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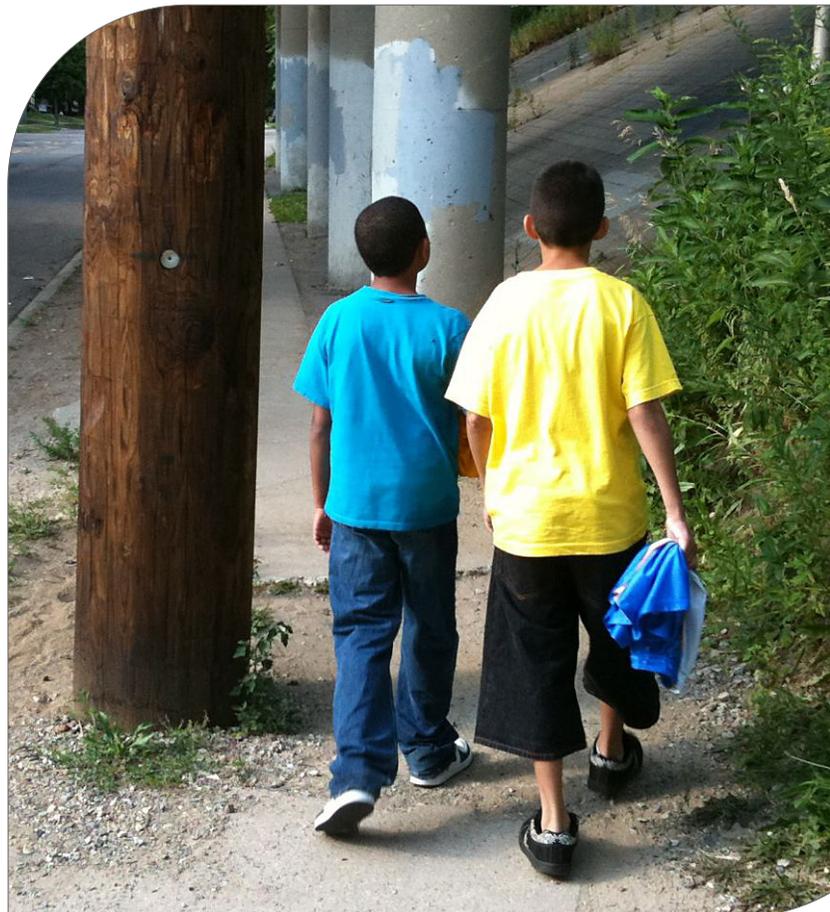
**Alliance**  
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Biking & Walking

**THE LEAGUE**  
OF AMERICAN BICYCLISTS



## Active Transportation Equity: A Scan of Existing Master Plans

This report examines 38 current bicycle and pedestrian master plans to assess the definition and inclusion of equity as a stated goal or outcome.



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## Active Transportation Equity: A Scan of Existing Master Plans

Advocacy Advance, a dynamic partnership between the League of American Bicyclists and the Alliance for Biking & Walking, is committed to maximizing funding for bicycling and walking improvements in communities across the country. As bicycling and walking improvements have become more widespread in the past 20 years thanks to federal funding, questions about how and where improvements are made have been raised. The question regarding process — who makes decisions in communities about where changes are made — will be examined in a follow-up report.

### Purpose

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The following report summarizes explicit mentions of equity within existing bicycle and pedestrian master plans. We examined master plans because they represent the clearest expression of the policies, programming, and projects that a community believes will make biking, walking, and rolling safe, convenient, and commonplace.

We chose 38 bicycle, pedestrian and joint pedestrian/ bicycle master plans based on recommendations from the Pedestrian and Bicycle Information Center, the League of American Bicyclists' Bicycle Friendly Community program, and our own research for best practices in active transportation planning. Each plan was searched for an explicit statement or mention of equity (literally the word "equity" to be inclusive of all possible types) and several terms we believe are associated with specific types of equity such as words describing race, family characteristics, and income.

**This report is not meant to be an exhaustive resource on the subject, but rather, a current compilation of how some cities are attempting to address equity within the context of bicycle and pedestrian master plans.** It is a report about what we found in planning documents and can begin to address some of the questions biking and walking advocates, agency staff, and transportation consultants may have as they look to incorporate equity considerations into bicycle and pedestrian planning goals.

Master plans are a small part of what it takes for a community to address equity-related disparities. This report focuses on **definitions** and **performance measures** related to equity in active transportation master plans. To fully realize equitable outcomes, the policies stated in plans must lead to processes, funding decisions, implementation, and evaluation that ensure that equitable outcomes are achieved. However, by considering equity at the planning stage, communities can assess whether they are planning for their entire community or perpetuating patterns of disparity. Planning can be a prerequisite for later investments and so it is vitally important that all communities, especially communities that are not traditionally a priority of planning processes, are intentionally included in active transportation planning.

Recognizing that an inclusive planning process is key to achieving equitable planning outcomes, a follow-up report highlighting some of planning processes in this report will be developed and released as an additional resource.

# Definitions of Equity

## In Bicycle, Pedestrian, and Joint Bicycle/Pedestrian Master Plans

Multiple definitions of equity were provided in the plans reviewed — sometimes within the same plan. Approximately half of the plans mentioned "equity," but that didn't always mean the terms were defined. When plans did define "equity" they generally defined it in terms of:

1. Geographic Equity - The distribution of biking and/or walking facilities and programs within a community, and/or
2. Social or Demographic Equity - The characteristics of populations served by biking and/or walking facilities and programs.

There was little discussion about where definitions of "equity" came from or why it was important that it be addressed. When plans did describe motivations for equity work, they referenced comprehensive plans (Los Angeles County), larger governmental equity initiatives (Seattle), health and sustainability (Phoenix), and environmental justice (Sacramento). See Table 1 for a list of plans that mentioned and/ or defined equity.

While each community should define equity in the way that is important to its unique characteristics, it is also useful to ground the community definition of equity in defined concepts that provide a framework for community strategies to achieve goals related to equity. Having clearer definitions of the type(s) of equity that master plans hope to achieve will help communities compare their methods and progress to one another.

**Table 1. List of Plans that Mention and/or Define Equity**

JURISDICTION	PLAN TYPE		DEFINITION(S)
	<i>Bike</i>	<i>Walk</i>	
Austin, TX	X		Provide equal access for all through public engagement, program delivery, and capital investment
Seattle, WA	X		Provide equal bicycling access for all; through public engagement, program delivery, and capital investment.
North Carolina	X	X	Fairness in transportation choice and facilities across communities
Northwest Arkansas	X	X	Equity in transportation planning refers to the distribution of impacts (benefits and costs) and whether that distribution is considered appropriate.
Minneapolis, MN	X		<ul style="list-style-type: none"> <li>• Geographic equity ensures that all parts of the city will see the same types of facilities at the same density and quality.</li> <li>• Demographic equity ensures that people of all age, race, ethnicity, and gender are treated equally.</li> <li>• Modal equity is achieved when bicycling is treated as an equal mode of transportation alongside autos, trucks, motorcycles, buses, and pedestrians.</li> </ul>
Eugene, OR	X	X	Build a system that addresses the needs and safety of all users, including youth, the elderly, people with disabilities, and people of all races, ethnicities and incomes.

**Table 1. List of Plans that Mention and/or Define Equity (continued)**

JURISDICTION	PLAN TYPE		DEFINITION(S)
	<i>Bike</i>	<i>Walk</i>	
Fort Collins, CO	X		Provide equal access to bicycling for all members of the community
Colorado	X	X	Mobility options to underserved populations, safe active transportation to schools and learning centers, and pedestrian mobility for seniors and disabled populations
Phoenix, AZ	X		<ul style="list-style-type: none"> <li>• Social Equity: The effort to provide bicycle transportation facilities for all socioeconomic groups and all portions of the community.</li> <li>• Modal Equity: Providing adequate transportation facilities for all modes (motor vehicle, pedestrian and bicycles), including parking facilities at destinations.</li> </ul>
Portland, OR	X		Develop a balanced, equitable, and efficient transportation system that provides a range of transportation choices; reinforces the livability of neighborhoods; supports a strong and diverse economy; reduces air, noise, and water pollution; and lessens reliance on the automobile while maintaining accessibility.

## Background on Equity

There are many models for and definitions of equity offered within transportation and non-transportation fields. Equity within the bicycling and walking movement tends to focus on recognizing and reacting to the [underrepresentation of youth, women, and people of color in advocacy efforts and local transportation decisions](#).

The League of American Bicyclists has chosen to pursue equity-related work within its organization and within the bicycling community because of its commitment to making bicycling safe and comfortable for everyone. Equity-related work, particularly work that focuses on social equity to address disparities in bicycling-related investments, representation, and resources, is a means to address disparities that prevent the League from realizing its universal goal of safe and comfortable bicycling for everyone. The League hopes that this work helps communities articulate why equity is important to them.

Advocacy Advance hopes this report can drive conversations forward by relaying how active transportation plans currently talk about equity and provide a basis for future standards in an evolving conversation within the bicycling and walking community. This report is not about best practices because of the evolving and emerging practices of communities that are beginning to incorporate equity-related issues in active transportation planning.

As there were few definitions for active transportation equity provided within the plans scanned for this report, the following are offered as potential models for advocates, agencies, and consultants to build and improve upon for their own planning purposes.

- » **Environmental Justice:**
  - "Equitable development is an approach to meet the needs of underserved communities through projects, programs, and/ or policies that reduce disparities while fostering places that are healthy, vibrant, and diverse."  
– Mustafa Ali, Senior Advisor to the Administrator for Environmental Justice at EPA
  - Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, "directs federal agencies to identify and address the disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations [and] ... is intended to promote nondiscrimination in federal programs that affect human health and the environment, as well as provide minority and low-income communities access to public information and public participation." – [Environmental Protection Agency](#)<sup>1</sup>
- » **Sustainability:** The [Triple Bottom Line](#) of sustainability is environmental sustainability, economic sustainability, and social equity. The social equity sustainability aspect works to ensure equal distribution of resources and access to amenities for all races and economic levels.
- » **Health:** Advancing equity in the context of obesity means inclusivity in preliminary stages of policy development, systems change, and other planning; policies tailored to meet unique circumstances and needs of community, and increased willingness to do more targeted investments. – [National Council of La Raza](#)
- » **Public Health:** "Equity [in health] is the absence of systematic disparities or in the social determinants of health, between groups with different levels of underlying social advantage/ disadvantage—that is, wealth, power, or prestige. Inequities [in health] systematically put groups of people who are already socially disadvantaged by virtue of being poor, female, and/ or members of a disenfranchised racial, ethnic, or religious group at further disadvantage." – Dr. P. Braveman, University of California, San Francisco
- » **Transportation:**
  - A "sustainable" transportation system "Allows the basic access and development needs of individuals, companies, and society to be met safely and in a manner consistent with human and ecosystem health, and promotes equity within and between successive generations. Is affordable, operates fairly and efficiently, offers a choice of transport mode, and supports a competitive economy, as well as balanced regional development. Limits air, water, and noise emissions, waste, and resource use...." – [Transportation Research Board Sustainable Transportation Indicators Subcommittee](#)

<sup>1</sup> EPA's Office of Environmental Justice has [defined](#) the term "minority" for environmental justice purposes to include Hispanics, Asian-Americans and Pacific Islanders, African-Americans, and American Indians and Alaskan Natives. However, the word "minority" may also be used to reference racial, ethnic, or other characteristics of people or communities. Some communities prefer descriptors other than "minority" and those preferences should be followed.

- The GROW AMERICA Act will build ladders of opportunity to help Americans get to the middle class by providing transportation options that are more affordable and reliable and by improving their quality of life through greater access to education and new job opportunities, including jobs in the transportation industry. - [US Department of Transportation](#)
- » **Targeted Universalism:** “Targeting within universalism means identifying a problem, particularly one suffered by marginalized people, proposing a solution, and then broadening its scope to cover as many people as possible. It sees marginalized populations in American society as the canary in the coal mine... It recognizes that problems faced by particular segments of American society are problems that could spill over into the lives of everyone.” – [John Powell, Stephen Menedian and Jason Reece, Poverty & Race Research Action Council](#)

## Equity and the Importance of the Language Used to Define It

Many of the active transportation master plans lacked discussion regarding how definitions of equity were created. To have legitimacy within the groups that are affected, it's important to develop a shared context and define key terms. Providing an example of the foundation on which such definitions are built, the [Transportation Equity Caucus](#), a coalition of partner organizations that is charting a new course for our nation to ensure all people can participate and prosper, focuses on [four core principles](#):

1. Create affordable transportation options for all people;
2. Ensure fair access to quality jobs, workforce development and contracting opportunities;
3. Promote healthy, safe and inclusive communities; and
4. Invest equitably and focus on results.

The overarching trends of current definitions of equity in active transportation master plans reflect equity being related to accessibility, safety, and other outcomes of a bicycle or pedestrian master plan. Austin and Seattle also name community engagement as a means for achieving the goal of equitable access for all.

Definitions of equity would be stronger, and better able to address community needs, if active transportation plans included a greater discussion of the equity framework that planners started with (e.g. environmental justice, health, or social equity) and the engagement framework used to create the community's definition of equity.

## Equity-Related Performance Measures

Definitions of equity define the goal that a master plan will help accomplish. **Performance measures tell planners and the public how success for a stated goal will be judged and tracked.** No matter how technically sound a performance measure is, it can only create positive outcomes if the goal is measurable and there is a data collection process that yields that specific data or it can be obtained.

**Table 2. Equity Performance Measures in Bicycle, Pedestrian, and Joint Bicycle/Pedestrian Master Plans**

JURISDICTION	PLAN TYPE		SELECTED PERFORMANCE MEASURES RELATED TO EQUITY
	<i>Bike</i>	<i>Walk</i>	
Denver, CO	X		% of Denver Moves network miles per council district
Seattle, WA		X	<ul style="list-style-type: none"> <li>• City investments toward Top Tier projects in High Priority Areas,</li> <li>• Public communication about pedestrian issues (views of plan on website),</li> <li>• Transit Ridership (boarding and alighting),</li> <li>• Mode Share (as measured by PSRC household travel survey).</li> </ul>
Seattle, WA	X		<ul style="list-style-type: none"> <li>• Zero areas of city lacking bicycle facilities by 2030</li> <li>• Increased Percentage of females, older adults, and people of color who ride regularly (a few times a month or more)</li> </ul>
Northwest Arkansas	X		<p>Apply environmental justice criteria to project selection criteria and providing transportation options and information to vulnerable populations</p> <ul style="list-style-type: none"> <li>• % of city produced materials available in multiple languages and formats.</li> </ul>
Minneapolis, MN	X		<ul style="list-style-type: none"> <li>• % modes share increase among underrepresented communities such as (gender, socio-economic status, race/ethnicity, age).</li> <li>• % increase in citywide bicycle mode share.</li> <li>• % of neighborhoods connected to a bicycle facility.</li> </ul>
Eugene, OR	X	X	<ul style="list-style-type: none"> <li>• Number of traffic signals without Accessible Pedestrian Devices,</li> <li>• List of completed projects from the ADA Transition Plan (once it is completed).</li> <li>• Annual pedestrian and bicycle crash statistics.</li> <li>• Density of pedestrian and bicycle facilities in areas with higher concentrations of racial and ethnic minorities and low-income households compared to other parts of Eugene.</li> <li>• Bicycle and pedestrian level of service (LOS) and quality of service (QOS) models.</li> </ul>
Fort Collins, CO	X		<ul style="list-style-type: none"> <li>• Build high-quality and leading-edge bicycle facilities in all parts of the city.</li> <li>• Implement inclusive bicycle-related programs and outreach.</li> <li>• Increase percentage of female bicycle commuters from 35% to 50%.</li> <li>• Increase population within 1/4 mile of a low-stress bicycle route from 17% to 80%.</li> </ul>

**Table 2. Equity Performance Measures in Bicycle, Pedestrian, and Joint Bicycle/Pedestrian Master Plans (continued)**

JURISDICTION	PLAN TYPE		SELECTED PERFORMANCE MEASURES RELATED TO EQUITY
	Bike	Walk	
Colorado	X	X	<ul style="list-style-type: none"> <li>Percent of underserved populations (low-income or minority) in the state living within a quarter mile of a defined bicycle or pedestrian facility</li> <li>Percent of schools in Colorado that have a Safe Routes map and program</li> <li>Number of schools teaching CDOT Safe Routes to School curriculum</li> <li>Percentage of students who bicycle or walk to school</li> <li>Percent of &gt;65 population living within a quarter mile of a defined pedestrian facility.</li> </ul>
Phoenix, AZ	X		Utilize a prioritization methodology that utilizes a variety of social equity measures, including: % of households in poverty; % of population under 18; % of households with no vehicles; and population density.
Portland, OR	X		<ul style="list-style-type: none"> <li>Percent of low-stress bikeways improved that serve areas in the lowest quartile of existing service (low-stress bikeway miles per square mile) and the highest quartile of disadvantaged population groups (percent disadvantaged population per block group)</li> <li>Percent of bicycling population: low income, female, non-white, under age 18, over age 65, etc.</li> <li>Assure that implementation criteria include comprehensive measures of equity, including poverty, minority status and age</li> <li>Regularly update the Equity Gap Analysis to account for changes in the low-stress bikeway network so that the results continue to inform project selection</li> <li>Develop a tool for addressing the health and equity effects of planned projects</li> </ul>

## Importance of Equity-based Performance Measures

A performance measure is the monitoring of ongoing progress toward pre-established goals. A performance measure may be selected for a variety of reasons, with common reasons including:

- » Ease of understanding by both technical and nontechnical audiences, and
- » Ability to implement with current resources (e.g. available data and existing information systems)
- » Variability with different choices of transportation alternatives, and
- » Characteristic(s) which can be controlled by the implementing agency.

Performance measures can be categorized by several different types, including:

- » Input measures – measure resources used or demand related to a goal
- » Output measures – measure units produced or services provided
- » Outcome measures – measure results of units produced or services provided
- » Efficiency measures – measure cost per unit of output or outcome
- » Explanatory/ Quality measures – measure environmental factors or qualitative indicators related to units produced or services provided

Many of the active transportation planning documents reviewed for this report did not describe how performance measures were selected nor did they attempt to balance different types of performance measures. More discussion on how the types of performance measures created were decided upon as well as how these will be achieved would provide clarity of the intent to produce outputs or outcomes in named communities. Performance measures are an appropriate place to identify current disparities and set targets for correcting them.

## Applying Performance Measure Terminology

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The Fort Collins, CO Bicycle Master Plan has a performance measure to “Increase percentage of female bicycle commuters from 35% to 50%.” This is an outcome performance measure, which measures the percentage of women bicycle commuters. However, the government does not directly produce or provide women bicycle commuters and so this can also be thought of as a community indicator that measures and impact at the community-level rather than a variable, characteristic, or output which the government can control.

The Fort Collins Bicycle Master Plan identifies women, as well as youth and seniors, as underrepresented groups and identifies facilities, education, and encouragement as ways to reach those groups. This identification is an input performance measure, some of which the government can control. The underrepresentation of women in bicycle commuting data may be an indicator of latent or potential demand for bicycle commuting among women. While the identification of women as an underrepresented user group seems to be, but is not explicitly, based upon data, the Bicycle Master Plan also identified strong community partners, such as FC Bikes, Vida Sana, and University of Colorado Health, that are indicative of demand for the outcome-based performance measure of a larger percentage of bicycle commuters being women.

The Fort Collins Bicycle Master Plan identifies specific education and encouragement programming, such as the Woman on a Roll initiative and an [open streets initiative](#), which are recommended to reach women as a new bicycling audience. Facilities, education, and encouragement activities are all units that the government can control and measure as output, outcome, efficiency, or explanatory/quality performance measures. The current plan does not specify how education and encouragement programming will be evaluated and what type of performance measure might be appropriate for that evaluation. This may be appropriate so that the evaluation of the use of various programming can be reassessed in a short timetable than the Bicycle Master Plan, but the types of performance measures used to affect the community indicator can have important effects on later decisions and is worthy of discussion in a Master Plan.

Most performance measures found in our review are output or outcome-related, however, an emphasis on the inputs needed to achieve goals as part of creating an inclusive process for equity goals should be more closely examined. [Effective outreach and engagement with targeted communities is important to prevent the appearance or occurrence of engagement that bypasses those most affected by a goal.](#) Outreach may also identify programming or other outputs that the agency can measure in order to achieve the larger stated goal and deepen the understanding of what is a performance measure for the agency and what is a community indicator that measure the impact of the agency's work.

## Tools for Equitable Planning

Tools and practices to create equitable biking and walking master plans and related planning documents are being developed in many communities. Improving these tools and sharing successes is important for creating best practices from current practices. This scan is not comprehensive and the following examples of current practices are provided to help understand the current state of practice.

### Examples of Community Outreach Tools and Efforts

**Partner Formation and Technical Assistance Model:** The Federal Highway Administration recently chose to highlight the work of the KidsWalk Coalition in New Orleans in its [Resident's Guide to Creating Walkable Communities](#). The KidsWalk Coalition involved a partnership between Tulane University's Prevention Research Center, the City of New Orleans, and other public health partners to implement infrastructure improvements that made walking and biking to school safer. The Coalition currently includes more than 25 active partners, including community groups. One of the difficulties encountered by the Coalition was building trust between its staff and city staff.

**Bicycle Master Plan-related Advocacy:** The Los Angeles County Bicycle Coalition (LACBC) engaged in a sustained [Better Bike Plan](#) advocacy campaign when the City of Los Angeles was creating its Bicycle Master Plan. Some of the key lessons learned through their multi-year engagement in the BMP process included the need to be engaged before a Request for Proposal is issued to ensure a proper framework, the need to develop a broad coalition and engage low-income communities early on, and the need for detailed implementation plans and performance measures in the final bike plan. Through engagement with low-income riders, the LACBC was able to get an explicit commitment to prioritization criteria that accounted for low-income and transit dependent communities from the City of Los Angeles.

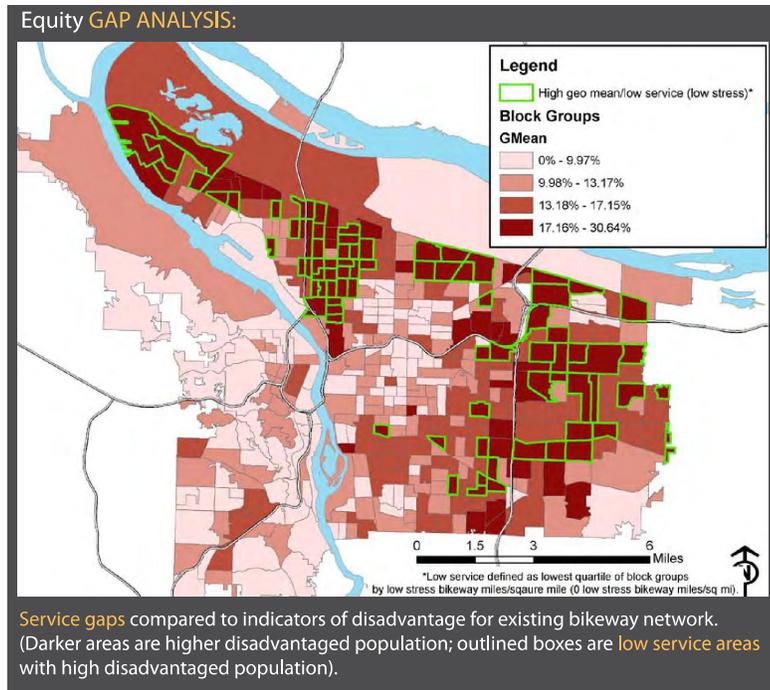
## Examples of GIS and Data Tools

Both Portland and Seattle included detailed GIS and data analysis of equity considerations relevant to their Bicycle Master Plans.

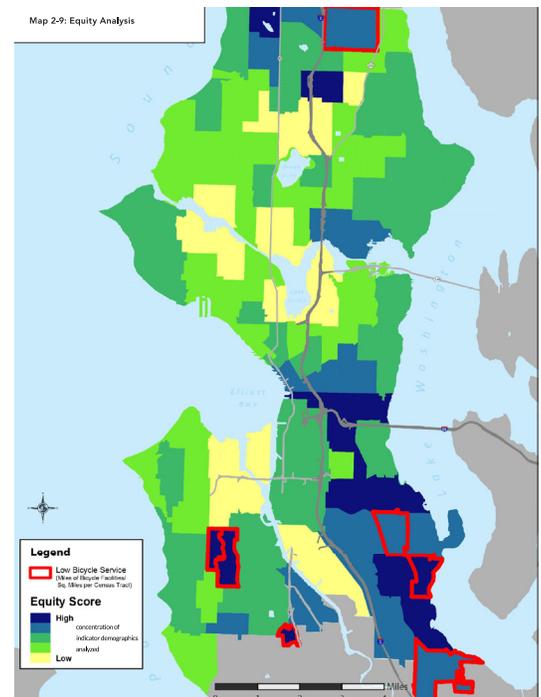
The Portland Bureau of Transportation contracted with [Portland State University](#) to conduct an equity analysis of new bicycle facilities in its Bicycle Master Plan. The analysis looked at several equity indicators – race, poverty, youth, and older adults – using census block data and comparing those indicators to the current Portland low-stress bikeway network. This analysis led to a map of service areas and disadvantaged population areas that can be updated as the bikeway network changes. The [Initiative for Bicycle and Pedestrian Innovation](#)'s user guide to developing pedestrian and bicycle master plans highlights the Equity Gap Analysis used by Portland's Bicycle Master Plan.

The Seattle Bicycle Master Plan used equity indicators that were similar to Portland's equity analysis, but also included the percentage of households with no automobile available for daily use. The Seattle Bicycle Master Plan used a simpler metric for bicycle service based on the availability of bicycle facilities in each census tract while the Portland equity analysis looked at specific activity types that were relevant to the spatial distribution of bicycle facilities, such as access to schools and transit.

**Map 1. Portland's Equity Gap Analysis**



**Map 2. Seattle's Equity Analysis**



## Other Tools and Efforts

While this is not an exhaustive list, the following resources are examples of some non-bicycle and pedestrian approaches to equity.

**Table 3. Examples of Non-Bicycle and Pedestrian Approaches to Equity**

JURISDICTION	CONTEXT	SUMMARY
<a href="#">Seattle</a>	Interagency Initiative	<a href="#">Racial Equity Toolkit</a> created as part of Initiative’s vision to eliminate racial inequality in the community by ending individual, institutional, and structural racism. Toolkit includes a six step process to confront racism through inclusion.
<a href="#">Portland</a>	Comprehensive Plan	A <a href="#">Framework for Equity</a> provides a guide for implementing actions to achieve goals within the City of Portland’s Comprehensive Plan. Equity is defined and action items are listed.
St. Paul and Minneapolis	Light Rail Service	As part of the outreach for a transit service study of a new light rail line, the District Councils Collaborative of St. Paul and Minneapolis (DCC) implemented a Trusted Advocate pilot project. Through the Trusted Advocate project, over 1200 community members interacted with existing community organizers, advocates, and leaders who had been contracted by the DCC and worked with the DCC to plan outreach in the communities affected by the project.
<a href="#">Newark</a>	Zoning and Land Use	First comprehensive update to zoning since 1954 included an <a href="#">interactive map</a> and web-based commenting. Newark partnered with the <a href="#">Center for Urban Pedagogy</a> to make zoning and land use more accessible and understandable.
<a href="#">Davidson, NC</a>	Health Impact Analysis (HIA)	The Town of Davidson did a <a href="#">rapid HIA</a> as part of its Active Transportation Master Plan which included a social and health equity analysis. The rapid HIA created a composite social, health, and environmental equity model in order to define high priority areas for future improvements.
<a href="#">Investing in Place</a>	Non-profit	Investing in Place is a new non-profit working to support a constituency for equitable planning in Los Angeles County. It uses convenings and <a href="#">research</a> to promote social equity in upcoming plans and revenue measures.
<a href="#">Sacramento Bicycle Advisory Committee (BAC)</a>	Resolution	The Sacramento BAC proposed a <a href="#">resolution</a> requesting that the City’s Bicycle Master Plan should be updated through an inclusive outreach process with a specific goal of equity in bicycling investment.
<a href="#">National Equity Atlas</a>	Resource	The <a href="#">National Equity Atlas</a> is a resource for data to track, measure, and make the case for inclusive growth. The Atlas focuses on data about how populations are changing and how equity is a growth model for regions and the nation.

## Conclusion

This report found a number of recent bicycle and pedestrian master planning processes and documents that consider equity as a community goal. While the list of plans is not comprehensive, it does indicate that achieving equitable outcomes is a stated goal that more communities are committing to when developing their vision of bikeability, walkability, and rollability.

While statements or commitments to equity were identified with the plans noted in this report, definitions of bicycle and pedestrian equity were less prevalent. When defined, little information about the process, stakeholders, or other previous equity definitions used to inform the definition was provided. Recognizing process as a critical input component to developing equitable outcomes, a follow-up Advocacy Advance report will highlight some of the planning processes mentioned in this scan.

In addition, indicating how plans will be measured over time to achieve success is just as important as defining and developing goals. Performance measures for equity in the plans reviewed for this report were mostly related to infrastructure outcomes in high priority areas. However, there were a number of plans that did not include data performance measures as data limitations were a barrier.

In summary, good and more data and inputs overall are crucial to developing and measuring equity goals within bicycle and pedestrian master plans. As active transportation advocates, planners, and engineers move forward on planning efforts, this resource is intended to serve as a reference with examples of approaches they can learn from and build upon.

Learn more about Advocacy Advance and  
find additional reports & resources at  
[www.AdvocacyAdvance.org](http://www.AdvocacyAdvance.org)