

U.S.DOT Key Performance Indicators (KPIs) for Equity

Fact Sheet for KPI:

Reduce national transportation cost burden by 5%, including transportation travel cost as a Percent of Income, by Fiscal Year 2030.

The U.S. Department of Transportation (“DOT” or “Department”) has identified several Key Performance Indicators (KPIs) to monitor implementation of the Department’s [FY 2022-2026 Strategic Plan](#) and the [Equity Action Plan](#). This KPI is included in both documents and is helping the Department monitor the financial burden that transportation costs place on households.

Current Status of this KPI

DOT calculates this KPI using a methodology that combines census data, information from tools developed by the U.S. Environmental Protection Agency (EPA) and several other data sources such as the Consumer Expenditure Survey. The analysis indicated that 47% of the U.S. population lives in census tracts where the average household is “transportation cost burdened,” meaning that they spend more than 15% of their annual income on transportation and/or 45% of more of their income on transportation and housing costs combined.

DOT wants to see a 5% reduction in this metric by 2030, as this will be an indication that transportation costs are becoming less of a strain on households.

DOT is continuing to develop and refine its cost burden methodology, which may include new data collection methods in the future.

Table 1: KPI Status Summary

KPI	Baseline (Fiscal Year 2022)	Interim Update	Target
Percentage of US population that are transportation cost burdened	47%	Planned for 2023	42% by FY2030 5% reduction by 2030

Why is this important

Transportation cost burden is an essential component of transportation insecurity. Transportation insecurity occurs when people are unable to get where they need to go to meet the needs of their daily life regularly, reliably and safely. Nationally, there are well-established policies and programs that aim to address food insecurity and housing insecurity, but not transportation insecurity. USDOT is working



to change that as a growing body of research indicates that transportation insecurity is a significant factor in persistent poverty.

Achieving this KPI will benefit people and communities. When people spend a greater percentage of annual household income on transportation (transit costs; vehicle maintenance and insurance costs; gasoline and fuel) they have less money left to spend on food, housing, education, and other important needs. People who live and/or work in compact mixed-use neighborhoods with a walkable street grid and easy access to public transit, jobs, stores, and services are more likely to have safe, affordable transportation options to meet their everyday needs. As a result, people can choose to drive less, which reduces their greenhouse gas emissions compared to people who live and work in less transit-oriented places. Walking, biking, and taking public transit can also save people money and improve their health by encouraging physical activity. Ultimately, DOT aims to adopt more precise measures of transportation cost burden that can help focus resources on the most transportation cost burdened households, including those in the lowest income quintile.

How the KPI was developed

Transportation cost is a complex concept that is challenging to represent and analyze. Over the last two years DOT has embarked on an evolving process which has included feedback from the public.

DOT initially developed a methodology to calculate transportation cost burden as part of its original Justice40 disadvantaged communities data index and tool, which was informed by DOT's May 2021 [Request for Information \(RFI\) on Transportation Equity Data](#). In fall 2022- spring 2023, as part of the development of DOT's ETC Explorer, DOT's cost burden methodology was updated, informed by the February 2023 [RFI on the US DOT Equitable Transportation \(ETC\) Explorer Tool and Index Methodology](#). Additional work to further refine the methodology is ongoing, based on a May 2023 workshop where industry experts discussed the methodology for estimating cost burden at the local level. This is part of a more targeted approach to understand and reduce transportation cost burden.

DOT's original transportation insecurity metric is available as part of the Center for Environmental Quality's (CEQ) [Climate and Economic Justice Screening Tool](#) and the updated metric is available as part of DOT's [ETC Explorer Tool](#). The tools can aid DOT and grantees in identifying areas with high transportation cost burden to prioritize funding decisions.

How it is calculated

The transportation cost burden, provided at the census tract level, is composed of three main cost components: 1) Transit costs 2) The value of travel time and 3) Vehicle ownership and use costs. These household transportation costs are combined and then divided by the median household income in the tract, to provide what percentage of a median household's income is spent on transportation (both personal vehicular and public transit). Tracts where households, on average, are spending more than 15% of their median annual income on transportation, are considered "Transportation Cost Burdened." The population of the "Transportation Cost Burdened" tracts are summed in the baseline calculation, and divided over the population of the Nation as a whole, to calculate the percentage of the US population that are transportation cost burdened.



Definitions

Transportation Cost Burden: This means communities whose transportation costs are high relative to their median income. The transportation costs are derived by calculating the primary costs associated with a household means of transportation: auto costs, transit cost, and commuting time costs. A household spending more than 15% of their annual income on transportation costs and/or 45% of more of their income on transportation and housing costs combined is considered cost burdened. For more information about how the transportation cost burden was derived, see the Technical Documentation.¹

Tools and Data Sources

Key tools and data sources used to calculate this KPI include:

- U.S Census [American Community Survey \(ACS\)](#) 5-Year Data (2016-2020)
- U.S. Bureau of Labor Statistics [Consumer Expenditure Survey](#) 2020-2021
- EPA [National Walkability Index](#) 2021
- EPA [Smart Location Database](#) 2021
- [EPA's EJScreen](#) 2022
- **ETC Explorer Tool:** DOT's Equitable Transportation Community (ETC) Explorer is an interactive web application that uses 2020 Census Tracts and data, to explore the cumulative burden communities experience, as a result of underinvestment in transportation, in the following five components: Transportation Insecurity, Climate and Disaster Risk Burden, Environmental Burden, Health Vulnerability, and Social Vulnerability.
- **CEJST Tool:** EO 14008 directed CEQ to develop a new tool called the Climate and Economic Justice Screening Tool, otherwise known as CEJST. The tool has an interactive map and uses datasets that are indicators of burdens in eight categories: climate change, energy, health, housing, legacy pollution, transportation, water and wastewater, and workforce development. The tool uses this information to identify communities that are experiencing these burdens.

How DOT is advancing this KPI

This KPI supports DOT Strategic Objective 3.1: Expanding Access, which seeks to expand affordable access to transportation, jobs, and business opportunities by removing barriers for individuals, businesses, and communities. DOT tracks progress toward Strategic Objectives through the [annual performance report](#).

It also supports the DOT Equity Action Plan "Expanding Access" pillar, which aims to increase social and economic opportunity for disadvantaged and underserved communities from the provision of affordable multi-modal transportation options close to affordable housing and the development of a transportation cost burden measure. DOT tracks progress toward the Equity Action Plan through annual updates shown on the [website](#).

Other DOT efforts that support or are supported by this KPI

This work relates to several other DOT efforts, including DOT's contributions to the [Justice40 Initiative](#), which is a government-wide initiative that seeks to deliver 40 percent of the benefits of certain Federal

¹ The Technical Documentation can be found here: <https://www.transportation.gov/sites/dot.gov/files/2023-05/5.2.23ETC%20Explorer%20Technical%20DocumentationFinal.pdf> . Cost burden methodology begins on page 20.



investments to disadvantaged communities that face burdens related to climate change, the environment, health, and economic opportunity. DOT's understanding of transportation cost burden was largely shaped through this initiative, and many DOT grant programs seek to improve transportation options for people throughout the country.

What DOT is doing to achieve this KPI

In FY 2024 and FY 2025, DOT will continue to encourage grantees to identify areas with high transportation cost burden to prioritize funding decisions and use the transportation cost burden as a consideration for funding. By September 2024, DOT will update the DOT ETC Explorer tool, including an enhanced methodology for measuring cost burden at the local level, system condition and enhanced access data, to help states and communities advance projects that benefit underserved communities. This will lay the groundwork for launching an enhanced transportation cost burden measure as part of a transportation disadvantage index by December 2027.

Where to learn more

[Center for Environmental Quality \(CEQ\) Climate and Economic Justice Screening Tool](#)

[USDOT Equitable Transportation Community \(ETC\) Explorer Tool](#)

