



The USDOT's Request for Information on Transportation Equity Data: An Analysis of State DOT Responses

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Summary

This report outlines current needs, perspectives, and best practices related to transportation equity based on an analysis of state DOT responses to the US Department of Transportation's (USDOT) Request for Information (RFI) on Transportation Equity Data. It first provides background information based on current related literature, then offers a three-pronged analysis of responses from state DOTs: 1) a rough maturity index, 2) identifying common themes, and 3) identifying best practices. This report aims to build on the USDOT's *Summary of Public Comments* (2021), which summarized RFI responses and highlighted major themes across all commenter types, by focusing exclusively on responses from state DOTs. In doing so, this report seeks to document current state DOT practices related to transportation equity and offer an initial assessment of state DOT progress towards equity goals.

A total of 314 public comments were submitted to the RFI on Transportation Equity Data, including 11 comments from state DOTs. The state DOTs that responded are: California (Caltrans), Connecticut (CTDOT), District of Columbia (DDOT), Kansas (KDOT), Louisiana (LDOTD), Massachusetts (MassDOT), Minnesota (MnDOT), Oregon (ODOT), Pennsylvania (PennDOT), Utah (UDOT), and Washington (WSDOT).

Overall, state DOTs reported using many of the same baseline population variables including race, ethnicity, income, and limited English proficiency (LEP) in equity analyses. Several state DOTs provided more expansive definitions of equity to include indicators related to public health; accessibility to jobs, education, and housing; and environmental exposures, among others. The importance of community engagement was also mentioned by nearly all state DOTs as an important equity principle that should be embedded across project development and evaluation. Many state DOTs reported being in the process of piloting or developing tools to improve equity assessments.

The diverse nature of state DOT responses to the RFI – which ranged in length, structure, and detail – made it challenging to construct a viable coding system. For the purposes of this report, we created a maturity index – a method typically used to measure institutional progress towards a specific set of equity goals – to assess state DOT efforts to advance transportation equity, using both information obtained from state DOT responses to the RFI and state DOT websites. Index questions identified eight goals which ranged from whether a state DOT had established performance metrics to assess internal progress towards equity goals, to the presence of an equity commitment statement on the state DOT website, to assessing the thoroughness of state DOT responses to the RFI. Out of a total of 15 possible points, the highest scoring state DOTs on our index were Caltrans (15 points), WSDOT (14 points), and MnDOT (13 points), and the four lowest scores were LDOTD (5 points), UDOT (5 points), DDOT (5 points) and KDOT (4 points). It is important to note that these scores are based on readily available public information and each agency's response to the RFI, which could miss important work being done behind the scenes. Given the limitations presented with using information in RFI responses, we suggest future research could include surveying state DOTs to help standardize results (see Caltrans DRISI, 2021).

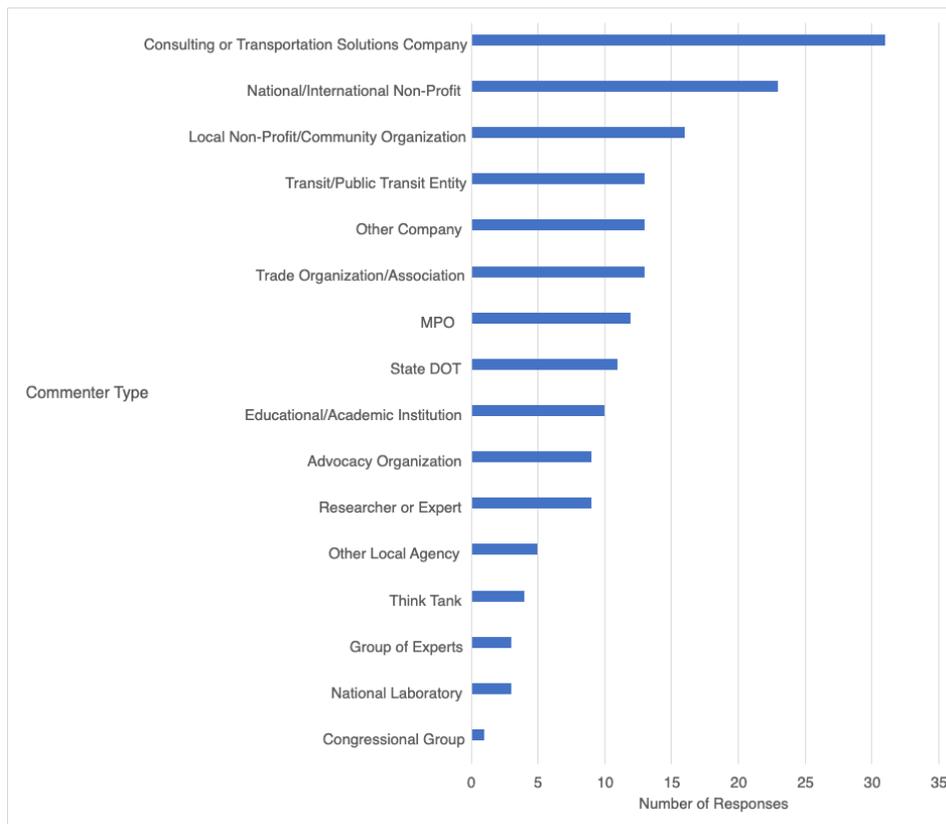
Common themes found in state DOT responses included a desire for enhanced data collection where data is currently inaccessible for state transportation agencies (e.g., trip purpose, facility conditions, etc.) and more federal investment for states to collect data, undertake equity analyses, and technical assistance, among others. The most substantial area of disagreement appeared in the forcefulness state DOTs expected from the USDOT in setting uniform equity data standards. DOTs from Connecticut, the District of Columbia, Utah, and Washington stated the USDOT should require states to use an equity lens when developing projects, whereas the Louisiana DOTD felt the USDOT should instead encourage states to develop plans for incorporating equity into project development.

Background

The purpose of this report is to understand how state DOTs are measuring or addressing equity by analyzing state DOT responses to the Transportation Equity Data RFI. To achieve this, the research team first conducted a scan of existing literature and federal policy to 1) construct a working definition of transportation equity and 2) understand the broader policy context.

In May 2021, the USDOT issued a Request for Information (RFI) on Transportation Equity Data to gather input on available data and assessment tools used to measure transportation equity. Public comments submitted to the RFI were intended to assist the USDOT to improve its federal transportation policies and programs and ensure more equitable outcomes (USDOT Transportation Equity Data RFI, 2021). The RFI was announced as an agency action step under President Biden’s Executive Order (EO) 13985, “Advancing Racial Equity and Support for Underserved Communities Through the Federal Government,” which directed all executive departments and federal agencies to understand their role in perpetuating barriers to opportunities for communities of color and other underserved groups, identify the best methods to assess equity, and produce agency plans which redress inequities and produce equitable outcomes (USDOT Transportation Equity Data RFI, 2021; Exec. Order No. 13985, 2021). A total of 314 comments were submitted to the RFI, 256 of which were relevant and unique. A breakdown of RFI responses by commenter type is provided in Figure 1.

Figure 1: USDOT Transportation Equity Data RFI Responses by Commenter Type



Source: *Summary of Public Comments*, USDOT, November 2021. Accessed: <https://www.transportation.gov/priorities/summary-public-comments-received-dots-request-information-transportation-equity-data>

The term *transportation equity* is generally defined as the fair distribution of benefits and burdens associated with transportation projects, policies, and plans (Williams et al, 2020; Karner et al, 2016; Litman, 2022; and many others). Transportation equity definitions, in both research and practice, also typically include an identification of underserved or overburdened populations that become the target of resource redistribution. Population-based variables such as racial and ethnic minorities, and individuals/households with low-income and limited English proficiency (LEP) are generally the baseline factors, while additional variables can include persons with disabilities, zero-vehicle households, seniors, youth, etc. (Williams et al, 2016), in addition to geography or activity-based factors (Caltrans, 2018). The transportation equity definition given in the Biden EO 13985 combines both population and geography-based factors, and defines equity as: “the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality” (Exec Order No. 13985, 2021). EO 13985 also defines underserved communities as populations which have been systematically denied the opportunity to participate in economic, social, civic life (Exec Order No. 13985, 2021).

Research on transportation equity also typically emphasizes the importance of providing ample opportunities for public engagement, which should occur early in the project identification and development process, in a variety of modalities, and in culturally appropriate ways (Karner et al, 2016). Federal regulations require public comment periods and local involvement in decision-making (EO 12898, TEA-21, and others), and in some cases states have additional public engagement requirements for transportation projects, for example with Tribal groups in California (Caltrans, 2018). Research on this particular dimension of transportation equity helps shed light on effective and inclusive public engagement strategies, as well as the multitude of federal and state regulations that state DOTs must keep track of and adhere to.

Finally, in terms of the broader political landscape, there are several key pieces of federal legislation which are critical to transportation equity analyses. They include Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin in activities that receive federal funding. Additional legislation has been passed in years since Title VI to achieve equity within transportation planning, surface transportation, and infrastructure projects. These acts attempted to move transportation planning away from unplanned roadbuilding and towards planned approaches that were cognizant of the environmental and social impacts of transportation (Cozart, 2017). Today, although there are numerous federal and state requirements regarding transportation equity, mandated equity analyses are not governed by any set of standards. This has led to a lack of consensus in how to operationalize transportation equity and therefore inconsistencies in equity planning by state DOTs.

Summary of State DOT Responses to the Transportation Equity Data RFI

The Transportation Equity Data RFI contained 25 questions which were divided into three sections: 1) methods and assessment tools to measure equity, 2) equity data considerations, and 3) transportation workforce data. For the purposes of this report, we chose to focus on state DOT responses to sections 1 and 2 only. This was done to help narrow the scope of research, and focus our attention on how state DOTs apply equity principles within the transportation planning and network evaluation processes.

State DOT responses to the RFI varied in length, structure, and detail. CTDOT, DDOT, and UDOT submitted the shortest responses at around two pages each, and Caltrans submitted the longest response at 37 pages. Many DOTs structured RFI comments in a question-and-answer format, directly responding to the USDOT's list of 25 questions (Caltrans, DDOT, KDOT, LDOTD, MassDOT, ODOT, PennDOT, and WSDOT). Although this format enabled us to concentrate on responses pertinent to our research question, it did not always produce useful information as many state DOTs provided little insight into their own equity practices and instead gave general suggestions on useful data, methods, or tools to measure equity. A couple of state DOTs structured their response as a report highlighting state initiatives that have successfully advanced transportation equity (MnDOT and CTDOT).

To analyze RFI responses, our research team first divided state DOT comments among reviewers equally. Reviewers were instructed to summarize methods, assessment tools, indices, best practices, and other resources of note reported as being used by state DOTs in RFI responses. Where applicable, our team documented the division and state DOT representative that completed the RFI on behalf of the agency. All information was summarized in an Excel spreadsheet.

Overall, state DOTs appeared in broad agreement on the baseline population variables – including race, ethnicity, income, and limited English proficiency – that should be the center of equity analysis. State DOTs did not offer precise definitions or thresholds for these population groups in their RFI responses, though several state DOTs reported using population definitions from Title VI and the EPA's EJ Screen tool (KDOT, MnDOT, PennDOT); others reported developing their own tool to identify population groups facing multiple burdens (Caltrans, UDOT, WSDOT). A couple of states reported using population data related to people living with disabilities and LGBTQ+ people in equity analysis (DDOT, ODOT). Interestingly, no state DOT reported collecting or analyzing data for the complete list of populations contained in the equity definition provided in EO 13985. In addition, many state DOTs reported using supplementary equity indicators to identify underserved or overburdened population groups and to help evaluate the impact of a particular project. These include determinants of health (Caltrans, KDOT, PennDOT, WSDOT), mobility (Caltrans, DDOT, ODOT), environmental exposures (LDOTD, PennDOT, WSDOT), and accessibility (Caltrans, KDOT, LDOTD, ODOT, PennDOT). Several state DOTs also mentioned using a weighted ranking model or creating separate indices for groups with different transportation needs (Caltrans, MassDOT, MnDOT, WSDOT). These methods were used to assess equity as part of state transportation planning and programming.

Where state DOTs seemed to diverge – and what seemed less defined in state DOT responses – is where equity analysis should occur in the project lifecycle, and how equity should be operationalized within different contexts, plans, or programs. For instance, it was unclear from state DOT responses whether equity should be assessed to identify “communities of concern” (Williams et al, 2016) at the project outset (e.g., as part of the initial needs assessment, to determine funding allocation, etc.), during project implementation (e.g., through community consultation), as part of project evaluation, or something that should be embedded throughout the entire project lifecycle.

Assessing State DOT Equity Practices – Developing a Maturity Index

The diverse nature of state DOT responses to the RFI made categorization and coding a difficult task. Given the limitations presented by RFI responses, we developed a maturity index which allowed us to measure state DOT progress towards equity goals and encompass both state DOT responses to the RFI in

addition to information obtained from state DOT websites. A maturity index, sometimes referred to as a maturity model, is typically used as an internal measure to assess an institution's diversity, equity, and inclusion efforts, generally across multiple underlying factors which are weighted to reflect their degree of impact (Korn Ferry, 2020; Crowley et al, 2016). Researchers and businesses created the maturity index as a method of measuring institutional development with respect to a specific set of goals and external contingencies (Wieczorek-Szymańska, 2017; Korn Ferry, 2020; Crowley et al, 2016). Maturity index scores can help provide a snapshot of an institution's development and identify areas for improvement.

A literature search identified similar tools being used in transportation contexts, including by state DOTs. For example, WSDOT recently evaluated its efforts towards advancing transportation equity through a Diversity Equity and Inclusion Spectrum Tool (WSDOT, 2021). This tool evaluates WSDOT's success across 12 different diversity, equity, and inclusion (DEI) components: DEI Vision, Commitment, Leadership, Policies, Infrastructure, Training, Diversity, Data, Community, Decisions, Accountability, and Inclusion. For each DEI component, WSDOT self-reports its score across a five-point scale: Not Yet Started, Ready to Start, Launched, Well on the Way, and Exemplary/Leading. For each DEI component, the tool provides explanations of what classification at a given level of development entails. The DEI Spectrum Tool is just one example of how state DOTs are using frameworks akin to maturity indices to track growth across multiple goals to advance equity work and identify areas of improvement.

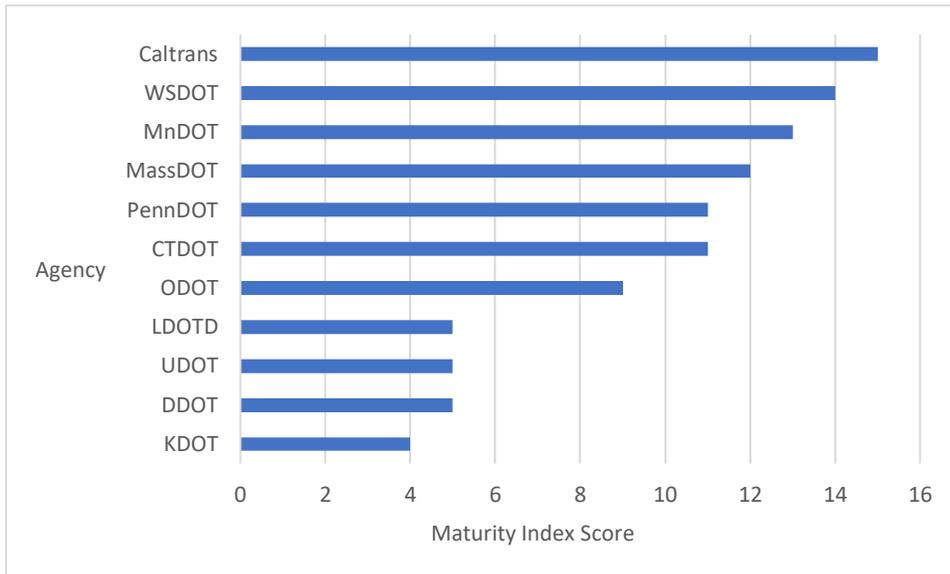
The literature review of maturity indices was instructive for the development of our tool, which we adapted to be used based on analysis of state DOT responses to the RFI in addition to publicly available information from state DOT websites. Transportation equity policies, programs, or practices not included in one of these sources were not accounted for in our maturity index evaluation. We generated index questions based on three factors: 1) questions posed by USDOT in the Transportation Equity Data RFI, 2) proven techniques that have advanced transportation equity, and 3) gaps in current transportation literature.

Our maturity index identified eight different goals which are indicative of strong state DOT transportation equity work including: the presence of an equity statement on its website; its RFI response; the prioritization of public engagement (Triplett et al, 2011); the use of guides to assess diversity and inclusion (Litman, 2018); data tools to measure inequity (Wellman 2015; Cozart 2017; Levine et al, 2019); the appointment of specialized staff dedicated to transportation equity; collaborations beyond the state DOT department; and its overall transparency in transportation equity pursuits. A complete list of maturity index questions is included in Appendix 1.

To analyze state DOT equity efforts, our research team divided state DOTs among reviewers equally and assigned an initial score. To help validate scores, reviewers exchanged state DOT assignments so that each state DOT was reviewed by each team member. Index response options were tailored based on the information available in RFI responses and on state DOT websites. Some questions were designed with yes/no response options, while others were evaluated on a grading scale. Points were assigned for each response option. The maximum number of points possible was 15 points.

The final state DOT maturity index scores were as follows: KDOT (4), DDOT (5), UDOT (5), LDOTD (5), ODOT (9), CTDOT (11), PennDOT (11), MassDOT (12), MnDOT (13), WSDOT (14), Caltrans (15). The median score was 11 points.

Figure 2: Maturity Index Scores



The four DOTs with the lowest scores were: KDOT (4), DDOT (5), UDOT (5), and LDOTD (5). Out of these four state DOTs, none appeared to have staff dedicated specifically to working on transportation equity; none were “very transparent” regarding their equity pursuits; and none had developed equity assessment tools. Three of these DOTs (UDOT, LDOTD, and KDOT) did not have equity statements or commitments on their websites. Interestingly, despite these overall low scores, both KDOT and LDOTD provided “very thorough” responses to the RFI, which was initially hypothesized to be a strong indicator of a state DOT’s commitment to advancing equity. This discrepancy may be explained by several factors. For example, agencies like KDOT and LDOTD may be pursuing a great deal of diversity and inclusion work behind the scenes, but not making those efforts as transparent as other agencies. Another explanation could be that KDOT and LDOTD are demonstrating a commitment to equity work that has not yet translated into more tangible policies and practices. Another simple explanation is that high-scoring agencies like MnDOT (13), which scored “somewhat thoroughly” on their RFI response, simply did not have the time or capacity to respond more thoroughly.

The four state DOTs which hovered around the median score were: MassDOT (12), PennDOT (11), CTDOT (11), and ODOT (9). Unlike the lower scoring DOTs, these state DOTs all demonstrated a commitment through equity vision statements on their websites, opportunities for public engagement in their transportation equity projects, and the development of equity assessment tools to improve their data collection. Generally, the factors which prevented these state DOTs from earning more points had to do with the lack of established performance metrics to evaluate their own transportation work, the lack of cited external partnerships in RFI responses, and less transparency in their transportation equity work. These shortfalls can be explained by a couple reasons. First, these state DOTs may be hesitant to create

their own equity assessment guide in anticipation of a federal equity guide from the USDOT. Second, these state DOTs may lack the resources to dedicate towards collaboration pursuits or more legible and better organized websites.

The three highest-scoring state DOTs were Caltrans (15), WSDOT (14), and MnDOT (13). Of these three state DOTs, all were considered “very transparent” regarding their equity pursuits; all had partnered or collaborated with other divisions of government, community-based organizations, or universities to advance transportation equity data development, collection, or analysis; all had staff dedicated specifically to working on transportation equity; all had developed equity assessment tools that incorporated multiple measures of inequity; and all used indices, frameworks, or other tools to assess progress on internal diversity, equity, and inclusion efforts. Overall, the results from our maturity index provide a useful, if limited, snapshot of state DOT progress towards advancing transportation equity.

Analysis of Common Themes from State DOT Responses to the RFI

Building on the USDOT’s *Summary of Public Comments*, which highlighted major themes across all Transportation Equity Data RFI comments, we focused on analyzing responses from state DOTs for common topics and recommendations. In general, we found a desire for more resources from the federal government in the form of research, data, and training. The main area of disagreement we identified was the role of the USDOT in setting national equity data standards and requirements for state and local transportation agencies.

Below are some of the summary themes from our analysis of RFI responses from state DOTs:

Importance of community engagement. Many state DOTs emphasized the importance of public engagement as a core equity principle – to ensure underrepresented voices are involved in the transportation decisions that impact them (CalTrans, MassDOT, WSDOT, MnDOT), and to assist in correcting nonresponse bias in data representing historically underserved groups (ODOT). State DOTs identified community engagement as an especially important alternative or supplement to emerging data sources such as location-based cell phone data, which is known to underrepresent the elderly, users without cell phones, and other transit-dependent populations. To improve community engagement, state DOTs recommended the USDOT expand direct public outreach and engagement (MassDOT, Caltrans, WSDOT, and MnDOT), including physically traveling to underserved communities. It was also suggested that USDOT should not rely too heavily on public meetings, third parties, or community-based organizations to distribute surveys (Caltrans, WSDOT, KDOT).

Role of USDOT in setting national transportation equity data collection and measurement requirements. State DOTs largely agreed that more guidance and improved data standardization from the USDOT would be helpful in measuring transportation equity. However, only some state DOTs recommended the USDOT implement stricter requirements supporting transportation equity, including 1) requiring state DOTs to use an equity lens when developing projects and 2) mandating the collection of data to ensure transportation interventions are being equitably implemented (Caltrans, UDOT, CTDOT, DDOT). WSDOT recommended the USDOT adopt something akin to Washington’s recently enacted Healthy Environment for All (HEAL) Act, which requires WSDOT to conduct environmental justice

assessments for transportation projects over \$15 million, as well as to incorporate environmental justice principles into decision-making processes for budgets, grant programs, and others. In contrast, the LDOTD felt the USDOT should instead encourage state DOTs to develop individual plans for incorporating equity into project planning, and that a “one-size-fits-all” approach was not feasible given the diversity of local conditions. Other state DOTs seemed to fall somewhere in the middle, stating the USDOT should *either* require or request state DOTs to undertake equity analyses as part of federal funding distributions (PennDOT), require state DOTs to use specific datasets to help isolate inequities and target investment (KDOT), or to improve the standard of state-level reporting (ODOT).

Research and data needs. Many state DOTs expressed a desire for the USDOT to serve as a national clearinghouse for research, data and mapping tools, and to invest in more open-source data (Caltrans, MassDOT, ODOT, LDOTD). Nearly all state DOTs stated the USDOT’s role should be to collect, aggregate (or disaggregate), and clean data and provide these data regularly to state DOTs to help with equity analysis, and policy and program development. Other specific data requests included data documenting: collisions on or near tribal lands (Caltrans); infrastructure and assets such as sidewalks, curb-cuts, and crosswalks (Caltrans, ODOT, WSDOT); active transportation mode use (ODOT); facility conditions for ADA accessibility (WSDOT); trip purpose (MassDOT, Caltrans, WSDOT); and the impact of new technologies and potential policy interventions (Caltrans); and a need to challenge historic baseline data points regarding equity (ODOT, MassDOT, WSDOT). Several state DOTs emphasized the need for more qualitative data specifically to capture trip purpose and experience, to supplement accessibility, and to develop a better understanding of the quality of the transportation network (MassDOT, WSDOT, Caltrans). Finally, several state DOTs requested more longitudinal research on transportation equity, for example to document whether increased investments in underserved communities have led to positive outcomes (ODOT), or to understand equity outcomes at the person-level (MassDOT).

More federal support. Several respondents advocated for additional federal investment for state DOTs to undertake equity-related research and for data collection. Some agencies identified the need for federal funding to form partnerships with independent researchers and universities and to ensure data collection efforts have met high ethical standards (CTDOT, Caltrans). Others wanted the USDOT to create specific set-aside funds to help states collect data, undertake equity analysis, and invest in training and technical assistance to help boost states’ capacity to do equity work (LDOTD, PennDOT, ODOT, MassDOT). Additional specific funding requests included: to support community-based organizations to distribute information, solicit public input, and provide financial incentives for individuals from underserved communities to participate in transportation decision-making processes (Caltrans, MassDOT); and to help purchase computers, analytic support, and other software and hardware (WSDOT). Not only could these financial investments improve transportation equity, they could be an instructive metric to identify underserved neighborhoods (PennDOT, LDOTD, ODOT), especially across state-lines or to assess cost outlay between modes (MassDOT).

Partnerships. Several state DOTs appear to be working closely with other state government departments, universities and research institutes, and community organizations to research, define, and implement equity programs (PennDOT, WSDOT, Caltrans, UDOT). According to state DOT responses, PennDOT worked with the Pennsylvania Department of Environmental Protection; WSDOT collaborated with the

state legislature via the recently enacted HEAL Act and also worked with the Washington State Department of Health on its Environmental Health Disparities Map; Caltrans engaged with UC Berkeley; and UDOT partnered with the Division of Multicultural Affairs.

User privacy. Several state DOTs expressed a need for USDOT policy and guidance related to protecting user privacy when collecting trip data (CalTrans, LDOTD, ODOT, and KDOT). Although state DOTs felt location-based cell phone and path data had a lot of potential to advance equitable transportation solutions, many highlighted the need to protect customer privacy and disassociate name and personal identifiers.

Other observations. We noticed some disagreement on the extent to which “new” equity definitions or frameworks needed to be developed by the USDOT, or if existing frameworks and research could be utilized. For example, ODOT recommended the USDOT adopt equity indices put forth by the Victoria Transport Policy Institute (VTPI). KDOT recommended the Department work with industry organizations such as AASHTO, NARC, AMPO and others to develop an equity data framework and data standards.

Omissions. There were few to no mentions of equity as applied within state grant programs, including Complete Streets, or open streets grant programs; equity within state project prioritization generally; equity within traffic enforcement; or long-term evaluations being conducted at the state-level to measure equity impacts.

It is worth noting that this report’s analysis of state DOT responses was conducted prior to the release of the [USDOT’s Equity Action Plan \(EAP\)](#). The EAP draws upon suggestions from state DOTs and describes the ways in which the USDOT will advance transportation equity moving forward. The USDOT’s EAP is divided into four major areas: wealth creation, power of community, interventions, and expanding access. These sections primarily focus on improving underserved populations access to federal grants, their ability to participate in transportation equity projects, and the general assessment of their circumstances through the advancement of data tools and measures. Within these sections, the USDOT addresses state DOTs suggestions on providing more federal funding to support community-based organizations, state DOTs emphasis on the importance of public engagement as a core equity principle, and state DOTs expressed desire for the USDOT to take a more prominent role in national data collection in order to help equity analyses and program development. However, the USDOT’s EAP does not address state DOTs wishes for additional equity analysis funding for state DOTs themselves nor does it attempt to strengthen or further partnerships between state DOTs and universities, non-profits, and research institutions. Additionally, there was no mention of accounting for user privacy in data tool improvement trajectories.

State DOT Equity Best Practices

State DOT responses to the RFI referenced multiple innovative programs, tools, and studies being undertaken at the state-level to advance transportation equity. We provide short descriptions of each below.

Caltrans

- **Equity Index Pilot Project:** This project uses measurements of health, mobility, accessibility, and social demographics to produce a transportation equity score for underserved communities. Caltrans weighs, maps, and compares the scores to understand how Caltrans is prioritizing and allocating project funds.
- **Smart Mobility Framework:** Caltrans Smart Mobility Framework outlines how Smart Mobility Principles (Location Efficiency, Reliable Mobility, Health and Safety, Environmental Stewardship, Social Equity, and Robust Economy) can be applied to Caltrans programs. It was last updated in 2020.
- **Healthy Places Index:** This index contains mapping and data resources and provides a health score for California neighborhoods to prioritize projects, investments, and resources. HPI includes guides to support policy interventions to help communities improve their health.
- **Other Caltrans initiatives** mentioned in their submitted response include a dedicated Office of Race and Equity, an Equity Statement, an Equity Strategy, a Race and Equity Action Plan (REAP), an Equity Advisory Committee, and numerous equity questionnaires.

CTDOT

- **The Connecticut Model:** CTDOT, in partnership with researchers from the Connecticut Racial Profiling Prohibition Project, has developed an ongoing system of identifying and mitigating disparity in traffic stops. This data helps policing administrators identify and intervene early on problematic enforcement activities or individual officers.

DDOT

- **Transportation Equity Framework:** DDOT’s three-step framework helps 1) identify the needs of a disadvantaged community, 2) conduct a mobility equity analysis to find the best kind of transportation to fit the needs of the community, and 3) allow the community to decide what is best for them.
- **DDOT Community Engagement:** DDOT has set up a Community Engagement Division which helps to connect community members to designated community engagement specialists across eight wards. This division is intended to respond to community member requests, provide updates on the status of DDOT projects, and help build community support for various DDOT transportation projects and initiatives.

KDOT

- **Kansas Department of Health and Environment (KDHE) County Health Outcomes ranking:** This is an annual, county-level tool providing data on health outcomes and race/ethnicity. It was recommended as a tool by KDOT to analyze equity.

LDOTD

- **No LDOTD programs were mentioned in their submitted public comments.**

MassDOT

- **Baseline Equity Indicators Project:** This project looks at data used to address equity within the agency as well as how social equity is used in transportation planning, design, and implementation. It has provided the agency with information on equity gaps in their data, where they are “inconsistent with defining and incorporating equity definitions”, and where they are doing well in terms of equity.
- **Competitive Access Theoretical Framework:** Gartsman et al. (2020) describes a new framework for transit agencies to examine competitiveness with auto-based transportation and network performance. It has been used by the MBTA in their Bus Network Redesign.

MnDOT

- **Rethinking I-94 Project:** The I-94 Highway was constructed in the 1960’s and disrupted and segmented the surrounding neighborhoods. Through this project, MnDOT is engaging with the communities along the 15-mile stretch of I-94 to help develop a new plan for this corridor.
- **Equity Lens Framework:** This framework was implemented in 2020 and is required when creating or changing policies. It asks staff to consider community relationships, discomfort around underrepresented groups, systemic bias, etc. with the goal of changing MnDOT culture and creating equitable policy in the future.
- **Transportation Equity Labs:** These are internal working groups to help MnDOT staff examine and experiment with equity-related issues in a structured environment.

ODOT

- **Transportation Cost Index:** An accessibility measure which considers environmental justice, land use compatibility, and the overall transportation system. ODOT recommends using it with housing costs and a social equity lens.
- **Multi-Criteria Evaluation Tool:** A tool being created in collaboration with Portland Metro that calculates model travel outputs to help measure health and physical activity outcomes using an equity lens.
- **Transit Network Explorer Tool:** ODOT uses this tool in combination with General Transit Feed Specification data to analyze transportation route stops, schedules, frequency, fares, etc.

PennDOT

- **PennDOT Connects:** PennDOT talks to local communities where there are transportation projects and asks about their needs and concerns that could potentially be addressed through transportation and influence the projects. This could include access to basic needs such as food, work, healthcare, etc.
- **Environmental Justice Advisory Board:** EJAB reviews the Department’s management of proposed and existing regulations and policies that impact the environmental health of communities.
- **Dismantling Systemic Racism Plan:** This plan includes creating and showing YouTube videos highlighting the importance of a diverse workforce to middle school, high school, and college students as well as positions within the Department itself.

UDOT

- **Equitable Engagement Pilots:** Utah committed to starting new partnerships with local community organizations and starting small projects with them. These could include building better streets and creating a shuttle service to provide access to healthcare. The program aims to improve access, transportation options, community, and engagement.
- **Transportation Equity Toolkit:** This toolkit is currently in development, but it will provide a template for project equity evaluations in the future.

WSDOT

- **HEAL Act:** Recently enacted state law requiring WSDOT to conduct an environmental justice assessment prior to any significant agency undertaking, including projects over \$15 million.
- **Environmental Health Disparities Map Tool:** This tool used by WSDOT combines multiple facets of data such as socioeconomic status, environmental issues, and sensitive populations by census tract. It has a ranking model to find the most burdened communities in terms of health disparities, which could potentially be related to transportation.

Conclusion

This report aims to understand how state DOTs measure or address equity using submitted public comments to the USDOT's Transportation Equity Data RFI. This report builds on the USDOT's *Summary of Public Comments* by focusing on state DOT responses only to help highlight and share innovative work taking place at the state level, as well as offer a brief assessment of state DOT equity practices using a rough maturity index. Overall, we found broad agreement in terms of how state DOTs define transportation equity at a very basic level. Using our maturity index, state DOTs in Washington, Massachusetts, and Minnesota demonstrated the most progress towards equity goals, all of which had dedicated staff working on equity data analysis and collection, in addition to being very transparent in documenting equity vision statements and performance metrics to achieve stated goals. Among the common themes and recommendations reported in state DOT responses to the RFI, we found a desire for more resources and investment from the USDOT for equity data collection and training, but some disagreement related to whether the USDOT should enforce uniform equity data standards. This research was undertaken prior to the release of the USDOT's Equity Action Plan which sought to incorporate many of the best practices and methodologies recommended through the RFI comment process.

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Appendix 1: Maturity Index

1. Does the state DOT have an equity statement or commitment on its website?
 - Yes (1 point)
 - No (0 points)
2. How thorough is the state DOT's response to the USDOT's Transportation Equity Data RFI?
 - Very thorough – majority of USDOT questions answered (2 points)
 - Somewhat thorough – several USDOT questions answered (1 point)
 - Little to no information provided (0 points)
3. Does the state DOT provide opportunities for public engagement and discussion beyond minimum requirements set by federal law?
 - Yes, there are many opportunities (2 points)
 - Yes, there are a few additional opportunities (1 point)
 - No (0 points)
4. Does the state DOT use an index, framework, or other tool to assess progress on its diversity, equity, and inclusion efforts?
 - Yes (2 points)
 - No (0 points)
5. Has the state DOT developed equity assessment tools that incorporate multiple measures of inequity (e.g., location, population statistics, etc.)?
 - Yes – multiple measures (2 points)
 - Yes – one measure only (1 point)
 - No (0 points)
6. Does the state DOT have staff specifically dedicated to working on transportation equity?
 - Yes (2 points)
 - No (0 points)
7. Has the state DOT partnered or collaborated with other divisions of government, community-based organizations, or universities to advance transportation equity data development, collection, or analysis?
 - Yes (2 points)

- No (0 points)
8. How transparent is the state DOT in its transportation equity pursuits?
- Very transparent (2 points)
 - Somewhat transparent (1 point)
 - Not at all (0 points)
9. Total Score:
10. Name of Reviewer:
11. State DOT being reviewed: