

# Tribal Transit Study: Demographic Needs Indicators, Funding Needs, and Livability — Executive Summary

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## Abstract

The objectives of this research are to study the demographics of tribal communities that relate to transportation needs, describe and evaluate existing tribal transit operations and funding, and examine the role of transit in livability and quality of life in tribal communities in the United States. Case studies in two Indian reservations were conducted to understand the role of transit and other factors in livability and improving quality of life in tribal communities. The case studies identified several factors that could be improved to enhance quality of life in the communities, and they showed that transit can play a role.

## Introduction

By providing mobility options and connecting transit-dependent populations to healthcare, education, employment, shopping, recreation, and other activities, public transportation plays a critical role and contributes to livability and quality of life. However, the geographic and demographic characteristics of a given area directly affect transit. Tribal lands are mostly rural with low population densities. Moreover, the share of the population often described as transit dependent, which includes seniors, people with disabilities, those with low income, youth, and households without automobiles, is often higher for tribal areas. Additionally, tribal areas often lack resources and are dependent on federal support to meet mobility challenges. This study provides an analysis of geographic, demographic, and transit related data in tribal communities, with a focus on federally recognized tribes in the lower 48 states.

This study also explores the concept of livability and transportation's role in improving livability. Two case studies were conducted with Standing Rock Reservation and Makah Tribe to understand the factors that residents think are important for livability, describe the quality of livability factors within these communities based on residents' perceptions, and explore how transit and other transportation factors contribute to livability.

## Geographic Characteristics

Reservations range in size from less than one square mile to thousands of square miles. In fact, some reservations are larger than some states. In addition to differences in land area, Indian reservations are widely dispersed geographically. However, many reservations are in the Midwest and southwestern states, while very few are in the eastern region. Some reservations overlap state boundaries.

Population sizes vary widely among tribal areas. In general, though, reservations tend to have low population densities. Most reservation lands can be described as rural, with some small urban and urban areas.

## Demographic Characteristics

Demographic information on reservations, primarily concerning factors that are traditionally associated with mobility-dependent segments of the population, was studied using data from the American Community Survey (ACS). Table 1 provides a summary of demographic data for all tribal areas with a population of 500 or more people, based on 2018 ACS five-year estimates. In the average tribal area, 19% of the population is aged 65 or older, 24% is aged 5 to 17, 16% has a disability, 27% has household income below the poverty level, and 9% are living in a household with no vehicle. The table also provides information

**Table 1. Demographic Data for Tribal Areas**

	Aged 65 or Older	Aged 5-17	Population with a Disability	Below the Poverty Level	Households with No Vehicles
	-----Percentage of total population-----				
Mean	19	24	16	27	9
10th percentile	10	18	10	14	3
25th percentile	13	20	12	18	5
Median	19	23	16	26	7
75th percentile	23	28	18	35	12
90th percentile	29	31	21	42	18

about the distribution of demographic data. For example, in 10% of tribal areas, 42% or more of the population is below the poverty level and 18% or more of households do not have a vehicle.

Tribal areas have a disproportionately higher percentage of some of these population groups, as shown in Table 2. Across tribal areas, 28% of the population is below the poverty level, which is twice the U.S. total of 14%. Because of lower incomes, many people living in tribal areas cannot afford to own an automobile. This is especially important considering that most tribal areas are rural, low-density areas with longer travel distances, which makes it more difficult to live without a vehicle. Nine percent of households in tribal areas do not have a vehicle. This is similar to the U.S. average, but it is much higher than the rural average. Tribal areas also have a higher percentage of school-aged youth.

**Tribal Transit Funding**

There has been progress in providing tribal transit services to meet these needs. The number of tribal transit systems and level of service has increased the past two decades as federal funding has increased, though the number of agencies and ridership levels have plateaued since 2015.

Funding for tribal transit comes from federal, state, local, and other sources. In 2005, Congress enacted the Safe, Accountable, Flexible, Efficient Transportation Equity Act

– A Legacy for Users (SAFETEA-LU). This transportation legislation created 5311(c), a new section of the rural transit program specifically tailored to providing funding for public transportation for Indian tribes. This 5311(c) formula funding under SAFETEA-LU began at \$8 million in 2006 and reached \$35 million with the Fixing America’s Surface Transportation (FAST) Act in 2016. In addition to the 5311(c) program, several other federal funding programs targeting non-urbanized areas are available to Indian reservations. These include the Rural Formula program (5311) and Enhanced Mobility for Seniors and People with Disabilities Formula (5310). Revenues from state general funds, state-level taxes, local general funds, and transit-dedicated taxes are some of the main state and local government sources of funding for tribal transit.

**Tribal Transit and Livability - Stakeholder Input**

To understand the importance of transportation and other factors to livability in tribal communities across the United States, the research team conducted tribal transit stakeholder interviews. Twenty such interviews were conducted at a workshop session at the 2019 National Transportation in Indian Country Conference in Big Sky, Montana, in September 2019.

Tribal transit stakeholders mentioned that, from their reservation’s perspective, core components of community livability, in order of importance, are access to jobs,

**Table 2. Demographic Data for Tribal Areas, Compared to U.S. and Rural Data**

	United States	Rural Areas	American Indian Reservation and Trust Lands
	-----Percentage of total population-----		
Age 5-17	17	17	21
Age 65+	15	19	14
Population with a Disability	13	15	15
Below the Poverty Level	14	12	28
Households with No Vehicles	9	4	9

affordable housing, access to healthcare services, cost of living, quality education, availability of transportation services, crime rates, broadband internet access, and cultural institutions. Transit was noted as being especially important in tribal communities for providing mobility options to people who lack a driver's license or personal transportation options and for those traveling longer distances in various weather conditions.

### **Tribal Transit and Livability – Case Studies of Standing Rock Reservation, ND-SD and Makah Tribe, WA**

This study conducted case studies in two Indian reservations to understand transit's role in livability and improving quality of life in tribal communities. The case studies, conducted with the Standing Rock Reservation in North Dakota and South Dakota and the Makah Indian Reservation in northwestern Washington, involved surveys of community residents and transit riders. The objectives of the case studies were to understand the factors that residents think are important for livability, describe the quality of livability factors within these communities based on residents' perceptions, and explore how transit and other transportation factors contribute to livability. Results identify issues that need to be addressed to improve livability and how transit could play a role.

Standing Rock Reservation has an estimated population of 8,616 and a land area of 3,568 square miles. Makah Indian reservation has an estimated population of 1,559 and a land area of about 47 square. Both have a relatively large population of youth.

Standing Rock Public Transit provides demand-response and intercity bus transit service to residents in communities in Sioux, Morton, and Burleigh counties in North Dakota and Corson and Walworth counties in South Dakota. Makah Public Transit offers demand-response transit to connect residents to the Clallam Transit System to access larger areas.

A total of 163 survey responses were received from Standing Rock and 100 from Makah Tribe. More than half (61% for Standing Rock and 74% for Makah) of the respondents live on the reservation. Respondents were initially asked to rate the importance of several different livability factors on a

scale of 1 (not important) to 5 (very important). Later, respondents were asked to rate the quality of each livability factor in their community on a scale of 1 (very poor) to 5 (very good). Figure 1 combines the responses to the two questions for Standing Rock and Makah respondents. This figure essentially maps the importance of various livability factors versus the perceived quality of these factors in an effort to identify gaps. These gaps can help determine which factors were perceived to be important but are not in good quality in their current communities.

While all livability factors could be improved in Standing Rock, specifically increasing affordable housing and available jobs, improving quality healthcare, reducing crime, and maintaining a clean environment can most significantly improve livability. Similarly, while all livability factors could be improved in Makah Tribe to improve livability, specifically increasing affordable housing and available jobs, reducing the cost of living, increasing shopping and entertainment options, improving quality healthcare, and maintaining a clean environment can most significantly improve livability. Comparing these results from a previous national survey shows that the perceived quality of many livability factors is lower in these reservations than in other rural or non-metro communities across the country.

Satisfaction with quality of life was also found to be lower in these tribal communities. About 44% of the respondents from Standing Rock said they were either very satisfied or satisfied with the quality of life in their community, and about 56% of respondents from Makah Tribe said the same. These percentages are lower than those found from the national survey.

Respondents from both case studies rated affordable transportation as being more important than did respondents from other non-metro areas across the country, indicating the importance of transit in a tribal community. Case study respondents indicated they were satisfied with the quality of transit service being provided but also suggested areas for improvement. Survey participants from both case studies agreed that it is important for transit services to be available in their communities.

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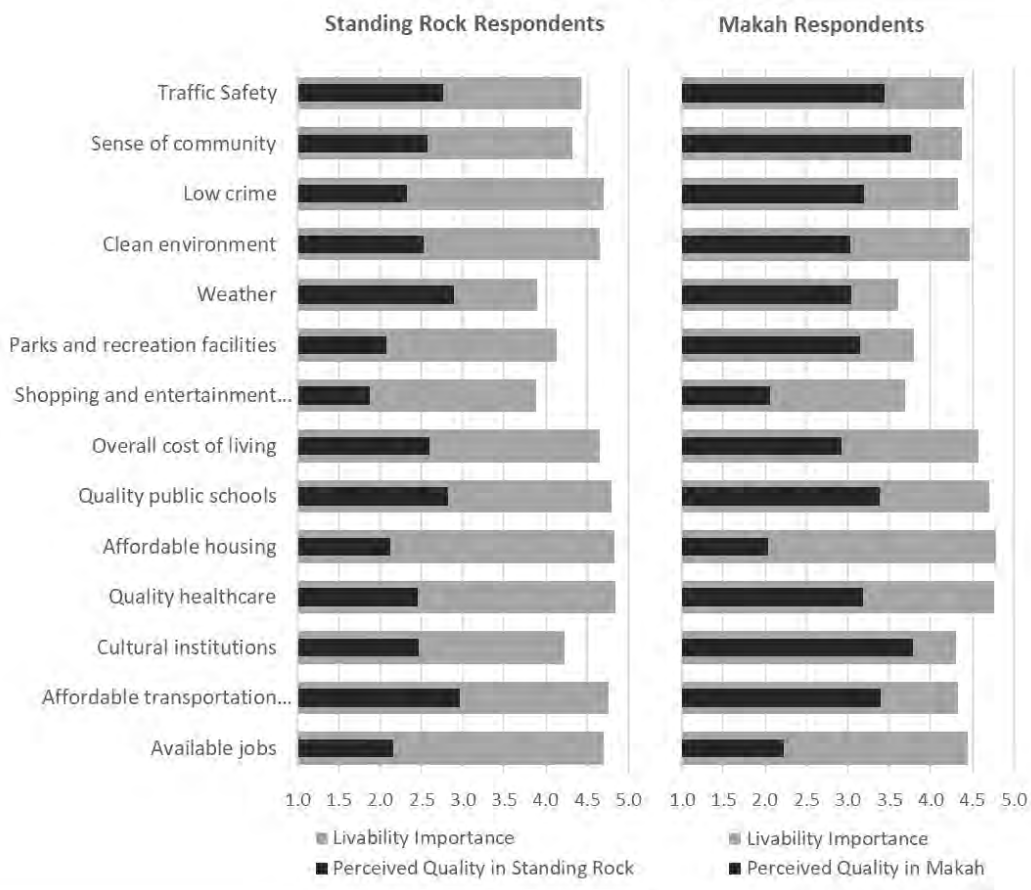
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**Figure 1. Importance of Livability Factors and Perceived Quality in Standing Rock Reservation and Makah Tribe**

**Conclusions**

Transit provision in tribal reservations is challenging due to geographic characteristics. Despite these challenges, there is a need for mobility service in these areas. Tribal areas have higher concentrations of some transportation-disadvantaged populations, particularly low-income populations, people without access to a vehicle, and youth. The need for transit in tribal areas is driven less by the elderly population, compared to other rural areas, and more by the high levels of poverty. Funding formulas that include not just the elderly population but also poverty levels and the youth population

would help ensure a more equitable allocation of funds for the tribes.

Transit is one of many factors that influence livability. Two case studies of tribal areas explored the quality of transit and other livability factors in these communities and how livability could be improved. Results showed many areas in which livability could be improved, most notably affordable housing, available jobs, and quality healthcare. Survey responses suggest that the perceived quality of many livability factors is lower in these reservations than in other rural or non-metro communities across the country.