

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

Fact Sheet for KPI:

Work to meet the Justice40 goal that 40% of the benefits of certain Federal investments flow to transportation disadvantaged communities.

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 the Strategic Plan under slightly different language and has been subsequently updated in the most recent Equity Action Plan to the text shown at the top of the page. **This KPI is helping the Department in meeting the goals of the Justice40 Initiative, which is a government-wide initiative that seeks to deliver 40 percent of the benefits of certain Federal investments to disadvantaged communities that face burdens related to climate change, the environment, health, and economic opportunity.**

Current Status of this KPI

DOT is monitoring this KPI by measuring the percentage of the benefits from certain Federal investments that flow to disadvantaged communities, using grant award data and data presented through the Council on Environmental Quality’s (CEQ) [Climate & Economic Justice Screening Tool \(CEJST\)](#) and [USDOT’s Equitable Transportation Community \(ETC\) Explorer](#). DOT is currently working with program managers across DOT to gather data and conduct updated analysis needed to develop baselines for DOT’s Justice40 covered programs with funding history, in alignment with government-wide guidance.

USDOT seeks to deliver 40 percent of the benefits of its Justice40 covered programs to disadvantaged communities as noted in Table 1. Not only will meeting this goal be consistent with the government-wide Justice40 initiative, but it will be an indication that DOT’s dollars are flowing to disadvantaged communities. If a program’s baseline falls below 40%, DOT will evaluate what actions are appropriate to help reach the 40% target.

Once program baselines are established, DOT will continue to review grant award data and census data to monitor progress towards the target over time. DOT may also continue to refine its calculation methodology, to reflect ongoing government-wide guidance and insight gathered from programs.



Table 1: KPI Status Summary

KPI	Baseline	Update	Target
Percentage of benefits from DOT’s investments flowing to transportation disadvantaged communities	Currently under development for all covered programs	Planned for 2024, when new funding history is established	40% of the benefits of federal investments of all DOT covered programs going towards transportation disadvantaged communities

Why it is important

DOT is committed to reducing inequities across our transportation systems to ensure that communities benefit from the safe, efficient, and sustainable movement of people and goods. When done right, transportation policy can transform economies, connect people to opportunities, and empower underserved communities to build generational wealth for the future. There are three major components of USDOT's implementation of the Justice40 Initiative. These include understanding:

1. The needs of a community through meaningful public engagement.
2. How a community is impacted by lack of transportation investments and options.
3. What benefits a project may create, who will receive them, and how the project’s benefits will create positive outcomes that will reverse how a community is experiencing disadvantage through increasing affordable transportation options, improving safety, reducing pollution, connecting Americans to good-paying jobs, fighting climate change, and/or improving access to resources and quality of life.

As part of the Justice40 Initiative, DOT is developing tools to assist communities in understanding the cumulative impacts that result from the lack of affordable, safe, multimodal transportation options, and how to connect components of disadvantage to the benefits projects are expected to deliver. When decision makers at all levels have the tools to reverse or mitigate the causes of disadvantage, the result is a higher quality of life and economic prosperity in all communities.

How the KPI and DOT’s Justice40 methodology was developed

On January 27, 2021, President Biden signed Executive Order (EO) 14008 “Tackling the Climate Crisis at Home and Abroad,” creating the Justice40 Initiative. EO 14008 tasked the Chair of [CEQ](#) with developing related recommendations in consultation with agency heads, including DOT Secretary Buttigieg.

DOT’s first step in implementing this EO was to identify covered programs. The next step was to develop the technical tools needed to calculate this metric in a sound way, including: 1. A preliminary methodology for defining “disadvantaged communities”, 2. A framework for measuring investment benefits, and 3. A method for estimating the distribution of benefits to disadvantaged communities. These steps are described in more detail in the sub-sections that follow. In December 2021, DOT tested this new 3-part methodology in a pilot program and determined that that the methodology was sound but would benefit from refinement over time.



Covered Programs

A “covered program” is a Federal Government program that generates benefits in one or more of the following seven areas: i. Climate change ii. Clean energy and energy efficiency iii. Clean transportation iv. Affordable and sustainable housing v. Training and workforce development (related to climate, natural disasters, environment, clean energy, clean transportation, housing, water and wastewater infrastructure, and legacy pollution reduction, including in energy communities) vi. Remediation and reduction of legacy pollution vii. Critical clean water and waste infrastructure. DOT completed a comprehensive review of its programs to determine which generate benefits in the seven categories above and provided its recommendations to the White House for approval. This list of covered programs is revisited every year.

Defining “Disadvantaged Communities”

The Transportation Disadvantage Index released in January 2022 was developed by DOT to help define what constitutes a “disadvantaged community” through a transportation lens, while awaiting the release of CEQ’s CEJST tool. During the summer of 2022, the Census released its 2020 Census data and updated tract boundaries. Given that several DOT funding programs are statutorily required to use the most current Census data, DOT made the decision to update its original “disadvantaged community” definition and tool with 2020 Census data and include additional indicators reflective of disadvantage related to transportation investments. This work resulted in the release of DOT’s Equitable Transportation Community (ETC) Explorer in May of 2023, which is designed to complement CEJST by providing users deeper insight into the Transportation disadvantage component of CEJST.

Transportation Insecurity Component of Disadvantaged Communities Metric:

Transportation insecurity is a key component of how DOT measures disadvantage through a transportation lens. It 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. DOT is working to change that as a growing body of research indicates that transportation insecurity is a significant factor in persistent poverty.

As part of its original Transportation Disadvantage Index, DOT developed an initial transportation insecurity measure that included transportation access, transportation cost burden and safety. This measure is included in CEJST. This metric was then updated as part of the development of the ETC Explorer. The development and update of this metric was informed by Requests for Information (RFIs) and engagement with subject matter experts and the public. Additional work to further refine the metric is ongoing. Moving forward, DOT is examining how to incorporate system condition and enhanced access data into its transportation insecurity methodology.

Framework for Measuring and Estimating Distribution of Investment Benefits

Step 1: Defining a Benefit

DOT needed to first develop methodologies for measuring benefits. This began with creating a common understanding of what a “benefit” is. The [Interim Guidance](#) issued by the Office of Management and Budget (OMB) defined a benefit as the impact of any investment made that directly or indirectly impacts communities in a positive way.



Step 2: Inventory Program Activities

Recognizing that each program provides unique benefits through its investments, DOT's next step was to perform a complete inventory of activities for covered programs. This included a thorough review of the program's foundational material, research, and input from program managers and stakeholders.

Step 3: Verify Available Data and Establish Project Locations

DOT then gathered program data on funded projects while beginning the process to develop benefits metrics and measure benefits. This included GIS data on project location or service area, data provided by applicants requesting funding, and historical data on performance, when available and applicable.

Step 4: Identify and Match Benefit Metrics with Program Activities

DOT next evaluated Justice40 covered programs to establish the benefits that could be measured. In this process, several common benefit categories emerged. DOT defined these as: Access, Emissions Reduction, Jobs & Economic Competitiveness, Resilience and Safety.

- **Access** – Increased transportation access is possibly the most broad, inclusive, and impactful benefit measurement when it comes to improving quality of life. It is heavily influenced by travel times, reliability, comfort, safety, and affordable alternatives such as public transportation or active transportation and land use.
- **Emissions** – Reducing pollution from the transportation system.
- **Jobs & Economic Competitiveness** – Jobs benefits are created when a project creates good-paying jobs; offers resources to help train people to keep them in good-paying jobs or registered apprenticeships; and uses hiring practices that include underrepresented populations or local people. Economic Competitiveness benefits are associated with increased productivity and are often generated from operational and maintenance cost savings or efficiencies.
- **Resilience** – Resilience benefits associated with climate resilience come from decreasing the climate-related vulnerability to communities and infrastructure from greater precipitation, flooding, severe wildfires, excessive heat, or other climate-driven effects.
- **Safety** – Safety benefits of transportation projects generally stem from reductions in fatalities, injuries, and property damage, often by reducing crash risk or crash severity. Safety benefits can also accrue from providing safer multi-modal transportation alternatives and improvements to walkability by reducing travel distances and direct interaction with vehicles (i.e., safer, accessible sidewalks and crosswalks).

Step 5: Develop Methodologies that Measure the Benefits

Over the course of 2022 and early 2023, DOT developed methods to measure the benefits generated by each program. Through coordination with Justice40 covered program managers and program analysis, DOT was then able to determine the percentage of benefits generated across each program by each benefit category.

During the summer of 2023, DOT participated in a working group with multiple federal agencies to identify common metrics to measure whether benefits are reaching disadvantaged communities. The working group determined that looking at dollars per benefit theme is a consistent, scalable, replicable, and relevant way to measure Justice40 benefits across all federal agencies.



Step 6: Method for Estimating the Distribution of Benefits

Measuring benefit distribution in disadvantaged communities requires location data. The granularity that DOT’s funding programs collect in location data varies from program to program. Examples of granularity include the- UZA, Congressional District, county, zip code, census tract and latitudinal/ longitudinal level. DOT has identified whether each jurisdiction in the above categories is disadvantaged or not according to CEJST and separately using the ETC Explorer.

Based on the project scope, location, and scale, buffers have been established to determine the reach of the project benefits by activity type. Due to the varying levels of geographic granularity of the data collected by each program, the distribution of benefits is project specific. Therefore, the use of buffers may be adjusted by each funding program based on the available data.

The formula below outlines DOT’s approach to calculating baselines for its covered programs in each of the identified benefit categories. The methodology will continue to be updated as new data is available and more guidance is provided on this government-wide initiative.

How it is calculated

DOT is currently calculating two sets of baselines for DOT covered programs with funding history, using CEJST and the ETC Explorer. The first set of baselines is the total program baseline and the second is the baseline for benefits. This will help DOT to understand how its investments are flowing to disadvantaged communities as identified by CEJST and transportation disadvantaged communities as identified by the ETC Explorer.

To calculate the baselines across each covered program, DOT is planning to use the process described in the previous section and the following formulas below that illustrate the calculation process in more detail.

Total Program Baseline

Total funds awarded through the program to projects identified as disadvantaged	÷	Total funds awarded through the program	=	% of funds flowing to disadvantaged communities
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Calculation of Baselines for Different Types of Benefit Categories (example: Emissions)

Step 1	Total funds awarded through the program	x	% of benefits generated by benefit category (ex: emissions)	=	Total funds reducing emissions
Step 2	Total funds awarded to project identified as being in a disadvantaged community	x	% of benefits generated by benefit category (ex: emissions)	=	Total funds reducing emissions flowing to disadvantaged communities
Step 3 (Baseline)	Total funds reducing emissions flowing to disadvantaged communities (calculated in Step 2)	÷	Total funds reducing emissions (calculated in Step 1)	=	% of funds flowing to disadvantaged communities reducing emissions

DOT is also in the process of designing a grants reporting system to calculate the percentage of funds flowing to disadvantaged communities as a whole and through each benefit category, covering the years 2016-2023 (for those funding programs with funding history going that far back) in addition to providing data on a variety of commonly requested data points.

Key Definitions

Covered Programs: USDOT currently has 40 [covered programs](#) across five modes. DOT is working with the White House to incorporate appropriate Inflation Reduction Act (IRA) programs. Over time, additional programs might be added or subtracted.

Benefits: [Interim Guidance](#) issued by the Office of Management and Budget (OMB) in 2021 defines a benefit as the impact of any investment made that directly or indirectly impacts communities in a positive way. Benefits are not specific to disadvantaged communities. An investment made by the DOT to help a local transit agency replace a bus shelter, for example, is expected to serve the local population for its expected useful life regardless of whether the community is disadvantaged or not. As described in the previous section, DOT’s benefit categories include: Access; Emissions; Jobs & Economic Competitiveness; Resilience; and Safety.

Disadvantaged Communities: As set forth in Executive Order (EO) 14008 on *Tackling the Climate Crisis at Home and Abroad*, disadvantaged communities are those that are marginalized, underserved, and overburdened by pollution. Disadvantaged individuals or groups may be more likely to experience negative outcomes such as unemployment, poor health, or reduced access to services and opportunities. In the context of transportation, disadvantaged individuals or communities may also experience negative impacts from transportation sources, which can impact health, or receive fewer benefits from transportation services, which can limit their ability to access jobs, healthcare, education, and other essential services. DOT encourages applicants to its discretionary funding programs to use [CEJST](#) as the primary tool to identify “disadvantaged communities.”



Transportation Disadvantaged Communities: DOT’s Transportation disadvantaged index, included in the [ETC Explorer Tool](#) provides a unique transportation-focused lens to reflect how a community is experiencing disadvantage relative to transportation investments. The following indicators were identified as part of the transportation disadvantaged definition: Transportation Insecurity, Health Vulnerability, Environmental Burden, Social Vulnerability and Disaster Risk Burden. These components are either adapted from existing federal indices or are newly developed using federal data sources. DOT encourages applicants to its discretionary funding programs to use the ETC Explorer to increase understanding of transportation disadvantage at the community level and prioritize projects that mitigate or reverse the causes of transportation disadvantage.

Tools and Data Sources

The following tools and data sources can be used to identify disadvantaged communities in support of the Justice40 initiative:

CEJST: 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.

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. The ETC Explorer is designed to complement CEQ’s CEJST tool by providing users deeper insight into the Transportation disadvantage component of CEJST, which will help ensure the benefits of DOT’s investments are reversing or mitigating the transportation related causes of disadvantage.

How DOT is advancing this KPI

This KPI supports DOT’s Agency Performance Plan Strategic Objective 4.3: Climate Justice and Environmental Justice, which seeks to address the disproportionate negative environmental impacts of transportation on disadvantaged communities. DOT tracks progress toward Strategic Objectives through the [annual performance report](#).

It also supports the DOT Equity Action Plan “Proactive Intervention, Planning and Capacity Building” pillar, which aims to ensure historically overburdened and underserved communities in urban and rural areas benefit from access to generational investment in the nation’s infrastructure through direct, hands-on technical support for transportation projects with local impact. DOT tracks progress toward the Equity Action Plan through annual updates shown on the Equity Action Plan [website](#).

Other DOT efforts that support or are supported by this KPI

The Justice40 Initiative relates to many efforts at DOT to advance equity, including, but not limited to: investments in disadvantaged communities, including those disadvantaged communities who have never applied for DOT funding before, and those communities located in rural or tribal lands; developing technical assistance opportunities and resources tailored for disadvantaged communities and partners,



such as the [DOT Navigator](#) and the [ROUTES Initiative](#); building meaningful public engagement opportunities with disadvantaged communities; maximizing agency collaboration to benefit disadvantaged communities; developing a transportation insecurity methodology; and, providing internal equity trainings for the federal workforce.

What DOT is doing to achieve this KPI

In addition to monitoring this KPI by measuring the percentage of the benefits that flow to disadvantaged communities using grant award data, DOT is engaging grant applicants in the process as well. Applicants are asked to use CEJST and the ETC Explorer, to address in their grant application, how their community or project area is experiencing disadvantage, and how the benefits of a project will reverse or mitigate the burdens or disadvantage their community or project area is experiencing, related to lack of transportation investments or opportunities.

DOT's monitoring of all Justice40 covered programs will help the Department determine whether changes need to be made to those programs that are not achieving the 40% target. This could include changes to the data collection process, the creation of technical assistance tailored to disadvantaged communities, and other ways for Federal agencies and workers to learn how to better assist, engage, and allocate resources to disadvantaged communities across multiple programs

Where to learn more

More information about the Justice40 KPI can be found on this [website](#).

More information on the ETC Explorer tool, in addition to the methodology and technical documentation, can be found on this [website](#).

