

## **6. EQUITY CONSIDERATIONS**

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## 6.1 USDOT DISADVANTAGED CENSUS TRACTS

The US Department of Transportation's (USDOT) Equitable Transportation Community (ETC) Explorer tool uses 2020 Census data to evaluate communities that have experienced cumulative burdens due to historical underinvestment in transportation infrastructure. The ETC Explorer considers five critical components: **Transportation Insecurity, Climate and Disaster Risk, Environmental Burden, Health Vulnerability, and Social Vulnerability**. This analysis helps identify areas where transportation investments can help mitigate disadvantages and ensure a more equitable transportation system.

The ETC Explorer complements the White House Council on Environmental Quality's (CEQ) Climate and Economic Justice Screening Tool (CEJST). It focuses on understanding transportation-related disadvantages and ensuring that the benefits of USDOT investments are targeted toward mitigating transportation challenges in underserved communities. Rather than serving as a binary indicator of whether a census tract is disadvantaged, the ETC Explorer provides a detailed look into the severity of transportation-related burdens in various communities across the country.<sup>2</sup>

Census Tracts/project areas at "0%" are considered the least disadvantaged, and "100%" are the most. DOT considers a census tract to be experiencing a disadvantage if the overall index score places it in the 65% (or higher) of all US census tracts. The 65% cutoff was chosen to be consistent with CEJST, prioritizing tracts at the 65th percentile or above for CEJST's low-income indicator.

### Components of Transportation Disadvantage

1. **Transportation Insecurity:** Limited access to reliable, affordable, safe transportation options.
2. **Health Vulnerability:** Higher rates of health conditions linked to transportation issues.
3. **Environmental Burden:** Exposure to environmental hazards and pollution exacerbated by inadequate transportation systems.
4. **Social Vulnerability:** There is a higher likelihood of social isolation due to lack of access to transportation.
5. **Climate and Disaster Risk:** Communities are more susceptible to climate-related disasters without resilient transportation systems.

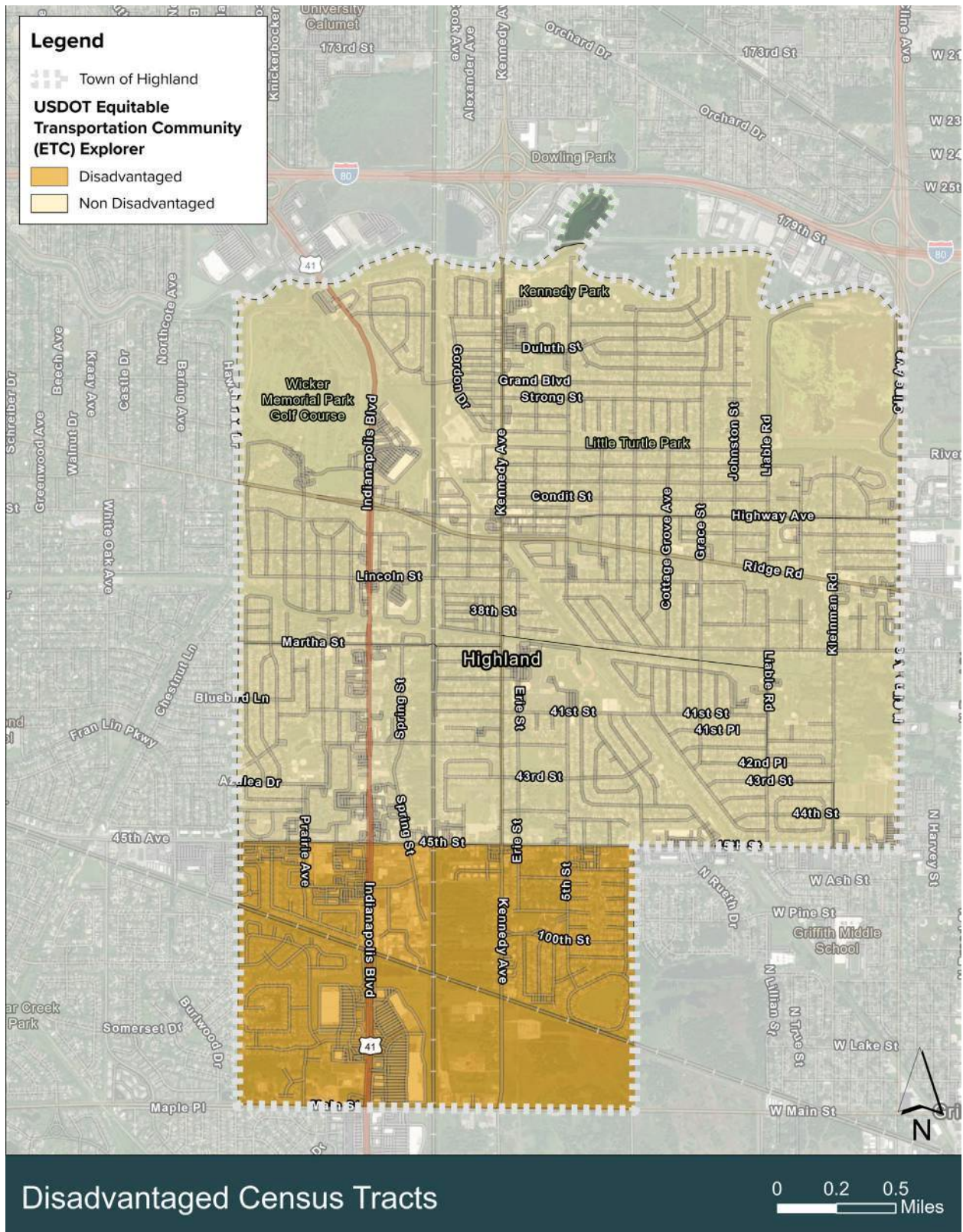
### 6.1.1.1 EQUITY FINDINGS IN THE TOWN OF HIGHLAND<sup>3</sup>

According to the ETC Explorer, one out of six census tracts in the Town is classified as disadvantaged at the **state level**, primarily located south of 45th Street.

<sup>2</sup> Source: [USDOT Equitable Transportation Community \(ETC\) Explorer](#)

<sup>3</sup> Source: [ETC Explorer - State Results | USDOT Equitable Transportation Community \(ETC\) Explorer](#)

Figure 22: Town of Highland – Disadvantaged Areas

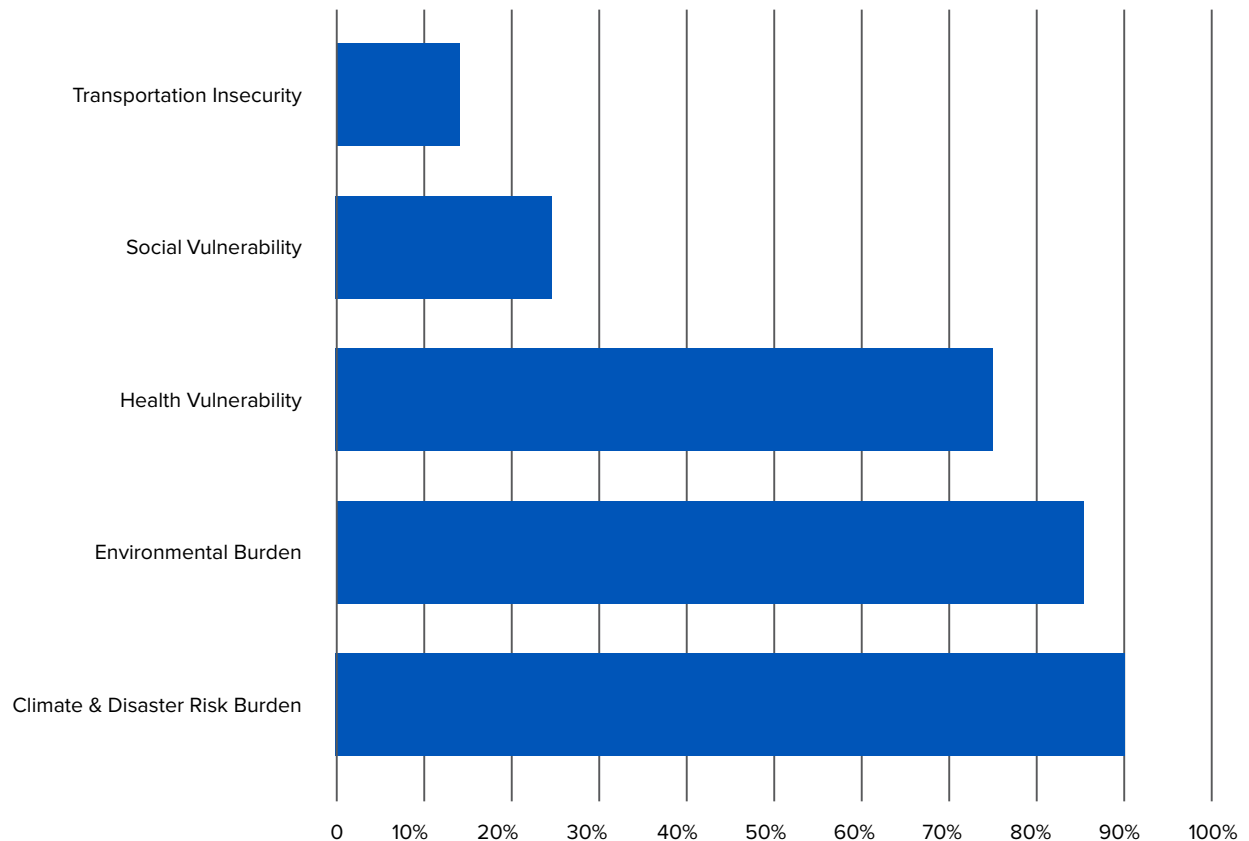


### 6.1.1.2 ETC EXPLORER'S DISADVANTAGE COMPONENTS AND INDICATORS

The ETC Explorer evaluates over 85,000 census tracts across the US, using a normalized scoring method called min-max scaling to create consistent comparisons. Scores for the five disadvantage components are calculated by summing the ranked, normalized indicators. These scores are then ranked in percentiles, comparing each census tract to others nationally and in different states. Based on federal guidelines, Census tracts ranked at or above the 65th percentile are considered disadvantaged.

### 6.1.1.3 ETC EXPLORER – STATE RESULTS

**Figure 23: Town of Highland – Overall Disadvantage Component Scores - Percentile Ranked**





### 1. Transportation Insecurity

The disadvantaged census tract in Highland ranked 14 percent for Transportation Insecurity. A percentage of transportation insecurity occurs when individuals cannot consistently and safely access the transportation needed for daily activities; in this tract, the percentage is significantly low, meaning it is not disadvantaged.

### 2. Environmental Burden – Disadvantaged

The disadvantaged census tract in Highland ranked 86 percent for Environmental Burden, indicating significant exposure to pollution and proximity to hazardous sites, such as facilities and roads, that may affect air and water quality. The tract ranked above the 65th percentile, putting this tract at a disadvantage under the environmental burden.

### 3. Social Vulnerability

Social Vulnerability measures the socioeconomic conditions affecting quality of life, with the disadvantaged census tract in Highland ranking at 25 percent. The percentile indicates some vulnerability based on factors like income, education, and housing; in this tract, the percentage is low, meaning it is not disadvantaged.

### 4. Climate and Disaster Risk Burden – Disadvantaged

The disadvantaged census tract in Highland ranked 90 percent for climate and disaster risk, meaning the town faces substantial risks from extreme weather events, heat, and precipitation changes that could impact transportation infrastructure. The tract ranked above the 65th percentile, putting this tract at a disadvantage under the climate and disaster risk burden.

### 5. Health Vulnerability – Disadvantaged

The disadvantaged census tract in Highland ranked 75 percent for Health Vulnerability, reflecting moderate health risks related to pollution, poor walkability, and long commutes, all of which can contribute to higher rates of illness like cancer or diabetes. The tract ranked above the 65th percentile, putting this tract at a disadvantage under the health vulnerability burden.

#### 6.1.1.4 COST, ACCESS, AND SAFETY SUMMARY FOR DISADVANTAGED CENSUS TRACT:

- **Poverty:** 17.55% of the population lives at or below 200% of the federal poverty line.
- **Transportation Costs:** Households spend an average of 12.59% of their income on transportation, which is estimated to cost \$10,783 annually.
- **Housing Cost Burden:** 24.72% of households spend over 30% of their income on housing.
- **Access to Vehicles:** 2% of households in disadvantaged tracts do not own personal vehicles.
- **Transit Availability:** No transit availability was reported, creating an access gap for those without personal vehicles.
- **Drive Times:** Average drive times to critical services (e.g., medical facilities, grocery stores) range from 2-18 minutes, although only certain services are accessible within a 15-minute walk.
- **Total Fatalities:** Traffic fatalities in this tract were estimated to be 0.12 per 100,000 people on an annual average between 2016 and 2020.

### 6.1.1.5 SUMMARY

The equity analysis of the Town of Highland reveals significant disparities in transportation access and environmental exposure. One census tract, predominantly located south of 45th Street, is classified as disadvantaged at the **state level**.

While the disadvantaged census tract ranks lower in Transportation Insecurity, indicating moderate access to transportation options, the census tract shows higher levels of disadvantage in Environmental Burden (86th percentile), Climate and Disaster Risk (90th percentile), and Health Vulnerability (75th percentile). These elevated scores suggest that residents in certain areas are disproportionately affected by pollution, extreme weather risks, and health issues, all by underinvestment in transportation infrastructure.

Additionally, socioeconomic factors such as poverty, transportation costs, and housing burdens contribute to the area's challenges, with 17.55% of the population living at or below 200% of the federal poverty line and nearly 25% of households facing high housing costs. The lack of public transit further isolates disadvantaged residents, particularly those without personal vehicles, reducing their access to essential services.

These findings emphasize the importance of targeted transportation investments and policies that address these disparities. By improving access to safe, reliable transportation and reducing environmental and health vulnerabilities, the Town of Highland can offer a more equitable transportation system that benefits all residents, particularly those in disadvantaged areas. It is also important to empower residents to articulate their needs and actively participate in planning and executing remedial measures. Additionally, initiatives to address health inequities, encompassing improved access to healthcare services, preventative care, and targeted health education programs for vulnerable demographics, are crucial. Collaborative efforts with local healthcare providers and community organizations are instrumental in fostering equitable health outcomes.

Crucially, when formulating and enacting land use, transportation, and environmental protection policies, decision-makers should consider diverse strategies that ensure equitable resource allocation and anticipate potential impacts on communities; this entails an all-inclusive consideration of social, economic, and environmental factors to uphold principles of justice and fairness.