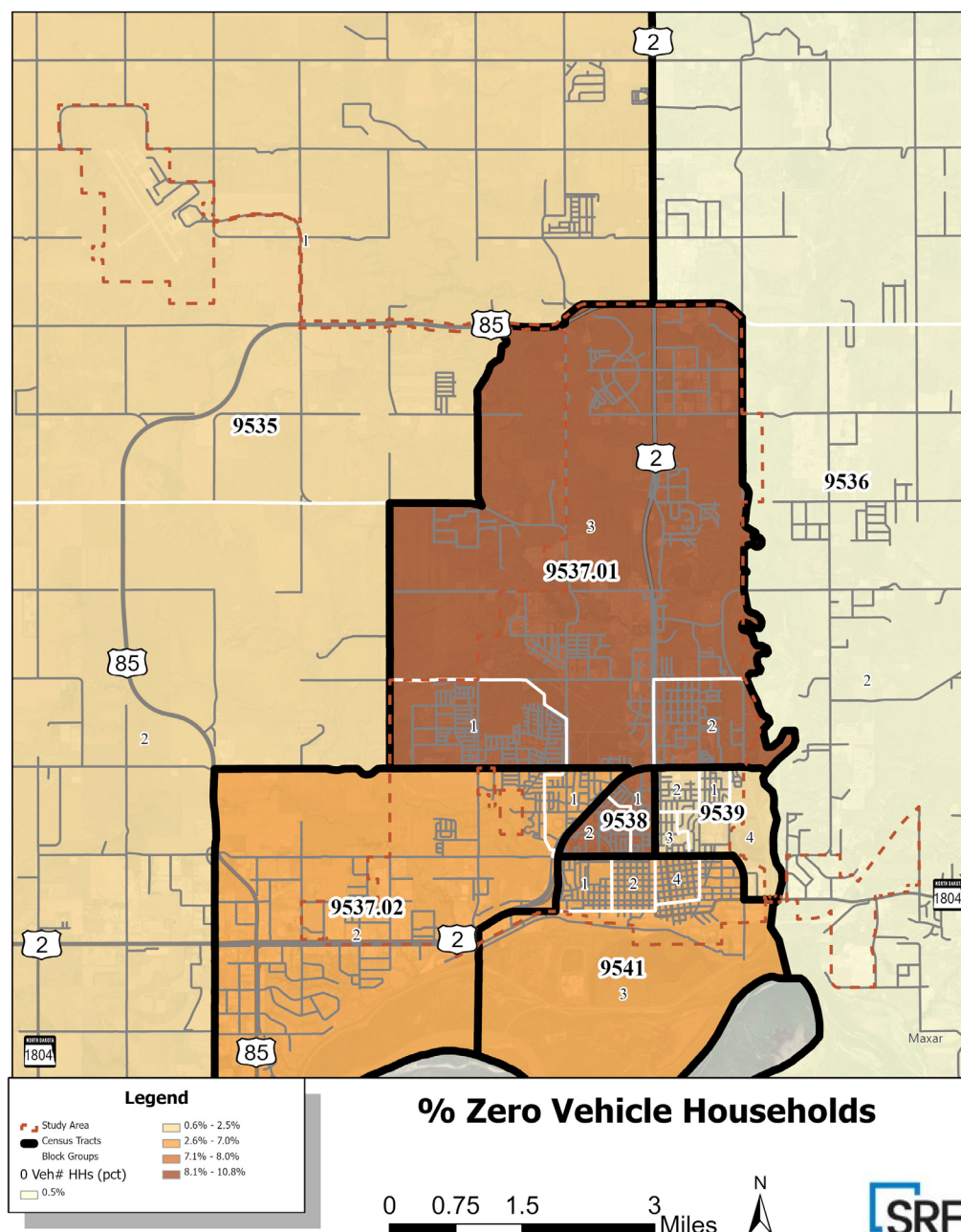
Percent of Population with a Disability - *Accessibility Equity, Mobility Equity, Jobs Equity*
The City of Williston rate of disabled population is 22.1 percent, higher than both the State (15.5 percent) and County (19.2 percent). No Census Tracts within the study area have a higher percentage than Williston's overall disabled population rate.

The transportation system may negatively impact the disabled population's accessibility and mobility, as people with disabilities may require different means of mobility or experience the transportation system differently than others. These populations in Williston may rely on alternative transportation modes such as walking, biking, taking transit, and/or mobility devices.

Figure 5. Disabled Population
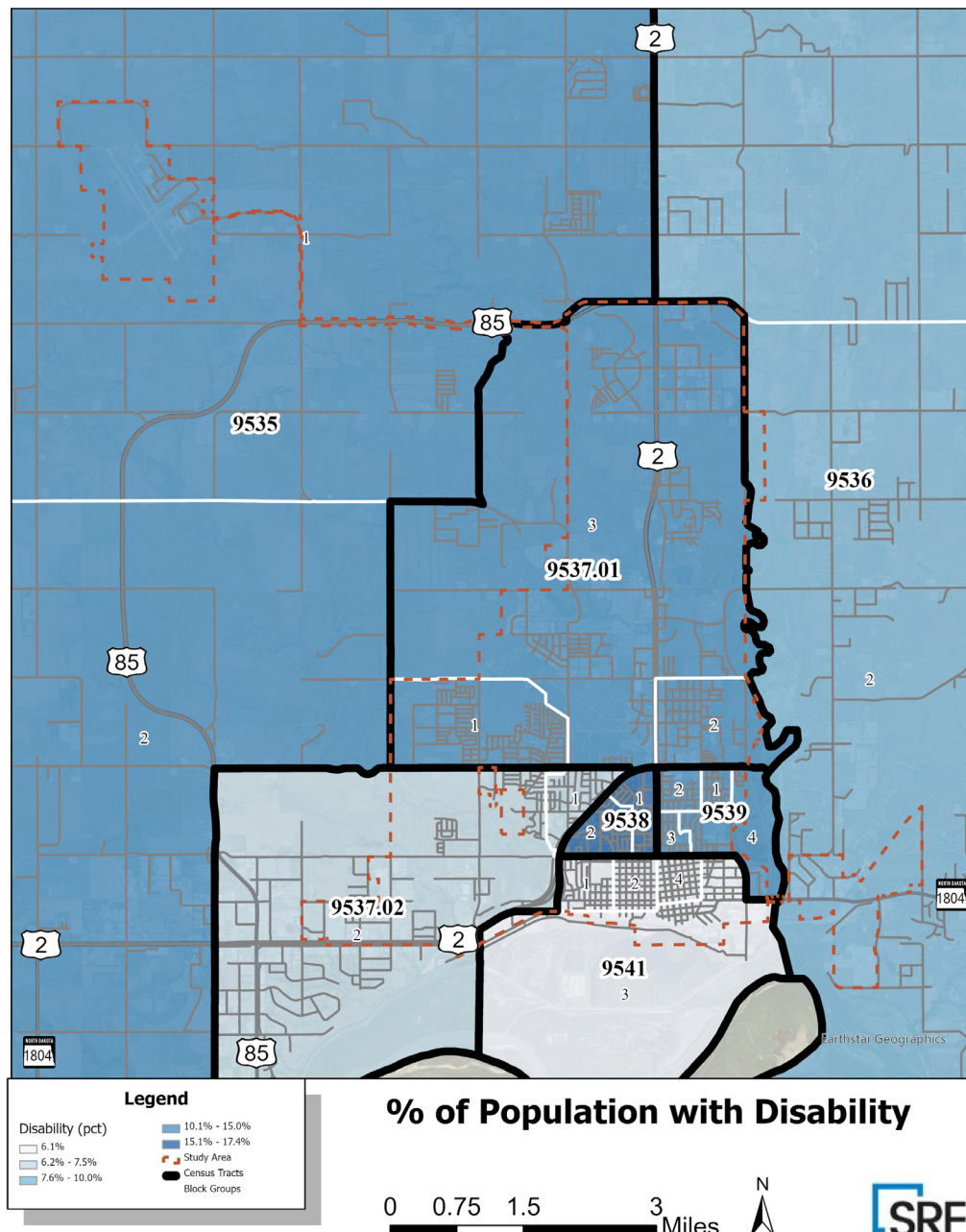
Housing Cost Burden - *Affordability Equity, Health Equity, Housing Equity*
The City of Williston rate of households experiencing housing cost burden (30 percent or more of household income spent on housing/rent) is 23.2 percent, higher than both the State (22.8 percent) and County (20.9) Within the study area, there are two Census Tracts with a higher rate of housing cost burden than the City (highest rate of comparison): Census Tracts 9537.01 (28.5 percent) and 9538 (33.8 percent).

The transportation system may negatively impact housing cost burdened households' affordability and health, as people with housing cost burdens make tough budgetary decisions between where they live, if they can receive healthcare, and/or how they get around. These populations in Williston are more susceptible to cost increases for day-to-day needs.

Figure 6. Housing Cost Burden
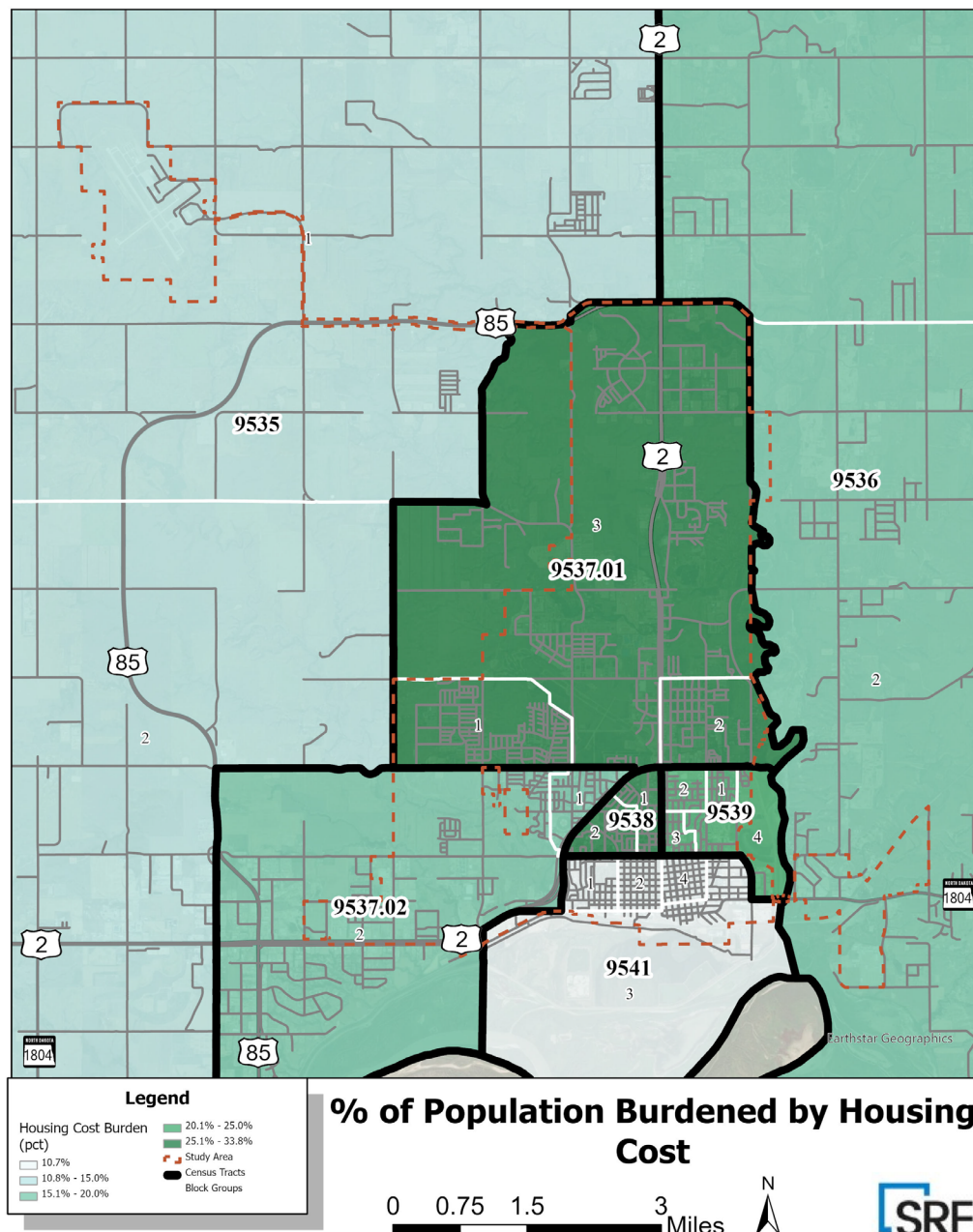
Commute of 20 Minutes or More – *Jobs Equity, Travel Time Equity*

The average work commute in North Dakota is just over 18 minutes. The City of Williston rate of population with a 20 minute or greater commute is 16.7 percent, lower than both the State (29.6 percent) and County (24.9 percent). Within the study area, there are two Census Tracts with a higher rate of population with a 20 minute or greater commute than the State (highest rate of comparison): Census Tracts 9535 (52.2 percent) and 9536 (50.4 percent).

The transportation system may negatively impact commute time as unsafe operations and inefficiencies lead to traffic congestion and delay. Commuting times impact accessibility to jobs and increased travel time may lead to decreased quality of life.

Figure 7. Commute Time
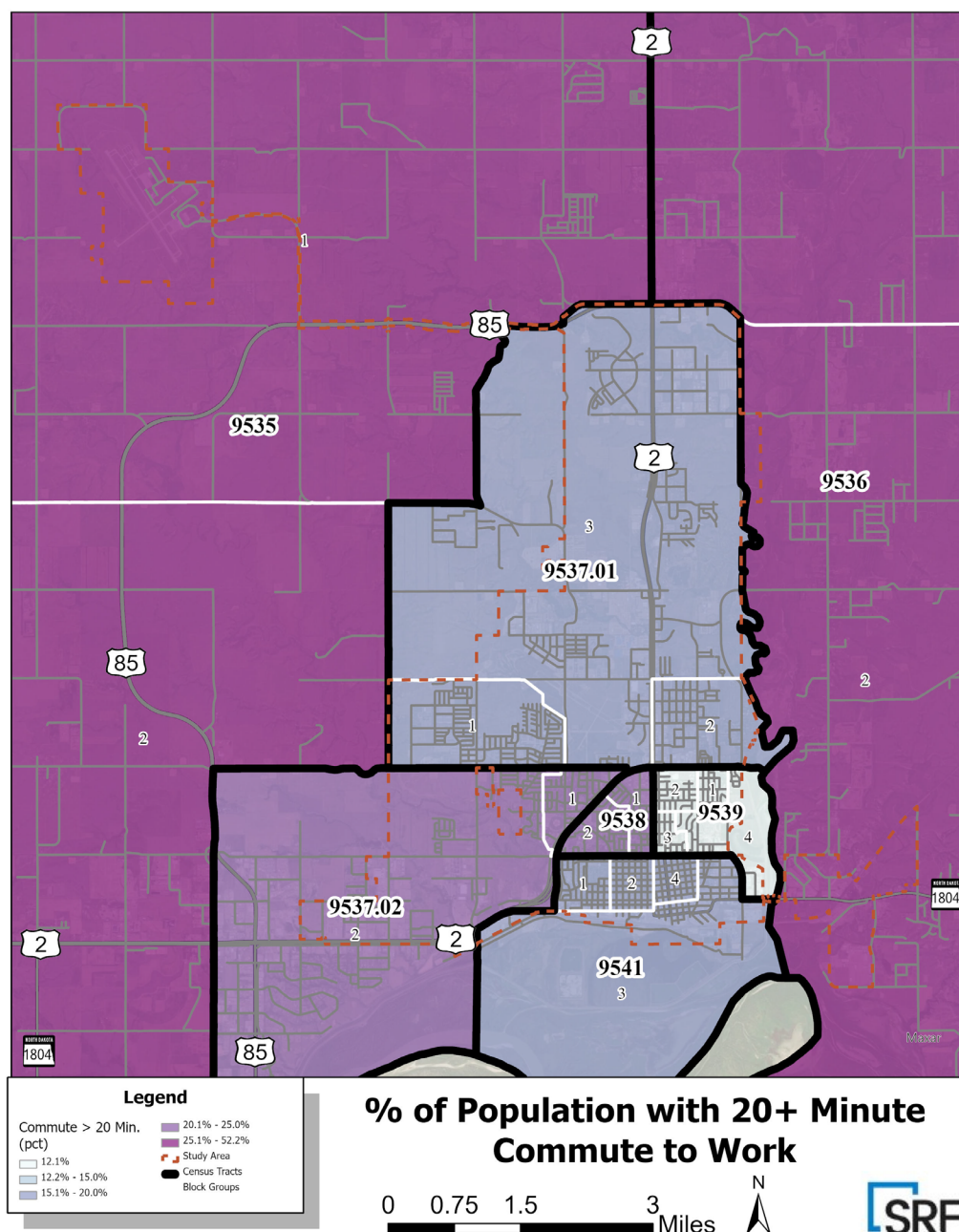
Indicator data varies between Census Tract geographies and Block Groups for a couple of reasons: (1) not all Census data is available at Block Group geographies and (2) Block Group data provides finer granularity and analysis of proximity to areas of interest and public gathering spaces. The project team uses Block Group indicator data when available, as summarized below.

Table 3. Block Group Indicators

| Census Tract	Block Group	Pop	% Age < 18	% Age 65+	% Minority	% LEP	% Below Poverty
State of North Dakota		776,874	23.5%	**15.9%**	15.5%	0.7%	**10.8%**
Williams County		39,076	**29.5%**	9.6%	19.2%	1.0%	7.4%
City of Williston		27,783	28.9%	7.9%	**22.1%**	**1.3%**	7.4%
9535	1	3,594	**31.7%**	14.9%	8.9%	0.2%	4.6%
	2	11,010	**32.4%**	3.0%	**33.1%**	1.1%	5.0%
9536	2	2,572	21.1%	**19.4%**	15.1%	0.0%	**20.7%**
9537.01	1	5,516	26.9%	12.5%	15.9%	0.0%	6.8%
	2	1,716	23.9%	12.9%	13.6%	0.0%	**11.8%**
	3	1,553	27.7%	8.9%	**28.5%**	0.0%	6.2%
9537.02	1	4,626	**32.4%**	1.0%	**43.8%**	0.0%	1.7%
	2	1,774	**37.6%**	5.4%	4.5%	0.0%	8.8%
9538	1	1,525	16.7%	0.0%	4.9%	0.0%	7.6%
	2	5,215	**43.6%**	4.3%	15.7%	**5.2%**	10.3%
9539	1	1,381	15.4%	**20.2%**	3.5%	0.0%	**22.3%**
	2	798	9.6%	12.8%	9.4%	0.0%	2.4%
	3	845	**31.7%**	**21.9%**	6.0%	0.0%	6.4%
	4	1,093	**43.5%**	7.6%	3.4%	0.0%	5.4%
9541	1	2,717	**29.7%**	12.6%	16.7%	0.0%	0.0%
	2	1,029	5.9%	**29.6%**	9.1%	0.0%	**14.9%**
	3	443	23.5%	0.0%	**40.6%**	0.0%	**32.3%**
	4	1,327	**38.7%**	3.2%	11.2%	0.2%	6.0%

Bold – Indicate rates higher than the highest rate of comparison (State, County, or City).

Age Younger Than 18 – *Accessibility Equity, Mobility Equity, Jobs Equity*

The City of Williston rate of population under 18 years old is 28.9 percent, higher than the State (23.5 percent) and lower than Williams County (29.5 percent). Within the study area, there are nine Block Groups with a higher rate of population under 18 years old than the County (highest rate of comparison): Census Tract 9535 Block Groups 1 (31.7 percent) and 2 (32.4 percent), Census Tract 9537.02 Block Groups 1 (32.4 percent) and 2 (37.6 percent), Census Tract 9539 Block Group 2 (43.6 percent), Census Tract 9539 Block Groups 3 (31.7 percent) and 4 (43.5 percent), and Census Tract 9541 Block Group 1 (29.7 percent) and 4 (38.7 percent).

The transportation system may negatively impact accessibility and mobility for people under 18 years old. Dependent-aged populations in Williston may rely on alternative transportation modes such as walking, biking, and/or taking transit.
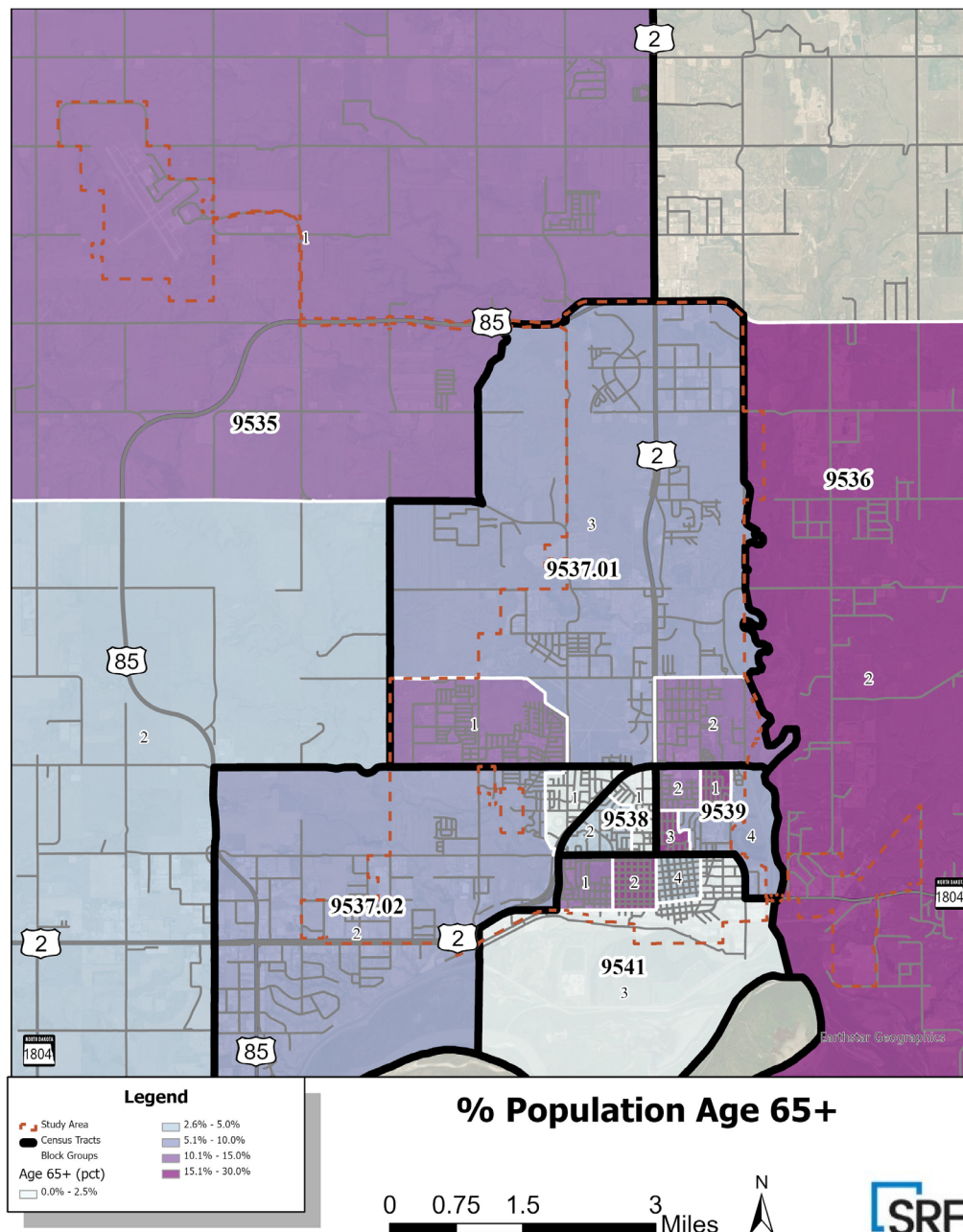
Figure 8. Age Younger than 18
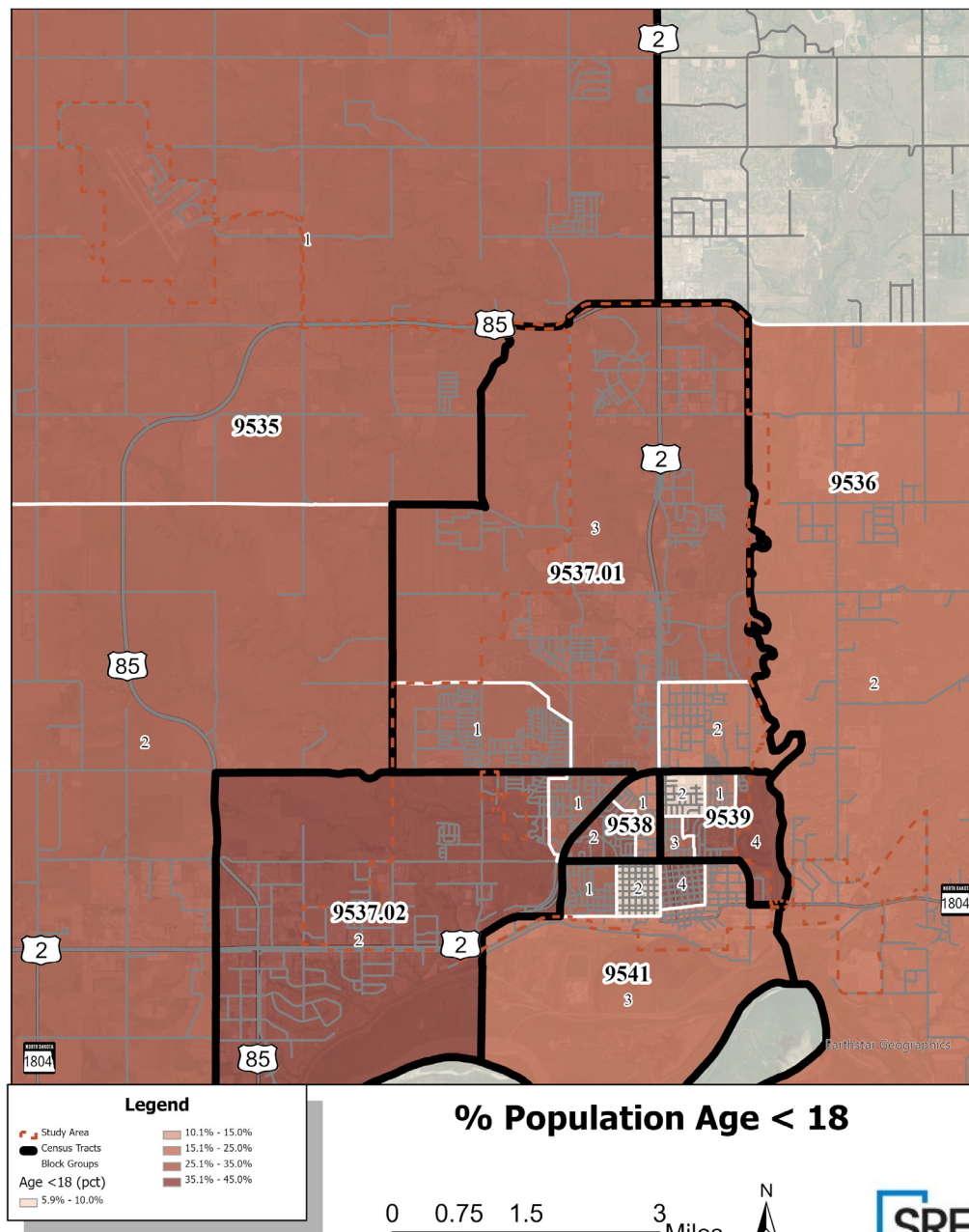
Age 65 or Older – *Accessibility Equity, Mobility Equity, Jobs Equity*

The City of Williston rate of population 65 years or older is 7.9 percent, lower than both the State (15.9 percent) and Williams County (9.6 percent). Within the study area, there are four Block Groups with a higher rate of population 65 years or older than the State (highest rate of comparison): Census Tract 9536 Block Group 1 (19.4 percent), Census Tract 9537.02 Block Groups 1 (32.4 percent) and 2 (37.6 percent), Census Tract 9538 Block Group 2 (43.6 percent), Census Tract 9539 Block Groups 1 (20.2 percent) and 3 (21.9 percent), and Census Tract 9541 Block Group 2 (29.6 percent).

The transportation system may negatively impact accessibility and mobility for people age 65 or older. Dependent-aged populations in Williston may rely on alternative transportation modes such as walking, biking, and/or taking transit.
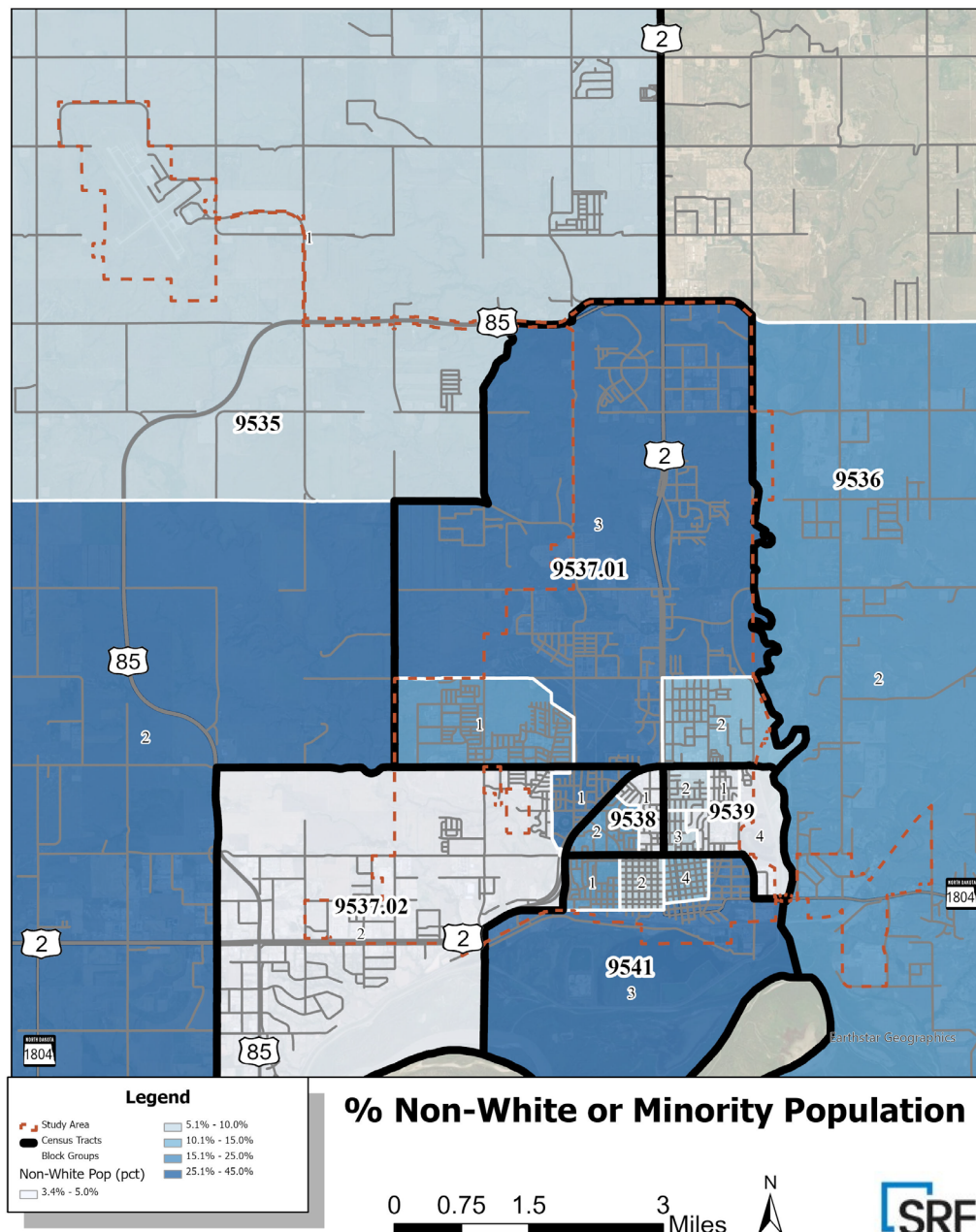
Figure 9. Age 65 or Older

% Population Age 65+

Legend
- Study Area
- Census Tracts
- Block Groups
- Age 65+ (pct)
  - 0.0% - 2.5%
  - 2.6% - 5.0%
  - 5.1% - 10.0%
  - 10.1% - 15.0%
  - 15.1% - 30.0%

0   0.75   1.5   3 Miles

SRF

Minority (non-white) Population – *Environment Equity*

The City of Williston rate of minority population is 22.1 percent, higher than both the State (15.5 percent) and Williams County (19.2 percent). Within the study area, there are four Block Groups with a higher rate of minority population than the City (highest rate of comparison): Census Tract 9535 Block Group 2 (33.1 percent), Census Tract 9537.01 Block Group 3 (28.5 percent), Census Tract 9537.02 Block Group 1 (43.8 percent), and Census Tract 9541 Block Group 3 (40.6 percent).

The transportation system may negatively impact the environment and equality of minority populations. Minority populations in Williston may face greater differences in size, degree, circumstances, etc., due to historic inequalities at the federal and state levels (USDOT included). Disproportionately high or adverse impacts from the transportation system to minority populations must be considered.

Figure 10. Minority Population

% Non-White or Minority Population

Legend
- Study Area
- Census Tracts
- Block Groups
- Non-White Pop (pct)
  - 3.4% - 5.0%
  - 5.1% - 10.0%
  - 10.1% - 15.0%
  - 15.1% - 25.0%
  - 25.1% - 45.0%

0   0.75   1.5   3 Miles

Limited-English Proficiency (LEP) Population – *Jobs Equity*

The City of Williston rate of LEP population is 1.3 percent, higher than both the State (0.7 percent) and Williams County (1.0 percent). Within the study area, there is one Block Group with a higher rate of minority population than the City (highest rate of comparison): Census Tract 9538 Block Group 2 (5.2 percent).

The transportation system may negatively impact the accessibility and mobility of LEP populations. LEP populations may be limited to certain types of jobs that require English language proficiency. Barriers or risks imposed by the transportation system may negatively impact LEP population's ability to access or sustain employment in Williston.

Figure 11. LEP Population

% Population with Limited English Proficiency Language Skills
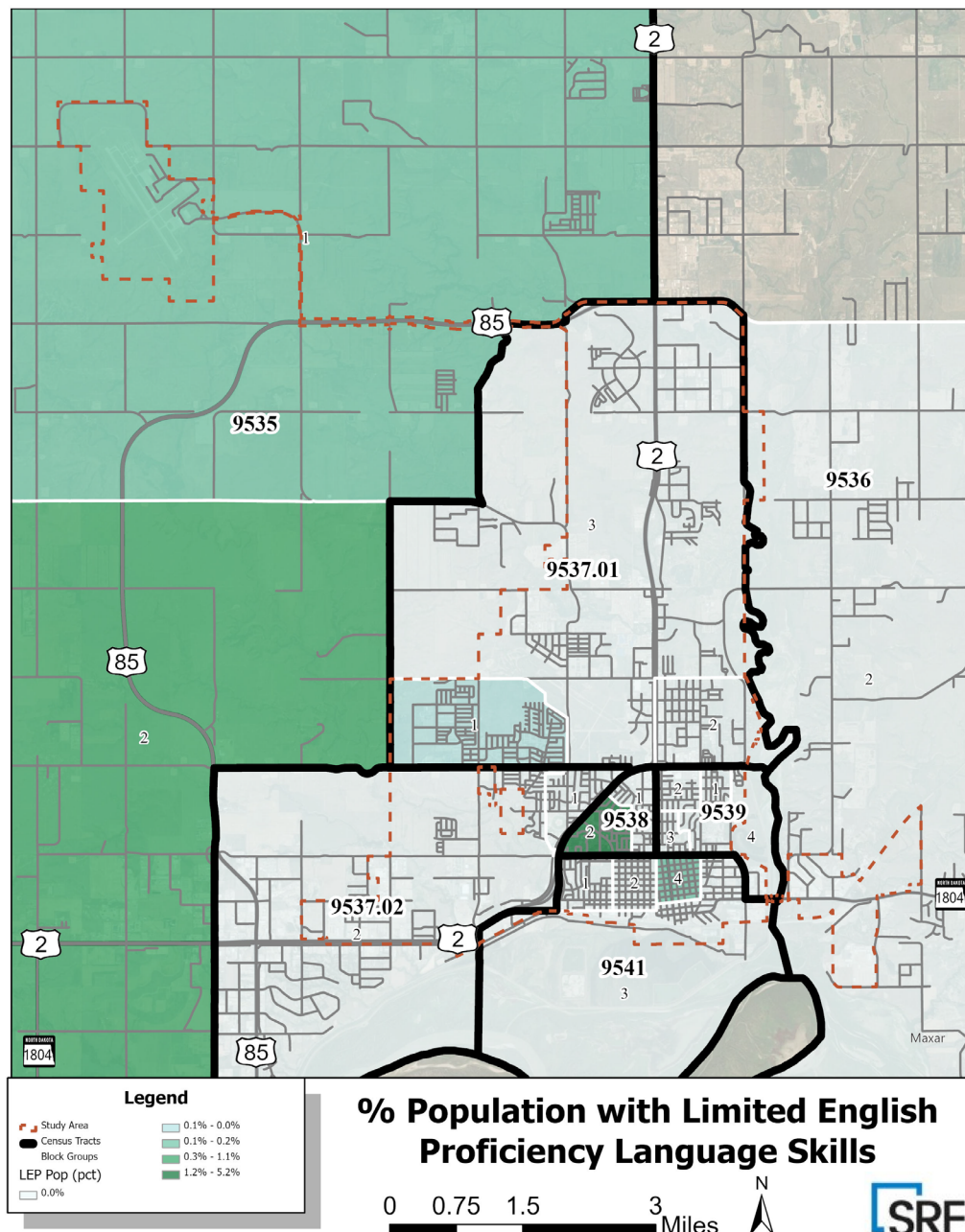
Population Living in Poverty – *Affordability Equity, Health Equity, Housing Equity*

The City of Williston rate of population living in poverty is 7.4 percent, lower than the State (10.8 percent) and the same rate as Williams County (7.4 percent). Within the study area, there are five Block Groups with a higher rate of minority population than the State (highest rate of comparison): Census Tract 9536 Block Group 2 (20.7 percent), Census Tract 9537.01 Block Group 2 (11.8 percent), Census Tract 9539 Block Group 1 (22.3 percent), and Census Tract 9541 Block Groups 2 (14.9 percent) and 3 (32.3 percent).

The transportation system may negatively impact the affordability, health, and housing of households living in poverty. Impoverished populations in Williston face financial hardships that impact where they live, if they can receive healthcare, and/or how they get around. Disproportionately high or adverse impacts from the transportation system to low-income or poverty populations must be considered.

Figure 12. Population Living in Poverty
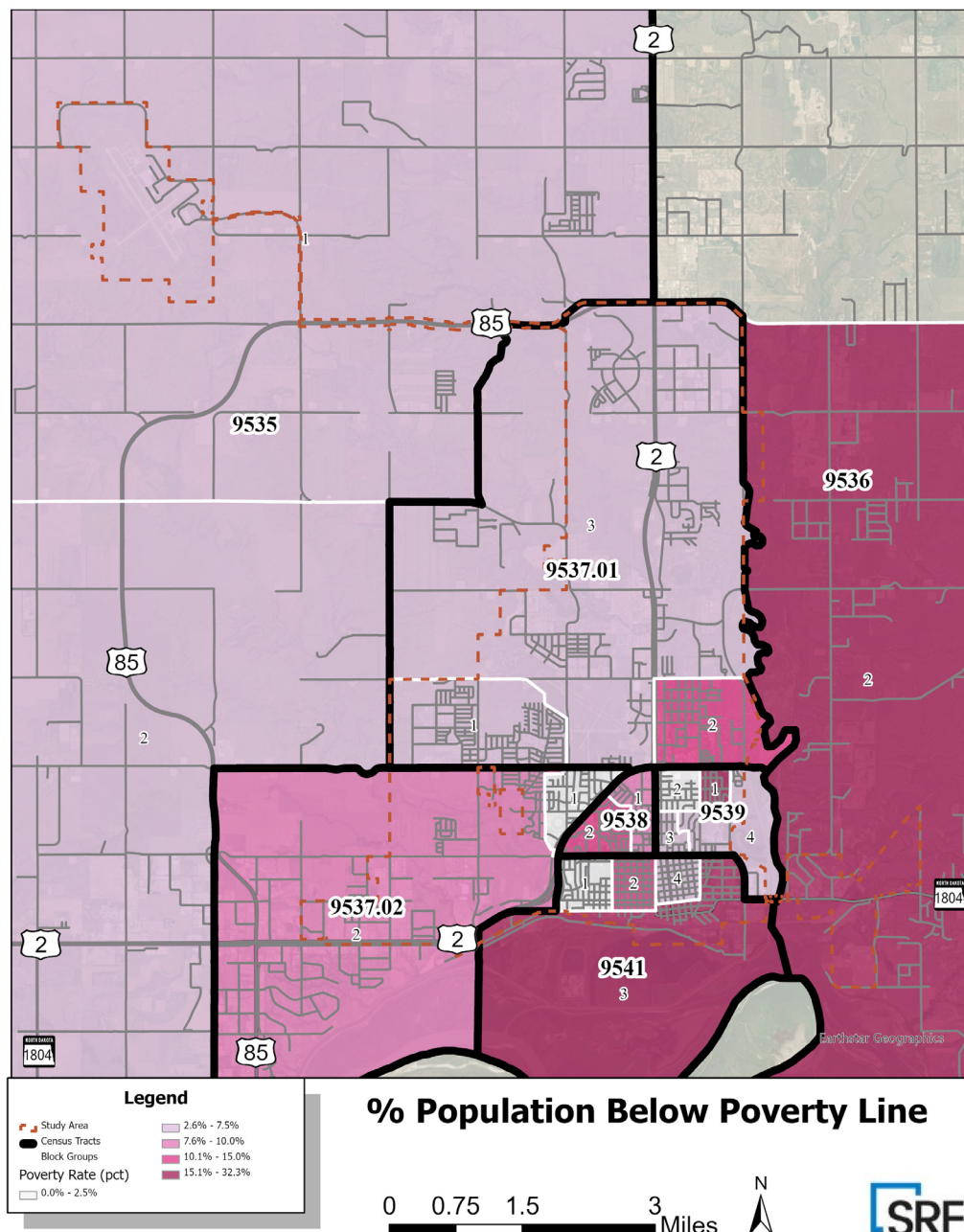
Equity Considerations and Prioritization

Prioritizing potential safety improvement projects, in part, through equity considerations in Williston is an important exercise. City staff and the project team have a strong dedication to understand the community and forward the goals and objectives of the City and USDOT surrounding multimodal transportation safety and disadvantaged populations. More than 15 factors have been considered in the comprehensive transportation equity analysis described above:

- USDOT's ETC Explorer Components (five components)
- Census Data (nine indicators)
- USDOT's ETC Explorer Disadvantaged Community Designation (Yes or No)
- Proximity to the High-Injury Network and Priority Community Locations or areas of interest including parks & trails, school facilities, public facilities, etc.

The City may consider using the transportation equity review to score and prioritize safety projects based on equity. One potential method of prioritizing would be to score based on the level of factor or indicators indicating disadvantaged and/or vulnerable populations. Preliminary scoring is based from USDOT ETC Explorer results and Census data indicators, with a maximum of 15 'points'.

Preliminary Equity Prioritization

The City of Williston and project team may tweak the equation below to weight certain equity metrics, increase thresholds, or decrease thresholds allocating points. Preliminary equity scoring is based on the following:

(ETC components above 65-percentile threshold) [max. of 5 points]   **+**

(ETC designation as 'Disadvantaged Community') [max. of 1 point]   **+**

(Census indicators higher than highest rate of comparison) [max. of 9 points]

                                   = Equity Score

Table 4 below shows an example of a simple prioritization exercise based upon the above equation, however, excludes spatial or geographic-based factors. Spatial or geographic-based factors may include proximity of proposed transportation safety improvement projects and/or Census Block Groups to the following:
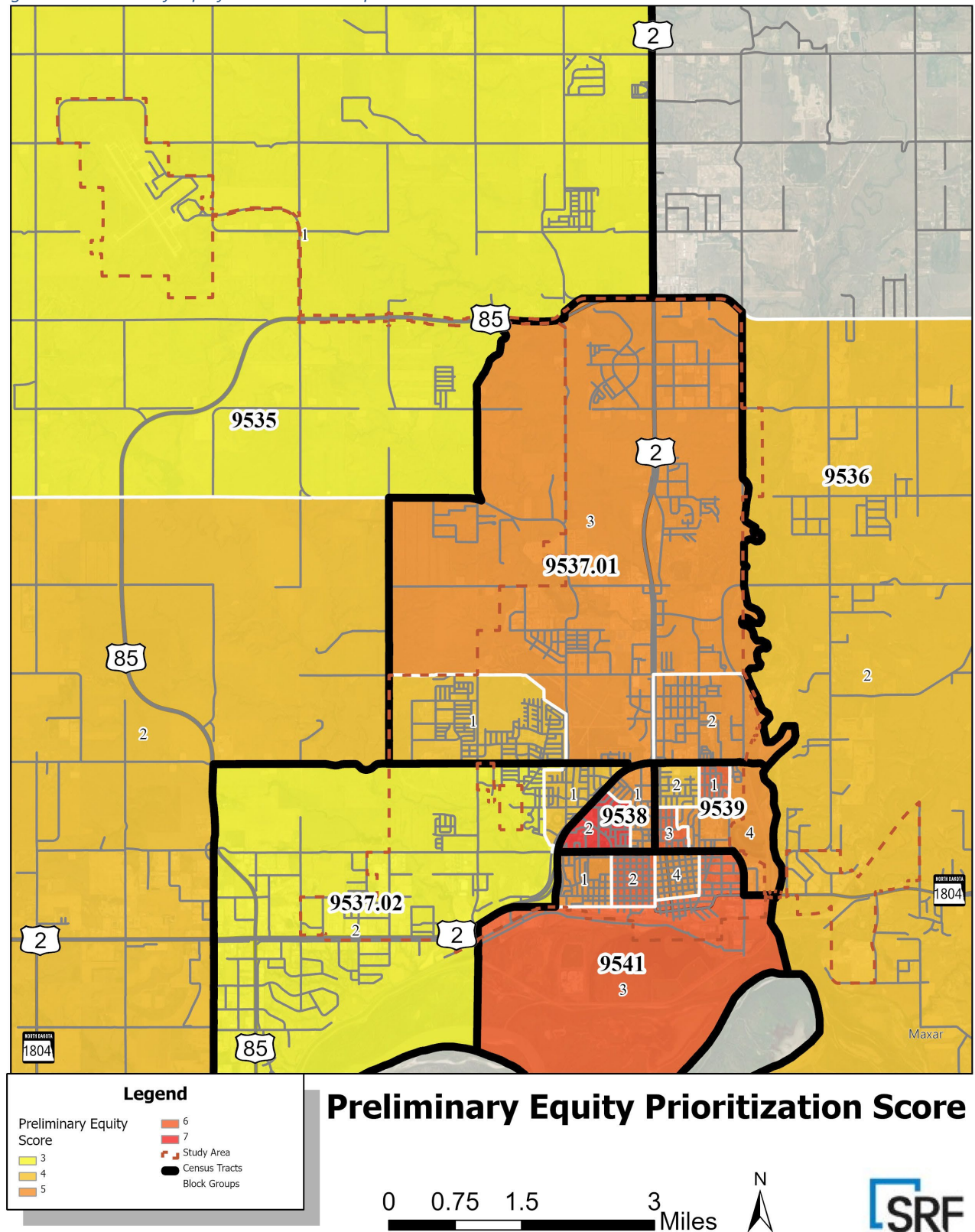
- Specified land use(s) (may be applicable to forthcoming crash profiles)
- Public facilities (public school, parks, shared use paths and trails)
- Areas of interest (other public facilities/services)

Table 4. Preliminary Equity Prioritization Matrix

CENSUS TRACT (CT) & BLOCK GROUP (BG)	USDOT ETC EXPLORER						CENSUS DATA								TOTAL EQUITY SCORE
	Climate & Disaster Risk	Environmental	Health	Social	Transportation	Disadvantaged	Zero-Vehicle	Disabled	Housing Cost Burden	Commute	Dependent-Aged*	Minority	LEP	Low-Income	
CT 9535 BG 1	0	0	0	0	1	0	0	0	0	1	1	0	0	0	3
CT 9535 BG 2	0	0	0	0	1	0	0	0	0	1	1	1	0	0	4
CT 9536 BG 2	0	0	0	0	1	0	0	0	0	1	1	0	0	1	4
CT 9537.01 BG 1	0	0	0	1	1	0	1	0	1	0	0	0	0	0	4
CT 9537.01 BG 2	0	0	0	1	1	0	1	0	1	0	0	0	0	1	5
CT 9537.01 BG 3	0	0	0	1	1	0	1	0	1	0	0	1	0	0	5
CT 9537.02 BG 1	0	0	0	1	1	0	0	0	0	0	1	1	0	0	4
CT 9537.02 BG 2	0	0	0	1	1	0	0	0	0	0	1	0	0	0	3
CT 9538 BG 1	1	0	1	0	1	1	0	0	1	0	0	0	0	0	5
CT 9538 BG 2	1	0	1	0	1	1	0	0	1	0	1	0	1	0	7
CT 9539 BG 1	1	0	1	0	1	1	0	0	0	0	1	0	0	1	6
CT 9539 BG 2	1	0	1	0	1	1	0	0	0	0	0	0	0	0	4
CT 9539 BG 3	1	0	1	0	1	1	0	0	0	0	2	0	0	0	6
CT 9539 BG 4	1	0	1	0	1	1	0	0	0	0	1	0	0	0	5
CT 9541 BG 1	1	0	1	0	1	1	0	0	0	0	1	0	0	0	5
CT 9541 BG 2	1	0	1	0	1	1	0	0	0	0	1	0	0	1	6
CT 9541 BG 3	1	0	1	0	1	1	0	0	0	0	0	1	0	1	6
CT 9541 BG 4	1	0	1	0	1	1	0	0	0	0	1	0	0	0	5

*Includes age less than 18 and age 65+ for a possible two points.

Figure 13. Preliminary Equity Prioritization Map

Preliminary Equity Prioritization Score

Legend

Preliminary Equity Score

3
4
5
6
7

Study Area

Census Tracts

Block Groups

0   0.75   1.5   3
Miles

N

SRF

Proximity to High-Injury Network (HIN) & Priority Community Areas of Interest

Vulnerable populations, as indicated by higher preliminary equity scores shown in Table 4 and Figure 13 may face greater safety risk when traveling on the multimodal transportation system throughout Williston. As shown in Figure 14, the HIN stretches through the most vulnerable communities represented in: Census Tracts 9538, 9539, and 9541. The network dissects these Census Tracts along several corridor with varying directional mobility:

- North-South
  - US Hwy 2/Dakota Parkway
  - US 85/2nd Avenue
  - Main Street
- East-West
  - 11th Street
  - 18th Street
  - 22nd Street

Additionally, these same vulnerable populations are located within 0.25-miles of 30 out of 38 (79 percent) total areas of interest, as preliminarily identified by the project team and City of Williston staff. Areas of interest within 0.25-miles of Census Tracts 9538, 9539, and 9541 include:

- Raymond Community Center
- Williams County Veterans Services
- Williams County Courthouse
- Fire Station #1
- Mercy Hospital
- Williston Rural Fire Department
- US Post Office
- Williston City Hall
- Public Library
- Harmon Park
- Davidson Park
- Western Star Park
- Railroad Park
- Recreation Park
- Westlawn Park

- The Area Recreation Center (ARC)
- Moose Park
- Williston Train Station (Amtrak)
- Northwest Dakota Public Transit
- Rickard Elementary School
- Lewis & Clark Elementary School
- Trinity Christian School
- St. Joseph's Elementary School
- McVay Elementary School
- ASB Innovation Academy
- Bakken Elementary School
- Wilkinson Elementary School
- Williston Middle School
- North Star Human Service Zone

There are several shared use paths and on-street bicycle facilities providing mobility for vulnerable populations. These facilities provide critical mobility for populations that may be required to take more trips through walking and biking. See Figure 15 for more detail.

With disadvantaged and vulnerable populations within these specific geographies, people traveling to and from areas of interest, or to go about their daily life or sustain their quality of life, may be at higher safety risk given the proximity of the HIN. Vulnerable populations may be at higher safety risk when traveling by their means of mobility (essential travel mode or mode of choice) to participate in the essential 'building blocks' of society and foundational Williston destinations such as:

- parks & trails
- educational facilities
- public facilities and governmental services
- cultural events
- social services
- healthcare
- emergency services
- religious institutions
- etc.

Through the transportation equity review, the City is considering vulnerable populations in safety action plan implementation projects by:

- understanding vulnerable populations' proximity to the HIN
- considering accessibility of vulnerable populations to and from foundational places of the Williston Community
- considering mobility of vulnerable populations to and from foundational places of the Williston Community

This understanding and consideration will result in developing contextual implementation strategies sensitive to how future transportation safety projects may impact Willison's most vulnerable residents.

Impacting Equity

Proposed implementation strategies at to-be-determined locations will positively impact disadvantaged and vulnerable populations within Williston. Strategic safety countermeasures on roadways and intersections will increase safety for travelers, helping to ensure people can go about their daily lives without being put at higher risk going wherever and however (multimodal) they need to go about their daily lives. By reducing the risks associated with 'high-injury' roadways in Williston, safety will be improved to ensure equitable accessibility to destinations for vulnerable and disadvantaged people. The to-be-determined multimodal transportation network improvements will improve safety for all residents and visitors from all walks of life to meet basic needs, go to work, get an education including higher education, participate in cultural events, receive healthcare, and ultimately sustain a higher quality of life in Williston.

[Forthcoming language regarding equity and to-be-determined projects, which will be based on crash profiles and resultant implementation strategies]
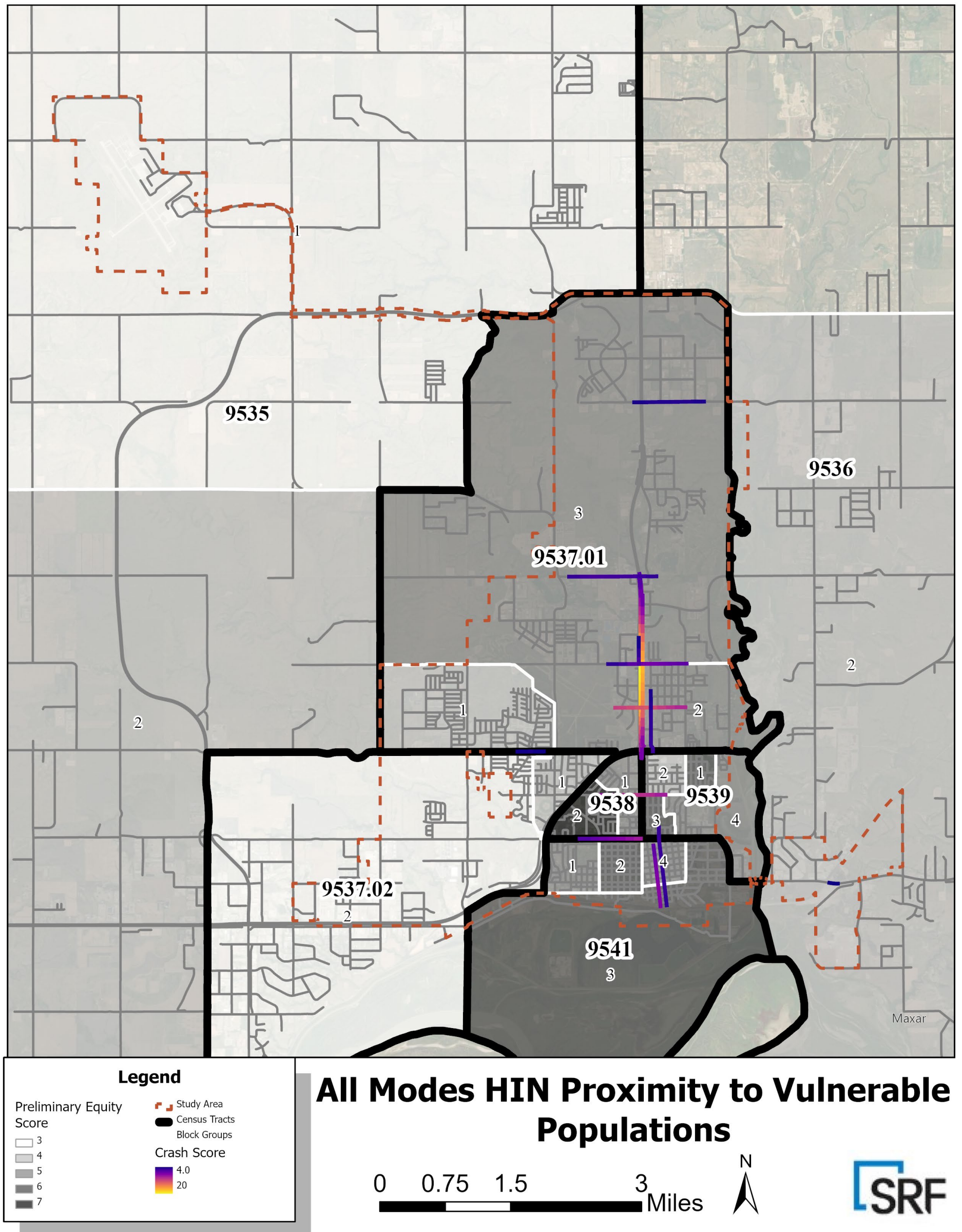
Figure 14. Disadvantaged Populations' Proximity to All Modes High-Injury Network (HIN)
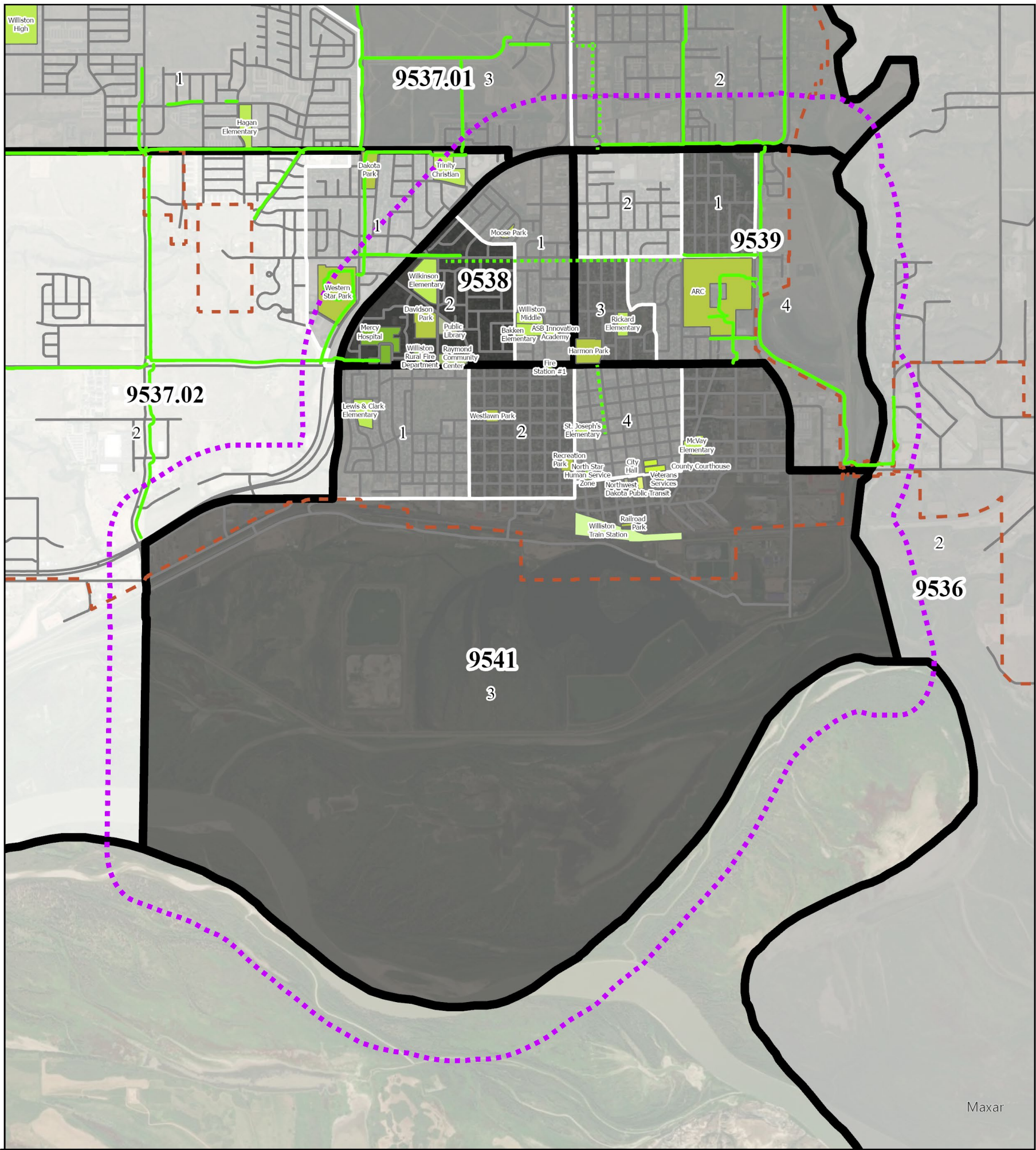
Figure 15. Disadvantaged Communities & Williston Areas of Interest