

Why GAO Did This Study

The National Highway System is key to the nation's economy, defense, and mobility. It comprises approximately 220,000 miles of roads and accounts for about 54 percent of all vehicle miles traveled. Poor pavement condition on National Highway System roads could pose safety issues and impede the flow of traffic.

House Report 116-106 included a provision for GAO to review issues related to pavement condition of the National Highway System.

This report assesses the extent to which: (1) pavement condition varies on the National Highway System and (2) FHWA assesses National Highway System pavement condition within states, such as at the local level.

GAO analyzed pavement condition data from FHWA and other publicly available data sources and developed a statistical model to assess variation in pavement condition by community characteristics. GAO also reviewed applicable statutes, regulations, and agency documents and interviewed FHWA officials to understand the extent to which FHWA assesses pavement condition.

What GAO Recommends

GAO is making two recommendations, including that FHWA analyze data on pavement condition within states and identify strategies to help states detect and address issues contributing to differences in pavement condition affecting certain areas and communities. DOT partially concurred with the recommendations and noted steps FHWA planned to address them.

View [GAO-22-104578](#). For more information, contact Elizabeth Repko at (202) 512-2834 or repkoe@gao.gov.

NATIONAL HIGHWAYS

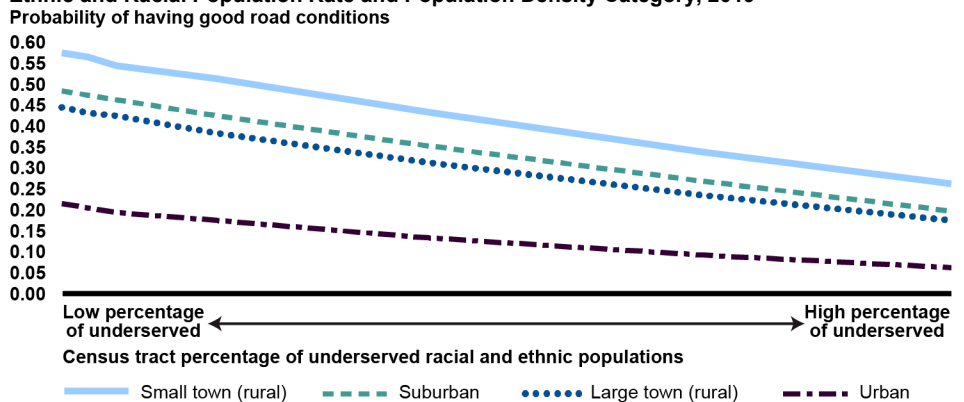
Analysis of Available Data Could Better Ensure Equitable Pavement Condition

What GAO Found

Most pavement on the National Highway System is in good or fair condition, but the condition varies widely across and within states. Moreover, GAO found that pavement condition varies based on certain community characteristics. Even when controlling for factors such as climate type and traffic density, pavement is less likely to be in good condition on roads in census tracts with:

- higher percentages of underserved racial and ethnic populations—communities facing systemic barriers in accessing available benefits and opportunities (see figure);
- higher family poverty rates; and
- urban areas.

Probability of Pavement in Good Condition on the National Highway System by Underserved Ethnic and Racial Population Rate and Population Density Category, 2019



Source: GAO analysis of Federal Highway Administration, U.S. Census Bureau, National Aeronautics and Space Administration, and U.S. Department of Agriculture data. | [GAO-22-104578](#)

Note: Data for 2019 were the most recent full year of available data at the time of our analysis. For more details, see fig. 12 in [GAO-22-104578](#).

The Federal Highway Administration (FHWA) assesses whether states are making progress toward state-wide pavement condition targets. However, FHWA does not regularly examine data to assess pavement condition within states, such as at the local level. The Department of Transportation (DOT) and FHWA have strategic goals and objectives related to safe, efficient, and equitable transportation. Most transportation stakeholders GAO interviewed noted that pavement in good condition is safer or more efficient for travel. Because FHWA has generally not analyzed data about pavement condition at the local level, it lacks awareness of issues that could pose risks to its strategic goals, such as concentrations of poor pavement condition or differences across communities.

In response to executive orders, DOT is determining how to assess equity impacts for all of its programs, but, as of June 2022, has not identified what pavement-specific analyses it will conduct, if any. Additional analyses of poor pavement concentrations and the differences by community characteristics could help FHWA understand why these conditions are occurring. These analyses could also help FHWA identify strategies to help ensure that all communities have safe and equitable pavement conditions.