



Transportation Equity Framework 2023





Report Title:

Vermont Transportation Equity Framework

Report Prepared by: Resource Systems Group (RSG) with support from Chris Cole Consulting, EBP Inc., Rights & Democracy Institute (RDI), and Toole Design Group

Report Prepared for:

Vermont Agency of Transportation

For additional information regarding this report, or for questions about permissions or use of findings contained in this document, please contact:

Vermont Agency of Transportation
219 North Main Street
Barre, VT 05641
(802) 448-0326
vtrans.vermont.gov/equity

| | |
|---|-------------|
| EXECUTIVE SUMMARY | VIII |
| 1.0 TRANSPORTATION EQUITY | 1 |
| 1.1 EQUITY | 2 |
| 1.2 FRAMEWORK PARTNERS | 7 |
| 1.3 WORKING GROUP | 7 |
| 2.0 STAKEHOLDER AND PUBLIC INVOLVEMENT | 9 |
| 2.1 ENGAGEMENT APPROACH | 10 |
| 2.1.1 DIRECT ENGAGEMENT | 10 |
| 2.1.2 STAKEHOLDER INTERVIEWS | 11 |
| 2.1.3 REGIONAL PLANNING COMMISSIONS | 13 |
| 2.2 KEY THEMES | 13 |
| 2.2.1 EQUITY VARIES ACROSS COMMUNITIES | 14 |
| 2.2.2 ESTABLISH EVALUATION METRICS | 14 |
| 2.2.3 PRIORITIZE PUBLIC TRANSIT | 15 |
| 2.2.4 INTEGRATE ACTIVE MODES | 15 |
| 2.2.5 IMPROVE FUNDING TRANSPARENCY | 15 |
| 2.2.6 ALTER BUSINESS AS USUAL | 16 |
| 2.2.7 LOCALLY IMPROVE PUBLIC ENGAGEMENT | 16 |
| 3.0 EQUITY FRAMEWORK PILLARS | 20 |
| 4.0 PILLAR 1: DISTRIBUTIVE EQUITY | 21 |
| 4.1 ACCURATE POPULATION REPRESENTATION | 21 |
| 4.2 APPROACH | 22 |
| 4.2.1 FUTURE OF VERMONT EQUITY MAPPING | 25 |
| 4.3 RECOMMENDATIONS | 26 |
| 5.0 PILLAR 2: PROCEDURAL EQUITY | 29 |
| 5.1 EQUITABLE ACCESS TO DECISION MAKING | 29 |
| 5.2 APPROACH | 30 |
| 5.3 RECOMMENDATIONS | 30 |
| 6.0 PILLAR 3 CONTEXTUAL EQUITY | 35 |
| 6.1 EQUITY EXPERIENCES | 35 |

| | |
|---|-----------|
| 6.2 NEEDS ANALYSIS | 35 |
| 6.3 NEEDS ANALYSIS: RECOMMENDATIONS | 37 |
| 6.4 SERVICE PROVISION | 39 |
| 6.5 SERVICE PROVISION: RECOMMENDATIONS | 39 |
| 7.0 PILLAR 4: CORRECTIVE EQUITY | 43 |
| 7.1 PRIORITIZATION AND PERFORMANCE MANAGEMENT FOR EQUITABLE OUTCOMES | 43 |
| 7.2 PRIORITIZATION PROCESS | 43 |
| 7.3 PRIORITIZATION: RECOMMENDATIONS | 44 |
| 7.4 ONGOING PERFORMANCE MANAGEMENT | 47 |
| 7.5 ONGOING PERFORMANCE MANAGEMENT: RECOMMENDATIONS | 49 |
| 8.0 IMPLEMENTING THE RECOMMENDED ACTIONS | 53 |
| 8.1 OVERVIEW | 53 |
| 8.2 FOUNDATIONAL ACTIONS | 53 |
| 8.3 EQUITY ACTION PLAN RECOMMENDED ACTIONS | 53 |
| ENDNOTES | 56 |

LIST OF FIGURES

| | |
|--|----|
| FIGURE 1: RATE OF EXPOSURE TO CANCER-CAUSING AIR POLLUTION BY RACE AND ETHNICITY IN VERMONT | 5 |
| FIGURE 2: EQUITY FRAMEWORK PILLARS | 20 |
| FIGURE 3: PUBLIC ENGAGEMENT WITHIN EQUITY ANALYSIS | 22 |
| FIGURE 4: AOT EQUITY WEB MAP | 23 |
| FIGURE 5: CLIMATE AND ECONOMIC JUSTICE SCREENING TOOL | 23 |
| FIGURE 6: FHWA MAP-21 PERFORMANCE MEASURES | 35 |
| FIGURE 7: EXAMPLE- CHITTENDEN COUNTY HOUSING DASHBOARD | 49 |

LIST OF TABLES

| | |
|---|----|
| TABLE 1: WORKING GROUP MEMBERS | 8 |
| TABLE 2: CONSULTATION METHODS | 10 |
| TABLE 3: EQUITY FRAMEWORK RECOMMENDED ACTIONS | 54 |

LIST OF ABBREVIATIONS

| | |
|-------|---|
| ACS | American Community Survey |
| ADA | Americans with Disabilities Act |
| AOT | Agency of Transportation |
| ASL | American Sign Language |
| BTS | Bureau of Transportation Statistics |
| CEJST | Climate and Economic Justice Screening Tool |
| CBO | Community Based Organization |
| CTEDD | Center for Transportation, Equity, Decisions, and Dollars |
| DBE | Disadvantaged Business Enterprise |
| DEI | Diversity, Equity, and Inclusion |
| DHAE | Disproportionately High and Adverse Effects |
| DMV | Department of Motor Vehicles |
| DOE | Department of Energy |
| DOT | Department of Transportation |
| EJ | Environmental Justice |
| EO | Executive Order |
| EPA | Environmental Protection Agency |
| ESL | English as a Second Language |
| FEMA | Federal Emergency Management Agency |
| FHWA | Federal Highway Administration |
| FTA | Federal Transit Administration |
| GMT | Green Mountain Transit |
| GTFS | General Transit Feed Specification |
| LATCH | Local Area Transportation Characteristics for Households |
| LEHD | Longitudinal Employer-Household Dynamics |
| LEP | Limited English Proficiency |
| LODES | LEHD Origin-Destination Employment Statistics |

| | |
|-------|---|
| L RTP | Long Range Transportation Plan |
| MOU | Memorandum of Understanding |
| MPO | Metropolitan Planning Organization |
| NASEM | National Academies of Sciences, Engineering, and Medicine |
| NHTS | National Household Travel Survey |
| NRPC | Northwest Regional Planning Commission |
| RFI | Request for Information |
| RPC | Regional planning commissions |
| RTP | Regional Transportation Plan |
| TAC | Transportation Advisory Committee |
| TCDG | The Creative Discourse Group |
| TIP | Transportation Improvement Program |
| UI | Unemployment Insurance |
| USC | University of Southern California |
| USDOT | US Department of Transportation |
| VAPDA | Vermont Association of Planning and Development Agencies |
| VPSP2 | Project Selection and Prioritization Process |
| VTEDI | Vermont Environmental Disparity Index |

GLOSSARY

Accessibility: Ease of reaching valued destinations, and can be measured for various locations, transit types, or times of day. Also includes ease of communication and understanding of documents and information. Most simply, it is the ability to reach, or be reached by, people, places, and things.

Active transportation: Human-powered mobility, such as biking, walking, or rolling. Often these methods are in contrast to driving a car or riding a powered mobility device which require minimal physical activity.

Brownfield: A property in which new uses are complicated by contamination from pollution or hazardous substances.¹

Communities of concern: Communities in geographic locations with higher exposure to environmental hazards, lower opportunity for public participation, and negative environmental, economic, or social conditions frequently used in the context of environmental justice.²

Community based organizations: Non-profit, research, or civil rights organizations with experience in understanding both underserved communities and disadvantaged or marginalized populations and their inequities.

Decision making processes: Public processes in which communities can express support, concern, or criticism for proposed transportation or planning projects to the decision makers.

Disadvantaged population: Minority, tribal, low-income, or indigenous populations exposed to a disproportionate amount of environmental harm.²

Environmental Justice: Fair treatment and involvement of all people and communities regardless of race, gender, national origin, or income level, in the development, implementation, and enforcement of laws, regulations, and policies.²

Equity: 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.¹⁸

Framework: A basic conceptual structure of ideas for building policies.

Gaps: Missing links between existing resources and needs, or opportunities to rectify inequities.

Immigration status: State of an immigrant's citizenship in the United States.³ This includes undocumented immigrants, refugees, visa holders, and permanent resident card holders.

Indigenous communities: Federal and state recognized indigenous tribes, tribal members, community organizations, including those living outside or in different reservations.²

Justice40: A federal initiative established under Executive Order 14008: Tackling the Climate Crisis at Home and Abroad that aims to deliver 40 percent of the overall benefits of relevant federal investments in climate and sustainable transportation to disadvantaged communities.¹⁸

Marginalized groups: Socially excluded groups based on characteristics such as race, age, housing or immigration status, and disability.

Meaningful public involvement: a process that proactively seeks full representation from the community, considers public comments and feedback, and incorporates that feedback into a project, program, or plan.

Multimodal access: Transportation systems that provide facilities for multiple types of transit modes, such as public transportation (transit), autos, and bicycles.

Needs: Practices or standards that should be met that should occur or be met based on national best practices. **Specific to equity, needs are** inequities in resources, access, or opportunities that affect community transportation or environmental outcomes.

Overburdened community: minority, low-income, tribal, or Indigenous populations or geographic locations in the United States that potentially experience disproportionate environmental and/or safety harms and risks.

Partners: AOT, RPCs, and all other public and private organizations involved in the implementation of the Framework.

Shared mobility: A transportation service that is shared among users such as vanpooling or bike sharing.

Social equity: Fair, just, and equitable management and distribution of all institutions, policies, and services used by the public.

Regional Planning Commission: Political bodies created by regional member municipalities. Provide connections between State and municipal agencies to coordinate planning efforts.⁴

Technical Advisory Committees: Research committees created to advise research projects and direct work to support Agency of Transportation goals.

Transportation Advisory Committee (TAC): Is the main method for local input into transportation planning at the state and federal level. Each RPC has a TAC responsible for identifying and prioritizing transportation projects in the region and providing local input to the Agency of Transportation.

Transportation equity: Increases access to mobility options, reduces air pollution, and enhances economic opportunity for Vermonters in communities that have been underserved by the State's transportation system. (VT Act 154) FHWA considers the "fairness in mobility and accessibility to meet the needs of all community members." The USDOT defines an equitable transportation plan to consider the circumstances impacting a community's mobility and connectivity needs, and this information is used to determine the measures needed to develop an equitable transportation network. To attain an equitable transportation network, all components of Title VI, environmental justice (EJ), and Nondiscrimination must be considered.⁵

Underserved communities: populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life, as exemplified by the list in the preceding definition of "equity." This term is used widely in the equity framework. It differs from other terms often used in the environmental justice context.



Executive Summary

Transportation Equity Framework

EXECUTIVE SUMMARY

The Transportation Equity Framework defines a set of principles and practices to guide the Vermont Agency of Transportation (AOT) including the Department of Motor Vehicles, Regional Planning Commissions, and other stakeholders such as towns and cities, to realize equitable outcomes for all people. All Vermont residents deserve equitable access to opportunities and resources, regardless of race, ethnicity, gender, socioeconomic status, or other identity factors.

The framework can be used to guide decision making throughout the agencies and jurisdictions. It can help to identify and address systemic barriers to achieving equitable outcomes and create policies and practices that promote fairness and inclusion.

“Vermont’s transportation system provides a diverse set of travel options that is just and allows fair and equitable access to opportunities to meet the needs of all Vermonters.”

- Vision for Transportation Equity

Fundamentally, transportation is a means to an end. We travel for work, we travel to meet our daily needs, and we travel for joy. *Transportation permits individuals to meet their daily needs and enhances their quality of life.*

An equitable transportation system increases access to mobility options, reduces air pollution, and enhances economic opportunity for Vermonters in communities that have been underserved by the State’s transportation system.

The Transportation Equity Framework is a guide and pathway to inform a set of actions that can achieve transportation equity. The framework comprises the following sections:

- An overview of equity, and a summary of Vermont and national transportation equity efforts.
- Stakeholder and public involvement that informed the framework.
- Key themes arising through stakeholder and public involvement.
- Framework pillars that organize actions and strategies to achieve the vision for transportation equity.
- Implementation plan that identifies key foundational actions and organizes the sequence of recommended strategies.

The development of the framework is informed by an extensive and comprehensive stakeholder and public involvement effort that included direct interviews with members of various planning agencies, meetings with each of the Regional Planning Commissions in Vermont, and a focused set of structured and unstructured activities within four communities to obtain a real sense of the challenges facing Vermonters.

This document defines a framework for how equity can become embedded within all AOT planning, maintenance, and project delivery processes. It is informed by national and local best practices, direct engagement with affected stakeholders, and accounts for the latest available data, tools, and methods. It develops an implementation plan with clear recommendations to achieve Vermont’s vision of transportation equity.

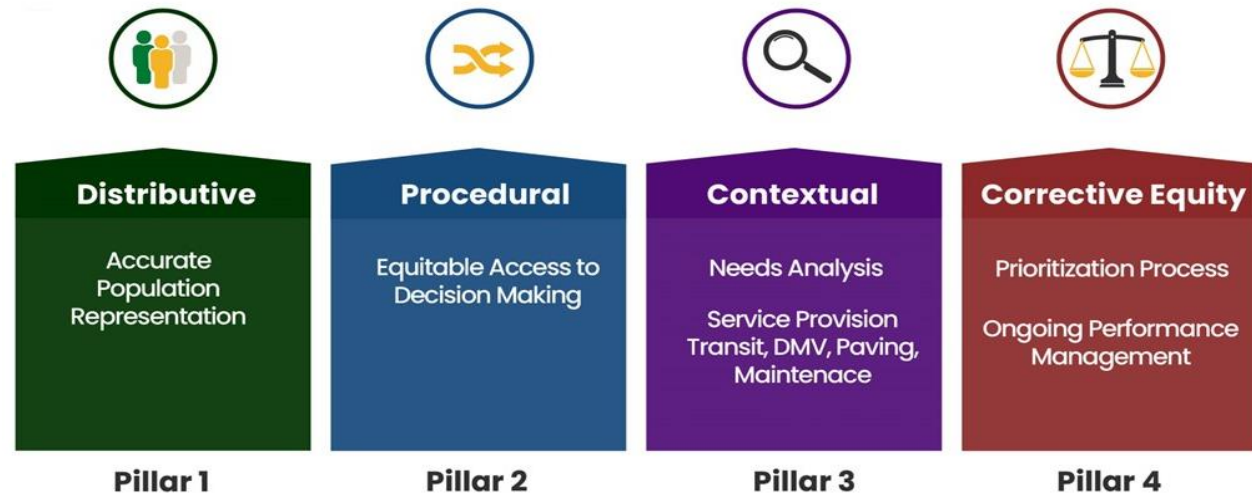
The framework forms part of a multithreaded response to state and federal actions including the Vermont General Assembly in Section 41 of Act 55 (2021) that asked for a recommendation on transportation equity and the January 2021 Presidential Executive Order creating the Justice40 initiative.

The framework outlines an approach to embed equity considerations and achieve equitable outcomes in day-to-day AOT activities. The framework supports adjacent work within Vermont and at the federal level to further equitable outcomes, including the Act 154 Environmental Justice Act and the USDOT Equity Action Plan.

As an ongoing and evolving process to achieve equitable outcomes, there must be equitable actions embedded into the continuous and ongoing procedures used in planning, delivery, and maintenance of the

transportation system. These processes are set out in four pillars used to organize the framework.

- **Pillar 1:** Distributive Equity. Account for all members of the population and their many defining characteristics using both quantitative and qualitative data.
- **Pillar 2:** Procedural Equity. Ensure that all community members can participate and bring their voices to the decision making process.
- **Pillar 3:** Contextual Equity. Identify policies, investments, and services to meet the needs to address current inequities and historical harms.
- **Pillar 4:** Corrective Equity. Incorporate solutions into project selection and prioritization activities to address inequities and track progress over time to achieve equitable outcomes.



Implementation Plan

The following three actions are considered foundational to the pursuit and realization of the equity goals set out in the Framework.

ACTION 1.1: Improve practices for identifying underserved communities including leveraging state data and developing local datasets. Specific strategies include:

- Develop best practices on the use of currently available data (both quantitative and qualitative).
- Develop best practices on creating and using local data.
- Develop guidance for identifying underserved communities in study areas.

ACTION 1.2: Seek opportunities to improve community trust and involvement by removing barriers to engagement. Specific strategies include:

- Develop ongoing relationships with organizations that represent or serve the needs of underserved communities.
- Identify liaisons representing underserved communities and form relationships with these individuals to establish a consistent dialogue with each community.
- Provide communication and engagement training for state and regional staff to support engagement with underserved communities.
- Assist with capacity building for community based organizations representing equity groups.

ACTION 2.1: Develop community engagement plans and public involvement processes specifically focused on underserved and historically marginalized communities. Specific strategies include:

- Fulfill the Act 154 obligations for the AOT to develop a community engagement plan by July 1, 2025.
- Provide training for AOT staff and other partners on approaches, methods, and strategies included in the engagement plans.
- Conduct pre-planning outreach to underserved communities. AOT and the RPCs can contact liaisons and community organizations to open lines of communication and involvement before active planning commences.
- Determine the feasibility of continued use of direct compensation to reduce barriers to participation for underserved communities.

A photograph of a street scene. In the foreground, a utility pole stands with a rainbow flag attached to it. To the left, a red banner hangs from the pole. The background shows a brick building with large glass windows displaying clothing. A green hexagonal graphic with the number '1.0' is overlaid on the right side of the image.

1.0

Transportation Equity

Transportation Equity Framework

1.0 TRANSPORTATION EQUITY

Introduction

The Transportation Equity Framework defines a set of principles and practices to guide the Agency of Transportation (AOT), Regional Planning Commissions (RPCs) and other stakeholders in creating and sustaining equitable outcomes for all people. All Vermont residents deserve equitable access to opportunities and resources, regardless of race, ethnicity, gender, socioeconomic status, or other identity factors.

The framework can be used to guide decision making throughout the agencies and jurisdictions. It can help to identify and address systemic barriers to achieving equitable outcomes and create policies and practices that promote fairness and inclusion.

The framework is a guide and pathway to inform a set of actions that can achieve transportation equity. This image shows the sequence of activities in the framework:



Overview

The role of transportation is to connect people to each other, to enable goods and commerce to flow from one place to another, and to create opportunities for individuals to meet their daily needs and achieve their greatest desires.

Unfortunately, the benefits of transportation are experienced differently across Vermont. We know that age, income, ability, language, and race and ethnicity are predictors of different outcomes for health, safety, and social well-being as well as resiliency in the face of climate change and economic uncertainty. We know that these and other factors predict safety on our roads, the quality of the air we breathe, and travel costs and time required to meet our basic transportation needs. Equity will be reached when these factors are no longer predictors in life outcomes and when outcomes for all Vermonters are improved.

“Vermont’s transportation system provides a diverse set of travel options that is just and allows fair and equitable access and opportunities for all Vermonters to meet their needs.”

- Vision for Transportation Equity

Social equity is focused on people rather than places. Social equity recognizes that we all deserve to have fair and just access to resources and opportunities to meet our needs even though we started life in different circumstances. It

examines conditions that exist today because of historical decisions—with a goal of improving them.

Per the President’s Executive Order 13985 from January 2021⁶, the United States Government **defines equity** as follows:

“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 and not limited to: 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.”

The Order defines underserved communities as “populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life, as exemplified by the list in the preceding definition of “equity.”

1.1 EQUITY

Applying a view of equity to the world of transportation requires an understanding of how transportation has shaped our world and our communities in Vermont. Transportation provides a means of freight and goods movement. It has

influenced where our communities were established. Fundamentally, transportation is a means to an end. We travel for work, we travel to meet our daily needs, and we travel for joy. *Transportation permits individuals to meet their daily needs and enhances their quality of life.*

Transportation provision has been unequal in its distribution, application, benefits, and burdens. This has resulted in existing inequities that we experience today.

Transportation equity must reduce inequities across our transportation systems and the communities they affect.

Transportation equity enables communities and individuals to access safe, affordable, inclusive, and multimodal travel options to satisfy basic needs and lead a meaningful life.

Transportation equity is a result of sustainable access to opportunities and the reduction of transportation-related disparities, adverse community impacts, and systemic health inequities.

Transportation equity is realized when these outcomes are achieved, and communities are not overburdened.

Equity in Vermont

It is essential that equitable outcomes are possible for everyone. However, specific communities and populations have experienced significant inequities through past injustices or through current actions, which need to be recognized.

Vermont’s rural context can often exasperate other inequalities by limiting access to core services to meet daily needs. For example, rural environments may magnify the challenges of

low-income or unhoused populations. It doesn't mean that rural areas are themselves an equity issue, but that being further from others may increase the burden of insufficient access to jobs, goods, and services. However, it may also improve outcomes, such as access to better air quality. Vermont's low average population density dispersed pattern of development complicates efforts to achieve transportation equity. Generalizations are inadequate, with focused solutions for a community often arising from within their own community. AOT and its partners need local leaders and seek to identify and understand current and past inequities across Vermont's population and work to address them.

Equity and Environmental Justice (EJ)

Equity is not the same as Environmental Justice (EJ). Although they are similar, the EPA defines EJ as the *“fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. Fair treatment means no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies.”*⁷

Equity is multifaceted and touches on a broad range of systems and activities:

- Equity goes beyond *equal* access to the process.
- Equity is a systemic and structural concept that *includes* EJ. Equity is connected to and shares goals with EJ.

- Equity is the *outcome* of justice that seeks to address past harms and to prevent future harms.
- Equity is the *result* of achieving fair and just outcomes regardless of the current situation.
- Equity is achieved through vigilant assessment that ensures no one is left behind and that over time fair and equitable outcomes are experienced by all of Vermont's residents.

Equitable outcomes require equitable processes and a continual and intentional set of actions to create lasting and meaningful change.

Equity is supported by the Vermont Constitution in Article 7 in that it establishes the government as a vehicle for the common benefit, protection, and security of Vermonters and not for the particular advantage of any single set of persons who are only a part of that community.⁸

Equitable Outcomes

Vermonters' lived experiences vastly differ across the state. They differ for many reasons. The landscape of Vermont has shaped our transportation system as much as it has been shaped by it. The features of the landscape (e.g., mountains, valleys, and rivers) have isolated certain communities while others have become centers of population and commerce. There is a direct connection between accessibility of place and land use, social, and economic outcomes. Given the influence that transportation plays to connect each other, it is important to understand how investments in our transportation system can help create a more just and equitable world.

However, our past investment and decisions have resulted in current inequities across our state. The Equity Atlas identifies some of these:

“Economic stability and wealth accrual are highly related to one’s ability to access employment and services via transportation” and policies have prioritized investment in auto-oriented transportation. This **negatively impacts people of color, people living with disabilities, and people experiencing poverty, who are less likely to own a car and may not live in areas that are well-served by transit or easily accessible by active transportation modes.** The data tells us that Vermont is not immune from these conditions. Those with the highest poverty levels commute further.⁹

There is a correlation, specifically in a predominately rural state like Vermont, between mobility and social outcomes.

In a University of Vermont study, about 9 percent of surveyed patients reported that transportation problems prevent them from accessing health services, like doctor’s appointments. (Act 154 of 2022)

Twenty-four percent of Americans living in poverty do not own a vehicle.¹⁰ A survey of Central Vermont residents during 2021 on the behalf of Capstone Community Action in Barre found that:

- 1/3 of respondents in Central Vermont had unmet transportation needs, most often associated with transit reliability, long travel times, too complicated, lack of safe walking and biking infrastructure.

- Just under 5 percent of the households surveyed had limited mobility due to challenges involved with having a valid driving license.
- Just under 7 percent of households surveyed reported that owning and maintaining a household vehicle was cost prohibitive.
- Rural residents without vehicle access report a feeling of isolation and lost independence. Many have missed appointments or social visits. The winter further hampers mobility with fewer opportunities to walk and bike.

Further, the distances that need to be traveled along with limited population density and economic amenities make access to essential needs--such as food and grocery stores--challenging.

According to the US Department of Agriculture, 24 percent of Vermonters have low access to grocery stores, which factors in distance to and quantity of stores, family and neighborhood income, and vehicle and public transportation availability. (Act 154 of 2022)

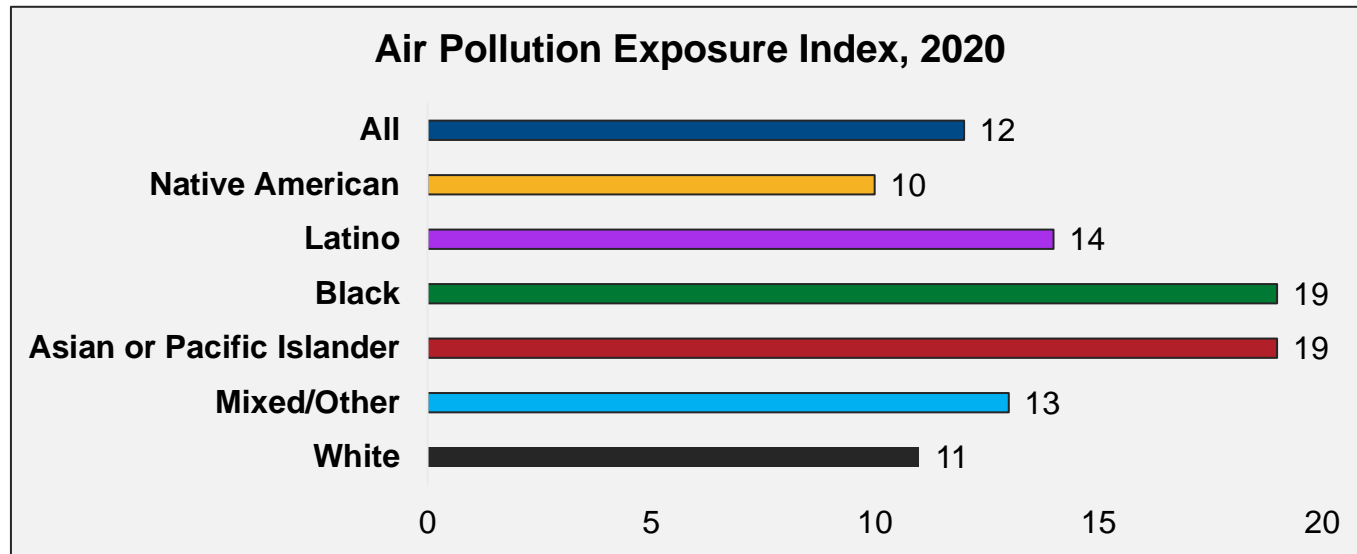
Conversely, urban areas of the state that have a greater diversity of housing options and travel options are prone to poor air quality, higher levels of noise and other pollutants. Historical centers of industry, such as Barre and Springfield, have brownfield sites and shrinking population bases as additional challenges. Each community has its own story – however, the pattern generally holds that those areas with higher populations and more jobs generally experience a

larger number and higher degree of negative environmental impacts.

The general urban environmental picture leads to specific inequities. The Equity Atlas (2019 data) indicates that in Vermont, people of color face up to 1.6 times the statewide average rate of exposure to cancer-causing air pollution (Figure 1).

Act authorizes an Advisory Council to be formed to guide ongoing conversations and the periodically revisit key metrics associated with the definition of environmental justice populations. The Act also specifies that a mapping tool be developed to support the definition of environmental justice populations and directs each state agency to develop community engagement plans. Since Act 154 contains a set of

FIGURE 1: RATE OF EXPOSURE TO CANCER-CAUSING AIR POLLUTION BY RACE AND ETHNICITY IN VERMONT



Source: National Equity Atlas

Vermont Environmental Justice Actions

Act 154, a 2022 Vermont law relating to environmental justice, is a significant piece of recent legislation. It intends to advance several actions included in this framework.¹¹ Specifically, the

processes relevant to this framework, the latter will need to consider and coordinate actions with Act 154 implementation. This coordination should address the fact that Act 154 is directed at all statewide agencies while this framework is specific to the Agency of Transportation and RPCs.

Recent National Efforts

USDOT and the Federal Highway Administration (FHWA) released complementary orders (USDOT Order 5610.2 (a)¹² and FHWA Order 6640.23A¹³) updating previous agency-related EJ orders. The orders reaffirm the collective commitment by USDOT and FHWA to consider EJ principles throughout federal transportation programs and policies and describe how EJ objectives are built into such planning and programming efforts. The orders additionally reiterate the importance of considering EJ principles early in planning efforts to prioritize reducing adverse effects on disadvantaged communities.

More recently, the Biden-Harris Administration elevated the topics of equity at a national level as an immediate priority and called for a whole government approach to address existing and historical harms. In January of 2021, the Administration created the Justice40 initiative, which aims to deliver 40% of the overall benefits of federal investments in climate and clean energy, including sustainable transportation, to disadvantaged communities.¹⁴ The Justice40 initiative includes interim guidance for federal agencies involved in programs covered by the initiative. The guidance provides documentation detailing how agencies can identify benefits for included programs, determine the distribution of benefits, and calculate and report on meeting the 40% goal of Justice40.¹⁵

Under the Obama-Biden Administration, USDOT provided state departments of transportation (DOTs) and regional planning organizations guidance on complying with EJ requirements, such as the 2015 FHWA Environmental Justice Reference Guide.¹⁶ This support has continued during the

Biden-Harris Administration, as evidenced by the agency's response to the 2021 Executive Order 13985 (Advancing Racial Equity and support for Underserved Communities Through the Federal Government).⁶ In May of 2021, USDOT released a 'Request for Information' (RFI) on transportation equity data that could aid the USDOT in evaluating transportation program and policy inequities.¹⁷ The goal of the RFI is for the USDOT to assess to what extent and in what ways its programs and policies have created and maintained systemic barriers to opportunity for disadvantaged populations. This assessment will aid the agency in developing and maintaining programs and policies that distribute resources and benefits more equitably.

The National USDOT Equity Action Plan was released in January 2022.¹⁸ The plan provides an explicit recognition of equity in transportation planning with four equity actions: wealth creation, intervention through direct hands-on technical support, empowering communities in decision making, and expanding access to affordable transportation options to bring economic mobility and transportation benefits. The Plan identifies examples of gaps and opportunities within each of these action areas.

On March 28, 2022, the Biden-Harris Administration released the USDOT Strategic Plan for fiscal years 2022 through 2026.¹⁹ The Plan centered equity as a department-wide strategic goal. The US Government took a critical lead in institutionalizing equity across the USDOT's policies and programs, with the aim of reducing inequities across transportation systems and the communities they affect. The Strategic Plan includes the following objectives:

- Expand access to transportation jobs and business opportunities by removing barriers for individuals, business, and communities.
- Reduce the effects of structural obstacles to building wealth.
- Empower communities through innovative public engagement with diverse stakeholders and community leaders to foster exchange and ownership.
- Ensure that equity considerations for disadvantaged and underserved communities are integrated into the planning, development, and implementation of all transportation investments.

1.2 FRAMEWORK PARTNERS

Vermont’s Transportation Equity Framework will be actioned by the Agency of Transportation, the state Regional Planning Commissions, and other partners. Two departments comprise the AOT. VTrans is responsible for planning, developing, implementing, and maintaining all transportation infrastructure. This includes but is not limited to roads, bridges, state-owned railroads and airports, park and ride facilities, bicycle facilities, sidewalks, rail trails, public transportation facilities, and supporting services. The Department of Motor Vehicles (DMV) is responsible for implementing and monitoring the state’s motor vehicle laws and regulations.

The Vermont Association of Planning and Development Agencies (VAPDA) is the statewide association for the State of Vermont's eleven RPCs, including the one federally

designated Metropolitan Planning Organization (MPO) in Chittenden County.

The framework partners will be responsible for implementing the recommended actions and will coordinate with local municipalities to realize the vision for transportation equity.

1.3 WORKING GROUP

The project team identified a working group comprised of representatives from VTrans, DMV, VAPDA, and the Agency of Natural Resources, shown in Table 1.

TABLE 1: WORKING GROUP MEMBERS

| ADVISORY WORKING GROUP MEMBER | ORGANIZATION | TITLE |
|-------------------------------------|--|---|
| Amy Tatko | Agency of Transportation | Communications and Public Outreach Director |
| Andrea Wright | Agency of Transportation | Environmental Policy Manager |
| Carey Hengstenberg | Agency of Natural Resources | Environmental Analyst |
| Charlie Baker | Chittenden County Regional Planning Commission | Executive Director |
| Colleen Montague | Agency of Transportation | Civil Rights Director |
| Erin Sisson | Agency of Transportation | Deputy Chief Engineer |
| Katharine Otto | Agency of Transportation | Planning Coordinator |
| Lori Valburn | Agency of Transportation | Civil Rights Director (retired) |
| Meghan Brunk | Agency of Transportation | District 2 Tech |
| Michele Boomhower | Agency of Transportation | Policy, Planning, and Intermodal Development Director |
| Mike Winslow | Addison County RPC | Transportation Planner |
| Nancy Prescott | Dept. of Motor Vehicles | Motor Vehicle Operations Director |
| Patricia Martin | Agency of Transportation | Title VI and ADA Coordinator |

A photograph of two people riding bicycles on a gravel path that runs alongside a body of water. The person in front is wearing a blue jacket, and the person behind is wearing a red jacket. The trees and bushes are in autumn colors. A large green hexagon with the number '2.0' in white is overlaid on the right side of the image.

2.0

Stakeholder and Public Involvement

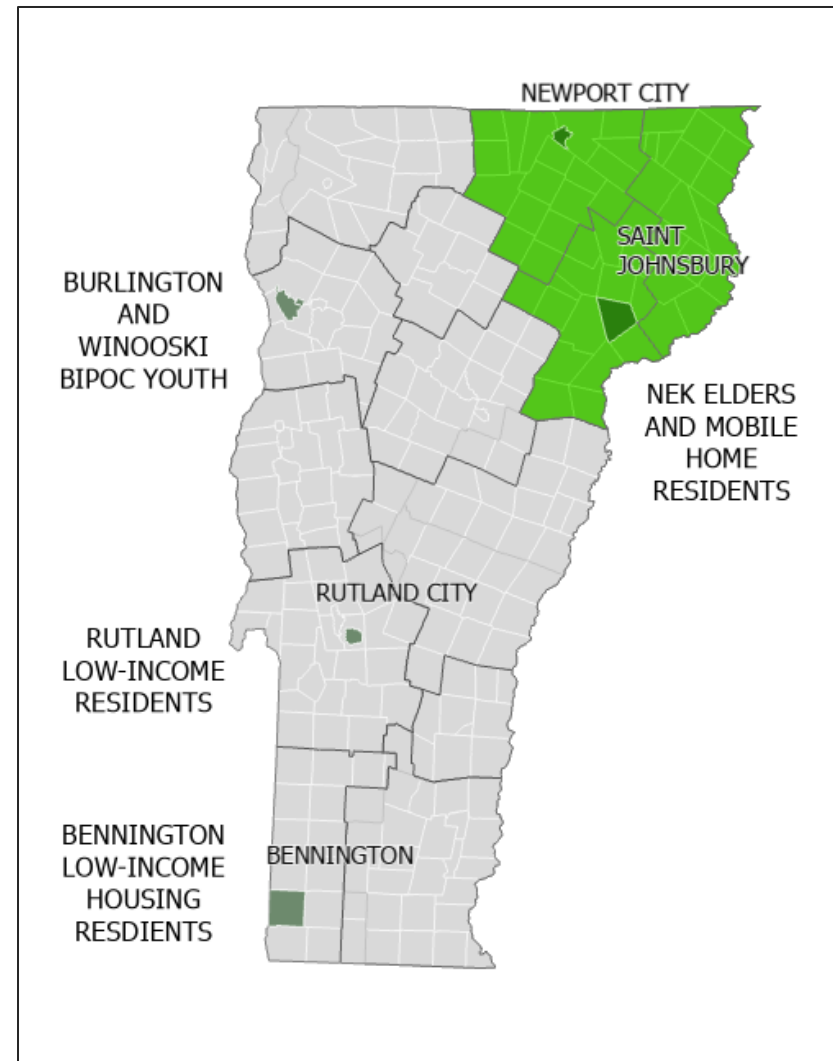
Transportation Equity Framework

2.0 STAKEHOLDER AND PUBLIC INVOLVEMENT

A comprehensive assessment of the current understanding of and actions around transportation equity was completed as part of the framework development. Three primary approaches were used to solicit and involve a diverse cross section of participants. These were:

- Direct engagement: Four communities within Vermont were identified for in-depth conversation and consultation.
- Stakeholder Interviews: Ten one-on-one meetings were scheduled to answer a consistent set of questions. The stakeholders included members of the AOT, DMV, RPCs, advocacy groups, Vermont community based organizations (CBOs) and nonprofits.
- Regional Planning Commission Meetings: Meetings were held with each RPC to explore the relevancy of the equity framework pillars, identify how the equity approaches are currently being used within the activities at the RPCs and how the framework can enhance equitable outcomes in future work at the RPCs.

These engagement efforts revealed several key themes and issues that reveal how transportation equity varies across the state and show where flexibility is required in the AOT Equity Framework. The engagement strategies and key themes that emerged from the discussions are summarized below.



Areas with direct community engagement

See Appendices E for detailed information from each of the engagement activities organized with one section for each of the three approaches. The direct engagement appendix includes a summary presentation on key lessons and insights from the activities.

2.1 ENGAGEMENT APPROACH

2.1.1 Direct Engagement

By engaging deeply with four communities around Vermont, the AOT gained a better understanding of the perspectives and experiences of communities most affected by environmental justice and equity issues.

The goal of the four community-specific engagement plans outlined in Table 2 was to learn and test approaches, strategies, and tools with each community, based on research and communication with members from each of these communities. The outreach team focused on prioritizing community knowledge and expertise, desires, priorities, needs and concerns and responding to communities' need for information and connection to decision makers.

TABLE 2: CONSULTATION METHODS

| Method | Description | Locations Applied |
|--|--|---------------------|
| Participatory Mapping | Maps as a visual aid to allow community members to communicate information about their environment | Bennington, Rutland |
| Community Meetings, Focus Groups, and Forums | Group discussions with, facilitated dialogue, with or without educational guest speakers | All |

| Method | Description | Locations Applied |
|------------------------------------|--|---------------------------------------|
| Photovoice Challenge & Ceremony | The collection of perspectives through photos as taken and described by community members. This also included a ceremony where photos were celebrated, discussed, and evaluated by a panel of community based judges, gamifying participation, and creating the basis for a focus group discussion | Winooski/ Burlington |
| Neighborhood Walks | Conversations that happen while walking (or using a wheelchair) around a community to ground conversations in local environments | Bennington |
| One-on-Ones with Community Leaders | Direct conversations with community leaders to gather information, receive guidance and feedback, and to understand and connect to local social networks | All |
| Facilitated Dialogue | Reciprocal dialogue between decision makers and community members that allows for distribution of information and direct feedback | Rutland |
| Assisted Public Participation | A collaborative effort of working with individuals to share information on processes, best practices, and to support community members to effectively engage with public participation opportunities | Bennington, Winooski/ Burlington, NEK |

Four communities were selected as target populations for testing and exploring various methods of community engagement. These sites were identified using tools such as the Vermont Environmental Disparity Index²⁰ and qualitative research conducted by members of the Rights and Democracy Institute (RDI) and REJOICE (Rural Environmental Justice Opportunities Informed by Community Experts). These target populations included: BIPOC young adults in Winooski and Burlington; residents of Bennington living in low-income

housing; older adults and mobile home park residents in the Northeast Kingdom; and low-income and un/under-housed residents of the Rutland area.

Overall, 21 community engagement events were held with a total of 324 individual participants in Bennington, Rutland, Winooski, and the Northeast Kingdom.

Several important engagement takeaways emerged that will guide this framework's further activities:

Engagement is about trust & relationships: Relationship-building begins *before* engagement. Often work is project by project, making this difficult. However, it is important to have a basis of trust in an ongoing and durable process outside any one project.

Employ Diverse methods of Information Sharing: Access to information varies as do the methods by which people best receive that information.

Employ Diverse methods of Information Collection: Understanding information that comes in many forms is important. Implementors must accept that community members deliver information in many ways. Recording, providing evidence and confidence that information was received and heard—regardless of its format or channel—is important. It is vital to be open to “non-professional” language and information.

Offer education and information to provide context: Provide continual information on the history of the issues and problems being solved, supply a range of additional information to bring others up to the current state of

knowledge, provide opportunities for educating the public so that they can participate in an informed discussion.

Provide support to those wanting to address issues:

Provide an interface that enables activists and engagement members to participate. Find appropriate method(s) for engagement, whether small groups meetings, one-on-ones, etc. Use those methods to give ongoing progress updates, continuous feedback and opportunities to provide input.



Burlington photovoice challenge (source: RDI)

2.1.2 Stakeholder Interviews

The goal of the stakeholder interviews was to gauge the level of understanding, reception, and maturity for implementing an

equity framework for the AOT. The interviews helped to identify Vermont equity-seeking communities, ways to apply approaches taken to-date, lessons learned by state departments and staff, and implementation successes or challenges.

Ten stakeholder interviews were conducted during summer 2022 (July 18 – September 14) lasting between 60-90 minutes each. Interviewees included representatives from within AOT and from Regional Planning Commissions as well as community based organizations representing statewide interests. They were identified based on discussions with the AOT and the working group.

The stakeholder interviews included the following AOT, DMV, and VAPDA representatives:

- Lori Valburn, former Director of Civil Rights // Office of Civil Rights
- Erin Sisson, Deputy Chief Engineer and Ann Gammell, Chief Engineer // Highway Division
- Vicki Good, Branch Operations, Supervisor of the South Burlington Office // DMV
- Kevin Marshia, Bureau Director // Asset Management
- Ross MacDonald, Public Transit Program Manager // Public Transit
- Charlie Baker, Secretary/Treasurer of VAPDA and Executive Director of Chittenden County Regional Planning Commission and Catherine Dimitruk, Chair of VAPDA and Executive Director of Northwest Regional Planning Commission

The primary AOT stakeholder interviewees above also coordinated additional written responses to the interview questions from Highway Division staff members in the Operations and Safety Bureau, including Operations, Transportation Management Center, State Highway Safety Office, Data, and Project Delivery.

The four stakeholder interviews with statewide community organizations consisted of:

- Dorah Nkurunziza, Case Manager // Community Asylum Seekers Project (CASPV)
- Mia Shultz, President // Rutland Area Branch of the National Association for the Advancement of Colored People (NAACP)
- Vermont Public Interest Research Group (VPIRG) *(representative asked not to be identified and for responses not to be attributed to VPIRG)*
- Marita Canedo, Program Coordinator // Migrant Justice

The key takeaways from the interviews were organized into three main categories – external-facing challenges, internal-facing challenges, and the equity framework – and include the following common themes:

- **External-facing challenges:** with the dynamic and complex nature of equity itself (how it is defined and by whom, persons/communities in need, appropriate resources to equitably meet needs, etc.), engagement (with other agencies and organizations, stakeholders, and the public), and funding priorities (how are decisions made, and is the process transparent).

- **Internal-facing challenges:** internal organizational culture and awareness, hiring practices, and bidding processes for contractors, especially for registered DBE entities.
- **The equity framework:** what does the framework look like, how will it be implemented, and should it aim to accomplish, and who will lead the charge.

Several interviewees mentioned that there was no formal definition of equity that informed and influenced their work but noted a desire or need to work with AOT partners to establish one. The RPCs attempted to do this over the summer but were unable to, in part due to variations in understanding of what equity means and requires. Interviewees noted that there is a clear distinction between “equality” and “equity,” and the two should not be conflated. Even among interviewees there were differences in how both terms were defined and understood in practice.

During conversations with community organizations, a significant knowledge gap became apparent: three of the four organizations were not aware of any strategies the AOT was taking to increase equitable engagement, and all four perceived a lack of engagement around the design of policies, programs, and projects.

The organizations identified opportunities for improvement such as more intentional and targeted communication on the part of the AOT plus greater support to the RPCs that are on the frontlines of transportation planning in cities, towns, and communities around Vermont (and, in many ways, are an extension of the AOT). They remarked a need to examine

existing capacity and the need to either expand or reconfigure existing channels and methods of communications so that key stakeholders and organizations deeply embedded in communities can play active roles in transportation planning and service delivery.

2.1.3 Regional Planning Commissions

Regional Planning Commissions serve as the local voice in the statewide planning process, legally delegated to represent the AOT at the local level as defined in the Transportation Planning Initiative (TPI) process.²¹ The RPCs are involved in local and regional planning across the state and have a range of experiences regarding equity in their work. Eleven meetings were held between June and October with each of the Regional Planning Commissions.

2.2 KEY THEMES

The following key recommendations resulted from the three engagement approaches:

- Equity is unique and local: understand that equity varies for each community and their respective transportation issues.
- Communities need reliable and standardized metrics: Communities and the AOT need to determine what equity metrics should be tracked and accounted for.
- Improve public transit service and active transportation: Improve accessibility and remove barriers to these modes.

- Ensure funding and project transparency: Improve funding transparency for projects to bring more voices to the table, shift focus to more equitably developing projects outside dense urban areas.
- Holistically integrate equity: Equity should be a key piece of all business and public processes.
- Broaden public engagement: Substantially change engagement and communication to encourage involvement from marginalized groups. Community organizations and institutions should be used to supplement data and improve community engagement. Create and maintain durable two-way communication channels.

Appendices E has a detailed summary of the engagement activities.

2.2.1 Equity Varies Across Communities

The RPCs interviewed varied in their understanding of what inequities are prominent throughout their communities, the specific demographics or areas in which inequities exist, and the specific solutions that they believe can be used to rectify their specific issues. Several are still working to understand where equity gaps exist in their communities and how best to engage residents most impacted. The groups identified in need of equity improvements throughout Vermont include low-income communities; older adults; persons with disabilities; people discriminated against due to race, gender, or sexual orientation; people living in rural areas; and people with language barriers that impair participation in decision making

processes. Identified groups also included people of color, people experiencing homelessness, people previously incarcerated, people without cars, immigrant agricultural workers, refugees, and members of the Abenaki indigenous population.



2.2.2 Establish Evaluation Metrics

Community organizations and stakeholders noted that there are currently no evaluation strategies in place for monitoring equity improvements and progress. Creating or identifying standardized performance metrics is necessary to track progress and evaluate the effectiveness of an equity framework. RPCs and other stakeholders also noted that data limitations create difficulties when integrating equity into project planning or when communicating with the public. This especially pertains to groups that are overlooked or not included in traditional Census data but are important for equity

considerations, such as people experiencing extreme poverty, people experiencing homelessness, or those in rural areas with significant land but little in monetary assets. Interviewees also stressed that this data should be flexible enough to be used in multiple evaluation formats--such as spatial data--and should be measurable in both capital projects and new programs or services. Additionally, interviewees indicated that having data at a higher resolution than Census tracts or block groups would provide even greater insight into where inequities are located, particularly in rural areas. This would provide further details about which projects would have the greatest equity impacts. Suggestions for achieving this level of resolution included leveraging data from schools or health care facilities.

2.2.3 Prioritize Public Transit

Community members identified both improved and free or low-cost access to public transportation as a significant opportunity for improving equity outcomes. Specific access improvements included expanding routes and schedules for public transit, especially those along routes to schools, health care facilities, and employment opportunities. This was cited as key for low-income community members who rely on either public or active transportation methods to get to work. Providing the service for no cost was also desirable and would remove further barriers to access for low-income or marginalized communities. Community members also emphasized the importance of continued safety improvements on public transportation, such as training skilled and reliable drivers or operators. There was also interest in on-demand transportation services, with many noting that most current

services, such as taxis or Uber/Lyft, are either unavailable in their communities or simply unaffordable.

2.2.4 Integrate Active Modes

RPC and stakeholder interviews both highlighted that an equity framework must also prioritize active transportation modes, such as bicycle and pedestrian support, along with motorized and public transportation. Making these improvements would provide secure transit infrastructure for community members who rely on accessible and safe active transportation throughout the year and provide low-emission alternatives to motorized transport. RPCs noted this is particularly important in rural areas where low-income or marginalized community members may be at least partially reliant on active transportation to reach employment opportunities. RPCs also showed concern for modal bias that influences placement of pedestrian or bicycle access on roadway projects. Additionally, projects designed to connect employment or community hubs should include infrastructure for active transportation as well.

2.2.5 Improve Funding Transparency

RPC members expressed concern that funds were being overly concentrated in urban areas, which has exacerbated inequities in rural or low-income areas. RPCs showed interest in having a pro rata process or a project selection framework like the VTrans Project Selection and Prioritization Process (VPSP2) mechanism but expressed that the system needs to focus on improving the level of local input, improving assessment of equity outcomes, and include assessing safety

information for active transportation modes. In contrast, stakeholders had mixed comments on VPSP2 as well, with many key stakeholders involved in the process stating that the tool does not include enough equity considerations to be used for supporting the equity framework. Community members also suggested diverting funding from road maintenance to focus on equity-based projects, indicating that they do little to improve equity since these projects primarily benefit private vehicle owners. Community members were especially interested in allocating maintenance investments to improving public transportation and pedestrian infrastructure, specifically routes with between affordable housing communities, employment opportunities, and public or recreational facilities. Creating periodic summaries of funding by geography and by travel mode was a common suggestion.

2.2.6 Alter Business as Usual

Stakeholder interviews emphasized that implementing the equity framework requires altering project approaches to ensure equity considerations become a routine part of business. This includes allowing flexibility in how the framework is tracked or measured so that it is accessible for a variety of official staff and community organizations. Suggestions for accomplishing this included utilizing dedicated staff members to identify, monitor, and work with impacted groups throughout the community. In addition to dedicated staff members, stakeholders also suggested disseminating DEI training and information among staff and the community to improve involvement and thinking regarding the equity framework.

2.2.7 Locally Improve Public Engagement

All interview groups gave extensive feedback on how to improve public engagement strategies.

Provide information on participation opportunities & utilizing community organizations

Community members stated that current public engagement practices do not provide enough information on how to best participate in public meetings or decision processes, which causes many to simply not participate. Many interviewees stated that lack of information limits not just participation potential, but also how effectively community members and officials can collaborate in any public processes. Some communities found that engaging or disseminating information through trusted community organizations resulted in higher engagement, particularly for marginalized groups. Interviewees noted that utilizing community groups as liaisons can provide specific issue analysis, help perform culturally sensitive engagement approaches such as translation services, and more effectively provide channels of communication between officials and their constituents. However, community groups also emphasized not to become overly reliant on them for disseminating or collecting information. This helps to avoid participation burnout and helps build trust between officials and community members through in-house efforts.

Engagement methods should vary by community.

The preferred or most effective methods of communication varied by community. Technology based outreach, such as texting, email, or Facebook communications was found to be

very effective when conducted in conjunction with recognizable community organizations. In-person outreach, such as canvassing and providing door-to-door information services, was successful in urban areas with high population density but was not as effective in rural areas. Community web platforms, such as Front Porch Forum, also had varied success due to different community connectivity to internet platforms. Telephone campaigns were the only method that had little success across all communities.

Information should be openly disseminated and received in multiple forms.

Community members expressed that informational materials should be available in multiple languages or interpretations, and that channels for requesting information or submitting feedback should be easier to access. Additionally, these reports noted that transportation officials and their staff should be prepared to receive feedback that uses a non-professional tone or language. Emotional responses and input should not be dismissed (also known as “tone policing”), and instead be viewed as reflecting the inequities or needs in the community.



*Youth engagement describing challenges to access
(source: RDI)*

Strategies need to focus on encouraging participation of marginalized groups.

Meetings discussed how historically marginalized communities and BIPOC groups have not routinely participated in engagement events or responded to outreach. Reasons for not attending included lack of internet access or technology skills for virtual events, lack of transportation for in-person events, or health reasons. Marginalized community members also expressed little confidence that their input would be valued or lead to substantial change. RPCs also noted the need to improve how public input is considered, including providing further information on how and when public input is used and treating all community members' input with equal respect to reduce marginalization in decision making processes. Multiple interviewees highlighted the need to engage community members more actively and holistically, particularly those from marginalized or rural areas. Some RPCs found that less formal engagement events were more likely to draw input and were better received by community members. These included approaches such as Front Porch Forum or attending other community activities including neighborhood walks and interactions used by Rutland's Project Vision. It was suggested that these events should focus on integrating safety, access, mobility, equity, and affordability.

Additionally, RPCs expressed a desire to target public communication and project engagement towards specific populations affected by transportation inequities--such as low-income, migrant, or rural households--to elicit stronger

participation from these key marginalized groups. RDI also notes that this will help officials handle more immediate community concerns and bridge gaps in bottom-up communication throughout the community. This is key to building community trust, and more directly connects community members to transportation officials and organizations. These reports also suggested compensating participants for their time when conducting meetings and similar activities, which will bring more low-income and marginalized people to the table. This will help improve targeted outreach by encouraging community members experiencing the highest inequities to participate in events and decision making.



Burlington & Winooski youth engagement (source: RDI)

Formulating a Public Engagement Plan

The essential first step towards embedding and creating an equitable process involves making a comprehensive engagement plan. The plan is only a start, as engagement is a continuous, iterative, and agile process that needs to change to meet the needs of the communities involved. Public engagement requires:

- Connection (meeting the communities where they are and in ways that are inclusive, understandable, and respectful).
- Education (reciprocal)
- Sustainability (continual, resilient and durable, partnerships)
- Adequately resourced (time, budget, flexible)

- Evaluation and Evolution (measure, monitor, adapt)

To create an inclusive public engagement plan, planning agencies should first identify disadvantaged populations that may be impacted by proposed projects or plans and connect with these populations to both encourage participation and better understand potential differential impacts. Tailored engagement strategies should be utilized to communicate with the focus populations meaningfully, respectfully, and to ensure these populations can comfortably and honestly express their needs and desires. Lastly, an inclusive and meaningful engagement plan needs to sustain equitable participation through long-lasting relationships and partnerships.



3.0

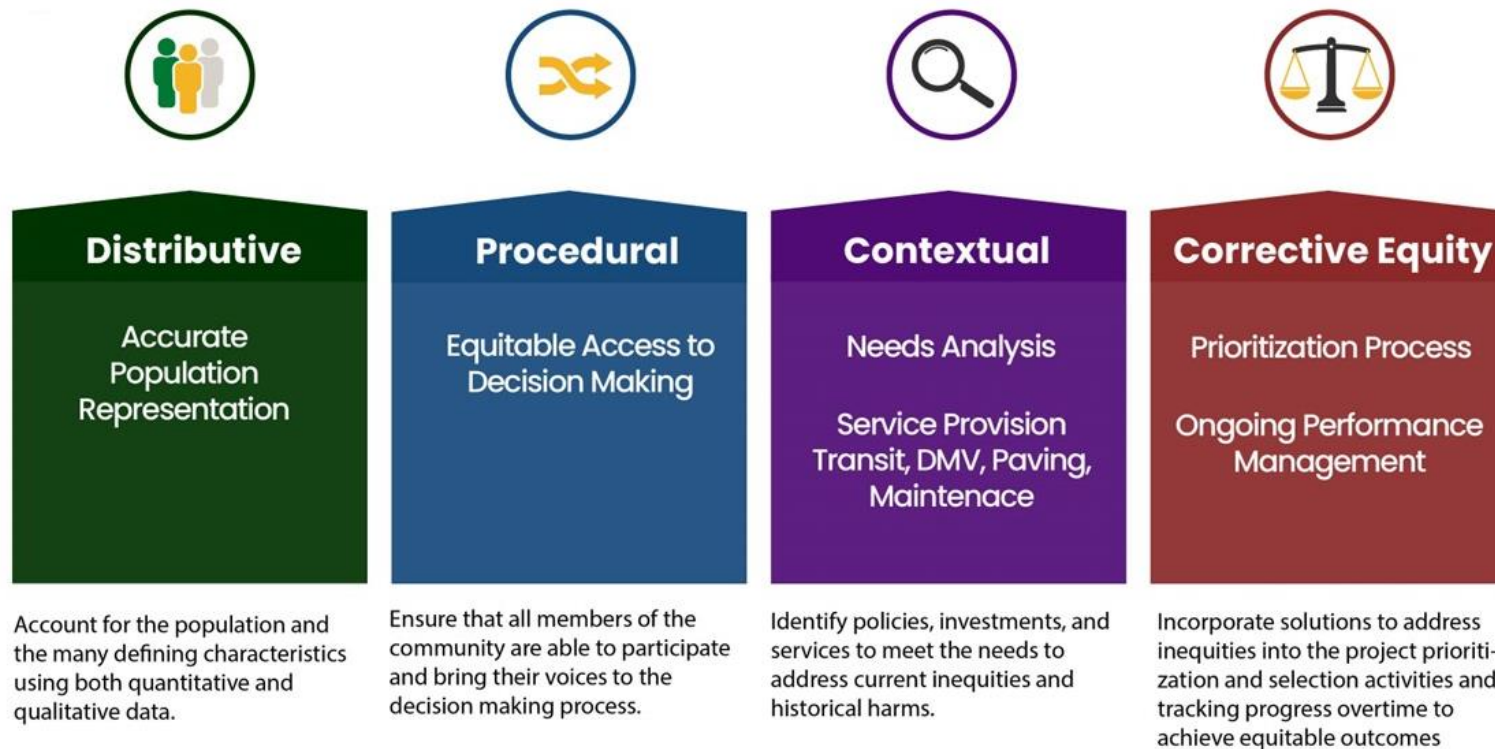
Equity Framework Pillars

Transportation Equity Framework

3.0 EQUITY FRAMEWORK PILLARS

The equity framework consists of four pillars that embed equity into the work of the Agency and the Regional Planning Commissions. Each pillar is defined by a key outcome and set of activities and processes designed to attain equitable outcomes. The pillars provide a mechanism to evaluate the existing state of the practice regarding equity; identify best practices on a local, regional, and national level; and identify what actions can be taken to embed equity within all transportation planning and investment activities.

FIGURE 2: EQUITY FRAMEWORK PILLARS





4.0

Pillar 1: Distributive Equity

Transportation Equity Framework

4.0 PILLAR 1: DISTRIBUTIVE EQUITY

4.1 ACCURATE POPULATION REPRESENTATION

“Who is out there?”

The first step in an equity analysis is to identify the key populations who will be involved and their transportation project- or plan-related needs.

The FHWA Title VI Program provides resources on identifying protected populations, while the *VTrans Public Involvement Guide* provides information on how to access population data. Both rely on a combination of quantitative tools such as EJ Screen, the Climate and Environmental Justice Screening Tool, FHWA Office of Planning, Environment, and Reality (HEP), and VPSP2 program as resources for data use or collection, while collecting qualitative data through community outreach and leaders. The AOT and RPCs currently use no definitive resource or methodology to collect and present equity data.

This process attempts to recognize that disparities in the allocation of resources, differential health outcomes, inequities in living conditions and a lack of political power place some communities in greater risk. It is also essential to address the systemic underrepresentation of certain groups or individuals common among typical data collection efforts.

In addition, understanding the community and population that may be affected by planning decisions today is vital. Rather than having a specific set of labels or descriptions for individuals and communities, Chapter 1 identifies that at any point the types of communities which may be receiving inequitable outcomes and experiences could change. Therefore, it is essential to have broad definitions and multiple ways for individuals and communities to identify themselves.

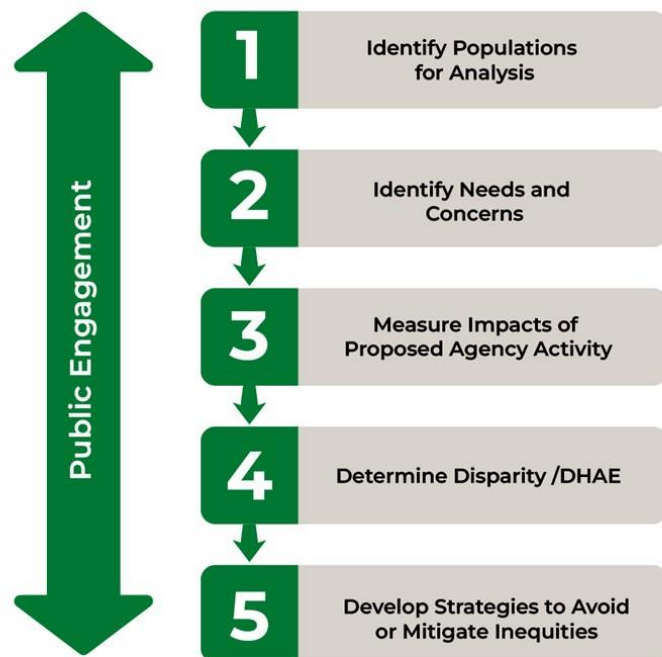
The National Academies of Sciences, Engineering, and Medicine (NASEM) guidebook for *Equity Analysis in Regional Transportation Planning Processes* lists the following as potential sources from which agencies can identify key populations:

- US Census Bureau: American Community Survey (ACS), Public Use Microdata Samples (PUMS),
- US Department of Health and Human Services poverty guidelines
- Local adult literacy programs or ESL programs
- Stakeholder input

These sources can all contribute meaningful insights on the diversity, extent, geographic coverage, and experiences of individuals and communities. Each source has its own strengths and limitations, and it is important to understand these when evaluating equity and comparing experiences across communities, jurisdictions, and geographies.

Figure 3 shows the pathway to achieve an inclusive and public engagement process with identifying the **who** as the top priority.

FIGURE 3: PUBLIC ENGAGEMENT WITHIN EQUITY ANALYSIS



Source: National Academies of Sciences, Engineering, and Medicine²²
 Note: DHAЕ is an acronym for disproportionately high and adverse effects.

4.2 APPROACH

Once key populations have been identified, the regional distribution and concentration of key populations can be considered using mapping, screening, or modeling tools. For example, the following tools could be used:

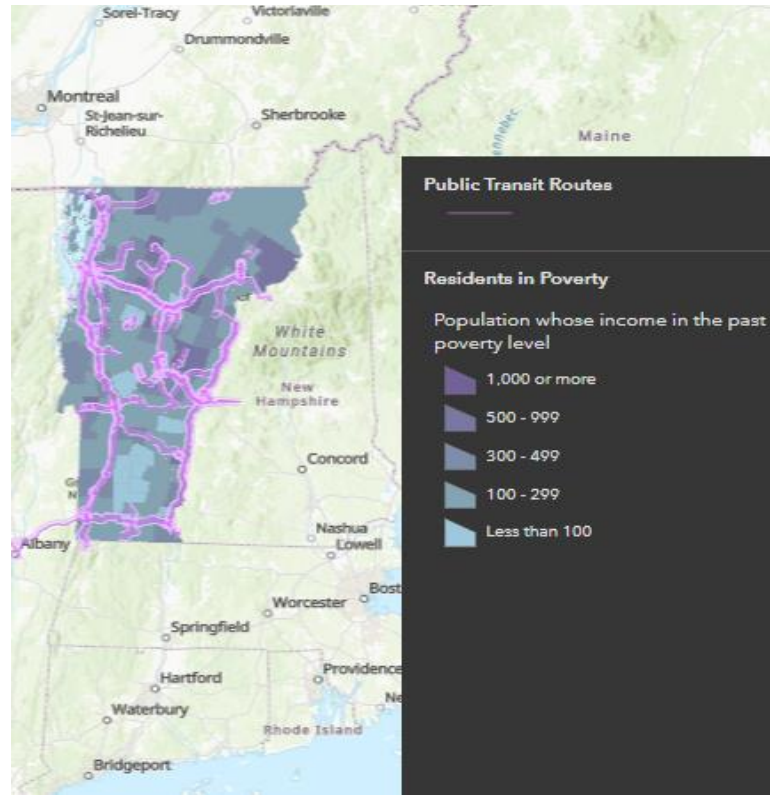
- Census data tools including data tables, maps, and various interfaces to the nationally collected data.

- GIS mapping (e.g., heat or dot density maps) to visualize and identify concentrations of disadvantaged populations. GIS mapping and travel demand modeling tools can help identify high priority areas of key populations that should be considered, if not prioritized, during the equity analysis.
- Travel demand modeling to determine potential benefits and disbenefits to disadvantaged populations based on travel patterns and population location.²³ Statewide trip based models may have less fidelity than activity based models or those that use a synthetic population.
- For a transit project, mapping or modeling transit stops and routes from General Transit Feed Specification (GTFS) to determine key population proximity and access.²⁴

The Vermont AOT has created a Transportation Equity ArcGIS Online Tool for use by transportation professionals to readily obtain Vermont specific census data integrated with related infrastructure and land use data.²⁵

The tool is a dynamic interface that queries US Census data with the ability to overlay specific spatial data uploaded by the AOT, such as transportation infrastructure, past and future investment locations, and any other geospatial data, that would be valuable to compare with social and demographic information.

FIGURE 4: AOT EQUITY WEB MAP

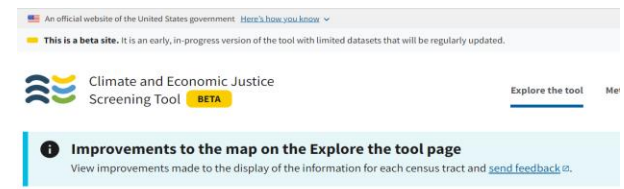


Source: AOT Equity Framework Web Map

The White House Council on Environmental Quality created the Climate and Economic Justice Screening Tool (CEJST) to assist in the equitable distribution of federal investment by identifying disadvantaged communities as part of the Justice40 initiative.²⁶ The CEJST utilizes ACS, FEMA, and Department of Energy (DOE) data to identify disadvantaged communities eligible for investment under the Justice40 initiative. Communities are deemed eligible if a census tract is above a

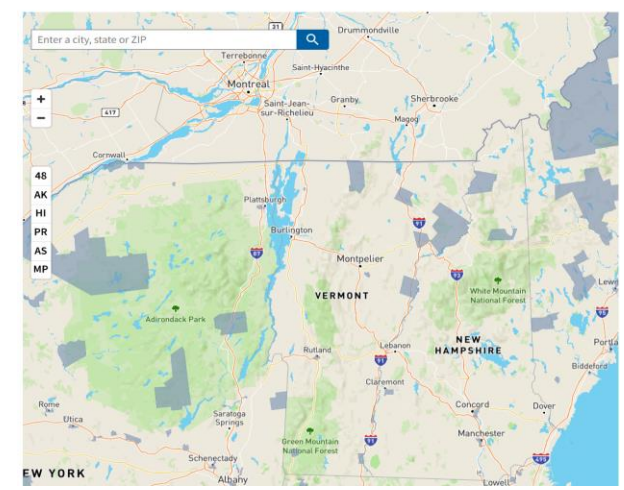
threshold for eight environmental, climate, health, or socioeconomic-related burdens.

FIGURE 5: CLIMATE AND ECONOMIC JUSTICE SCREENING TOOL



Explore the tool

Use the map to see communities that are identified as disadvantaged. The map uses publicly-available, nationally-consistent datasets. Learn more about the methodology and datasets that were used to identify disadvantaged communities in the current version of the tool on the [Methodology & data](#) page.



Source: Climate and Environmental Justice Screening Tool

Additional spatial mapping tools and data beyond these are included in Appendix B.

Important User Information

Census data and tools produced at the national level are often used at the state and regional levels for equity analyses. Although these sources are comprehensive, they are also often survey-based, and as such are not always reflective of changing demographics, through under or oversampling. This can result from sampling bias, or low-density survey areas and areas with low response rates, whose responses may not reflect the entirety of the population or capture important but less-numerous demographic groups.

It is important to validate and supplement national data with local data as well as more qualitative data collected through direct outreach and other public involvement efforts.²⁴ As such, it can be helpful to cross reference national survey data with available regional or localized data to validate surveyed characteristics of underserved populations.

The spatial tools often consider geographic concentrations and ‘thresholds’ of populations. Caution should be taken when using mapping tools, because a low concentration or threshold of underserved populations still warrants consideration, and in reality, geographic distinctions are not binary - as “EJ-areas” and “non-EJ areas.” Additionally, pre-formulated mapping tools often select a set of indicators to produce mapping results, and users must be careful to understand what is and is not included in an analysis, particularly if composite scoring, indices, or modeled estimates are used. For example, race and ethnicity were not included in the CEJST’s criteria and so some research groups have advocated for supplementing CEJST mapping results with race and ethnicity data indicators.²⁷

State and local agencies often utilize additional in-house resources in conjunction with national surveys/tools to provide analysis of the transportation conditions or investments that may differentially impact different areas or groups. These tools and resources include the following:

- Travel models: used to model the impacts of transportation projects in terms of the spatial patterns of demand and performance. The AOT maintains a trip based (4-step) statewide travel demand model.
- Asset management systems: These include bridge and pavement management systems used to track and forecast conditions.
- Project or asset extent and location data: Often maintained in GIS systems, this can include things like the location of pedestrian and bicycle facilities, or the location of transit stops.
- Crash Data: databases of crashes by type, severity, and location. The AOT maintains an extensive crash database with a public query interface.
- Financial data: This may include tracking expenditures by geography and type.
- Accessibility analysis tools/methods: Typically involving an analysis of how easily individuals in different locations are able to access key destinations such as jobs or essential services, most commonly expressed in metrics such as “X destinations accessible within Y travel time.”

- Local survey data: Many regions employ travel surveys to help develop their travel models or understand behavior and needs. Transit agencies also conduct onboard surveys that can capture important information on traveler demographics and the conditions they experience or needs they have.
- Cell phone/vehicle probe data on travel patterns: This type of information is becoming more widespread and available through various vendors for understanding disaggregate travel patterns. Each data vendor varies in the type and depth of information they provide. This type of ‘large, passively collected’ location data is becoming more widely available and can identify patterns typically hard to observe on-the-ground. However, these data are prone to bias given the sources of the location data (cell phones use, smart cars, areas with good cellular signal, etc.) and their quality is highly variable at this time.

Like the national-based tools, the inputs and outputs of these tools and resources should be validated by community collaborators, underserved community members, and complementary regional or state resources, when possible. In terms of equity, it is important to be cognizant of underrepresentation, overrepresentation, or misrepresentation of underserved population groups that may be built into AOT models, technology, or surveys, and to try to minimize these biases to the greatest extent possible. Community collaborators and underserved community members can additionally help identify bias within AOT resources and practices. This includes partnerships with CBOs and even

formal consultation with town clerks, librarians, or other public officials who may be some of the most informed public officials as to who lives in the community.

4.2.1 Future of Vermont Equity Mapping

Act 154 – “An act relating to environmental justice” was passed in Vermont in 2022. It specified that a Vermont environmental justice mapping tool needed to be developed to depict environmental justice populations. The Act also defined an environmental justice population to be the following:

- Annual median household income is not more than 80 percent of the state’s median household income (\$63,477 in 2020.²⁸),
- Where people of color and Indigenous people comprise six percent or more of the population, or
- Where at least one percent or more of households have limited English proficiency.

The Agency of Natural Resources must review and recommend updates to the definition every five years. An Advisory Council established under Act 154 will have to balance EJ concerns and definition issues with the resolution of the US Census data and the requested environmental justice populations. Ideally, the findings from this framework can be used to enhance the delivery of the analysis and mapping required by Act 154.

4.3 RECOMMENDATIONS

The following actions are recommended to address identified challenges and gaps between the state of the practice and current activities within Vermont.

The actions within Pillar 1 are foundational and are the highest priority that should be initiated before subsequent pillars.

- 1.1 **ACTION:** Improve practices for identifying underserved communities including leveraging state data and developing local datasets.

BACKGROUND

Stakeholder feedback emphasized a lack of data on populations in Vermont that face high inequities, either due to inaccessibility or a lack of granular or local data. Inconsistent application and use of available data between different agencies and the types of planning undertaken also complicate the issue (i.e., NEPA studies with FHWA approval may limit the use of informal and qualitative data relative to local planning studies). Aligning agencies at all levels in the state will have numerous benefits, including when applying for USDOT discretionary grants, demonstrating Title VI compliance, and aligning with Justice 40 and federal strategic plans. Creating ways to use both qualitative and local data with Census data will reduce sample size issues especially for underrepresented groups as well as in small rural communities, where national and state datasets may not provide sufficient detail.

STRATEGIES

- **Develop best practices on use of currently available data (both quantitative and qualitative).** The AOT and the RPCs should jointly develop the process for selecting the available data from federal and state agencies that will be used to answer questions about key population identification and representation. This could include a user guide for how to best use this data, what limitations the data may have and when supplemental data may be needed. This guidance should be maintained and updated by the AOT.
- **Develop best practices for creating and using local data.** This could be a statewide TPI project that engages all RPC's and AOT Planning staff and results in an agreed set of local datasets, approaches to the use and collection of local data, and other qualitative resources.
- **Define the identification process and develop guidance for identifying underserved communities in study areas.** The guidance should be consistent statewide but leave room for local conditions, innovation, and updates over time. The guidance should incorporate and align with the efforts under Act 154, Vermont's Environmental Justice law, that requires the AOT to have a community engagement plan describing how to engage EJ focus groups in meaningful participation. A key starting point for this would be to leverage the FHWA Title VI Program Implementation Plan (Sept. 2022)²⁹ and the VTrans Public Involvement Guide (2017) to improve guidance

for using Equity Impact Worksheets for internal AOT managers to identify equity focus populations and potential impacts on these populations.³⁰ Recent publications including the USDOT’s Promising Practices for Meaningful Public Engagement in Transportation Decision Making should also be consulted.³¹

1.2 ACTION: Seek opportunities to improve community trust and involvement by removing barriers to engagement.

BACKGROUND

Building trust between the AOT, regional partners such as RPCs and the communities they work for requires long-term commitment, patience, and evidence that the conversation goes two ways. This action aims to address the remaining gaps between partners and their communities, and work towards a durable relationship. This action is supported by strategic planning to identify the needs of the communities and find the most impactful means of establishing and building long-term relationships.

STRATEGIES

- **Develop relationships with organizations that represent or serve the needs of underserved communities.** The RPCs will provide the space needed to create a connection and opportunity for AOT employees to meet members of their community. Educational meetings with food and stipends for attendees that focus on how the planning and project

development process works in Vermont could support this. Activities such as tabling at community-led events by the RPC, AOT, or both, could help strengthen existing relationships at the staff level for the AOT and RPCs, and simultaneously engage communities with higher barriers to participation. The AOT should be directing the process to establish a consistent approach statewide and allow each RPC or other regional offices (i.e., AOT district offices) to customize their methods appropriate to their needs.

- **Identify liaisons representing underserved communities and form relationships with these individuals to establish a consistent dialogue with each community.** Ongoing strong relationships are built on open, honest engagement and communication, which develops into trust over time. Listening to people, understanding their concerns, and giving an accurate response provides a common understanding of the challenges both parties face, and will foster a relationship over time.
- **Provide communication and engagement training for state and regional staff to support engagement with underserved communities.** These engagement strategies should be included in the Act 154/VTrans Equity Framework public engagement plan.
- **Assist with capacity building for Community Based Organizations (CBO’s) representing equity groups.** Public agencies that have gained traction on equity topics invest in their community collaborators to return

value on equity efforts to the agency and build a stronger community fabric that helps move society towards long-term equity. This can include soliciting the services of CBOs as fully paid consultants, engaging CBO staff on steering groups or standing committees,

and including CBO members as advisors to agency staff on budgeting, programming, and work planning.



Pillar 2: Procedural Equity

Transportation Equity Framework

5.0 PILLAR 2: PROCEDURAL EQUITY

5.1 EQUITABLE ACCESS TO DECISION MAKING

“Who is NOT at the table?”

Procedural equity seeks to include identified communities that may be historically transportation disadvantaged to participate, engage, and find ways to reduce barriers to their involvement. Efforts should be made to assess who can participate and who is represented, with the goal of having all voices heard to inform decisions.

The *VTrans Public Involvement Guide* and *VTrans Project Definition Process Guidebook*, both released in 2017, encourage early stakeholder participation and provide both resources and outreach methods available to encourage disadvantaged populations to participate. These include planning strategies, meeting best practices, media strategies, and other outreach tools. An example of this effort includes the VTransparency website (<https://vtransparency.vermont.gov/>) that shows current and planned construction projects, along with contact information. Additionally, the TPI is designed to directly link the public and state agencies. The TPI codified the mechanism by which the AOT coordinates policy development and planning through the RPCs to ensure involvement by Vermont citizens and rural local officials. As such, the RPCs are the AOT’s on-the-ground representatives. RPCs

communicate through boards and commissions appointed by member towns and are designed to provide greater access to decision making for the public. To improve these engagement efforts, some RPCs have adopted compensation policies for participants, acknowledging real time and monetary costs that incur by participating (per Action 1.2 above).

The Act 154 Environmental Justice law clearly articulates the purpose of this pillar:

Meaningful participation in Vermont means that all individuals have the opportunity to participate in energy, climate change, and environmental decision making, including needs assessments, planning, implementation, permitting, compliance and enforcement, and evaluation.

Meaningful participation also integrates diverse knowledge systems, histories, traditions, languages, and cultures of Indigenous communities in decision making processes. It requires that communities are enabled and administratively assisted to participate fully through education and training.

Meaningful participation requires the State to operate in a transparent manner with regard to opportunities for community input and also encourages the development of environmental, energy, and climate change stewardship.

(Act 154: An Act relating to Environmental Justice in Vermont³²)

5.2 APPROACH

Successful examples of broad engagement have included developing community-specific engagement plans after initial consultation with community leaders and liaisons.

Communities with strong networks of service and community groups reported greater success in communicating engagement efforts. The success of RPCs and community boards has been mixed regarding involvement of diverse underserved communities.

The availability of broadband and the internet have enhanced public participation significantly, although certain populations and rural communities may still lack adequate access.

It is important to note that there is no standardized methodology for ensuring access to decision making, within the AOT and among the partners. The following engagement practices have been identified to improve participation and community representation:

- Work with community organizations and liaisons to engage underserved communities.
- Provide opportunities for community discussions on how community feedback is integrated in projects and demonstrate how engagement feeds into decisions. Increasing time for community feedback during project scoping can help communities understand what feedback the AOT seeks, while allowing for careful consideration of public input.
- Develop specific engagement strategies and plans for underserved communities, including engaging

organizations and liaisons with connections to these communities. This includes indigenous communities in Vermont to improve representation in project feedback and relevant population datasets.

- Provide communications materials in multiple languages and accessible formats.
- Connect community members to resources as needed.
- Use multiple formats for engagement activities.
- Consider opportunities outside of public meetings such as neighborhood walks, participatory mapping, open houses, or one-on-one discussions.
- Incorporate community members into the decision-making process through board or committee appointments.
- Develop compensation policies for those attending community meetings and engagement events.

5.3 RECOMMENDATIONS

The following actions are recommended to address identified challenges and gaps between the state of the practice and current activities within Vermont.

- 2.1 ACTION:** Develop community engagement plans and public involvement processes specifically focused historically marginalized communities and underserved communities.

BACKGROUND

As the local voice in planning, many RPCs identified challenges in meeting the needs and demands placed on planning agencies to effectively involve and engage the public. The AOT and partners should provide tailored and varied engagement opportunities, and a consistent approach by developing a published and agreed on process in the community engagement plans.

It is important to recognize that some members of underserved communities will need to offset expenses to attend meetings and there may be personal costs of attendance at public forums, which reduce the ability for some people to participate. These challenges need to be accounted for to reduce barriers for disadvantaged populations that have previously been unable to participate. Participant compensation for public meetings is one such tool to reduce barriers. There is also recognition that the public and especially those who may be overburdened and underserved have valuable experiences that are valuable to identify the challenges to realizing equitable outcomes. This expertise should be recognized and remunerated. Stipends to reduce burden versus compensation for information must be recognized, using the distinction to guide when and how any financial exchange is conducted.

STRATEGIES

- **Fulfill the Act 154 obligations** for the AOT to develop a community engagement plan by July 1, 2025. Develop a roll out plan for this including training and periodic updates.
- **Provide training.** Create and deploy training for AOT staff and partners in approaches, methods, and strategies included in the engagement plans.
- **Develop regionally specific community engagement plans.** AOT and RPCs should work with underserved communities and community organizations to let them directly inform these engagement plans. Agencies should update guidance and approaches to reflect current approaches and methods.
- Conduct **pre-planning outreach** to underserved communities. AOT and the RPCs can contact liaisons and community organizations to open lines of communication and involvement before active planning commences.
- **Determine the feasibility of using direct compensation to reduce barriers to participation for underserved communities and/or disadvantaged or underserved community members.** AOT should engage in discussions with federal and state funding partners and agencies to develop policy guidance around this approach. Policy will need to clearly identify the situations in which this is an appropriate strategy and how to employ it in a fair, transparent manner. RPCs should also consider local and regional sources of funding that may be more readily accessible for this strategy in the near-term while the AOT

investigates a longer-term solution and policy on the subject.

2.2 ACTION: Create a communication protocol from the AOT to the RPC and municipality detailing the project elements that were included in the preferred alternative at the conclusion of project scoping.

BACKGROUND

There are often changes in the design and layout of projects between the initial planning and scoping phases when extensive outreach and public involvement occurred and the later design and construction phases. This action would review the community input during the project planning phase and determine which community elements were included/excluded by the AOT and why. This step appropriately sets community expectations, explains AOT decision making and develops trust between all stakeholders, RPCs, municipalities, the public, and underserved communities.

STRATEGIES

- **Provide online project status reports.** Publish the evolution of project design online so the material can be referenced by staff and partners in direct engagement activities. Project responsiveness summaries that outline design changes to public comment can be one way to document the evolution of the project.

- Provide opportunities for community discussions about how community input is integrated, **how project decisions are made**, and why certain input or feedback was or wasn't incorporated into decisions.
- **Increase the opportunity for community engagement through a variety of methods.** For example, hold events in-person and virtually, at different dates and times and share project information, commiserate with the type of project and level of effort.
- **Improve use of interpreters and translators** to ensure that all members of the audience can participate by including information for these services in project materials.

2.3 ACTION: Increase engagement with Vermont's Indigenous Community in the planning process.

BACKGROUND

Engagement with Vermont's Indigenous community has been inconsistent and often limited to project-specific activities or organized ad-hoc by various regional organizations rather than an overall consistent government approach.

STRATEGIES

- **Conduct this engagement** through a facilitated and coordinated manner. This would create new lines of communication between the state recognized tribes and the state government. This is beginning to take place through the implementation of Act 154, Vermont's

Environmental Justice law. Having a single, trusted voice for the State would assist in developing this long-term relationship.

- **Establish communications with the Vermont Commission on Native American Affairs.** Using the Act 154 process as a starting point, identify an AOT liaison to the Commission.
- Within the AOT and partners, **identify a person or team tasked with leading any engagement** with the Indigenous community. This may be found in the AOT project development environmental section as they have a history of engagement through archaeological aspects of highway project implementation.

2.4 ACTION: Improve communication strategies to respond to community concerns during engagement activities.

BACKGROUND:

Leveraging every engagement opportunity to inform and build trust should be a priority. Providing information and trying to address questions raised by members of the community is an important part of this process, even when the question may not be 100% on topic. Providing information, even in the form of an information card, can be an important resource and connect individuals to the services and information they seek. Trained facilitators are essential along with providing those facilitators with a range of information to address the varied requests from public meetings.

STRATEGIES

- **Develop a resource card for each RPC region that includes the contact information for regional and community agencies and organizations, public and private, that support the community.** It should also include State and regional contacts for the resources the state provides to communities. This is also a great opportunity to educate community members about 211 services and how individuals can contact them. It is important that individual community members are heard and receive reliable information. These community and state resource cards are living documents that will need to be updated as new resources are discovered or developed.
- **Leverage the DMV as an important entry point for sharing information about available resources.** Coordination on the resource card with the DMV could produce consistent and robust information that can be customized to the region with options to translate and provide information in different mediums to maximize its accessibility to the community.

2.5 ACTION: Consider representation of community diversity in advisory committees, ad-hoc committees, and decision making bodies.

BACKGROUND:

This action addresses concerns of a perceived lack of voice and standing from community members in the planning process. Finding members of the community who may also have some similar lived experiences to participate can provide a mechanism for building trust in the planning process. This

action requires additional support for new members who may also face challenges in fully participating and who may be unfamiliar with the formal planning process. Education and support should be provided for new board members as well as members who may have been on the board for years.

STRATEGIES

- **Seek to elevate historically marginalized or underrepresented communities in the composition of boards and committees at the regional and state level.** The RPC Board, advisory committees (e.g., TAC), AOT advisory committees (e.g., Public Transit), and ad-hoc

committees should all have membership that reflects the community's composition.

- **Update board recruitment processes for the TAC and ad-hoc committees** to pursue this goal in their recruitment of advisory members.
- **Develop support strategies to provide resources to current board members and new board members** that recognize a range of different experiences and expectations.



6.0

Pillar 3: Contextual Equity

Transportation Equity Framework

6.0 PILLAR 3: CONTEXTUAL EQUITY

6.1 EQUITY EXPERIENCES

Pillar 3 uses the actions completed within Pillars 1 and 2 to assess how communities have and are experiencing transportation equity. Pillar 3 comprises two parts:

- **Needs analysis:** *Are there inequities in the outcomes experienced by Vermonters?*
- **Service provision:** *Are the services that the AOT and RPCs carry out done in an equitable manner? Are the services available to all members of the population – regardless of ability, income, language, etc.?*

This pillar is centered on the recognition that social and economic outcomes can be predicted by the color of one’s skin, how much income one brings home, sex or sexual identity, or even where one lives – sometimes as a result of planning and transportation investments. By realizing this contextual and historical perspective, we can better understand the role previous decisions played in determining today’s conditions.

6.2 NEEDS ANALYSIS

Needs can be derived from many sources, including public engagement activities within Pillar 2. State and federal performance measures also provide a robust and consistent

set of criteria to evaluate needs over time compared to desired benchmarks. The Federal guidance informs much of the proactive planning work. Figure 6 shows the current federal performance measures monitored and agreed to with FHWA for the AOT.

FIGURE 6: FHWA MAP-21 PERFORMANCE MEASURES



RPCs are often the first to identify and prioritize investment needs, which are then communicated to the AOT and partners. Within RPCs, equity alone has not been a driving force in the identification of investment needs, despite several RPCs including long-term equity considerations in their work. Rather, it has been a secondary consideration to already established projects or goals. As noted in Pillar 4, although some RPCs have begun to integrate equity into their long-term

planning and current project scopes, it is a limited factor when making investment decisions for both RPCs and the AOT.

There are several current challenges that RPCs and the AOT could investigate to begin understanding and collecting data on community needs:

- Challenges in transporting middle and high school students due to lack of transportation opportunities, safety concerns with active travel modes, and road or traffic signal conditions.
- Difficulty in accessing physical or mental health care facilities or appointments.
- Barriers in access to improved job opportunities.
- Safety considerations for older or disabled residents, particularly during periods of inclement weather.
- Ownership and maintenance costs of personal vehicles.
- Access for undocumented residents or those living near the US border.
- Barriers to personal electric vehicle ownership.

RPCs and the AOT are excellent at conducting studies and identifying needs. However, alternative approaches and methods may be needed to identify needs to achieve equitable outcomes for the underserved communities and all Vermonters. Resources from FHWA and the National Academy of Sciences identified the following as key elements of a comprehensive needs assessment:

- Collect input from stakeholders, particularly community members from key disadvantaged population groups about

major issues and needs. Consider using surveys with demographic questions and well-designed oversampling plans to ensure demographics are representative of the region.²³

- Equity audits can evaluate environmental health and safety conditions for key populations resulting from the existing transportation system. Resources include data tools such as EJSCREEN tool, walk/bike audits, regional emissions models, and crash data. The Vermont equity web map (Figure 4) is a local resource to supplement national data.³³
- Determine access to essential services such as jobs, food, and medical services for key populations resulting from the existing transportation system. Consider using GIS mapping, GTFS feeds, travel demand modeling, Census data, travel surveys, and transit rider surveys to evaluate access. US Census data including Longitudinal Employer-Household Dynamics (LEHD) and Local Area Transportation Characteristics for Households (LATCH) can be used to determine key population travel characteristics and patterns to additionally determine access.²⁴

- Report back and validate findings with stakeholder groups, document data and stakeholder-identified needs.³⁴

Needs will differ by region and population demographics in Vermont and can be identified through public meetings, surveys, or input from community partners. These needs can then be quantified using national survey data, audits, modeling, and mapping tools.

6.3 NEEDS ANALYSIS: RECOMMENDATIONS

The following actions are recommended to address identified challenges and gaps between the state of the practice and current activities within Vermont.

- 3.1 ACTION:** Establish a standardized process to measure regional need and inequities across underserved communities.

BACKGROUND

The perceived lack of standards or measures around equitable outcomes was noted throughout the process. This limits proactive planning toward embedding and considering equitable outcomes. Identifying the goals and how they can be measured and monitored is essential to this pillar. Partners should work to establish a standardized process for measuring inequities (like that of the FHWA Performance Standards), particularly in underserved communities, and delivering all services in an equitable manner.

Developing a consistent and defined process to highlight needs throughout the transportation system is an essential opportunity to improve equitable outcomes across the state. RPCs play an important role, elevating local voices, particularly those from identified disadvantaged groups, to understand and communicate regional needs. RPCs will require additional investment and financial support to increase staff capacity. The AOT can look for common trends and develop solutions for underserved communities' needs.

STRATEGIES

- **Evaluate the inequities of current transportation system outcomes.** AOT and RPC GIS staff and planners are skilled in this type of analysis. It could be used to highlight needs that would improve outcomes for underserved communities and underserved or overburdened populations.
- **Determine regional or statewide measures.** Once identified, these can be tracked and monitored over time to measure progress toward achieving equitable outcomes.

- 3.2 ACTION:** Establish a consistent consideration of equity in the project development process.

BACKGROUND

The project purpose and needs statements are essential to the project definition and a valuable place to insert equity considerations into the existing project planning and development process. Early consideration of the current inequities, especially those of historically marginalized groups,

can generate alternative approaches and a wider set of project options. As a required part of project development, the question will create greater consistency in the consideration and application of equitable treatments.

STRATEGY

- **Develop appropriate equity language in a purpose and needs statement** that directs the project team to examine and incorporate the needs of all community members. AOT, the RPC, and FHWA should work collaboratively on this.

3.3 ACTION: Provide training and knowledge of historical and current harms.

BACKGROUND

Transportation projects can negatively affect communities, including underserved communities, and AOT and RPC staff should have awareness of these previous harms. A lack of knowledge and understanding of past harms created by historical transportation projects reaffirms community perception that government, regional or state, does not understand their needs or interests. Acknowledging harm is a critical step in establishing communication and trust.

This is part of the process of building trust and strengthening the relationship between transportation agencies and the public. It would be helpful for any training provided to employees to address how to acknowledge historical harms and understand their impacts in Vermont and to Vermonters.

STRATEGIES

- **Develop training materials for regional and state employees.** Consult with the Office of Racial Equity who has materials that cover this topic.
- **Facilitate community conversations about historical harms.** Allow communities to air grievances. Discuss current inequities and the relationships between historical decisions and current experiences.

3.4 ACTION: Provide support and resources to less resourced municipalities to access grants, technical support, and other resources.

BACKGROUND

Resource constraints were frequently identified by RPC staff and TACs as the primary reason grants and planning efforts were not pursued. Small towns are even further constrained in their ability to apply for federal and state resources due to lack of staff. Financial constraints also include the ability to meet local match requirements. These limitations reinforced existing inequities where larger and better resourced communities were able to secure funds for projects.

STRATEGIES

- **Evaluate the distribution of TPI funds with an equity lens based on differences in local and regional capacity.** The existing TPI funding formula is based on the following criteria: population, highway mileage, and number of towns served. RPC budget needs within the TPI should be discussed and additional criteria considered to

reflect the capacity needs of individual RPCs and their municipalities.

- **Create opportunities for greater collaboration and knowledge sharing between the RPCs, with State support.** This could include more explicit opportunities for AOT, ACCD, and other agencies that engage directly with municipalities to share experiences, approaches, and methods with other state and local partners. This would include case studies and success stories on approaches and results. The AOT and VAPDA can collect these on a periodic basis to illustrate the equity needs in the state. Entities such as VAPDA could convene statewide multidisciplinary events to share and exchange information.

6.4 SERVICE PROVISION

“Are services delivered in an equitable manner?”

Level of service provision evaluates whether services provided are performed in an equitable manner. All services should be available to the population regardless of ability, income, or language.

Service provision has largely been guided by federal requirements for the use of federal funds. Since the AOT is a recipient of federal funds, the AOT’s services and investments must comply with Title VI of the Civil Rights Act of 1964 and operate without regard to race, color, national origin, sex, age, disability, low-income status, or limited English proficiency. Therefore, guidance has been established to help AOT services comply with this law within the *Federal Highway*

*Administration Title VI Program.*³⁵ Title VI roles and responsibilities are assigned by AOT divisions. The document clarifies what each division is responsible for ensuring that their services comply with Title VI. For example, the Highway Division must monitor contractor activities to prevent discrimination and adverse impacts on the community. These responsibilities are focused on Title VI compliance and not necessarily equity. The FTA Title VI reports are a key measure of the effort and attention that has been placed to remain in compliance but also make a good faith effort toward recognizing the equity needs of disadvantaged communities and populations identified by Title VI and LEP.³⁶

Equity remains a relatively new lens and it will take some time to embed the definitions, goals, and processes into day-to-day activities.

6.5 SERVICE PROVISION: RECOMMENDATIONS

The following actions are recommended to address identified challenges and gaps between the state of the practice and current activities within Vermont.

- 3.5 ACTION:** Improve accessibility to service materials, public meetings, and events.

BACKGROUND

Community members voiced the need for more reliable and accessible communication from AOT service providers, particularly for public transit service updates and route closures. Community members also voiced concern that these

were not readily available in multiple languages. The AOT should coordinate with responsible transit service providers to regularly post service updates in multiple languages and provide flyers or handouts at bus stops in multiple languages for long-term route changes.

Language needs continue to change rapidly, which can catch transportation service providers off guard. The DMV has had success in technology based translation services as well as recruiting multilingual staff. These successes have resulted in translating DMV forms and materials into fourteen languages. The DMV can work with the Vermont Refugee Resettlement program to better understand new immigrant communities and the languages they speak to consistently meet the needs of new Vermonters. This information from the Vermont Refugee Resettlement program should be updated annually amongst the AOT and RPCs to generate a current understanding of needs.

STRATEGIES

- **Emphasize and highlight implementation of public transit provider Title VI Plans.** AOT Public Transit Program staff should continue this cooperative work with the AOT Office of Civil Rights. This will serve to support the continual improvement and evolution of Title VI plans to adapt to the changing needs of the population.
- **Support diverse participants in state bids and contracts.** Continue to monitor and encourage minority owned and registered disadvantaged business enterprises.

This directly supports wealth creation and can elevate new perspectives and generate new insights.

- **Improve the access and availability of materials and public information to meet the needs of limited English-speaking community members.** Formalize greater diversity of languages into AOT communications.
- **Expand the provision of AOT materials in multiple languages and operability of multiple languages on its website.** Tailor materials based on regional and local language needs identified through actions in the Distributive Equity pillar. Prioritize candidates who speak multiple languages when recruiting.
- **Leverage the DMV's statewide presence.** DMV's regional facilities provide an existing physical framework to share a range of transportation resources in multiple languages.
- **Share language interpretation and translation services and best practices.** Support RPCs and other partners including municipalities by educating them on the availability of interpretation and translation services as well as educating them on the methods to maximize their utility. AOT has information at <https://vtrans.vermont.gov/translation-services-and-resources>

3.6 ACTION: Increase investment in public transit services, non-motorized travel modes including bicycling and walking (active transportation), and the infrastructure required to support

these systems with specific consideration to equitable mobility access and reducing barriers to these modes of travel.



BACKGROUND

Evaluating inequities should also consider the full spectrum of non-auto modes, including transit and active transportation. The evaluation should consider the quality of transit connections to necessities, such as medical facilities, schools, foods and services, and employment opportunities.

Community members living in rural areas expressed a need for more affordable, reliable, and safe transportation opportunities to essential destinations. The AOT and RPCs should collaborate to facilitate investment in and deployment of affordable commuter bus options, and safe and well-maintained bike and pedestrian infrastructure. They should also consider subsidies for taxi, transportation network companies, or micro transit services that improve rural

connectivity. This may require innovations in project delivery to consider incorporating project elements that often are not eligible for funding because certain communities may lack the resources to apply for or meet federal and state grant program match requirements and will require coordination and approval from the FHWA. Shoulder widening is a viable equity consideration for the highway design program, especially important for municipalities and regions with fewer resources to apply for grants. Municipalities could additionally consider widening sidewalks.



Community members were also generally unaware of equity-improvement policies or programs in place for equitable service provision at the AOT and were more aware of efforts from community organizations. The AOT should consider how they can communicate their services with community organizations to improve equitable service provision.

STRATEGIES

- **Expand shared mobility services, such as car sharing, and micro transit to provide basic mobility services.** Subsidizing private taxi companies providing on-demand mobility in rural areas for equity mobility services, where none exist, should also be considered. Continue to expand mobility options that function as a system of mobility for individuals who cannot drive or afford to own a car.
- The AOT should also consider beginning new and continuing current pilot programs for shared mobility, similar to bike share, scooter, and E-bike share programs

to provide transportation options to individuals who cannot drive or afford a car.³⁷

- **Explore innovative partnerships such as with health and human service agencies.** These could help focus funding and infrastructure improvements needed to expand equitable mobility programs.
- **Investigate ways to reduce the financial burden for municipalities and regions.** Some municipalities struggle with staff time and local match for federal grants for equity focused projects such as local transit, active travel, and other mobility programs. Focus staff assistance in these municipalities and explore funding mechanisms such as reduced local match based on objective measures of municipal capacity.



7.0

Pillar 4: Corrective Equity

Transportation Equity Framework

7.0 PILLAR 4: CORRECTIVE EQUITY

7.1 PRIORITIZATION AND PERFORMANCE MANAGEMENT FOR EQUITABLE OUTCOMES

Pillar 4 embeds equity in the performance management process to achieve equitable outcomes in investment decision making and other processes, and to monitor and measure success over time. Pillar 4 comprises two parts:

Prioritization process (Corrective Equity): *How will future actions (investments, policies, etc.) deliver equitable outcomes?*

Incorporating equity into the decision making process for all programs is essential for achieving equitable outcomes. Equity is sometimes at odds with existing policies, plans and procedures – however, equity needs to be clearly identified as a priority in every decision making process.

Ongoing performance management (Corrective Equity): *How will progress toward equitable outcomes be monitored and measured? How do we know whether we are on the right track? As we envision a more equitable future, we will need ongoing monitoring and evaluation to realize that vision.*

Achieving a goal and vision is rarely linear. Instead, it is often a series of actions that when combined, trend in the direction of the goal. Monitoring with an eye toward the future will allow

for short term corrections as well as inform long-term adjustments in the upstream processes.

7.2 PRIORITIZATION PROCESS

“Are we accounting for equity in our investments and planning?”

The AOT can utilize project prioritization methods to focus investments in disadvantaged areas to meet the needs of key population groups. The Federal Justice 40 initiative intends to direct funding to specific disadvantaged populations with the greatest needs. Similarly, AOT and the RPCs can develop equity-integrated evaluation criteria to analyze the equity contributions of multiple projects and to address region-wide inequities and needs.

The AOT and RPCs prioritize projects using the *VTrans Project Selection and Prioritization Process (VPSP2)*. The evaluation criteria include safety, asset condition, mobility and connectivity, economic access, resiliency, regional community, environment, and health access. This process currently does not include equity as a distinct criterion or prioritize projects in underserved communities.

Along with the VPSP2 process to determine project prioritization, the AOT utilizes quantitative metrics to analyze project impact, while collecting qualitative information through public engagement. These are engagement events or meetings facilitated by AOT staff, consultants, RPCs, local municipalities, local boards, and citizens or law enforcement.

As noted in previous pillars, these engagement activities have not had an explicit consideration of equity.

Planning agencies can consider the following solutions to mitigate inequity for state and regional transportation projects:

- Prioritize funding to projects and plans that directly address the disproportionate and/or detrimental impacts identified in the equity analysis (or previously) and brought on by the existing transportation system.
- Use disadvantaged population survey data and stakeholder input collected during public engagement process and throughout any equity analysis to improve disadvantaged population’s engagement and participation.
- When adopting equity-based policies or increasing the involvement of disadvantaged populations, evaluate and measure progress using quantitative metrics and targets.....

7.3 PRIORITIZATION: RECOMMENDATIONS

There are clear opportunities to improve equity considerations in the project selection and prioritization process.

The following actions are recommended to address identified challenges and gaps between the state of the practice and current activities within Vermont.

- 4.1 ACTION:** Enhance the consideration of equity within the VPSP2 criteria and emphasize AOT/RPC coordination in the process.

BACKGROUND

Stakeholders and feedback from RPCs made clear that equity needs to be better accounted for in the current project prioritization and selection process. Minor revisions to the VPSP2 are possible to account for these. However, the system should be tested to evaluate how it performs with additional criteria and revisions made to ensure it is reflecting equity needs adequately.



Any equity-based prioritization criteria in the VPSP2 program would need to consider weighting that allows project elements to be included that mitigate inequity by addressing past burdens and current conditions. Agencies could evaluate the benefits and detriments of potential projects with respect to equity focused demographic groups and should consider how

similar projects in the past have positively or negatively impacted diverse populations. The gaps and subsequent recommendations make clear that a key element to realize equitable outcomes will be to include explicit equity related criteria that can be embedded within the exiting VPSP2 process. This will result in certain investments being selected over others if all things are equal except for the equity scores.

STRATEGIES

- **Amend the VPSP2 process criteria.** Ensure equity is embedded into the existing criteria or add an additional equity criterion.
- **Increase education efforts to better communicate the function and design of the VPSP2 program.** This should reflect how the criteria are utilized, how transportation values are calculated, and where new equity criteria have been added to the program. This would improve understanding for RPCs, TACs, and the community groups that will participate in this process. Asset Management should lead these educational meetings and training once the equity criteria have been included in the VPSP2. Local understanding (at the TAC level) is essential to build confidence in the process. AOT staff should engage with RPCs and their TACs to improve their understanding and determine how future training on the tool can be improved.

4.2 ACTION: Improve transparency and clarity in project planning and development process.

BACKGROUND

Public input was clear that the project development process is not well understood outside of the professionals involved. This led to confusion as to when and how best to provide input, and created frustration on both sides since there was a gap between information coming in and the ability to incorporate and use that information. The process is also different depending on the lead section or division and the type of project, making clear communication challenging. This only reinforces the need to make it as easy as possible to engage communities which may have been historically marginalized and unheard in past efforts.

Stakeholders and community members were particularly concerned with how funds were focused in urban versus rural areas, and requested transparency around how funds are generated, the composition of funding across programs or areas, funding trade-offs, where local collaboration occurs, and final decision making processes.

The AOT and RPCs should work towards greater transparency in their prioritization decisions and funding practices. This should include a report back of decision making rationale and providing time and space for discussions with community groups to clarify questions about how and why decisions were made. Stakeholders, community groups, and RPC TACs acknowledged their interest in better understanding the final funding decisions, their projects relative rank and identifying what, if anything, can be done to improve future chances. AOT is largely responsible for the final decisions on which project elements are included or excluded in the design of a project and should explain the rationale for such decisions to the

community. This is a foundational element of communication for building transparent, open, and trusting relationships.

STRATEGIES

- **Develop a straightforward, visually impactful explanation of the project development process.** This should explain where and how decisions are made and what input is anticipated. Using the VTransparency website (<https://vtransparency.vermont.gov/>) it may be possible to improve the user experience for those looking to understand the status of investments under consideration by the AOT. Information is more readily available for design and construction projects but was less clear for projects earlier in the planning cycle.
- **Provide information on current stages of project development.** Include information on where and when engagement and public involvement will occur.
- **Provide a more detailed summary to RPCs explaining how and why VPSP2 funding decisions were made.** This communication loop is a critical component of transparent decision making and building community relationships.

4.3 ACTION: Account for population and demographic characteristics in safety data collection to enable equity analysis.

BACKGROUND

National data has shown that persons of color and lower income households have experienced higher rates of injury and death because of the transportation system. Limited to no information is available to provide a comparable analysis in Vermont given the lack of racial and other data being collected from all parties involved in a crash.

VT crash reporting templates should provide the details necessary to perform equity analysis such as including race, ethnicity, and other helpful descriptive characteristics for all parties in a crash. Currently, crash reports only ask for some of this information from some of the involved parties. For example, it is not currently possible to evaluate patterns in crash data for individuals of a specific race or ethnicity if they were not driving a vehicle.

With additional data being collected there is an opportunity to understand how changing investments can affect underserved communities by improving data collection. For example, greater understanding of demographic information for safety data, particularly crash data, could improve understanding of equity impacts for a project by showing distinct effects on these communities and populations.

STRATEGIES

- **Seek to have reporting templates or requirements augmented to include equity considerations.** Partner with other state agencies and the legislature to advocate for this.
- **Create opportunities for additional analyses that would be conducted if the data were available to help inform**

the desired information to include in the form. This can include spatial and temporal patterns of crashes associated with other factors such as mode, race/ethnicity, etc. Utilize non-traditional data sources (i.e., health and hospitalization) combined with traditional sources to gain further insights on current inequities (i.e., census, land use).

- **Communicate with the Office of Racial Equity.**
Leverage their efforts to improve data resources related to historically marginalized and disadvantaged communities.

7.4 ONGOING PERFORMANCE MANAGEMENT

“Are we tracking toward our goals of equitable outcomes?”

Part 2 of Pillar 4 considers ongoing measurement to monitor success toward achieving equitable outcomes. Successful changes only occur when tracked, measured, and communicated. Successes can be celebrated and opportunities for improvement identified. Monitoring with an eye toward the future will allow for short term corrections as well as inform long-term adjustments in the upstream processes.

The AOT has a Civil Rights office and has appointed Title VI liaisons to provide technical advice, maintain statistical data by race, color and national origin, conduct reviews, and investigate complaints. Also, each year the liaison is responsible for providing a Division and Department Title VI

report to the Title VI liaison with any additional needs and patterns of non-compliance. This helps ensure nondiscrimination action and continuous performance management within the different divisions and subrecipients, but it is focused on Title VI requirements and not specifically ensuring equity outcomes. Internally, the Civil Rights office also monitors procurement, hiring, and diversity, equity, and inclusion (DEI) activities within the AOT and DMV, including training and new employee supervision.

Federal Regulations

There are several equity-oriented federal regulations and policies that dictate goals, metrics, and requirements that must be tracked for compliance purposes:

- *Title VI of the Civil Rights Act of 1964* (Title VI) prohibits intentional discrimination based on race, color, and national origin for recipients of federal funding. USDOT Title VI regulations additionally cover unintentional actions or actions of discrimination, and track and monitor the impact of federally designated funds on underrepresented groups.
- *1994 Executive Order 12898* – Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations provided directives for federal agencies to create Environmental Justice strategies which identify and analyze the health and environmental impacts of federally funded projects on minority and low-income communities.

- *2000 Executive Order 13166* – Improving Access to Services for Persons with Limited English Proficiency requires agencies to provide federally funded, accessible services, programs, and activities for LEP populations, but doesn’t require an analysis of disproportionate or detrimental impacts.
- *2012 USDOT Order 5610.2 (a) and FHWA Order 6640.23 (a)* – Complementary orders updating agency EJ requirements; considering EJ principles through both agencies’ programs, policies, and planning efforts; and highlighting the importance of considering equity early in planning efforts to reduce adverse effects on disadvantaged communities.
- *2015 FHWA Environmental Justice Reference Guide* – Created during the Obama-Biden Administration, it provided state DOTs and RPCs guidance on complying with EJ requirements.
- *2021 Executive Order 13985* – Advancing Racial Equity and Support for Underserved Communities Through the Federal Government: USDOT released RFI on transportation equity data that could aid USDOT in evaluating transportation program and policy inequities.
- *2021 Justice40 Initiative* – Goal of delivering 40% of federal investments in climate and clean energy (including sustainable transportation) to disadvantaged communities. Includes interim guidance for federal agencies including documentation detailing how agencies can identify benefits for included programs, determine the distribution of benefits, and calculate and report on the 40% goal. Biden-

Harris Administration released Climate and Environmental Justice Screening Tool (*CEJST*); a mapping tool used to help federal agencies identify disadvantaged communities as part of Justice40.

- *2022 USDOT Equity Action Plan* – Recognizes equity in transportation planning with four equity actions: wealth creation, intervention through direct hands-on technical support, empowering communities in decision making, and expanding access to affordable transportation options to bring economic mobility and transportation benefits. Introduces the use of equity performance indicators:
 - State DOTs and the largest 100 MPOs must adopt a quantitative equity screening component to their STIP/TIP development processes by 2030.
 - By 2025, increase the number of USDOT discretionary grant applications by 5% from disadvantaged communities who have never applied for USDOT funding before.
 - Increase USDOT direct contract funds to small, disadvantaged businesses from 18.2% in 2021 to 22% by 2026.
 - Reduce national transportation cost burden by 5%, including transportation travel cost as a percent of income, by 2030.

The Federal initiatives have started to move toward tracking equitable outcomes beyond tracking impacts and engagement activities associated with Title VI. There are opportunities for the AOT to begin incorporating equity performance measures into the annual reporting processes and dashboards to

improve communication and information future investment priorities.

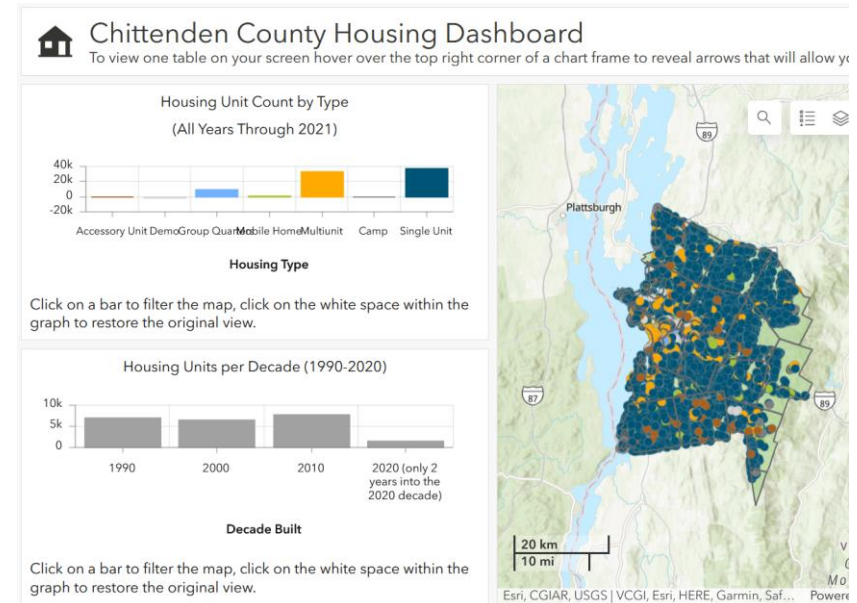
Some RPCs have existing dashboards that can document progress toward achieving regional goals, however these goals need to be aligned with priorities included in VPSP2 if capital investments are required. RPCs follow the required monitoring put forth by Title VI, but equity is not explicitly measured or monitored via the RPC regional dashboards. Community organizations also indicated they were not aware of AOT or RPC evaluation or accountability strategies regarding equity.

Federal policy since the MAP-21 Federal Transportation Bill has required state transportation agencies and metropolitan planning organizations to develop targets for several measures and annually report on progress toward meeting them.

Figure 7 shows an example dashboard from the CCRPC. This dashboard provides an interactive mapping function tied to interactive charts and other visuals. This example includes some equity metrics by town, such as availability of affordable housing. This example can be repeated throughout the state once consistent metric and information is available to populate the databases.

The Vermont AOT Equity Framework Web Map is an excellent start to displaying and presenting Vermont specific transportation data and census demographic data (see Figure 4).

FIGURE 7: EXAMPLE– CHITTENDEN COUNTY HOUSING DASHBOARD



Source: CCRPC Housing Dashboard
<https://www.arcgis.com/apps/dashboards/1b980d3a955a49c09a62c08f7404eb0a>

7.5 ONGOING PERFORMANCE MANAGEMENT: RECOMMENDATIONS

The following actions are recommended to address identified challenges and gaps between the state of the practice and current activities within Vermont.

4.4 ACTION: Improve project and policy understanding of equity, how equity is measured, and how it is embedded into the AOT and RPCs work.

BACKGROUND

Creating measurable performance standards is essential to monitor and adapt to inevitable changes in the pursuit of specific goals or a vision. Achieving equitable outcomes for Vermonters is no different.

Defining what equity is and how it can be achieved through investment and policy were central themes throughout much of the public and stakeholder engagement. Providing examples of the types of policies and investments that can result from equitable engagement and outreach strategies will be important to illustrate and educate others.

The VPSP2 and the MAP-21 performance measures both provide consistent, data informed processes useful to tracking progress over time. Achieving equitable outcomes will require that same level of investment in developing consistent approaches as well as monitoring techniques. It is also important to acknowledge that equity is hard to define when the geography or topics become too vague. The process and the outcomes become too abstract. It is important to value local approaches and develop regionally appropriate measures, dashboards, and reports to identify inequities and progress toward addressing them.

RPCs noted widespread interest in reporting spending measures by geographic region or per capita to put numbers into context and compare geographic equity of spending. Reporting on historical investment by region within the state by travel mode, or investment category, can provide transparency on how investment patterns have contributed to current conditions. This recommendation is the start of the

benchmarking process for the data collection to improve the use of funding data to make future investment decisions.

STRATEGIES

- **Identify equity elements in capital and non-capital projects.** For example, new pedestrian infrastructure, widened highway shoulders, complete streets projects, investments in public transit expansion, innovative shared mobility programs such as E-bike and car sharing, subsidies for private and non-profit mobility providers.
- Develop monitoring to **establish baseline expectations** for centering equity in the day-to-day practice of the AOT through the activation of the pillars of equity.
- **Establish new measures to track progress on** recommendations within this framework. Each pillar can be monitored as to how well it is being delivered, tracking what can be tracked, and presenting this information in a manner that can be used by the AOT, RPCs, and other organizations.
- **Clearly identify local and state equitable outcomes.** The Federal Performance Measures represent the start of outcomes which need to be further evaluated to understand how specific communities, populations, and marginalized communities experience these measures relative to the overall population.
- **An annual performance report should be created to summarize equity measures and progress over time**

toward equitable outcomes. The performance report would include a summary of historical investment patterns in transportation funding across geographies.

- The performance report should be structured as the framework under the six pillars with the performance measured as follows:
 - Can we identify underserved communities within each region?
 - Is everyone participating in the decision making process?
 - Are all needs being heard and accounted for?
 - Are the services we provide conducted equitably?
 - Are we accounting for equity in our investments and planning?
 - Are we tracking our performance towards more equitable outcomes?
- A statewide meeting could be held with representatives from the regions, community groups and the state to discuss changes to performance reporting, prioritization processes, and other framework elements to produce more equitable results.
- Consider organizing an Equity Performance and Accountability Team in each region comprised of RPC staff, AOT staff, and members of community groups (e.g., human service agencies) representing underserved communities. Initially such organizational changes may be helpful to create the culture of awareness around equity as

it becomes embedded into the day-to-day activities of the AOT and partners.

- These meetings and the statewide summit will be critical to creating an equity policy community and a culture of equity within the transportation sector. The equity focus could be incorporated into VAPDA and other planning events already occurring.



4.5 ACTION: Identify equity champions within the AOT and RPCs.
STRATEGIES

- **Identify individuals to assist in the implementation of this framework.** This more intentional approach will help

develop an enhanced culture of equity and a decision making system that has equity embedded in the AOT and Regional Planning and project delivery processes. It will also simultaneously engage underserved communities in the decision making.

- **Update job descriptions to explicitly include equity as an agency focus.** Examine individual job duties to illustrate how equity is accounted for within day-to-day activities.

4.6 ACTION: Create and/or identify an Equity Coordinator position within the AOT.

BACKGROUND

An Equity Coordinator position within AOT can shine a light on implementation of the Framework action and generally elevate topics around equity. This is critical given the multidimensional aspects of equity as it involves not only safety, but also travel access, job access, housing access, health, and other topics associated with other agencies. It is essential to have someone who can communicate within the AOT in all areas but also across agencies. The role would also support the development of similar roles within RPCs and possibly within local municipalities.

STRATEGY

- **Identify and/or create an AOT position to be the point person for the implementation of the framework and Act 154.** It is still unclear how much effort the rollout of Vermont’s Environmental Justice law will require of each

covered agency, including AOT. The Agency may need to consider funding a new position to handle the workload associated with Act 154 and the implementation of the Transportation Equity Framework. This position would assist the AOT in leading the implementation of portions of the framework and monitoring the various implementation projects. They would also be instrumental in establishing trainings, a focal point of communication for equity and community organizations, coordinating the reporting work in the regions into a statewide report, managing any central meetings such as the statewide summit suggested in this report, and help to create a culture of equity within the AOT.



8.0

Implementing the Recommendations

Transportation Equity Framework

8.0 IMPLEMENTING THE RECOMMENDED ACTIONS

8.1 OVERVIEW

The Transportation Equity Framework includes nineteen actions comprised of several strategies. Three actions are considered foundational and are prioritized. These actions should be pursued early in the implementation plan of the Equity Framework to build momentum and greater awareness of the topics. The foundational actions will start the process and align the AOT and partners with other parallel efforts, including those within Act 154. The remaining sixteen actions are to be pursued in partnership between the AOT and the RPCs.



8.2 FOUNDATIONAL ACTIONS

The following actions are considered foundational to the pursuit of other recommended actions.

- **ACTION 1.1:** Improve practices for identifying underserved communities including leveraging state data and developing local datasets.
- **ACTION 1.2:** Seek opportunities to improve community trust and involvement by removing barriers to engagement.
- **ACTION 2.1:** Develop community engagement plans and public involvement processes specifically focused on underserved communities and historically marginalized communities.

8.3 EQUITY ACTION PLAN RECOMMENDED ACTIONS

The following actions are recommended to be initiated to achieve the vision for transportation equity, “Vermont’s transportation system provides a diverse set of travel options that is just and allows fair and equitable access to opportunities to meet the needs of all Vermonters.” Many of the actions will require individual planning efforts involving AOT, the RPCs, and other statewide partners.

The actions are organized by pillar in Table 3

TABLE 3: EQUITY FRAMEWORK RECOMMENDED ACTIONS

| | |
|---------------------|--|
| Distributive Equity | <p>1.1 Improve practices for identifying underserved communities including leveraging state data and developing local datasets.</p> <p>1.2 Seek opportunities to improve community trust and involvement by removing barriers to engagement.</p> |
| Procedural Equity | <p>2.1 Develop community engagement plans and public involvement processes specifically focused on underserved communities and historically marginalized communities.</p> <p>2.2 Create a communication protocol from the AOT to the RPC and municipality detailing the project elements that were included in the preferred alternative at the conclusion of project scoping.</p> <p>2.3 Increase engagement with Vermont's Indigenous Community in the planning process.</p> <p>2.4 Improve communication strategies to respond to community concerns during engagement activities.</p> <p>2.5 Consider representation of community diversity in advisory committees, ad-hoc committees, and decision making bodies.</p> |

| | |
|-------------------|---|
| Contextual Equity | <p>3.1 Establish a standardized process to measure regional need and inequities across underserved communities.</p> <p>3.2 Establish a consistent consideration of equity in the project development process.</p> <p>3.3 Provide training and knowledge of historical and current harms.</p> <p>3.4 Provide support and resources to less resourced municipalities to access grants, technical support, and other resources.</p> <p>3.5 Improve accessibility to service materials, public meetings, and events.</p> <p>3.6 Increase investment in public transit services, non-motorized travel modes including bicycling and walking (active transportation), and the infrastructure required to support these systems with specific consideration to equitable mobility access and reducing barriers to these modes of travel.</p> |
|-------------------|---|

4.1 Enhance the consideration of equity within the VPSP2 criteria and emphasize AOT/RPC coordination in the process.

4.2 Improve transparency and clarity in project planning and development process.

4.3 Account for population and demographic characteristics in safety data collection to enable equity analysis.

4.4 Improve project and policy understanding of equity, how equity is measured, and how it is embedded into the AOT and RPCs work.

4.5 Identify equity champions within the AOT and RPCs.

4.6 Create and/or identify an Equity Coordinator position within the AOT.

ENDNOTES

- ¹ US EPA Overview of EPA's Brownfields Program (<https://www.epa.gov/brownfields/overview-epas-brownfields-program>)
- ² US EPA EJ 2020 Glossary (<https://www.epa.gov/environmentaljustice/ej-2020-glossary>)
- ³ US Department of Homeland Security (<https://www.dhs.gov/immigration-statistics/reporting-terminology-definitions#19>)
- ⁴ VAPDA Definition of Regional Planning Commissions (<https://www.vapda.org/>)
- ⁵ USDOT planning definition of equitable transportation provision: https://www.planning.dot.gov/planning/topic_transportationequity.aspx
- ⁶ Executive Office of the President. Advancing Racial Equity and Support for Underserved Communities Through the Federal Government. Jan 2021. <https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government>
- ⁷ US EPA definition of Environmental Justice: (<https://www.epa.gov/environmentaljustice/learn-about-environmental-justice>)
- ⁸ Vermont constitution. <https://legislature.vermont.gov/statutes/constitution-of-the-state-of-vermont/>
- ⁹ National Equity Atlas. <https://nationalequityatlas.org/>
- ¹⁰ 2014 FHWA NHTS BRIEF: Mobility Challenges for Households in Poverty from the 2009 National Household Travel Survey)
- ¹¹ Vermont Act 154 of 2022. <https://legislature.vermont.gov/Documents/2022/Docs/ACTS/ACT154/ACT154%20As%20Enacted.pdf>
- ¹² US Department of Transportation (USDOT). Department of Transportation Order 5610.2(a). May 2012. [https://www.transportation.gov/transportation-policy/environmental-justice/departement-transportation-order-56102a#:~:text=DOT%20Order%205610.2\(a\)%20sets,%2C%20rulemaking%2C%20and%20policy%20formulation.](https://www.transportation.gov/transportation-policy/environmental-justice/departement-transportation-order-56102a#:~:text=DOT%20Order%205610.2(a)%20sets,%2C%20rulemaking%2C%20and%20policy%20formulation.)
- ¹³ US Department of Transportation: Federal Highway Administration (FHWA). FHWA Order 6640.23A. June, 2012. <https://www.fhwa.dot.gov/legisregs/directives/orders/664023a.cfm>
- ¹⁴ On January 27, 2021, President Biden signed Executive Order (EO) 14008, Tackling the Climate Crisis at Home and Abroad, creating the government-wide Justice40 Initiative. On July 20, 2021, the Office of Management and Budget (OMB) released [Interim Implementation Guidance](#) for the Justice40 Initiative (M-21-28), which has guided the Department's work on Justice40 along with relevant statutory authorities. For more information visit <https://www.transportation.gov/equity-Justice40>
- ¹⁵ Office of Management and Budget (OMB). Interim Implementation Guidance for the Justice Initiative (M-21-28). July 20, 2021. <https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf>
- ¹⁶ US Department of Transportation: Federal Highway Administration (FHWA). Environmental Justice Reference Guide. April 2015. <https://rosap.ntl.bts.gov/view/dot/50875>
- ¹⁷ US Department of Transportation (USDOT). Request for Information on Transportation Equity Data. May 2021. <https://www.federalregister.gov/documents/2021/05/25/2021-10436/request-for-information-on-transportation-equity-data>
- ¹⁸ US Department of Transportation. Equity Action Plan. January 2022. https://www.transportation.gov/sites/dot.gov/files/2022-04/Equity_Action_Plan.pdf
- ¹⁹ US Department of Transportation FY 2022-26 Strategic Plan. <https://www.transportation.gov/dot-strategic-plan>
- ²⁰ Vermont Environmental Disparity Index. <https://www.arcgis.com/apps/webappviewer/index.html?id=68a9290bde0c42529460e1b8deee8368>
- ²¹ 19 V.S.A. § 10I (<https://legislature.vermont.gov/statutes/section/19/001/00010i>)

-
- ²² “Equity Analysis in Regional Transportation Planning Processes, Volume 1: Guide”, National Academies of Sciences, Engineering, and Medicine, 2020
- ²³ National Academies of Sciences, Engineering, and Medicine 2020. Equity Analysis in Regional Transportation Planning Processes, Volume 1: Guide. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25860>.
- ²⁴ US Department of Transportation: Federal Highway Administration (FHWA). Environmental Justice Analysis in Transportation Planning and Programming: State of the Practice. February 2019. <https://rosap.ntl.bts.gov/view/dot/43567>
- ²⁵ Vermont Agency of Transportation Equity Framework ArcGIS Online Dashboard. <https://experience.arcgis.com/experience/ca4f8c20106940c286c2b69b8929804c/page/Home%3A-Diversity%2C-Equity-and-Inclusion/>
- ²⁶ Council on Environmental Quality (CEQ). Climate and Economic Justice Screening Tool. February 18, 2022. <https://screeningtool.geoplatform.gov/en/>
- ²⁷ Rhodium Group. Justice40 Initiative: Mapping Race and Ethnicity. February 2022. <https://rhg.com/research/justice40-initiative-mapping-race-and-ethnicity/>
- ²⁸ <https://www.census.gov/quickfacts/VT> Vermont median household income (in 2020 dollars), 2016-2020: \$63,477
- ²⁹ VTrans Title VI Program Implementation Plan FY23. <https://vtrans.vermont.gov/content/vtrans-title-vi-program-implementation-plan-fy23>
- ³⁰ Vermont Agency of Transportation/ VTrans Public Involvement Guide. June 2017. <https://vtrans.vermont.gov/sites/aot/files/highway/documents/publications/VTransPublicInvolvementGuide2017.pdf>
- ³¹ US Department of Transportation. Promising Practices for Meaningful Public Involvement in Transportation Decision-Making. October 2022. <https://www.transportation.gov/sites/dot.gov/files/2022-10/Promising%20Practices%20for%20Meaningful%20Public%20Involvement%20in%20Transportation%20Decision-making.pdf>
- ³² Vermont General Assembly. S.148, An act relating to environmental justice in Vermont. <https://legislature.vermont.gov/Documents/2022/Docs/ACTS/ACT154/ACT154%20As%20Enacted.pdf>
- ³³ US Environmental Protection Agency. Environmental Justice Screening and Mapping Tool. <https://ejscreen.epa.gov/mapper/>
- ³⁴ National Academies of Sciences, Engineering, and Medicine 2020. Equity Analysis in Regional Transportation Planning Processes, Volume 1: Guide. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25860>.
- ³⁵ US Department of Transportation: Federal Highway Administration. Title VI of The Civil Rights Act of 1964 and Additional Nondiscrimination Requirements. https://www.fhwa.dot.gov/civilrights/programs/title_vi/
- ³⁶ US Department of Transportation: Federal Transit Agency. Title VI Compliance Review Final Reports. <https://www.transit.dot.gov/regulations-and-guidance/civil-rights-ada/title-vi-compliance-review-final-reports>
- NACTO “Shared Micromobility in the U.S. 2020-2021.”³⁷ <https://nacto.org/shared-micromobility-2020-2021/>