

MOUNTAIN-PLAINS CONSORTIUM

RESEARCH BRIEF | MPC 23-508 (project 684) | December 2023

The Association Between Tribal Transit and Food Insecurity Status Among Native Americans in North Dakota



the **ISSUE**

Native American tribes, many located in rural areas, have high rates of food insecurity. Food insecurity is linked to preventable diseases such as hypertension, diabetes, cancer, and obesity among Native Americans. There is a need to understand the level of food insecurity among Native Americans in North Dakota and the role transportation may play in addressing this issue.

the **RESEARCH**

The study employed a six-item survey module developed by the National Center for Health Statistics. The six-item questions lead to categories of high/marginal food security, low food security, or very low food security. The survey also included 37 additional questions addressing transportation systems, financial information, hunger-coping strategies, health, nutrition, and demographics.



A University Transportation Center sponsored by the U.S. Department of Transportation serving the Mountain-Plains Region. Consortium members:

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North Dakota State University
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Project Title

The Impact of Transportation
Service on Food Access
Among Native Americans in
North Dakota: A Case Study

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the FINDINGS

The results revealed that nearly 50% of the respondents have very low food security, 27% have low food security, and 25% have high or marginal food security. An ordered logit model revealed that income, food assistance programs, education, and the ability to drive to the grocery store significantly influence food security. Higher income and education were associated with lower food insecurity, while assistance programs mitigated the negative effects of low income. Driving oneself to the grocery store significantly lowered food insecurity levels by 63%, emphasizing the role of transportation in improving food security. The study found that 20% of respondents do not drive or have access to a vehicle for transportation. Native Americans in North Dakota are significantly less likely to own or have access to a vehicle. Most respondents (71%) drive to get groceries, while 27% get a ride from someone, and 21% walk. Age, income, living within walking distance of a grocery store, availability of fresh food, and living on the reservation were found to be positively associated with the likelihood of an individual eating healthy food every day.

the IMPACT

This research will help inform decision makers regarding the level of food insecurity among Native Americans living in North Dakota. Further, it illustrates the lack of transportation, as Native Americans in North Dakota have substantially less access to vehicles compared with national and state averages. Providing better access to healthy foods for Native Americans can address the health issues, such as diabetes, hypertension, and obesity, which hinder this underserved population.

For more information on this project, download the Main report at <https://www.ugpti.org/resources/reports/details.php?id=1144>

For more information or additional copies, visit the Web site at www.mountain-plains.org, call (701) 231-7767 or write to Mountain-Plains Consortium, Upper Great Plains Transportation Institute, North Dakota State University, Dept. 2880, PO Box 6050, Fargo, ND 58108-6050.



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