MEASURING WHAT WE VALUE

**Policies** to prioritize public health and build prosperous regions

HOW REGIONAL TRANSPORTATION PLANNING AGENCIES ARE PROMOTING PHYSICAL ACTIVITY AND HEALTH

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Nashville Area MPO (Tennessee)

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INTRODUCTION

All across the United States the demand for more opportunities to safely walk and bicycle are at an all-time high in both heartland towns and urban centers alike. Communities are being built to encourage more physical activity by making it easier to exercise and making it safer, more convenient and more attractive to walk or bicycle from place to place. Step by step, as better active transportation projects are funded, planned and constructed, people are able to make active transportation an integral part of their daily routine. And more communities are realizing the immense benefits of prioritizing these projects in the parts of their communities where underserved residents will benefit the most from improved health.

The benefits of increased physical activity abound: reduced risk of chronic diseases, longer lifespans, improved mental health, fewer visits to the doctor, and reduced demand on overstressed healthcare systems, to name just a few. All of these have direct fiscal benefits for taxpayers and the local, state, and federal governments. Healthier residents are a vital building block of a stronger local economy. Finding ways to improve the health of the most vulnerable populations — the people most likely to suffer from poor health outcomes — creates a foundation of shared and sustainable prosperity.

The good news is that an increasingly large number of local transportation agencies are recognizing both the demand for and benefits of routine opportunities to bike and walk. They are eager to find ways to build more of the infrastructure to encourage it. Yet in most places, the speed at which these projects are built fails to meet the demand.

As the agencies tasked with drafting regional plans that govern both policy and the spending of federal transportation dollars within their borders, metropolitan planning organizations (MPOs) are critically important to this process. MPOs coordinate local partners and stakeholders, drive and make policy, and are ultimately the gatekeepers of billions of transportation dollars.

They have a critical role to play, and many are responding by finding ways to prioritize public health in their plans, projects, and policies. This paper outlines four policy levers MPOs have at their disposal to help increase and improve active transportation projects to meet demand, decrease health disparities, increase access to opportunities, and strengthen local economies. Under each of the four policy levers, we chronicle MPOs that have helped deliver transformative results for the people they serve.
Under federal law, metropolitan planning organizations (MPOs) are responsible for coordinating transportation investments among local governments, public agencies, and a wide variety of constituents in their jurisdictions. MPOs conduct comprehensive planning processes to examine current and future transportation needs and prioritize those needs based on available federal funding. Short- and long-range MPO plans specify how transportation dollars will be spent across a region. These plans are intended to align investments with a region’s larger mission and goals, and these goals increasingly include items such as improved public health, more opportunity for vulnerable populations, and stronger local economies.

When it comes to funding projects in their respective regions, MPOs have the power to make investments that can improve public health. As the primary regional planning agencies that convene and persuade local stakeholders, they have power to create policies that can influence other state and local dollars, as covered later in the third section on planning.
Policy 1: Dedicating funding for active transportation

MPOs in larger areas with more than 200,000 people have substantial decision-making authority over a portion of federal transportation funds directed to them through a process known as suballocation. MPOs receive funds from the federal Surface Transportation Block Grant (STBG) program, governed by the FAST Act, The Fixing America’s Surface Transportation Act. The FAST Act is the transportation law adopted by Congress in 2015. This program was formerly known as the Surface Transportation Program (STP) under the previous federal authorization bill, MAP-21.

State departments of transportation (DOT) control the federal funds for MPOs serving areas with fewer than 200,000 people. While the state DOT is required to spend those funds within the MPO borders, the ultimate decisions of how to spend these funds still rests with the state DOT and not the MPO — leaving the MPO with limited control over the process. That being said, MPOs in smaller regions can establish policies and plans to improve public health and promote active transportation, as the regions of Missoula, MT and Corvallis, OR have done. (Stories from each are shared later on in this paper.)

In addition to the STBGP, another primary source of suballocated funds in some states is the Congestion Mitigation and Air Quality Improvement (CMAQ) Program. CMAQ provides funding for surface transportation projects that improve air quality or mitigate congestion, like high-occupancy vehicle lanes, ridesharing, bikesharing, public transportation, active transportation, and more.

MPOs have the ability to make sure that investments include walking and biking accommodations and promote physical activity. Nearly all federal transportation funds that MPOs can access are incredibly flexible and can allow bicycle and pedestrian elements to be funded and designed within larger infrastructure projects. Even state and local transportation funds that may prioritize traffic circulation or safety can often be engineered to include complete streets elements to provide safer opportunities for walking and bicycling.

In this section, we highlight MPOs that have developed either dedicated active transportation funding programs, or funding programs that are dedicated more broadly to compact growth and livable communities, which have significant active transportation benefits.
Policy 1: Dedicating funding for active transportation

DEDICATING FUNDING FOR COMPETITIVE BICYCLING AND WALKING PROJECTS

The Nashville Area MPO (Tennessee)
The Puget Sound Regional Council (Seattle, Washington)
Metro (Portland, OR)

The Nashville Area MPO has dedicated 15 percent of its Urban Surface Transportation Program (STP) to bicycling, walking, and transit-supportive projects. Ten projects totaling approximately $10 million were funded in the last round of the Active Transportation Program in 2014.

To award this funding to projects, jurisdictions need to develop applications that are reviewed by MPO staff and the MPO Bicycle and Pedestrian Advisory Committee (BPAC), a volunteer group of local and state agency staff, local law enforcement, and advocates with a deep knowledge of bicycle and pedestrian safety. Evaluation criteria encompass promotion of environmental and personal health, expected utility and usage, contribution to the built environment, and value over not building the project.

In the city of Mt. Juliet, nearly two miles of new sidewalks will connect Providence Greenway and Jerry Mundy Park to residences and commercial areas. For $1.25 million plus the local match, a shared use path will be provided for those traveling on foot and bicycle, grass strips between sidewalks and roadways, crosswalks, pedestrian signals, pedestrian hand rails, signs and more. In Gallatin, an award of $560,000 will help build four miles of sidewalks in 13 high-priority locations to connect schools, residences and businesses. A more than $2 million award will help launch a new bike share program with 23 stations total in Franklin and Cool Springs.

The Nashville Area MPO used STP dollars for this purpose because of the program’s flexibility. In federal transportation law before the 2015 FAST Act, the Surface Transportation Program (STP) was composed of flexible federal funding for pedestrian/bicycle infrastructure, transit capital projects, bridge/tunnel projects, and projects to preserve and improve federal-aid highways. It is “flexible” because an MPO or state has the discretion to fund projects based on local priorities; funding programs that are not flexible establish specific requirements on the kinds of transportation projects that must be funded. The FAST Act’s Surface Transportation Block Grant (STBG) program, which replaced STP, remains flexible. Three other federal transportation funding programs are also flexible: the Federal Highway Administration’s (FHWA) Congestion Mitigation and Air Quality Improvement Program (CMAQ), FHWA’s National Highway Performance Program (NHPP), and the Federal Transit Administration’s Urban Formula Funds.
Policy 1: Dedicating funding for active transportation

The Puget Sound Regional Council (PSRC) has dedicated funding for bicycle and pedestrian projects in its region and promoted quality active transportation design through education. PSRC’s non-motorized set-aside and regional competition, described below, have contributed to the increase in bicycle and pedestrian projects funded throughout the Puget Sound region. Since 1992, PSRC has funded a steadily increasing amount of transportation projects that include bicycling and pedestrian elements.

PSRC first dedicated 10 percent of all of its STP and CMAQ funding to non-motorized projects in 1992. Additional STP and CMAQ funds are equally divided into two programs: 1) the Regional Competition (which funds projects that support designated regional centers and the corridors that serve them) and the Countywide Process. Funds from the 10 percent non-motorized set-aside are merged into the Countywide Process in order to be part of each county’s review. Through the Countywide Process, each of the four counties in PSRC’s region review and score proposed projects. Each county then submits recommendations of projects to fund to PSRC’s Executive Board, which authorize projects for funding.

To guide effective design of bicycle and pedestrian projects funded in the region, PSRC staff also conduct workshops on bicycle and pedestrian infrastructure design and encourage jurisdictions to refer to guidelines like NACTO’s Urban Street Design Guide. More protected bicycle lanes have been proposed for the 2016 Regional Competition compared with past competitions.

A couple hundred miles south of the Puget Sound region, Metro’s 2019-2021 Regional Flexible Funds Allocation (RFFA) Policy provided policy direction to allocate the estimated $130.38 million available in federal flexible funds for the fiscal years 2019-2021 in the Portland, OR region. Regional flexible funds are a combination of STP funds, CMAQ, and Transportation Alternative Program (TAP) funds. Consistent with past funding cycles, regional leaders and the MPO dedicated approximately 39 percent of the regional flexible funds to active transportation. The policy also directs:

- $25.8 million for active transportation and complete street capital projects
- $2 million for project development for active transportation projects, to support development of a package of bicycle and pedestrian projects that are “ready-to-go” and can leverage discretionary federal resources
- $1.5 million for Safe Routes to School Programs

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Policy 1: Dedicating funding for active transportation

- $250,000 for regional programs that support Metro’s Climate Smart Strategies, including programs that encourage people to walk and bicycle
- $7.54 million for Regional Travel Options grants for local communities to encourage active travel

Furthermore, Metro awarded more RFFA project selection points to bicycling and walking projects that would help complete the region’s proposed active transportation network as designed in Metro’s 2014 Active Transportation Plan.³

³ View the ATP at: www.oregonmetro.gov/regional-active-transportation-plan

Bicycling infrastructure is more noticeable, safe, and accessible in the Portland area compared with many other regions in the U.S. Photo: Rochelle Carpenter, T4America
**Policy 1: Dedicating funding for active transportation**

**INCENTIVIZING SAFE ROUTES TO SCHOOL PROJECTS**

North Central Texas Council of Governments (Dallas-Fort Worth, TX)

The North Central Texas Council of Governments (NCTCOG) — the MPO for the Dallas-Fort Worth (DFW) Metropolitan Area — used funding to encourage school districts and local governments to better coordinate safe routes to school projects.

Too often, schools lack the appropriate infrastructure for children and families to travel to and from school because the school sites and transportation facilities (especially sidewalks and bikeways) were planned separately. This creates unsafe travel conditions for students and discourages walking and bicycling. Improved coordination is needed between local governments and school districts planning safe, active transportation to schools.

To address the challenges of transportation safety and access to schools, NCTCOG took two innovative actions: First, the MPO allocated TAP funds specifically for Safe Routes to School projects, and prioritized the Safe Routes projects that demonstrated coordination between a city and a school agency in the application. Second, the MPO used an incentive to encourage communities to apply for funding for these projects.

As part of the 2014 Transportation Alternatives Program (TAP) call for projects, any application for a SRTS project needed to include documentation expressing mutual support by both the city and the school district in which the project would be located. This helped ensure both entities with a major stake in student travel and safety had coordinated and agreed upon the proposed project.

*Photos: North Central Texas Council of Governments*
Policy 1: Dedicating funding for active transportation

Also, as an incentive, applicants for SRTS projects in the 2014 call for projects were given the option of requesting the use of Transportation Development Credits (TDCs) to meet the federally required 20 percent local funding match. TDCs are federal non-cash credits that states accrue when they make capital investments on tolled roads and bridges. TDCs allow regions and states to use federal obligation authority instead of providing a cash match for transportation projects. NCTCOG chose to set aside credits for SRTS projects to help encourage communities to implement such projects in addition to other larger scale active transportation projects.

TDCs are also being used to incentivize coordinated planning for SRTS. NCTOG’s regional transportation plan, Mobility 2040, outlines a series of optional policies that local governments and school districts may adopt in order to receive TDCs and offset the local funding match required for federal transportation projects, including SRTS and active transportation projects. One such policy is for cities and school districts to meet regularly to develop citywide and campus-specific SRTS plans for existing and future school sites.

In the future, NCTCOG will continue to prioritize SRTS projects that demonstrate coordination between cities and school districts. Furthermore, the agency plans to set aside funds specifically for SRTS and active transportation planning studies in order to encourage communities to thoroughly evaluate existing conditions and develop a plan before requesting funding for infrastructure.\footnote{For more information on SRTS funding by MPOs, see a report by the Safe Routes to School National Partnership, \textit{The Role of MPOs in Advancing Safe Routes to School through the Transportation Alternatives Program} at \url{http://saferoutespartnership.org/sites/default/files/resource_files/srts_brief_mpo_final.pdf}.}
Policy 1: Dedicating funding for active transportation

TARGETING TRANSPORTATION FUNDS TO SUPPORT COMPACT, WALKABLE COMMUNITIES

Metropolitan Transportation Commission (San Francisco Bay Area, CA)

The city of Berkeley used OBAG funds to improve access to the Berkeley BART station for those traveling on foot, bicycle, and transit. The city also made complete streets improvements and upgrades to the configuration of adjacent Shattuck Street. Photo courtesy of the Bay Area Rapid Transit

The Metropolitan Transportation Commission’s (MTC) nationally recognized One Bay Area Grant (OBAG) program encourages the coordination of housing and transportation, channeling the MPO’s investments to areas identified for focused growth. OBAG is an innovative program that leverages federal transportation dollars to address the Bay Area’s significant housing needs, land conservation goals, and more. It has supported numerous critical projects — including many active transportation projects — throughout the Bay Area. Sixty percent of projects funded by OBAG since its creation in 2012 have incorporated bicycle or pedestrian elements due to the program’s requirements.

OBAG supports active transportation by providing a large and continuous funding source for transportation projects, including non-motorized projects and programs. Additionally, in order to even be eligible for OBAG funding, a jurisdiction must adopt a complete streets resolution demonstrating compliance with California’s Complete Streets Act of 2008. Furthermore, all transportation projects funded in that jurisdiction — not just those funded by OBAG — must comply with the Act.
Policy 1: Dedicating funding for active transportation

Requiring local jurisdictions to adopt this resolution has brought more attention to the implementation of complete streets at the project level. To receive OBAG funding, the jurisdiction needs to complete a complete streets checklist, which must be reviewed by either the jurisdiction’s own Bicycle and Pedestrian Advisory Committee (BPAC) or the county’s BPAC; this ensures that interested stakeholders have an opportunity to be involved in the details of the projects early on in their development.

MTC’s second OBAG cycle, adopted in 2016, will allocate $386 million to local transportation projects over a five-year period. The funds are distributed to each of the Bay Area’s nine counties by a formula based on population, recent housing production, and commitments to future housing production, with an added emphasis on the production of affordable units. Each county’s Congestion Management Agency (CMA) then develops its own project selection criteria to choose projects for funding. MTC provides guidance on what the CMAs should consider during their project selection process to best meet the program’s overall goals. And as described, there are certain eligibility requirements (e.g., adopted complete streets resolutions, certified housing element and progress reported annually) to promote complete streets projects, especially those that provide access to housing. A housing element provides an analysis of a community’s housing needs and identifies strategies to meet those housing needs.

One requirement unique to OBAG is the requirement to invest a significant portion of OBAG funds into Priority Development Areas (PDAs). PDAs are areas designated for future growth and are typically accessible by one or more transit services and existing job centers, shopping districts, and other essential destinations. As part of OBAG, counties are required to direct a bulk of their OBAG funds to projects serving PDAs.

Directing OBAG funding to priority projects within each county has prompted jurisdictions to build more complex, transformative, multi-modal transportation projects — such as retrofitting a street to be safe and accessible for all users — instead of spreading funding to a variety of smaller, piecemeal efforts. For example, the city of Berkeley applied OBAG funds to improve access to the Berkeley BART station for those traveling on foot, bicycle and transit. The city paired this effort with complete streets improvements and upgrades to the configuration of adjacent Shattuck Street. In addition, San Francisco combined a road diet and street repaving with pedestrian improvements, a buffered cycle track, a bus boarding island, and streetscape enhancements in its Second Street Complete Streets project.

Several MPOs are using performance measures to analyze and score proposed transportation projects and rank those projects by their ability to meet the region’s goals. The MPOs profiled here use performance measures, indicators, or project selection criteria to prioritize active transportation projects.

With diminished public confidence in politicized decision-making about how we spend taxpayer dollars, it is more important than ever to demonstrate the benefit that multi-billion dollar transportation investments provide. As T4America wrote in our first *Measuring What We Value* report:

> People want to know that transportation funds are being spent in a way that creates value, supports long-term job growth, makes their communities more attractive to business and talent, and will contribute to their economic health and resilience. They are looking for a transportation system that provides not just movement but safe, reliable, and affordable access to necessities like jobs, education, health care, and groceries. Measuring the impact of transportation investments in a way that resonates with the public is critical going forward.⁶

Transitioning to a more performance-based system of transportation investment was one of the key reforms of MAP-21, the 2012 federal transportation authorization. New federal rules take effect in 2017 requiring MPOs to begin assessing spending against a range of fairly modest measures developed at the federal level.

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Policy 2: Performance measures to better assess project benefits

But MPOs have significant latitude to go much further, as those chronicled in this section have done. Because performance measures can help prioritize investment more prudently and transparently — as well as help make the case for additional investments — these new measures rolling out in 2017 should be seen as the floor, rather than the ceiling, of what is possible.

Decision-makers should therefore move beyond what is federally required. MPOs should demonstrate the effectiveness of their current transportation system and the impacts proposed projects would have on mobility and related measures of public health, access to opportunity, quality of life, and other concerns of a metropolitan region.

There is a difference between performance measures, targets, indicators, and project selection criteria. MPOs may establish performance measures and targets in order to achieve certain goals for the performance of their transportation system and conditions related to it, such as public health outcomes, social inequities, environmental impacts, fatalities/injuries, commute times, and more. MPOs may use indicators to evaluate their transportation system’s current performance. MPOs may use project selection criteria in order to analyze, score, and rank proposed transportation projects to fund the projects that will best achieve certain outcomes related to a region’s goals.

The MPOs described below use performance measures, indicators, or project selection criteria to prioritize active transportation projects and have funded more of these kinds of projects than ever before.
Policies to prioritize public health and build prosperous regions

Sacramento Area Council of Governments (California)

The Sacramento Area Council of Governments (SACOG) uses a robust set of 20 performance measures to develop a more transparent, data-driven process to select transportation projects that advance seven key regional policy goals. This approach has resulted in funding for more projects from SACOG’s Regional/Local Program to make it safer and more convenient to walk or bicycle.

Many of these 20 performance measures have an economic dimension. Many have also been used to demonstrate a proposed project’s impact on public health and health disparities. For example, one of SACOG’s seven policy priorities is to increase transit ridership and/or rates of active transportation. To this end, SACOG established a few measures to directly assess a proposed project’s impact on bicycling/walking mode share. One measure is used to evaluate how a proposed project would change bike and walk mode share in Environmental Justice areas, or how it would influence the number of transit, walk, or bike trips per capita.7

As a result of its use of performance measures, among other factors, SACOG funded more active transportation projects and fewer roadway expansion projects in its 2012 long-range transportation plan (LRTP) compared to previous LRTPs. SACOG estimated that prior to using the performance-based framework, only 25-30 percent of funded projects included elements to help facilitate walking or biking. In the latest round of Regional/Local Program funding, this number increased to 45-50 percent of projects.

For more details about the MPO’s process, refer to the Sacramento case study in Measuring What We Value: Prioritizing public health to build prosperous regions, available at http://t4america.org/maps-tools/mpo-case-studies/

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7 Environmental Justice areas are those with disproportionately higher rates of low-income residents, people of color, households spending more than 50 percent of income on housing costs, and single-parent households, among several other key characteristics.
PRIORITIZING PUBLIC HEALTH BENEFITS AND A VARIETY OF TRANSPORTATION MODES FOR VULNERABLE POPULATIONS THROUGH PROJECT EVALUATION

Nashville Area MPO (Tennessee)

Backed by data from two comprehensive studies on health and transportation and growing public demand to make biking and walking safer and more convenient, the Nashville Area Metropolitan Planning Organization designed a scoring and selection process to prioritize the projects that will maximize public health outcomes. This new approach substantially increased the amount of funding in the MPO’s long-term transportation budget dedicated to making it safer and more attractive to walk or ride a bicycle in Middle Tennessee, helping the region improve the health of its residents.

Through the project evaluation process, each proposed transportation project received up to a certain number of points based on its impact on factors like multi-modal improvements, safety, and public health. With up to 80 of the available 100 points relating to public health, safety, or social equity, the new process prioritized active transportation projects with the greatest public health benefits to the community.

The MPO drew results from two recent studies to devise some of the indicators related to public health and vulnerable populations: the Middle Tennessee Transportation and Health Study (MTTHS) of 2012 and the Non-Motorized Demand and Physical Activity Assessment of 2014. The MTTHS is a comprehensive study of disease prevalence, active transportation rates, and other health-related behaviors among Middle Tennessee residents. The Non-Motorized Demand study determined the propensity for walking and bicycling in parcels across the MPO region based on land use.

Based on these studies and through its 100-point project scoring system, the MPO awarded points to proposed transportation projects with bicycle/pedestrian elements if the project would serve a population with high rates of poor health outcomes or to projects with a high propensity for walking and bicycling based on existing land use.

For more details about the MPO’s process, refer to the Nashville case study in Measuring What We Value: Prioritizing public health to build prosperous regions, available at [http://t4america.org/maps-tools/mpo-case-studies/](http://t4america.org/maps-tools/mpo-case-studies/)

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8 The MTTHS and the Non-Motorized Demand study are both described in more detail in this policy paper and in the accompanying case study within Measuring What We Value: Prioritizing public health to build prosperous regions, available at [http://t4america.org/maps-tools/mpo-case-studies/](http://t4america.org/maps-tools/mpo-case-studies/)
**Policy 2: Performance measures to better assess project benefits**

**USING CRITERIA, DATA AND MODELING TOOLS TO WIN FUNDING FOR ACTIVE TRANSPORTATION PROJECTS**

**Greensboro MPO (North Carolina)**

With scarce transportation resources, the Greensboro MPO designed a sophisticated evaluation process to analyze proposed active transportation projects and identify the projects that best meet a funding program’s goals and criteria. This has helped the region fund the best projects with MPO dollars and also be more competitive for funding controlled by the state.

The MPO’s formula scores and ranks bicycle and pedestrian projects competing for TAP funding. Its criteria are used to evaluate projects according to land use connectivity, transportation system connectivity, safety and mobility, and project readiness and viability.

This process ensures that the most competitive active transportation projects are proposed for funding, which the MPO has demonstrated in two ways. First, the methodology has proven effective in identifying the most needed and practical regional projects to receive the MPO-directed TAP funds. Second, the MPO’s use of automated GIS models to simulate the state’s prioritization process for North Carolina Department of Transportation-directed TAP funds has allowed the MPO to put its most competitive projects forward in the state’s competition. As a result, NCDOT awarded the Greensboro MPO the second highest number of projects (behind the Charlotte region) in the state’s TAP and SRTS programs. Impressively, the region came out ahead of other more populated metropolitan regions. For the fiscal year 2015-2025 Transportation Improvement Program (TIP), the MPO submitted 20 projects (the maximum allowed) and five were funded.

For more details about the MPO’s process, refer to the Greensboro case study in *Measuring What We Value: Prioritizing public health to build prosperous regions*, available at [http://t4america.org/maps-tools/mpo-case-studies/](http://t4america.org/maps-tools/mpo-case-studies/)
MEASURING AND SELECTING PROJECTS THAT MEET REGIONAL GOALS

Chattanooga-Hamilton County/North Georgia Transportation Planning Organization (Tennessee)

In order to fairly evaluate projects as varied as interstates and pedestrian connections, the Chattanooga-Hamilton County/North Georgia Transportation Planning Organization (Chattanooga TPO) devised a performance measurement system to analyze, score, and rank projects across the metropolitan area for inclusion in its long-range transportation plan.

The TPO undertook a public process among its board members and community members to develop indicators that would be used to evaluate specific transportation projects, specifically a set of twelve performance measures within seven categories.

To allow transportation projects of different scales to be appropriately evaluated for their relative benefits and contributions to the region’s agreed-upon goals, the performance measures were then weighted across three geographic scales: “Within Community,” “Community to Region,” and “Region to Region,” with varied weights according to the level of significance for each scale.

In more concrete terms, this means that congestion reduction and economic growth measures are more heavily weighted in the “Region to Region” scale, while environmental sustainability (which includes context-sensitive design and non-motorized access measures) is more heavily weighted in the “Within Community” scale. By doing this, bicycle/pedestrian projects at the “Within Community” level, for example, more fairly compare to roadway projects at the “Region to Region” level.
Policy 2: Performance measures to better assess project benefits

This process allows the Chattanooga TPO to evaluate proposed projects for their purpose and performance, not just their mode and project description. Focusing on performance measures helped decision-makers realize that transportation projects of a variety of modes would help the region and their jurisdictions meet agreed-upon goals. In so doing, the process helped overcome previous assumptions that roadway projects were the only solution to help the region advance towards its goals.

An outcome of this work is that more bicycle, pedestrian, and transit projects were funded compared with previous long-range plans. Funding for bicycle and pedestrian improvements at least doubled in the TPO’s last regional transportation plan (the Chattanooga-Hamilton County/North Georgia 2040 Regional Transportation Plan adopted in February 2014) compared to the previous 2035 update adopted in February 2010. Funding for public transportation projects increased by 18 percent and funding for system preservation projects doubled.9

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9 For more details, see “Chattanooga 2040 RTP Performance-Framework: Balancing Regional and Community Needs” by Melissa Taylor with the Chattanooga TPO and Tracy Selin with Cambridge Systematics, Inc. and published by the Transportation Research Board at [www.chcrpa.org/2040RTP/Final_TRB_paper_061914_certifed.pdf](http://www.chcrpa.org/2040RTP/Final_TRB_paper_061914_certifed.pdf)
**Policies to prioritize public health and build prosperous regions**

**Policy 2: Performance measures to better assess project benefits**

**USING PROJECT SELECTION CRITERIA TO PRIORITIZE WALKING AND BICYCLING PROJECTS FOR UNDERSERVED COMMUNITIES**

*Metropolitan Council (Minneapolis and St. Paul, MN)*

In 2014, the Twin Cities region’s Metropolitan Council carried out an evaluation and redesign of the process through which it solicits and selects regional projects for funding through its long-range transportation plan. Its goal was both to refresh the process after the passage of MAP-21 and prepare for a future that would be more austere, more multimodal, and more equitable.

The Met Council established equitable development as a goal for regional development in their long-range Thrive MSP 2040 plan, spurred by a grant from the U.S. Department of Housing and Urban Development (HUD) that focused on barriers to affordable housing and stable communities. From there, equity has emerged as a priority programmed into all of the MPO’s work, including its regional transportation plan selection process.

Under the new process, projects are first scored to compete with projects of the same transportation mode, rather than competing for funding by federal funding category. Transit projects are therefore primarily scored to compete with other transit projects rather than highway construction or roadway expansions, which are also eligible for funding through the Surface Transportation Program, for example. Scoring projects this way helps elevate the best projects for funding through any eligible program.

The roadway, bicycle/pedestrian, and transit/TDM mode categories each included three to four evaluation subcategories. For example, bicycle and pedestrian facilities included safe routes to schools infrastructure, multi-use trails and bicycle facilities, and pedestrian facilities (sidewalks, streetscaping, and ADA).

Projects are evaluated on a sophisticated, data-driven basis by factors including role in the regional transportation system and economy, equity, and housing performance, and multimodal facilities and connections. They then pass through two Met Council committees for vetting before the Transportation Advisory Board ultimately votes to approve them or not. Any later changes to project scope would need to pass through this same process.

The Met Council’s project selection points helps promote bicycling and walking projects for underserved people in two ways. First, the incorporation of equity criteria boosts points for projects serving high-need populations who would be more likely to rely on bicycling and walking. Second, the Met Council awards more points to jurisdictions with a greater affordable housing “score,” making places with more affordable housing more competitive for transportation funding to improve connections to and in those places.


11 More on how the Met Council produces this affordable housing score can be found here: [https://metrocouncil.org/Housing/Publications-And-Resources/HOUSING-POLICY-PLANS-REPORTS/Understanding-changes-to-Housing-Performance-Score.aspx](https://metrocouncil.org/Housing/Publications-And-Resources/HOUSING-POLICY-PLANS-REPORTS/Understanding-changes-to-Housing-Performance-Score.aspx)
Policy 2: Performance measures to better assess project benefits

The Met Council has also prioritized bicycling and walking projects in their project selection system by increasing the number of points that a project in the roadways category would receive for having a multimodal component. As a result, all road projects programmed for funding in 2018 and 2019 will have some on-road or trail-based bicycle or pedestrian element.

Another element of the MPO’s project selection process that promotes bicycling is the regional bicycle transportation network (RBTN). The RBTN is the bicycle equivalent to a functional classification roadway map, with priority bicycle transportation corridors laid out across the region. A multi-use trail on a priority corridor receives a significant amount of points in the scoring process for the LRTP.

The Metropolitan Council keeps every step of its sophisticated evaluation process transparent to the general public and stakeholders so that people know definitively why their project was or was not selected. Technical experts for each mode have created clear scoring guidelines and methods that are available to both applicants and scorers.

[12] https://metrocouncil.org/Transportation/Planning-2/Key-Transportation-Planning-Documents/Bike-Pedestrian-Plans/RBTN.aspx
PRIORITIZING QUALITY BICYCLE/PEDESTRIAN DESIGN TO MAXIMIZE SAFETY, COMFORT, AND EFFECTIVENESS

Metro (Portland, OR)

The design of active transportation projects matter. Better design means that more people will feel safe and inclined to walk or bicycle from place to place.

Knowing this, Metro included the design of active transportation projects as a high priority factor in the allocation of the 2019-2021 Active Transportation and Complete Streets regional flexible funds. Metro awarded project selection points to proposed projects that would provide physical separation from traffic, wider bicycle and pedestrian facilities, and other premium design features. Metro asked applicants to identify “design elements of the proposed project that would lead to increased use of active transportation modes by providing a good user experience, increasing user comfort, and eliminating/mitigating barriers to active travel.” The application packet included a list of design elements that applicants could refer to. Metro therefore encouraged applicants to seek funding for projects that would be suitable for all ages and abilities and provide a high level of separation from traffic, a high level of comfort, and the feeling of safety. The design criteria are based on regional design guidelines developed in Metro’s 2014 Regional Active Transportation Plan.

14 Refer to this document from the application packet for a list of the Active Transportation Design Guidelines: http://www.oregonmetro.gov/sites/default/files/RFFA%20Nomination%20packet_2019_FINAL_corrected.pdf
Policies to prioritize public health and build prosperous regions

ADDITIONAL RESOURCES

- T4America issued a report in 2016 that recommends specific performance measures to help MPOs meet goals to improve public health outcomes, promote equality among diverse residents, and protect the environment. T4America recommends using identified datasets to monitor progress towards goals over time, evaluate proposed projects to understand impacts and prioritize projects for funding, and compare future scenarios of transportation networks and/or land use at the regional level (known as scenario planning). *Planning for a Healthier Future: Incorporating Health, Equity and Environmental Performance Measures in Regional Transportation Plans* is available to download at [http://t4america.org/2016/06/22/introducing-planning-for-a-healthier-future/](http://t4america.org/2016/06/22/introducing-planning-for-a-healthier-future/).

- T4America issued a report in 2015 that describes the work of innovative DOTs and MPOs experiencing early successes in measuring the performance of their transportation system and making investments to get the best bang for the buck. The report also lays out recommended goals and measures to make the transition to a performance measurement framework. *Measuring What We Value: Setting Priorities and Evaluating Success in Transportation* is available to download at [http://t4america.org/maps-tools/performance-measures-report/](http://t4america.org/maps-tools/performance-measures-report/).

- The *Guide to Sustainable Transportation Performance Measures* from the U.S. Environmental Protection Agency describes 12 environmental, economic, and socially equitable performance measures — such as transit accessibility and bicycle/pedestrian level of service — that can be used by transportation agencies. It is available to read here: [www.epa.gov/smartgrowth/guide-sustainable-transportation-performance-measures](http://www.epa.gov/smartgrowth/guide-sustainable-transportation-performance-measures).

- For guidance on developing performance measures for bicycling and walking, the *Guidebook for Developing Pedestrian and Bicycle Performance Measures* from the Federal Highway Administration covers how walking and bicycling projects, activities, and impacts can be measured. The guidebook includes information on how to track measures, what data are required, and what places are employing such measures. It is available here: [www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/performance_measures_guidebook](http://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/performance_measures_guidebook).
3. Planning and policies that support regional goals

MPOs are charged with shaping transportation in their region for decades into the future — even a century or more. They develop plans that project trends in population growth, development, environmental impacts, public health outcomes, and more; they crucially fund transportation projects that will best meet a region’s demands and address expected changes over a long period of time. They exist to coordinate transportation investments at a regional level, while ensuring that the public — especially those traditionally underserved by the transportation system — have numerous opportunities to participate in the decision-making process.

The true power of MPOs lies in their ability to convene decision-makers and stakeholders to address transportation, growth, safety, and economic development issues. Most MPOs see what is required at the federal level as a floor, not a ceiling. They use a full range of tools at their disposal to engage decision-makers and the public in planning and goal-setting, gathering data, performing technical analysis, and developing forward-looking policies and programs to shape the region while addressing health, environmental, economic, and social goals.

In addition to meeting a number of federal requirements to develop long-range and short-term transportation plans, MPOs and their member jurisdictions creatively examine transportation challenges and identify solutions through innovative planning programs and policy development. MPOs may provide resources and support to local governments and other partners to study their region’s defining issues. These studies may focus on areas as large as an entire metro region or as small as the neighborhood surrounding a school. MPOs also adopt policies to direct planned investments to adapt to and address important trends. For example, to support local
Policy 3: Planning and policies that support regional goals

Businesses, reduce traffic fatalities, or increase walking and bicycling to improve public health outcomes, MPOs may adopt a complete streets policy to direct jurisdictions to provide safe, convenient access for all road users (e.g., those traveling on foot, bicycle, transit, wheelchair, or stroller).

The examples of MPOs in this section describe planning processes that address public health outcomes and social inequities with investments in active transportation that will have impacts for decades to come. This section also includes examples of MPOs that have adopted policies that will promote bicycling and walking projects and allow people to integrate more physical activity into their daily routine.

*Previous page photo: ARC’s Livable Communities Initiative funded many improvements in Decatur, GA, including a plaza, entrances to a MARTA station, and sidewalks and streetscaping downtown. Photo: The City of Decatur.*
Policies to prioritize public health and build prosperous regions

Policy 3: Planning and policies that support regional goals

PROMOTING ACTIVE TRANSPORTATION THROUGH LIVABLE CENTERS GRANTS

Atlanta Regional Commission (Georgia)

The Atlanta Regional Commission (ARC) launched a program in 1999 that incentivized development patterns and transportation projects that would help the region improve air quality and reduce vehicle miles traveled (VMT). The program was also designed to advance a number of other regional goals, like focusing growth into well-connected, built-up areas, providing more transportation options, and laying down the smart public groundwork to encourage more private investment.

In the 1990s, air pollution levels in the Atlanta region exceeded legal limits set by the federal government, resulting in nonconformity to federal Clean Air Act requirements for more than two years and limiting Atlanta’s ability to use federal transportation funds.

Vehicle emissions were the primary culprit for growing air pollutants, yet regional transportation funding was programmed for a concerning amount of roadway expansion and other projects that were known to increase air pollution. While the priorities of the state and the many localities in the sprawling region were not going to change overnight, a new approach to transportation planning was needed to steer growth to places where trips could be shortened or eliminated and to reduce single occupancy vehicle trips and overall vehicle miles traveled. In addition to the areas around stations on the underutilized Metropolitan Atlanta Rapid Transit Authority (MARTA) rail system, numerous towns and cities in the region were clamoring for support to reinvest in their downtown cores and other areas where walkable, bikeable, and transit-connected growth was possible.

ARC launched the Livable Centers Initiative (LCI) in 1999 to incentivize development patterns and transportation projects that would help the region improve air quality and reduce VMT, while advancing a number of other regional goals: (1) Encourage a diversity of housing, employment, commercial, shopping, and recreational land uses at transit stations and local/regional centers accessible by people of all ages, abilities, and income levels; (2) Enhance access to a range of travel modes, including transit, walking, and biking, and increase street connectivity to provide optimal access for pedestrians and bicycles while dispersing traffic; and (3) Foster public-private partnerships and sustained community support through an outreach process that promotes the involvement of all stakeholders, including those historically underserved or underrepresented.

LCI helped ARC and local jurisdictions put an emphasis on using federal dollars to develop strong city/town centers and the region’s major employment areas like Buckhead, Perimeter, and Midtown. A very popular program, 114 transportation projects have been funded by LCI in 67 jurisdictions in the Atlanta region since 1999.

LCI was about far more than funding well-located, smart projects, however. Prior to LCI, there was little or no funding available to conduct local planning and update zoning codes and, in many jurisdictions, outdated land use regulations or zoning codes prevented mixed-use developments from being built. LCI provided, and continues to provide, a critical way to help communities update zoning codes, land use regulations and design standards. Additionally, the program has funded master plans for town centers and transit-oriented
Policy 3: Planning and policies that support regional goals

development to strengthen the street grid, connections to transit, and more. Today, 67 percent of LCI grantees have adopted zoning regulations to allow mixed-use development that were recommended in their studies.

Notably, in order to receive LCI transportation dollars, local jurisdictions must demonstrate a commitment to follow the recommendations in their LCI plan, such as by adopting new zoning codes or regulations.

ARC credits LCI as one impetus to the increase in walkable communities in the region. A report by Smart Growth America’s LOCUS program found real estate development in regionally significant walkable urban places, nicknamed “WalkUPs,” has significantly increased since the early 1990s in the region. From 1992-2000, about 13 percent of real estate investment was made in areas defined as current or emerging walkable places. That number almost doubled between 2001 and 2008, when about 22 percent of development occurred in WalkUPs. Since 2009, regional development in WalkUPs doubled again to 50 percent. Real estate developers in the area recognize the pent-up market demand for more housing and offices in places where it is safe and easy to walk and bicycle. The active transportation projects supported by LCI grants have contributed to the Atlanta region’s economic development as the benefits of walkable places attract real estate developers.


Left, ARC’s Livable Communities Initiative funded many improvements in Decatur, GA, including a plaza, entrances to a MARTA station, and sidewalks and streetscaping downtown. LCI also funded mixed-use developments, affordable housing, and various planning studies in the city. Photo: The City of Decatur. Right, ARC’s LCI program funded sidewalks and streetscaping improvements in downtown Norcross, GA. Photo: The City of Norcross.
Policy 3: Planning and policies that support regional goals

LCI has been the primary source of federal funding for biking and walking infrastructure in the region since the program began. Every LCI transportation project has included pedestrian facilities and most have included bicycling infrastructure. Since 2010, 40 LCI projects have been programmed in the short-term transportation plan; 29 of these projects included bicycle facilities. About a dozen of these are under construction or completed.

The impact of LCI does not stop at the projects it directly funds. A number of notable smart growth projects began springing up around the region — funded by a variety of sources — because of the innovation sparked by the funding from the program. The LCI framework provided a planning and outreach process that brought together stakeholders and community members to develop a common vision and action plan that would be implemented by many partners, not just ARC. The process also helped to create and sustain momentum by offering continued assistance through follow-up “supplemental” grants, LCI meetings, and technical assistance.

Local jurisdictions have also responded by creating community improvement districts (CIDs), self-taxing districts that generate revenue for projects and programs. In addition to providing a framework and energy for locally-scaled planning, CIDs are using those funds to provide the funding match for capital projects required by LCI grants.
**Policy 3: Planning and policies that support regional goals**

**INCREASING ACCESS TO BIKE-SHARE FOR PEOPLE IN NEED**

*Oregon Cascades West Council of Governments (Corvallis, OR)*

Recognizing that higher active transportation levels lead to reduced rates of chronic diseases, the coordinated care organization (CCO) for the Corvallis, OR region provided seed funding to pilot a public bikeshare system. The CCO supports the bikeshare system because it helps Medicaid recipients get to their appointments and other essential destinations while being physically active. Anyone with a credit card may use the bikeshare; however, the CCO subsidizes the cost to borrow a bike for two hours for Medicaid recipients.

In Oregon, CCOs are responsible for providing non-emergency medical transportation for Medicaid recipients. Oregon Cascades West Council of Governments (OCWCOG) provides this service as a contractor for the InterCommunity Health Network CCO in its three-county region.

Several features make the new system accessible to people with low income, the elderly, and people who may have balance-related challenges. First, the system has six stations with 33 bicycles and 2 tricycles. The tricycles are available for those who cannot ride a bicycle or who require a larger basket to get groceries or bring clothes to a laundromat.

Second, the COG placed stations in proximity to Medicaid clients’ homes as well as locations they frequent for medical appointments. Stations are also near transit stops for easy connections. Third, bicycles and tricycles may be unlocked at the station by either a smart phone app or any cell phone via text message. 90 percent of Medicaid recipients have a cell phone.

Last, COG and CCO staff sought a system that would allow users to lock their bicycles at any place in the region without incurring extraordinary costs. The vendor (Zagster) provides u-locks to secure a bicycle. Users can check out a bicycle for two hours without being charged. In two hours, most users are able to bicycle anywhere in the city, lock their bicycle for 45-60 minutes for a medical appointment, and have enough time to ride back to a station. Medicaid recipients have a code that allows them to rent a bike for free, which enables them to use bike sharing to get to a medical appointment free of charge.

Bike-sharing has been supported by decision-makers across the region. Ideas for the system were discussed by transportation and health professionals long before funding became available. Moreover, other health care companies and professionals validated the bike share program. Doctors with the Boston Medical Group began writing prescriptions for their patients to use bike share. Another CCO in Jackson County, Oregon worked with United Way to launch a bike-sharing system. This informal dialogue and examples of use by peers led to the introduction of a bike share program to decision-makers, making it more readily accepted once funding became available.
Policy 3: Planning and policies that support regional goals

STUDYING AND PLANNING FOR SAFE ROUTES TO SCHOOL

Maricopa Association of Governments (Phoenix, Arizona)

It is important to ensure that funding also provides safer connections for students to walk or bicycle to school. The Maricopa Association of Governments (MAG) in the Phoenix region responded to the preferences of their members by earmarking nearly a third of one funding stream for projects that improve walking and biking connections to schools.

MAG found that approximately 75 percent of survey respondents indicated a preference for spending TAP money on SRTS projects and suggested that MAG designate nearly 30 percent of TAP funds to SRTS projects. MAG responded by making this one of its priorities for TAP funding beginning with the FY15 competitive grant process. In line with the survey respondents, an estimated 28 percent of MAG’s TAP funds for FY2015-2018 are now programmed for SRTS infrastructure and non-infrastructure projects.

In addition to funding infrastructure projects and education, promotion, or enforcement campaigns, MAG encourages members to use these funds to conduct safety assessments around a specific school (or a group of schools) to identify unique issues that students face walking or bicycling to that school. Called a framework study, a MAG member may apply for up to $100,000 to do this safety assessment.

An engineering consultant may conduct the framework study by counting how many students are walking and bicycling to school; suggesting particular solutions to help neighborhood areas where students have not been walking or bicycling to school; and recommending improvements at the school to the school district or off-site to the local agency based on observations.

MAG’s initiative — encouraging local agencies to do a safety assessment before requesting funding for a SRTS project — is unique for several reasons. First, it allows local agencies to understand the unique safety issues at a particular school or group of schools and propose a customized SRTS project based on that school’s set of challenges before proposing a solution to facilitate walking or bicycling to school. Second, it encourages key partners to work together on solutions to challenges walking or bicycling to school; indeed, early results of this initiative show improved collaboration between partners like local agencies, schools, parents, and local businesses. And third, it provides rationale for a future proposed SRTS project.
Policy 3: Planning and policies that support regional goals

DEVELOPING A REGIONAL SAFE ROUTES TO SCHOOL INVENTORY AND STRATEGY

Metro (Portland, OR)

Metro provided a Regional Travel Options grant to the Pacific Northwest Regional Division of the Safe Routes to School National Partnership to collect and analyze data to support development of a Regional Safe Routes to School Strategy. The grant funded a comprehensive survey of every school district in the region to gather information on the number of children walking and bicycling to school; demographics of the school population; barriers to walking and bicycling; concern about student transportation; identified infrastructure needs; number of SRTS action plans completed; types of non-infrastructure programs available; an atlas of every public K-12 school showing access to transit and gaps in the walking and bicycling networks; and a prioritization of schools for different types of investments (capital and programs) based on a set of criteria for equity, potential impact, and safety. The criteria were developed by a regional work group.

The results from the inventory will be published in October 2017 and will be used by Metro and local agencies to help prioritize investments in the Regional Transportation Plan, as well as to help school districts be more competitive seeking funding.
Policy 3: Planning and policies that support regional goals

 PROVIDE PLANNING GRANTS AND IMPLEMENTATION FUNDING TO FOSTER COMMUNITY-BASED SOLUTIONS

**Metropolitan Transportation Commission (San Francisco Bay Area, CA)**

In 2005, the **Metropolitan Transportation Commission** established the Lifeline Transportation Program to better address mobility needs of low-income residents in the San Francisco Bay area. The 2001 Lifeline Network Report identified coverage gaps — both gaps in geographic coverage and infrequent service during evening and weekends — in the region’s transit system for low income persons to access jobs/services. The report recognized that solutions to address gaps must be developed and planned at the local level, and recommended a Community Based Transportation Planning (CBTP) program to identify locally prioritized solutions to address these gaps.

The CBTP program provides funding for low-income neighborhoods (called “Communities of Concern”) to evaluate and directly identify their transportation needs and priorities, develop plans to address them, and prepare proposals to compete for funding from MTC. The plans are developed in collaboration with low-income neighborhoods, communities of color, transit operators, county congestion management agencies and MTC, and prepared by consultants on behalf of the under-resourced neighborhoods.

The Lifeline Transportation Funding Program provides funding for transportation projects that a) improve mobility and accessibility for low-income communities and b) are derived from the CBTP or other local planning efforts in low-income neighborhoods. Eligible projects for Lifeline include walking and bicycling projects, fixed-route bus service, transit stop improvements, shuttles, and more.

Since the programs began in 2006, Lifeline has distributed $190 million to 224 projects over three funding cycles — supporting hundreds of projects that remedy specific gaps in mobility and access for people with low incomes.\(^\text{16}\)

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\(^{16}\) For more information, see Creating Healthy Regional Transportation Plans by TransForm and TransForm’s Best Practices Library.
DEVELOPING COMMUNITY-BASED WALKING AND BICYCLING PLANS

Akron Metropolitan Area Transportation Study (Ohio)

The Akron Metropolitan Area Transportation Study (AMATS) in Ohio created the Connecting Communities Planning Grant program to provide funding for local communities to hire consultants in order to develop plans that could create connections for those traveling by foot, bicycle, and transit. The consultants work closely with the community and AMATS to establish goals and deliverables, and meet often to ensure communication of priorities.

AMATS requires that recipients of Connecting Communities funding conduct active public meetings, such as walking audits or bike-n-brainstorms. Walking audits tour constituents on foot through a specific area to assess the functionality and comfort of the transportation network and built environment for pedestrians and to identify potential improvements. Through a bike-n-brainstorm, people bicycle on a route to determine its functionality and comfort and conjure ideas to improve the route for bicycling. These public meetings are planned together by AMATS, the community, and a hired consultant — all of whom participate in the event. The most effective active public meetings include the people who walk and bicycle in the area and their elected representatives, working in tandem to identify obstacles to biking and walking.

AMATS formed innovative partnerships with nonprofits to complete the community-based transportation plans. For example, people participated in a 10-mile bike-n-brainstorm on the Ohio & Erie Canal Towpath Trail and through the downtown of the city of Barberton. The city of Barberton, the Barberton Community Foundation, Neighborhood Development Services, Inc., R-D Bike Shop, ManorCare and SourceCare helped organize this bike-n-brainstorm in 2013, pictured at right. The Barberton Community Foundation continued to advocate for the implementation of ideas generated from the bike-n-ride — and even awarded $224,000 to the city of Barberton. This grant was used to construct a bicycle and pedestrian connector spanning the Tuscarawas River from the Ohio & Erie Canal Towpath Trail to downtown Barberton.

The Connecting Communities program produced project ideas that were thoroughly researched, analyzed, and vetted by community members. Such attention and community support led to the success in funding, designing, and constructing transportation projects. Indeed, MPO staff have noticed that projects recommended through the Connecting Communities program have been significantly less likely to be altered or diminished compared with projects that communities planned in other ways.
Policy 3: Planning and policies that support regional goals

CONDUCTING WALKING AUDITS FOR A BICYCLE/PEDESTRIAN MASTER PLAN

Indian Nations Council of Governments (Tulsa, OK)

The Indian Nation Council of Governments (INCOG) found a novel way to bring members of the community together with planners and decision-makers to better understand the most critical places to make safer and more convenient for walking and bicycling.

INCOG led walking audits called Walkshops in 11 cities to facilitate conversations between transportation professionals and members of the public on the challenges of navigating specific areas on foot, and their potential solutions. Through these Walkshops, members of the community, INCOG staff, and consultants were able to “walk a mile in someone else’s shoes,” experiencing firsthand just how difficult and dangerous it can be to walk in places that lack critical infrastructure. With this information, they made tailored recommendations for pedestrian and bicycle improvements to be incorporated into the Regional Bicycle/Pedestrian Master Plan, called the GO Plan.

With expertise from a consultant, INCOG also delivered a one-day training on bicycle and pedestrian planning and design for transportation professionals at the local and regional level. The trainers drew from design guidelines to make attendees more familiar with technical aspects of non-motorized design, including the Bike Guide by the American Association of State Highway and Transportation Officials (AASHTO), the AASHTO Pedestrian Guide, the NACTO Urban Bikeways Guide, and the NACTO Urban Street Design Guide.

To date, INCOG has funded six bicycle and pedestrian projects from the GO Plan through the MPO’s TAP funds. Projects derived from the Walkshops will also be considered for INCOG’s next long-range transportation plan, which is currently being developed.
Policy 3: Planning and policies that support regional goals

INSTITUTIONALIZING COMPLETE STREETS THROUGH ACTIVE TRANSPORTATION PLANNING

Missoula MPO (Montana)

An impressive number of residents in the city of Missoula commute by walking or bicycling — estimated at 8.3 percent and 6.4 percent, respectively. This puts Missoula near the top of the list of U.S. cities with people who walk or bicycle to work. The share of commuters in the MPO area who walk or bicycle is impressively high since the MPO solely encompasses the city of Missoula in total and part of Missoula County. How did Missoula reach mode shares that exceed many other cities? In part, the Missoula MPO’s proactive approach to active transportation planning has helped institutionalize bicycling and walking infrastructure in city operations, and has made the case for more bicycle and pedestrian funding region-wide.

The Missoula MPO’s active transportation plan (ATP) reflects the community’s vision of a transportation network that facilitates walking and bicycling. It includes recommendations for active transportation policies and project designs, as well as a list of bicycle and pedestrian projects to propose for federal funding. Such a concerted and focused planning effort was made possible by the bicycle and pedestrian elements developed during Envision Missoula, an award-winning scenario planning process accomplished by MPO-led community engagement between 2007 and 2008.

Envision Missoula led to a “focus inward” planning scenario and has since influenced regional growth policy and long-range transportation plan updates. As a result, the MPO has supported development in the urban core rather than the urban fringe and focused on multi-modal transportation projects, particularly through the development and implementation of the Active Transportation Plan (ATP).

The ATP’s bike and pedestrian focus has resulted in the funding and building of more active transportation projects in four ways.

First, because the ATP clearly shows the gaps in walking and bicycling infrastructure and how long it would take to fill them with current funding, it has been instrumental in making the case for more dedicated funding for active transportation with local decision-makers. An example is Missoula’s sidewalk subsidy program. The city has authorized $600,000 annually to help complete the sidewalk system faster. The sidewalk program is funded by citywide road district fees and used to subsidize the assessments to adjacent property owners during city-initiated sidewalk construction and maintenance projects. The program has removed political and financial costs associated with construction, allowing the city to move faster and complete more projects each year.

Second, the plan has been integrated into land-use planning. When land use planners review subdivision and rezoning plans, the adopted ATP gives them the legal framework to require developers to build bicycle and pedestrian improvements as part of their projects. The policies and recommendations also help guide project engineers designing city- or county-constructed projects; they even help influence maintenance programs like snow removal.

Third, to maximize the effectiveness of the ATP, all of its projects were integrated into the MPO’s long-range transportation plan and adopted as an amendment into the city/county growth policy, providing an ongoing list of projects that can be funded. As the state-of-the-practice develops, these projects are refined and prioritized according to their respective potential to shift trips to walking and bicycling and achieve equity for vulnerable populations.

And fourth, an implementation committee is a key element of the ATP’s success, with members of the committee consistently identifying, seeking funding for, and building active transportation projects. The ATP contains implementation goals for policies, programs, and projects, and identifies which agencies are responsible for overseeing and implementing those goals. Those agencies — representing public works, county planning, parks and recreation, and transit — meet regularly to check in on their progress. In addition to city and county agencies, local advocacy organizations such as the Bicycle & Pedestrian Advisory Board, Bike Walk Alliance of Missoula, and the Missoula Institute for Sustainable Transportation also participate in the implementation committee. This strong partnership between agency staff and advocacy groups helps focus efforts on the most critical plan objectives.

The goals of implementing the ATP ranged from those that would be attainable within a year to loftier, longer-term aspirations. The implementation committee continues to meet quarterly in order to resolve current challenges, as well as to create compelling applications for competitive grant programs like TIGER or the state’s Transportation Alternatives Program.

The MPO prepares annual reports covering the progress made implementing the ATP. These reports are instrumental in demonstrating to elected officials, such as Missoula City Council members, how demand for bicycle and pedestrian access can be met through concerted funding efforts and strategic policy changes.

For more details, read the full plan, available at www.ci.missoula.mt.us/1608/Plans-and-Documents.
IDENTIFYING AND BUILDING HIGH PRIORITY BICYCLE PROJECTS

San Diego Association of Governments (California)

Bicycle and pedestrian projects funded by the San Diego Association of Governments have significantly increased over the past several long-range transportation plan (LRTP) cycles, partially due to SANDAG’s creation of the San Diego Regional Bike Plan, which was completed in April 2010.

Funding for bicycle and pedestrian projects increased from $250 million in the 2003 LRTP to nearly $5 billion in the 2015 LRTP. The 2003 plan funded four regional bikeway projects and grants to local jurisdictions for bicycle and pedestrian planning and capital projects. The 2015 plan funds implementation of a comprehensive regional bikeway network, as well as safe routes to school, safe routes to transit, dozens of local projects, supportive infrastructure and other programs.

The process to develop the plan helped decision-makers and transportation agencies understand the need for bicycling infrastructure in the region and discover viable solutions to create safer and more accessible ways for residents to bike for transportation. The plan also included a social equity component: SANDAG staff identified places with a high concentration of low-income populations to ensure that the bicycle plan included connections for these areas.

SANDAG established criteria to prioritize the most important bicycling projects for funding in the region and then used these criteria to create a tiered list of priority bicycle and pedestrian projects.

In 2013, the SANDAG Board of Directors approved the Regional Bike Plan Early Action Program (EAP). The EAP commits to building the highest priority bicycle projects identified in the bike plan within ten years. These bicycle projects also include improvements to the pedestrian environment. Funding for the EAP originated in a 2 percent non-motorized set-aside of the TransNet sales tax, which funds transportation projects in the San Diego region.

With the help of a strong advocacy network, SANDAG has continued to enact new policies that have created safer, more accessible places to walk and bicycle. For example, the SANDAG Board of Directors approved a Regional Complete Streets Policy in December 2014 to require that all new planned transportation projects incorporate bicycle and pedestrian elements into project planning and cost estimates.

The Bayshore Bikeway is a regional corridor that will eventually extend 24 miles around San Diego Bay, providing a vital and scenic connection to Bayfront employers, as well as tourist and recreational destinations. Approximately 15 miles of bike paths have been built to date. Pictured is a phase completed in April 2015 located across from Naval Base San Diego just south of downtown. Photo: SANDAG
Policy 3: Planning and policies that support regional goals

ENGAGING ARTISTS TO IMPROVE COMMUNITY ENGAGEMENT AND BUILD BETTER PROJECTS

The Nashville Area MPO (Tennessee)
Atlanta Regional Commission (Georgia)

Transportation planners strive to provide transportation options that get people where they need to go in the safest, most reliable, and most accessible way possible. Public input, of course, is required to accomplish this well. However, public involvement efforts that rely solely on limited community meetings may result in projects without strong support from local residents and business owners. Diversifying how transportation planners gather information from the public is paramount to planning and building projects. Successful transportation planning requires not only accurately addressing people’s concerns, but also generating enough buy-in and enthusiasm to carry a project through to construction.

Creative placemaking is emerging as a strategy to deeply involve the public in transportation planning. A creative placemaking program could help an MPO improve civic engagement, design better transportation projects, and foster new partnerships. In the transportation context, creative placemaking is an approach that deeply engages the arts, culture and creativity — especially from underserved communities — in planning and designing transportation projects such that they are rooted in the community's desires and better reflect and celebrate local culture, heritage and values.

Artists have a host of skill sets that would be useful to transportation planners in a quest to make public meetings more engaging and enthusiastic. Imagine an artist who could use engaging, thought provoking media to get people to think about and articulate their ideas to solve local transportation challenges. Or an improvisational actor who could negotiate tensions surrounding difficult decisions that may exist in a community. Artists with these skills could help transportation planners generate authentic, enthusiastic responses from residents and business owners while planning important transportation projects.

Creative Placemaking

Read more about communities and regions across the country that are drawing the creative energy and skillsets of artists to engage community members in transportation planning and build successful, community-led projects. Transportation for America produced a guidebook for transportation planners on local governments on creative placemaking. The Scenic Route features examples of organizations that planned, designed, constructed, and implemented better transportation projects by working with artists to design more effective public meetings, mitigate the negative impacts of transportation project construction, map cultural assets that should remain accessible, and much more. http://creativeplacemaking.t4america.org

Engaging the public through the arts and culture helps produce better projects, builds better places that are loved and cared for by the entire community and can help advance your critical transportation projects. This new resource was made possible through the generous support of the Kresge Foundation.
Policy 3: Planning and policies that support regional goals

The Nashville Area MPO adopted creative placemaking principles in its 2040 long-range transportation plan, known as Middle Tennessee Connected. The MPO is supporting the work of a social services and advocacy organization, Conexión Américas, to inspire and document the ideas of residents and area business owners to solve transportation challenges along Nashville’s Nolensville Pike through hands-on media and artistic processes. Their creative placemaking methods and transportation ideas are described in the report, Envision Nolensville Pike: Community, Creativity, and Imagination in Placemaking. MPO staff helped organize community meetings, convened an advisory committee made up of local transportation agencies, and focused discussions on transportation solutions.

The MPO will continue working with artists and arts organizations to engage community members in transportation planning, transportation project design, and construction impacts mitigation across the region.

To understand what potential existed to involve artists and cultural organizations in the Atlanta region, the Atlanta Regional Commission (ARC) partnered with the metropolitan Atlanta Arts and Culture Coalition (MACC) in the early 2000s. ARC and MACC conducted robust research on creative industry data and co-hosted public forums on the value of arts and culture in economic development, regionalism, education and quality of life.

While Atlanta boasts one of the highest ratios of arts-related businesses per capita in the nation, its arts funding community is less robust. In 2012, the future of MACC was uncertain due to lean budgets combined with a sea change in local arts leadership, threatening to leave the region without a touchstone arts leadership group. Supported by resounding community feedback, ARC offered to take on arts and culture in its regional planning efforts, voting in 2012 to assume the role “to promote the Atlanta region as a premier center for the arts and culture.”

Now, ARC hosts cultural organizations and planners side-by-side. Incorporating the two has been an ongoing process, but ARC ultimately settled on convening an interdisciplinary team from every division (transportation, research, land use, aging, etc.) to identify opportunities to integrate arts into functional planning, guided by an advisory committee of regional stakeholders. While the team always has more ideas than funding, they have managed to launch several successful arts forums and administer a competitive grant program to help communities install public art. They are currently developing a cultural inventory toolkit for local communities.

In transportation, the group has helped community improvement districts reimagine several MARTA transit stations through arts and “tactical urbanism,” which are quick, flexible and cheap methods to make a place more enjoyable or accessible. Their work also led to a shuttle service for seniors to and from the symphony. ARC currently uses data from the New England Foundation for the Arts to benchmark the role the creative economy plays in the region overall. The commission is always on the hunt for new types of arts and cultural data to incorporate into its efforts.

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19 www.atlantaregional.com/local-government/arts-culture
Policy 3: Planning and policies that support regional goals

ADOPTING A COMPLETE STREETS POLICY; HELPING LOCAL JURISDICTIONS ADOPT AND IMPLEMENT ACTIVE TRANSPORTATION POLICIES AND PROJECTS

Broward County MPO (Florida)
The Mid-Ohio Regional Planning Commission (Columbus, OH)
The Mid-America Regional Council (Kansas City, MO and Kansas City, KS)

“Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Complete streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from train stations.”21

Prompted by a need for safer streets and a lack of safe bicycling/walking facilities, the Broward Metropolitan Planning Organization spearheaded an effort to build regional consensus and political support for planning, designing, and building more complete streets projects. Supported by a grant from the Centers for Disease Control and Prevention, the Broward County MPO developed guidelines and continues to provide technical assistance, promote information, and facilitate peer exchanges for its member jurisdictions in adopting complete streets policies and designing and constructing complete streets projects.

As a result, 16 of the MPO’s 31 jurisdictions have adopted Complete Streets resolutions or guidelines, and the MPO increased funding for active transportation projects, with 90 individual bicycle and pedestrian projects totaling $120 million awarded funding since 2012. Cities and counties across the MPO region have integrated complete streets designs into projects, working in partnership with local agencies and the Florida Department of Transportation.

For more detail about the MPO’s process, refer to the Broward County case study in Measuring What We Value: Prioritizing public health to build prosperous regions, available at http://t4america.org/maps-tools/mpo-case-studies/.
The Mid-Ohio Regional Planning Commission (MORPC) in the Columbus, OH region provided funding and robust support to its members to implement the MPO’s Complete Streets policy, resulting in effective multi-modal transportation project design. The policy is effective largely because it is directly tied to funding; all project sponsors that receive any federal funding from the MPO must comply with the Complete Streets policy by considering the needs of all users in each project. Sponsors may consider the context when proposing and designing projects, which gives jurisdictions (such as those in rural areas) flexibility in designing complete streets.

The success of the MPO’s policy may be attributed to the MORPC staff who are dedicated to providing technical assistance and reviewing projects — before and after they are funded — to best integrate bicycle, pedestrian, and transit elements. For example, MORPC staff continually participate in field trips with MPO members to get a better understanding of their proposed projects and to provide direct feedback on how best to design them.

The inclusion of bicycle and pedestrian features on roadways is not expensive. Local governments and the public can even see this for themselves, as the relatively low cost of adding transit, bicycle, and pedestrian elements to a project is projected in the MPO’s cost estimator tool. In the circumstance that jurisdictions experience funding shortfalls, however, MORPC provides funding for members to build complete streets projects, providing additional guarantees that bicycle and pedestrian pathways will be constructed.

All project sponsors have complied with the Complete Streets policy since its adoption in 2010. An extensive outreach process helped foster buy-in among MORPC’s board and ensured adoption of the policy. Initially, to help acclimate members to complete streets, MORPC developed a checklist and toolkit. MORPC is now updating its complete streets toolkit to be more responsive to the needs of its members with resources and tools. For example, the cost estimator tool generates projected costs to provide bicycling or walking connections, and a map in the Active Transportation Plan, which shows the existing and missing transit, bicycling, and pedestrian infrastructure, helps localities know where to plan for facilities like bus stops, bike lanes, and sidewalks.

Reports and data now show the impact of initiatives like the MPO’s Complete Streets policy and implementation strategies. Annual efforts to collect active transportation trip data show the growing demand for trails, sidewalks, and bike facilities. The MPO’s report, the Impacts of Central Ohio Trails Study, documented annual trail usage at 12 million trail miles traveled. Since 2010, communities within the region have built more than 50 miles of bike facilities and sidewalks using MORPC’s funding and at least five communities have adopted their own local Complete Streets policies.
Policy 3: Planning and policies that support regional goals

The Mid-America Regional Council (MARC) in the Kansas City region instituted a Complete Streets policy for all of its federally funded transportation projects in 2011. MARC updated its Complete Streets and Green Streets policy in 2015.

While the policy is established at the MPO level, MARC staff attribute the growth in bicycling and pedestrian projects largely to the adoption of Complete Streets policies by its member jurisdictions. Local policies allowed jurisdictions to tailor the application of bicycle, pedestrian, and transit facilities to their transportation projects and buy into complete streets as a standard practice.

The policy is also successful because it is context sensitive and aligned clearly to a project. Project sponsors must adhere to the policy while planning any transportation projects that involve public rights-of-way, including the LRTP, and when transportation projects are programmed into the Transportation Improvement Program using federal funds. MARC’s members are required to comply with the Complete Streets policy. A project sponsor indicates how a proposed project will meet the policy on a form that is reviewed by MARC staff.

The MPO provides support to its members to be better informed about complete streets. For example, MARC staff provide materials, conduct workshops, and host experts as speakers on complete streets topics. While the MPO does not mandate that projects adhere to specific design guidelines, the MPO’s handbook directs members to design standards they can use if they so wish.

The MPO also provides some Surface Transportation Program funding for challenge grants to local governments to do planning related to complete streets and livable communities.

As a result of the complete streets support and policies adopted by the MPO and its member jurisdictions, the MPO has seen more routine integration of bicycle and pedestrian projects into the transportation network.
Planning


Creative placemaking


Complete streets

- For a comprehensive list of MPOs and governments that have adopted quality Complete Streets policies, see "[The Best Complete Streets Policies of 2015](http://smartgrowthamerica.org)" by Smart Growth America’s National Complete Streets Coalition.
- The *Urban Street Design Guide of 2013* and *Urban Bikeway Design Guide of 2014* by the National Association of City Transportation Officials (NACTO) provide recent guidance for planners to design communities meant for bicycling and walking.
- For more resources on Complete Streets implementation, see the “Implementation” page of the National Compete Streets Coalition’s website.
4 Improved data and measuring what matters

As regional transportation planning agencies, MPOs rely on data to assess current conditions on transportation infrastructure and predict changes in the movement of people and goods in the future. The MPOs described in this section have excelled at collecting and/or using data to either better understand current walking and bicycling patterns or prioritize walking and bicycling infrastructure where it would be most effective. Data used in these transportation planning examples include: public health outcomes, the availability of active transportation facilities, the quality of active transportation facilities, the proximity of places between which people could walk or bicycle, and more.

Data should be used by MPOs and public health professionals to reveal relationships between existing and planned transportation infrastructure and health disparities. Data should be broken down by age, race, ethnicity, income level, and other important demographics in a larger effort to plan transportation projects that reduce inequalities in access to destinations and a variety of transportation modes.
Many of the strategies explored in this section demonstrate a spark of collaboration among MPOs and health departments. However, more needs to be done to foster truly integrated approaches to data collection on health outcomes. Public health is a responsibility shared among planning agencies and health officials; the way they work should reflect that duty.

Previous page photo: People navigate a section of Dickerson Pike in Nashville, TN that lacks sidewalks, curbs and other basic infrastructure to make walking safe and convenient. Photo: Rochelle Carpenter, T4America
DEVELOPING NEW TOOLS TO SCORE AND VISUALIZE ACTIVE LIVING

Madison Area Transportation Planning Board (Wisconsin)

In order to help decision-makers identify places where transportation infrastructure is supporting or inhibiting active living, the Madison Area Transportation Planning Board developed an Active Living Index (ALI) for the City of Madison and Dane County, WI. The online assessment tool is designed to show the public and decision-makers “how conducive to active living a place is.” Users navigate a map to learn a place’s Active Living Score, a composite of the place’s current accessibility to destinations including grocery stores, schools, health care centers, shops, services, and parks via walking, bicycling, or public transportation. Anyone with an internet browser can easily use the interactive application without needing experience with GIS or access to GIS software.

The MPO used the ALI to evaluate projects considered for Transportation Alternatives Program funding. The MPO and other agencies hope to use the tool to evaluate and select proposed transportation projects for additional funding sources in the future.

The ALI may be the first application in the country that is based on the street and walking network and uses all of the following transportation components to calculate a score:

- Intersection density
- Population density
- Destination density (weighted by importance from a walk access perspective informed by research on the issue)
- “Premium” bicycle facilities (such as paths, bike boulevards, and buffered/protected bike lanes)
- Bicycle level of service
- Transit service area
- Transit access to jobs

The ALI is based on several research papers and evidence-based projects. A summary of the methodology is publicly available in the application.

The application is used to inform decision-makers about the places in Dane County that would benefit from bicycling and walking infrastructure. ALI directs users to focus especially on places that have factors like greater intersection density and destination density that are more conducive to active transportation. The application also provides information on the places more inaccessible by walking, bicycling, and public transportation; these places are also more likely to have residents with higher rates of chronic diseases compared with other residents in the county. A study of Wisconsin adults by the University of Wisconsin showed that lower rates

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22 www.cityofmadison.com/ALI - Developed by Dan Staidensticker (Madison Area Transportation Planning Board), Milena Bernardinello (City of Madison Department of Planning, Community & Economic Development), William Schaefer (Madison Area TPB), Mike Cechvala (Madison Area TPB)
of chronic disease exist in block groups that were more walkable and closer to public transportation. The study also found higher sidewalk density in neighborhoods surrounding low-income residents; the walking infrastructure is there to support active transportation trips if there were a variety of destinations to walk to.\textsuperscript{23} The creation of the ALI was a direct response to these and other findings. The Dane County Capital Region Healthy Communities (CRHC) coalition — made up of both public health and planning professionals working to increase physical activity and access to nutritious food — proposed the development of the index. The index is used to measure the county’s built environment and provide helpful data to decision-makers, planners, and public health professionals. Decision-makers can better understand a place’s potential for active living based on either the composite ALI score or component scores that allow the user to see a place’s greatest strengths or weaknesses related to insufficient destinations, street connectivity, transit access, or other factors.

The index is a product of much collaboration between many Plan4Health coalition members who convene through the American Planning Association’s Wisconsin chapter.\textsuperscript{24} For example, the City of Madison Department of Planning conducted an analysis at the census block level on the relationship between the ALI score and the prevalence of child obesity and adult-onset type 2 diabetes; ALI was found to be a statistically significant predictor of those health conditions. The University of Wisconsin Department of Family Medicine and Community Health contributed the health data needed for this analysis. The Capital Area Regional Planning Commission contributed initial research and input from similar studies and applications.

The MPO used the ALI to evaluate projects considered for Transportation Alternatives Program funding. The MPO and other agencies hope to use the tool to evaluate and select proposed transportation projects for future funding sources.

Creation of the ALI was made possible by a grant from the American Planning Association (APA) and the Centers for Disease Control and Prevention (CDC). The Capital Regional Healthy Communities coalition of Dane County will build off of the ALI to create communities that are friendlier to walking and bicycling, increase access to healthy food in food deserts, and incorporate health into local and state planning efforts. APA funded this work in partnership with the American Public Health Association in March 2015 through a grant from the CDC.

\textsuperscript{24} Coalition members represent neighborhoods and sectors of local government, planning, health, academia, and more. A list of Plan4Health coalition members is available at http://plan4health.us/plan4health-coalitions/dane-county-wi-capital-region-healthy-communities/.
COUNTING BICYCLE AND PEDESTRIAN TRAVELERS WITH PERMANENT, CYCLICAL,
AND PROJECT SPECIFIC METHODS

Delaware Valley Regional Planning Commission (Philadelphia)

The Delaware Valley Regional Planning Commission (DVRPC) in the Philadelphia area operates an impressive program to count travelers on foot and bicycle in three ways: permanent, cyclical, and per project counts.

The MPO owns and maintains seventeen permanent counters that keep constant track of how many people pass by on foot and bicycle across the nine-county region. DVRPC also has access to data from another ten counters that only track pedestrians.

DVRPC also runs a cyclical bicycle count program over a seven-day period every three years at about 120 different locations. Cyclical bicycle counts help track bicycle travel trends over time. Counts are recorded with pneumatic tubes at locations with a trail or sidepath, a sharrow, a bicycle lane, a striped shoulder, or mixed traffic.

The MPO uses bicycle and pedestrian counts to improve conceptual designs for transportation projects. Counts also show the impacts that projects may have on commuters’ behavior by taking before and after counts. For example, counts taken before and after the Cynwyd Heritage Trail was recently connected to a large regional trail, the Schuylkill River Trail, and showed that bicycle commuting increased along with recreational riding. Data from this trail may be used to justify safe bicycling and walking routes in other locations.

With its three counting methods, DVRPC runs one of the most robust bicycle and pedestrian counting programs in the country. The government agency is leading the way for other public offices to conduct multi-pronged bicycle and pedestrian counting programs.25

25 www.dvrpc.org/webmaps/pedbikecounts/
MAKING BICYCLING AND WALKING COUNT

Southern California Association of Governments (Los Angeles)

Many municipalities in the Los Angeles region wanted to collect data on bicycle trips but did not know how to do so. Furthermore, bicycle count data that did exist in various jurisdictions were difficult to compare because the data were not standardized. To address these gaps and make bicycle count data comparable between locations and years, the Southern California Association of Governments (SCAG) maintains an online Regional Bike Count Data Clearinghouse. Through the clearinghouse, bicycle count data are standardized and SCAG provides a training manual on how to conduct bicycle counts, which helps SCAG jurisdictions be consistent in how they each count bicyclists.

Local agencies and community grants applications may use the data in the clearinghouse to help make the case for funding. For example, local jurisdictions rely on the database to prepare applications for the statewide Active Transportation Program, which requires before and after non-motorized counts for all funded projects.

In 2017, the clearinghouse will be updated to include automated counter data in the clearinghouse; Los Angeles County Metro will work with cities to install the automated counters. SCAG will also expand the database to include pedestrian counts. The MPO will make further improvements to the clearinghouse with features that include improved data upload options, standardized reports that may be generated for each count location, and an online manual counter app.

The counters will help SCAG and its member jurisdictions evaluate the effectiveness of bicycling and walking projects and make informed decisions about future investments. Ample opportunity exists on how to use this database to improve bicycling and walking connections in the region. SCAG’s new 2016 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) will fund $12.9 billion in transportation projects that include active transportation elements over the next 20 years with a focus on four goals:

- Improve active transportation connections to High Quality Transit Areas and transit corridors;
- Develop a regional bikeway network connecting all parts of the region;
- Develop a regional greenway network to provide urban greenspace and separated bicycle/pedestrian paths;
- Improve connections between neighborhoods and transit, schools, parks, and nearby businesses using complete streets strategies.

26 www.bikecounts.luskin.ucla.edu/
PRIORITIZING ACTIVE TRANSPORTATION PROJECTS BASED ON HEALTH OUTCOMES AND LIKELIHOOD OF WALKING OR BICYCLING

Nashville Area MPO (Tennessee)

Leading up to the development of the 2016 long-range transportation plan (LRTP), Middle Tennessee Connected, the Nashville Area MPO conducted two studies to inform the prioritization process for funding transportation projects that would improve safety and access for those traveling on foot or bicycle. The MPO awarded points to proposed active transportation projects seeking funding in its LRTP that would be built in places with poorer health status and a higher likelihood of bicycling or walking, based on the findings from these studies.

In the first robust study, the MPO collected data on residents’ health status, physical activity rates, nutrition habits, and transportation behaviors. The Middle Tennessee Transportation and Health Study of 2012 analyzed more than 6,000 households from urban, suburban, and rural households across the region. Researchers attached six health questions to the Household Travel Survey and asked study participants to complete a travel diary on one assigned day of the week. Residents in about 600 households also answered a larger health questionnaire, wore a GPS device for four days, and logged details about their travel in a travel diary. One adult in the 600-household study subset also wore an accelerometer for four days. The MPO used these data as inputs for the Integrated Transportation and Health Impact Model (ITHIM), which predicts decreases in chronic disease rates with increases in minutes of active transportation rates and reductions in air pollution level.

The MPO also used these data to prioritize active transportation projects for people whose health would most benefit from walking and bicycling. MPO staff determined four demographic characteristics that were most highly correlated with being in poor health. The MPO then awarded points to bicycle/pedestrian projects that served a census tract with a higher average rate of at least three of these demographic characteristics.

Second, the MPO developed the Non-motorized Demand and Physical Activity Assessment of 2014. This study helped the MPO prioritize new and expanded pedestrian and bicycling infrastructure in places where bicycling and walking trips would more likely take place. Since walking or bicycling for transportation are more likely to happen in mixed-use areas with higher density and a diversity of destinations, the MPO awarded more points to walking and bicycling projects in these areas when selecting projects to fund through the LRTP.

Policy 4: Improved data and measuring what matters

ASSESSING BICYCLE AND PEDESTRIAN LEVEL-OF-SERVICE

Nashville Area MPO (Tennessee)

The Nashville Area MPO analyzed roadways in its region to determine non-motorized level of service in order to understand the walking and bicycling conditions in Middle Tennessee. To accomplish this, fifteen variables were collected for arterial or collector roadways in the MPO region, including the number of through lanes, shoulder width, sidewalk presence and width, width of buffers between sidewalks and/or bicycle facilities, presence/type of bicycle facility, traffic volume, speed limit, and more. Each roadway segment received a grade from A to F based on its accommodations for those traveling on foot or bicycle relative to the roadway’s character. The following variables were studied on arterials and collectors (not including interstates or controlled access facilities that prohibit pedestrian or bicycle use) in the MPO region to determine bicycle level-of-service (BLOS) and pedestrian level-of-service (PLOS):

- Number of through lanes
- Lane width
- Shoulder width
- Sidewalk presence and width
- Width of sidewalk buffers
- Presence and type of bicycle facility
- Presence of rumble strips
- Percent of roadway with sidewalks
- Presence and width of on-street parking
- Spacing of trees or other pedestrian barriers if applicable (e.g., bollards)
- Traffic volumes
- Percentage of heavy vehicles
- Speed limit (posted speed limit)
- Peak hour factor
- Directional distribution of traffic volumes

The MPO found that, at the time of this study, there were over 400 miles of bicycle facilities on arterial or collector roadways in the MPO area that included bike lanes, multiuse paths, and shared routes. 66 percent of all inventoried roads (2,164 miles) had a BLOS of C or better. Correspondingly, 1,106 miles of inventoried roadways had a BLOS of D or worse. Relating to walking infrastructure, there were over 500 miles of sidewalks on arterial or collector roadways in the MPO area. 63 percent of all inventoried roads (2,044 miles) had a PLOS of C or better. 1,225 miles of inventoried roadways had a PLOS of D or worse.29

29 2014 Regional Bicycle & Pedestrian Study: Sidewalk and Bikeway Facilities Inventory, Bicycle and Pedestrian Level-of-Service Analysis
Policy 4: Improved data and measuring what matters

Mapping Inequities in Transportation and Public Health Outcomes

Regional Equity Atlas (Portland, Oregon)

An equity atlas uses data to map a region’s disparities in health, transportation access, and wealth, among other indicators. Portland’s Regional Equity Atlas, for example, illuminates the difference in how distinct neighborhoods and populations are able — or unable — to access vital resources, and how public health outcomes may relate. It features an interactive online tool that allows users to see the connection between health outcomes and a number of indicators, such as the existence of sidewalks or access to transit. Other indicators include data on wealth and income, affordable housing, environmental factors, and a host of demographic characteristics. The Regional Equity Atlas is maintained by 1000 Friends of Oregon, Ecotrust, and Futurewise. Metro (the region’s MPO) is a primary funder and uses the Regional Equity Atlas to highlight inequities in infrastructure and identify the projects that can help vulnerable populations.

In addition, PolicyLink has a host of resources through the National Equity Atlas.30

Many streets in Portland and surrounding areas require more safe and easy ways for people to walk and bicycle from place to place. Photo: Rochelle Carpenter, T4America.

30 http://nationalequityatlas.org/
ADDITIONAL RESOURCES

The following resources provide easily accessible data on public health, transportation, and the built environment:

• The Transportation and Health Tool shows how transportation systems in U.S. states and metropolitan regions compare with each other on their performance relating to safety, walking/bicycling, air quality, and connectivity to destinations. The tool also includes recommendations of strategies to improve public health outcomes through transportation planning and policy. The tool was developed by the U.S. Department of Transportation and the Centers for Disease Control and Prevention (CDC) with the American Public Health Association (APHA). The tool is available at www.transportation.gov/transportation-health-tool.

• The Built Environment and Public Health Clearinghouse in the Georgia Institute of Technology includes a section that lists resources for data and analysis measures that support work on the built environment and public health. The clearinghouse is available at www.bephc.gatech.edu/data-and-assessment.

• AARP created a Livability Index that indicates the livability of a neighborhood, city, or state. The Livability Index generates a score based on 40 metrics and 20 policies pertaining to seven categories: housing, neighborhood, transportation, environment, health, engagement, and opportunity. The index is available at https://livabilityindex.aarp.org/.

• The County Health Rankings and Roadmaps website allows users to ascertain important health data by county including a physical inactivity rate, an access to healthy foods score, a primary care physician ratio, a poverty rate, and more. The rankings are available at www.countyhealthrankings.org/.

• The Alliance for Biking and Walking publishes a biennial Bicycling and Walking in the United States Benchmarking Report. The report contains data on bicycling and walking levels in 50 states, the 52 largest cities, and several midsized cities. The report also contains data on demographics, safety, funding, policies, infrastructure, education, public health indicators, and economic impacts. The report is available at www.bikewalkalliance.org/resources/benchmarking.

• The U.S. Environmental Protection Agency maintains the Smart Location Database to convey location efficiency from place to place. An interactive map shows an area’s score based on housing density, diversity of land use, neighborhood design, destination accessibility, transit service, employment, and demographics. The database is available at www.epa.gov/smartgrowth/smart-location-mapping#SLD.

• PolicyLink maintains the National Equity Atlas to provide data on demographic change, racial inclusion, and potential economic gains from achieving racial equity for the United States and its largest 100 cities, 150 regions, and all 50 states. These data help understand and make the case for racially inclusive growth, which is essential for local economies to thrive. The atlas is available at http://nationalequityatlas.org/.
Conclusion

Making it safer and more convenient for more residents to bicycle or walk helps local communities thrive economically, gives residents choices to be more physically active and healthy as part of their daily routine, and offers underserved people an affordable way to get to work, health care services, the grocery store, and other essential destinations. As conveners of a region's transportation decision-makers and gatekeepers of federal money, MPOs can play an influential role by dedicating funding, instituting performance measures to better assess the benefits, establishing new policies or plans, and creating new repositories of data.

Among the many examples of efforts by MPOs to promote health outcomes and active transportation projects, there are a few core, endemic lessons.
TAKE THE TIME TO DO DEEP, WIDESPREAD OUTREACH

The MPOs featured in this paper went above and beyond federal public engagement requirements. They led robust participation processes with their board members, key stakeholders, and the public. Take the Sacramento Area Council of Governments, for example. Developing complex performance measures to evaluate, score, and rank transportation projects for funding was no easy task, and they received many questions about the process, the technical feasibility, and the implications. SACOG both kept their stakeholders very engaged and developed easy-to-understand graphics to clearly communicate how new performance measures would influence project selection. These efforts profoundly increased understanding, buy-in, and enthusiasm for the final set of performance measures and the process of using them to choose projects. Involving multiple people and types of organizations may require significant time, attention, and resources by MPO staff, but it can pay off with greater buy-in and better projects.

DEVISE POLICIES WITH APPLICATIONS TO A RANGE OF AN MPO’S MEMBER JURISDICTIONS

Make sure that members of diverse sizes, locations, and populations are able to access new funding and other resources. For example, the Atlanta Regional Commission structured its Livable Centers Initiative to have an eligible jurisdiction in every county. And Mid-Ohio Regional Planning Commission in the Columbus region made sure that its Complete Streets policy is context sensitive, so that members from urban to rural areas have the flexibility to incorporate the bicycle, pedestrian, and transit-supportive features that best fit their needs. All MORPC members have since complied with the Complete Streets policy to date when building projects with funding through MORPC.

BE COMPREHENSIVE

The Broward County MPO runs one of the best complete streets programs in the country because it offers a full suite of funding, technical assistance, resources, outreach capacity, partner coordination, and tools (like the evaluation toolkit) to support its members in planning, funding, and even building complete streets projects.

BE BOLD

The MPOs profiled here — and others — are stepping up, but a great urgency still exists to build the necessary bicycling and walking projects to keep people safe, active, and connected to the places they need to go. Use the examples in this paper to inspire and inform your efforts, tailor them for your region, and improve upon them to give the people in your region the bicycling and walking projects they demand and deserve.