



NJ 2020 SHSP

Equity Emphasis Area

Completed Priority Action 12

Research on active transportation and other general equity metrics and tools



March 5, 2024





Memo

Date: Tuesday, March 05, 2024

Project: NJ 2020 SHSP Equity Emphasis Area, Priority Action #12

To: NJDOT

From: Action Leader - Sascha Frimpong, NJTPA

Subject: Research on active transportation and other general equity metrics and tools

Summary

The New Jersey 2020 Strategic Highway Safety Plan (SHSP) Equity Emphasis Area Priority Action12 addresses incorporating equity related to bicycle and pedestrian needs in underserved communities. This memorandum presents the results of research on active transportation and other general equity metrics and tools currently in use by the three New Jersey Metropolitan Planning Organizations (MPOs); North Jersey Transportation Planning Authority (NJTPA), Delaware Valley Regional Planning Commission (DVRPC) and South Jersey Transportation Planning Organization (SJTPO), and peer state Departments of Transportation (DOTs), MPOs, and select cities across the United States in their programs and projects. The background research conducted and presented herein provides an understanding of how equity focused programs and tools are being used in transportation planning and may be considered by NJDOT.

Summary findings from New Jersey MPOs

NJTPA ENVIRONMENTAL JUSTICE COMMUNITIES & LOCAL SAFETY PROGRAM PROJECTS, August 2022

INTRODUCTION

Title VI requires that MPOs actively engage historically underserved communities across various aspects of planning, programming, public outreach, and participation. To fulfill this directive, NJTPA conducted an evaluation of transportation safety conditions within these communities, focusing on the allocation of federal Highway Safety Improvement Program (HSIP) funds through the NJTPA Local Safety Program (LSP) and High-Risk Rural Roads (HRRR) Programs.

The objectives of this study are twofold. Firstly, it seeks to unveil the connection between vehicular crashes (both fatal and injury-related) and the regional demographics underpinning NJTPA's jurisdiction. Secondly, the study aims to appraise the alignment of LSP projects with Environmental Justice (EJ) communities within the region. Employing regression analysis, this research illustrates that all of the 129 project sites within the LSP/HRRR initiatives exhibit significant correlation with various EJ factors. Notably, these projects tend to be situated in census tracts characterized by a higher prevalence of households without cars and communities that are predominantly minority or low-income.



Furthermore, a distinct analysis focused on the interplay between fatal and injury-related crashes and EJ indicators reveals that all types of crashes are intertwined with higher concentrations of minority and low-income communities. Additionally, a strong correlation emerges between elevated concentrations of households lacking cars and incidents involving pedestrians and cyclists.

This document comprehensively outlines the analytical methodology employed, provides a succinct summary and constructive discussion of the findings, and concludes with insightful reflections on the outcomes.

METHODOLOGY

Data Collection:

- Census tract level data from the American Community Survey on EJ populations including minorities, low-income, limited English proficiency, disabled, zero car households, and older adults.
- Crash data from the New Jersey Division of Highway Traffic Safety's database for the NJTPA region.
- Locations of LSP and HRRR projects in the NJTPA region.
- Roadway data from NJDOT's Straight Line Diagrams.

Methodology

- Defined EJ populations based on thresholds above regional averages.
- Mapped concentrations of EJ populations at the census tract level.
- Buffered and spatially joined crash data to census tracts to quantify crashes in each tract.
- Buffered and spatially joined LSP/HRRR project locations to census tracts.
- Normalized crash data by road miles and population in each tract.
- Ran correlation analysis between EJ factors and crashes per road mile and per population.
- Analyzed correlations between LSP/HRRR projects per tract and EJ factors.
- Compared regional averages to averages in tracts with LSP/HRRR projects.

In summary, the analysis used robust EJ demographic data, crash records, and project locations to identify relationships between EJ populations and crashes, and the targeting of safety investments to EJ areas.

FINDINGS

Key findings from the Environmental Justice Communities & Local Safety Projects report:

- Pedestrian and bicycle crashes showed stronger correlation with EJ indicators than overall crashes. Higher concentrations of minority, low-income, limited English proficiency, and carless households were associated with more pedestrian and bicycle crashes per road mile.
- Carless households had the strongest correlation with pedestrian and bicycle crashes out of the EJ indicators examined.



- The analysis found 129 LSP/HRRR projects were located in census tracts with higher concentrations of carless households and minority/low-income populations compared to regional averages.
- Tracts with LSP/HRRR projects had higher averages of carless (21.5%), limited English proficiency (17%), low-income (32%), and minority (59.8%) households compared to the regional averages of 13.3%, 13.9%, 24.3%, and 47.2% respectively.
- When looking at crashes per population, the correlations with EJ factors were weaker, suggesting crash rates are more related to infrastructure factors than simply population demographics.
- The report concludes that the LSP and HRRR programs have effectively targeted areas with EJ populations that tend to experience a higher frequency of pedestrian and bicycle crashes.
- It provides recommendations for incorporating equity considerations more explicitly into project selection, public outreach, and design components of these programs.

In summary, the key findings demonstrate the relationships between EJ populations, crash rates, and the equity impacts of the Local Safety Programs in the NJTPA region.

DVRPC Crashes and Communities of Concern in the Greater Philadelphia Region, December 2018

INTRODUCTION

To fulfill Title VI requirements, DVRPC conducted an evaluation of transportation safety conditions within historically underserved communities.

As the designated metropolitan planning organization for the Greater Philadelphia region encompassing nine counties, the DVRPC is dedicated to enhancing mobility choices, preserving natural resources, and fostering healthy communities to create broader opportunities for all residents. The commission has previously undertaken projects like Equity Through Access, the Camden Health Element, and the Greater Philadelphia Food Systems Study, all of which prioritize equity and health considerations.

One of DVRPC's paramount commitments is to establish a safer transportation system, considering that traffic crashes pose a critical public health concern. Nationwide, vehicle crashes are a significant cause of death, particularly among younger demographics, with recent years seeing an increase in severe vehicle crashes following a period of decline. This report underscores that in the years between 2012 and 2016, 1,889 individuals lost their lives in vehicle crashes, while another 5,294 sustained serious injuries within the region.

Remarkably, 21 percent of those either killed or severely injured were pedestrians or bicyclists, despite constituting only 11.6 percent of regional trips. Vulnerable road users face disproportionate risks, often concentrated in areas with high-speed road design and dense populations of pedestrians and cyclists. These areas tend to overlap with communities that include racial minorities and low-income individuals, thus magnifying the risks for these groups.



The report focuses on comprehending the distribution of severe vehicle crashes across the region and identifying which potentially disadvantaged populations face the highest exposure. By employing data-driven methods, the study aims to pinpoint areas of concentrated crisis and disparities, with the intention of supporting DVRPC's endeavors to address built environment issues, foster public health, and promote equity.

METHODOLOGY

Data Collection

- Census tract level data on EJ populations from the American Community Survey, including minorities, low-income, limited English proficiency, disabled, zero car households, and older adults.
- Crash data from NJDOT and PennDOT for the DVRPC region, limited to crashes resulting in fatality or serious injury (KSI).
- Locations of LSP and HRRR projects in the DVRPC region.
- Roadway data from DVRPC's travel model including length, traffic volume, and functional classification.

Methodology:

- Calculated crash rates per road mile and per population for census tracts.
- Normalized crashes by traffic volume to account for exposure risk.
- Ran a correlation analysis between EJ factors and crash rates to identify correlated populations.
- Mapped census tracts based on crash rates and EJ populations.
- Analyzed land use, road types, and collision types for case study census tracts with high crashes and EJ populations.
- Compared case study tracts to demographically similar tracts with low crashes.
- Assessed the targeting of LSP/HRRR projects to high minority and low-income tracts.

In summary, the report used a robust set of demographic, crash, and roadway data to identify relationships between equity populations and crash rates, and evaluate the equity impacts of safety investments.

FINDINGS

Key findings from the Communities of Concern and Local Safety Program Projects report:

- Census tracts with above average crash rates were nearly twice as likely to also be above average for minority, low-income, disabled, or carless households compared to the average tract.
- Low-income populations showed the strongest correlation with higher crash rates, especially vulnerable user (pedestrian/bicycle) crashes.
- Case study tracts with high crashes tended to be bisected by high-speed arterials and have more commercial land use, where crashes concentrated.
- "Hit pedestrian" crashes were the most common collision type in case study tracts.
- Case study tracts had much higher shares of arterial roads compared to demographically similar tracts with low crashes.



- 41% of Philadelphia's High Injury Network overlapped with tracts that were high-crash and high minority/low-income.
- The report recommends implementing systemic safety improvements like traffic calming and pedestrian infrastructure upgrades in equity areas.
- It also advises incorporating equity populations into scoring criteria for programs like the Transportation Improvement Program (TIP) and HSIP to direct more funds to impacted areas.

In summary, the analysis demonstrated the concentration of crashes in low-income and minority areas and pointed to strategies to improve safety in these impacted communities.

SJTPO Environmental Justice Report, September 2021

INTRODUCTION

Serving as the designated MPO for Atlantic, Cape May, Cumberland, and Salem Counties, SJTPO is tasked with the development of a Regional Transportation Plan (RTP) and a TIP. These pivotal planning components, coupled with the EJ Report, are mandated to incorporate considerations of EJ. This is accomplished through the following strategic actions:

- Identifying and addressing the needs of low-income and minority populations, confirming equitable distribution of both benefits and burdens associated with transportation investments across the planning area.
- Elevating the existing analysis procedures so that the RTP and TIP align with the requisites of Title VI.
- Scrutinizing the current public engagement methods and implementing enhancements, as deemed necessary, to foster the participation of minority and low-income communities within the decision-making process.

METHODOLOGY

The following section describes the data collected for the EJ report and methodology used for data analyses.

Data Collection:

- Demographic data from the US Census Bureau, including the Decennial Census and American Community Survey 5-year estimates.
- Data on poverty, race/ethnicity, households with disabilities, households with no vehicles, and elderly populations.
- Crash data from the region.
- Locations of transit stations and bus stops.

Methodology:

- Defined EJ and Transportation justice (TJ) populations based on thresholds for regional averages for various demographic factors.
- Mapped concentrations of EJ and TJ populations at the Census Block Group level.
- Analyzed the allocation of TIP funds geographically to assess distribution to EJ areas.



- Calculated and compared crash rates for the region and EJ/TJ areas based on population and road miles.
- Assessed transit access by calculating the percentage of EJ populations within walking distance of transit stations and bus stops.
- Developed a Ladders of Opportunity analysis to assess access to essential services.
- Compared various transportation-related statistics (commuting behavior, traffic volumes, etc.) for the region versus the state.

In summary, the analysis relied on robust demographic data at a fine geographic scale to identify and map EJ and TJ populations. It then used this information along with additional transportation data to conduct a variety of equity assessments.

FINDINGS

- The SJTPO region has higher rates of poverty (14.2%) compared to the state of New Jersey (10.5%) and the national average (13.8%). It also has a higher percentage of African American residents (14.3%) than the state (13.5%) or national averages (12.7%).
- EJ areas were defined based on thresholds for poverty, minority populations, and other factors. TJ areas were defined based on poverty, households with disabilities, elderly populations, and other factors.
- An analysis of crash data found that crash rates are higher in EJ and TJ areas compared to the overall region. However, fatality rates are lower, likely due to the more urban nature of EJ/TJ areas.
- Transit access is more favorable for EJ and concentrated EJ areas compared to the overall region. About 45-51% of EJ populations live within walking distance of transit stations or bus stops.
- The distribution of Transportation Improvement Program (TIP) funds within the region does not appear biased against EJ populations based on population percentages.
- The report recommends continued monitoring and improvement of equity conditions, seeking representation from disadvantaged groups, expanding equity analyses, and coordinating with transit agencies to improve access for EJ/TJ populations.

Literature Review from Other States

Table 1 highlights the key findings from the research by agency. For each agency examined, information is presented on the equity-related program, whether the program emphasizes bicycles and pedestrians, program metrics and frameworks, and their applications. Of all the programs reviewed in this table, only a few focus exclusively on active transportation; however, many programs reviewed have developed metrics and frameworks that can be applied to all types of projects, including active transportation projects.

Literature Review Key Findings

- Several transportation agencies have developed equity-focused programs and tools to guide investments and policies, though few focus exclusively on active transportation.



- Common metrics used in equity tools and frameworks include concentrations of minority, low-income, limited English proficiency, disabled, youth, elderly, and zero vehicle households based on census tract data.
- Oregon DOT's tool prioritizes bicycle/pedestrian improvements in underserved areas based on safety, equity, and health factors.
- Multiple agencies have screening tools to identify "communities of concern" or high-need areas based on demographic and equity indicators. These are used to target investments.
- Performance frameworks used by Washington State DOT and Atlanta Regional Commission (ARC) incorporate equity factors into project evaluation and scoring criteria.
- Public engagement plans emphasize inclusive outreach and input from underserved groups.
- Several agencies conduct equity analyses of proposed projects and plans to assess benefits and impacts on disadvantaged communities.
- Tools like the Climate and Economic Justice Screening Tool identify disadvantaged tracts nationally based on environmental, climate, and socioeconomic burdens.
- Findings demonstrate the widespread use of data-driven tools and consistent metrics to direct transportation investments to historically underserved populations and locations.

Recommendations

Based on the literature review and findings from the three MPO's in the region, NJDOT could use the following recommendations to equitably prioritize bicycle and pedestrian infrastructure needs in the State:

- **Develop a quantitative tool** to identify underserved census tracts in NJ based on demographic, socioeconomic, and environmental indicators. This could be used along with recently released NJDEP's Environmental Justice Mapping, Assessment and Protection Tool (EJMAP)
- **Utilize tool to target investments** and assess potential impacts of proposed projects on disadvantaged communities.
- **Incorporate equity factors** into project evaluation criteria and funding prioritization processes. NJDOT is also incorporating equity into state aid programs. Starting with the 2020 Transportation Alternatives solicitation, NJDOT and the MPOs added an equity component to the Transportation Alternatives Program (TAP). The addition of this scoring criteria will ensure that applications benefit underserved communities with populations defined by:
 - Advancing Racial Equity and Support for Underserved Executive Order 13985,



- Executive Order on Environmental Justice (EJ) 12898,
 - New Jersey Governor's Executive Order 23,
 - Limited English Proficiency (LEP); and
 - Individuals with disabilities.
- **Emphasize outreach** to underserved groups and consider their input in decision-making.
 - **Apply equity lens** broadly across all transportation programs and modes, including active transportation initiatives. This is already being done for a few NJDOT programs through the office of Local Aid.
 - **Increase active transportation investments** in areas identified as having high concentrations of underserved populations.
 - **Develop performance measures** to track effectiveness of efforts to advance transportation equity across NJ.



Appendix A: National Best Practice Research



Table 1. Equity Focused Agency Programs

Agency Name	Type (DOT, MPO, City, Other)	Program Name	Yes/No	Program Type	Bike/Ped Emphasis?			Other Equity Considerations/Frameworks?		
					Metric/Framework	Applications	Yes/No	Program Type	Metric/Framework	Applications
Oregon DOT (ODOT)	DOT	Equitable Active Safety Improvements Evaluation (EASIE)	YES	Program to identify and prioritize quickly implementable equitable active transportation improvements	EASIE includes strategies to guide ODOT in addressing issues related to pedestrian and bicycle safety on the state highway system with consideration given to social equity. Two criteria are chosen to be used for the Project methodology, consistent with the Project's call to action: <ul style="list-style-type: none"> Safety: Pedestrian and bicycle crash frequency, severity and latest 3 years crash data and latest fatalities; and Pedestrian and bicycle crash Risk Factors Equity: Transportation disadvantaged Index (TDI) and Health 	Project identification and implementation focused on bicycle and pedestrian improvements in areas underserved areas				
ODOT	DOT	Active Transportation Needs Inventory (ATNI)	YES	Needs inventory to identify gaps in bike/ped network	ODOT's ATNI project inventoried existing sidewalks, bicycle lanes, shared use paths, and shoulder datasets to provide an inventory of existing pedestrian and bicycle infrastructure along State highways in Oregon. The project assesses pedestrian and bicyclist needs and deficiencies with regards to rural and urban standards in the Highway Design Manual. The ATNI tool evaluates available infrastructure along with other factors such as crash data, crash risk factors, TDI, Level of Traffic Stress, and bicycle connectivity to prioritize gaps and needs on State highways. The data includes crash risk factors, pedestrians and bicyclists involved crash data (2014 to 2018), TDI, bicycle Level of Traffic Stress, bicycle connectivity, transit stops, North American Industry Classification System data, Adventure Cycling Association routes/scenic bicycle routes, bicycle lanes/sidewalks, and transportation system plan projects.	Inventories existing bike ped network and identifies gaps in the ODOT network. This data is being used by other programs to prioritize active transportation improvements				
ODOT	DOT	Transportation Disadvantaged. Index (TDI)	NO				YES	Index scoring census tracts based on equity factors	Index map showing areas where concentrations of equity-focused populations live. Uses American Community Survey data for: <ul style="list-style-type: none"> Elderly populations (65 and older). Youth populations (under 18). Non-white and Hispanic populations. Low-income population Limited English proficiency population Households without access to a vehicle. People with a disability Crowded households (More than one person per room in a given household) These data are updated on the same timeline as ATNI as part of that project.	Feeds into other ODOT programs to identify TDI communities



Agency Name	Type (DOT, MPO, City, Other)	Program Name	Bike/Ped Emphasis?			Other Equity Considerations/Frameworks?				
			Yes/No	Program Type	Metric/Framework	Applications	Yes/No	Program Type	Metric/Framework	Applications
Florida DOT (FDOT)	DOT	Efficient Transportation Decision Making (ETDM) Program - Environmental Screening Tool	NO				YES	Project screening framework	Florida's ETDM process defines the procedures for planning transportation projects, conducting environmental reviews, and developing and permitting projects. Developed through the "Environmental Streamlining" initiative, accomplishes major transportation project planning with early and continuous agency participation, efficient online electronically managed environmental review and meaningful dispute resolution mechanisms. ETDM is carried out through the use of the Environmental Screening Tool (EST).	<ul style="list-style-type: none"> Integrate data from multiple sources into an easy to use, standard format Analyze the effects of proposed projects on the human and natural environment Communicate information effectively among Environmental Technical Advisory Team (ETAT) representatives and to the public Store and report results of the ETAT review effectively and efficiently Maintain project records, including commitments and responses, throughout the project life cycle
Washington State DOT (WSDOT)	DOT	Performance Based Project Evaluation Report	NO				YES	Project screening framework	A performance-based project evaluation developmental model that responds to the assessment results and stakeholder input. The model incorporates a sorting layer to take advantage of internal subject matter expertise, a criteria-based scoring layer, and a more detailed evaluation of environmental, health and equity values through a screening layer. The steps of the layered evaluation process contribute to a project's composite score. After assigning a composite score, evaluators rank each project within grouping categories to prevent unintended competition between different modes. Decision makers can then pull a ranked list from the group ranks and assess for funding balance across regions	Project evaluations based on equity
Boston Region MPO	MPO	Multiple programs including Destination 2040 LRTP, TIP, Public Engagement Plan	NO				YES		<p>The MPO takes an "equity in all policies" (EiAP) approach to achieving this goal. EiAP is based on the "health in all policies" approach from the field of public health. EiAP means that equity is a part of every policy, process, and decision at the MPO. This approach is strategic and inclusive. At every step in the decision-making process, MPO staff engage the region's most vulnerable populations to develop and implement strategies for advancing equity.</p> <p>MPO TIP has updated equity analysis process and conducts Equity analysis of project impacts, in the aggregate, funded in the most recent TIP</p> <p>Equity evaluation during the project selection process</p>	<ul style="list-style-type: none"> Transportation Improvement Program (TIP): The MPO's capital planning document records which projects will be funded in the region over the next five years. Equity analysis of project impacts, in the aggregate, funded in the most recent TIP Equity evaluation during the project selection process Arcgis Story Map setup to view equity populations and proposed projects in the LRTP. LRTP needs assessment focused on equity populations



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			Yes/No	Program Type	Metric/Framework	Applications	Yes/No	Program Type	Metric/Framework	Applications	
Atlanta Regional Council (ARC)	MPO	Equitable Target Areas (ETA)	NO					YES	Census tract scoring tool	<p>The ARC uses an ETA Index to understand environmental justice communities and connectivity. Categories are based on standard deviations from the mean:</p> <ul style="list-style-type: none"> Category 1 - if its percentage exceeded the highest standard deviation Category 2 - if its percentage was between the second highest and highest standard deviation Category 3 - if its percentage was below the second highest standard deviation. <p>Factors include percentages of the population in Census Tracts considered to be in Poverty, as well as those that responded as African American, Asian, Hispanic, and another race that is not White</p>	<p>The ETA Index measures the impacts of investments and programs of the Plan on ETAs and provides input for project prioritization, evaluation, and monitoring.</p> <p>The ARC has a web-based application, Project Evaluation Visualization, to evaluate individual projects based on estimated benefit-cost ratios and individual performance metrics. Measures are identified for both Needs and Performance and then weighted based on a sensitivity test of the ARC's goals and objectives.</p>
Minnesota Department of Transportation (MnDOT)	DOT	Student Transportation Equity for Priority Populations (STEPP) Tool, Statewide Multimodal Transportation Plan	YES	Scoring criteria for each school in the State	<p>STEPP supports equitable scoring during the Safe Route to School grant application process. Equity Score from 0 to 100 for each school reflecting the seven equity indicators. The entire state area is aggregated to a grid of hexagonal tiles and for each hexagonal tile, the percentile rank for each measure is multiplied by the measure's weighting coefficient and added together. The equity score for each school is equal to the sum of the products of the percentile rank of each raw measure of equity and its respective weighting coefficient.</p> <p>Criteria include:</p> <ul style="list-style-type: none"> Students eligible for free and reduced-price lunch Students of Color or American Indian Percent of population ages 5-17 English Language Learning Students Households with access to one or zero motor vehicles Non-motorists killed or seriously injured in a crash Workers commuting by biking and walking 	<p>SRTS staff would use them in two ways: to evaluate equitable distribution of past SRTS resources, and to allocate SRTS assistance more equitably in the future. The STEPP tool helps prioritize investments with a score that is not subjective. The equity score uses seven indicators to identify priority populations in Minnesota, providing a picture of higher need for Safe Routes to School assistance. In order to be more equitable in the allocation of resources, MnSRTS will award application points based on these measures.</p>					
Portland Bureau of Transportation (PBOT)	City DOT	Equity Matrix	NO					YES	Equity matrix based on census tracts	<p>The Equity Matrix is used to rank internal lists that relate to projects, programs, and procedures to achieve Citywide Racial Equity Goals and Strategies.</p> <p>PBOT's Equity Matrix assigns a score (maximum of 10) to every census tract using the demographic variables of race/ethnicity, income, and limited English proficiency. In the matrix census tracts are ranked from 1 to 5 for income level and race composition, then combined for an equity score of a maximum of ten. Census tracts with higher than citywide average populations with LEP are just outlined on the map due to a large margin of error in the data.</p>	<p>Matrix being used for project prioritization based on census tract scores</p>



Agency Name	Type (DOT, MPO, City, Other)	Program Name	Bike/Ped Emphasis?		Other Equity Considerations/Frameworks?		
			Yes/No	Program Type	Metric/Framework	Applications	
Hillsboro MPO	MPO	Underserved Communities and Environmental Justice Areas	NO			<p>Screening tool to identify underserved census block groups</p> <p>Underserved and underrepresented people have historically been disenfranchised from participating in decision-making, are disproportionately burdened by negative planning outcomes, and may need special accommodations to be included in planning processes. This program focuses on those communities.</p> <p>Underserved Communities: 80th - 100th percentile of block groups (very high concentrations) based on the concentration of the 10 indicators; the most underserved communities are block groups with anywhere from 4 to 9 characteristics within the 80th - 100th percentile range.</p> <p>Environmental Justice Areas: top 10th percentile of block groups based on the concentration of racialized minorities, ethnic minorities, or low-income households</p>	<ul style="list-style-type: none"> 2020 Vision Zero Speed Management Action Plan Transportation Improvement Program 2018 School Safety Study and Safe Routes to Schools Program Plant City Transit Study 2020 Resilient Tampa Bay Study
Metropolitan Transportation Commission (MTC)	MPO	Equity Priority Communities (EPCs)	NO			<p>Tool to identify EPC communities in the MPO area.</p> <p>EPCs are census tracts that have a significant concentration of underserved populations. A tract is an EPC if it exceeds both threshold values for Low-Income and People of Color shares or exceeds the threshold value for Low-Income and also exceeds the threshold values for three or more variables.</p> <p>Criteria include:</p> <ul style="list-style-type: none"> People of Color (70% Threshold) Low-Income (28% Threshold) Limited English Proficiency (12% Threshold) Senior 75 Years and Over (8% Threshold) Zero-Vehicle Households (15% Threshold) Single Parent Families (18% Threshold) People with a Disability (12% Threshold) Rent-Burdened Households (14% Threshold) 	<p>MTC uses the EPC framework to guide its work and decisions to ensure historically underserved communities have equitable access to housing and transportation. For example, projects like Plan Bay Area 2050, the Transportation Improvement Program (TIP), Lifeline Transportation Program, etc. all utilize the EPC framework to determine to fund and prioritize projects that would meaningfully reverse existing disparities. In Plan Bay Area 2050, each of the 35 strategies has been crafted to advance equity in EPCs. The 2021 TIP did an investment analysis to assess whether EPCs are receiving an equitable distribution of the region's near-term transportation investments.</p>
California Environmental Protection Agency (CalEPA)	Other	CalEnviroScreen	NO			<p>Scoring methodology</p> <p>CalEnviroScreen was developed by the Office of Environmental Health Hazard Assessment of the CalEPA and is a mapping tool that helps identify California communities that are most affected by sources of pollution, and where people are especially vulnerable to pollution's effects. First released in 2013, the screening tool has recently been updated to its 4th version in February 2021.</p>	<p>Used by state agencies to identify vulnerable communities for targeted investment and administering grants under different programs, such as to identify disadvantaged communities by directing that 25% of the proceeds from the Greenhouse Gas Reduction Fund go to projects that provide a benefit to the top 25% scoring census tracts. Also, under Caltrans' Active Transportation Program, areas with the highest 10% of CalEnviroScreen scores are eligible for funding under the disadvantaged communities category of the grant application.</p>



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			Yes/No	Program Type	Metric/Framework	Applications	Yes/No	Program Type	Metric/Framework	Applications
City of San Antonio	City DOT	Equity Atlas	NO				YES	Census tract indicators	The City of San Antonio's Equity Atlas provides census-tract level data based on several regional inequality indicators. These include race, income, education, language, and historic redlining data. The atlas is publicly accessible and allows users to click on tracts to see how the City's scoring system assesses needs and access barriers in detail.	
US Govt	Other	Climate and Economic Justice Tool (CEJST)	NO				YES	Climate and Economic Justice Screening Tool	<p>The tool highlights disadvantaged census tracts across all 50 states. Communities are considered disadvantaged if they are in census tracts that meet the thresholds for at least one of the tool's categories of burden. The tool uses datasets as indicators of burdens. The burdens are organized into categories. A community is highlighted as disadvantaged on the CEJST map if it is in a census tract that is (1) at or above the threshold for one or more environmental, climate, or other burdens, and (2) at or above the threshold for an associated socioeconomic burden.</p> <p>In addition, a census tract that is surrounded by disadvantaged communities and is at or above the 50% percentile for low income is also considered disadvantaged.</p> <p>Criteria include Climate change, energy, health, housing, legacy pollution, transportation</p>	Helps identify disadvantaged census tracts quickly based on thresholds identified. Agencies trying to identify and incorporate disadvantaged communities in different phases of project development can use this tool directly instead of having to develop a new tool/methodology.