



**Visualize 2050
Planning and
Programming Process**

Public Health

Part 13 of 27



TABLE OF CONTENTS

OVERVIEW OF PUBLIC HEALTH.....	3
TPB’S ROLE AND KEY STAFF	4
ROLE OF KEY PLANNING AGENCIES	4
PUBLIC ENGAGEMENT.....	4
A CLOSER LOOK AT TPB PLANNING ACTIVITIES RELATED TO PUBLIC HEALTH	5
Air Quality Implications to Public Health	5
Bicycle, Pedestrian, Micromobility Implications to Public Health.....	5
Congestion Management Implications to Public Health	6
Safety Implications to Public Health	7

OVERVIEW OF PUBLIC HEALTH

Considering public health in the transportation planning process is vital to foster healthy communities. Public health relates to transportation in many ways:

- Emotional health impacts from travel including frustrations from congestion or delays as well as personal safety and security concerns related to crime, behaviors from other travelers like speeding, or navigating unfamiliar places
- Environmental health impacts from motor vehicle-related air pollution on respiratory health
- Physical health impacts that could have positive or negative effects. Examples include benefits from active travel, extended sedentary travel or roadway crashes, as well as challenges accessing healthy food options
- Social health impacts from mobility and accessibility challenges

For more information about key public health topics see these related parts within this Visualize 2050 Planning and Programming Document:

- Air Quality
- Bicycle, Pedestrian, and Micromobility
- Congestion
- Safety



Feeling safe while biking promotes more cycling and healthier communities.
Biking family in DC (Mike Maguire/[Flickr](#))



Walkable environments promote healthy communities.
Pedestrian family Royal Street, Alexandria, VA (Rachel Beyerle/COG)

TPB’S ROLE AND KEY STAFF

Working towards a healthy region for all residents and visitors involves planning and coordination across borders on issues from everyday wellness to emergency response. The TPB is active in planning better bicycle and pedestrian mobility options and safer travel across all modes. The TPB also conducts air quality and pollution analysis. Results of this analysis help to provide agencies with data showing impacts of the transportation system and how communities are affected. Many TPB staff contribute to transportation planning efforts related to public health shown in Table 13.1.

TABLE 13.1: KEY STAFF

TPB Staff	Title	Role
Kanti Srikanth	Executive Director	Director for the Transportation Planning Board (TPB)
Michael Farrell	Senior Transportation Planner	Contributor for Bicycle, Pedestrian, Micromobility
James Li	Transportation Engineer	Contributor for Congestion Management
Janie Nham	Planning Manager, Safety and Systems Performance Analysis	Contributor for Safety
Jane Posey	Principal Transportation Engineer	Contributor for Air Quality

The TPB’s Transportation Safety Subcommittee and Bicycle and Pedestrian Subcommittee engage staff at member agencies to share best practices and coordinate improvements.

ROLE OF KEY PLANNING AGENCIES

Engagement with land-use and environmental decision-makers is also critical since health is so closely tied to the communities in which people live. The Metropolitan Washington Council of Governments (COG) has a Department of Environmental Planning that monitors regional air quality and publishes alerts when air quality may be harmful to people. Through this department, COG staff the Metropolitan Washington Air Quality Committee (MWAQC). Additionally, through the COG Department of Community Planning and Services, COG staffs a Planning Director’s Committee. These committees involve staff from localities throughout the National Capital Region.

PUBLIC ENGAGEMENT

Within each public-health related topic noted previously, there are occasions for the public to be engaged in the planning process. At a minimum, the public may provide comments at TPB meetings as information is shared with the Board for decision-making. The public may also watch committee meetings online to learn more about the region’s planning activities. In addition to these venues, the TPB has provided fora for addressing safety, such as a Regional Curbside Management Forum, and a Safety Summit. There is also regular outreach to the TPB Access for All

Advisory Committee, which is made up of representatives from traditionally marginalized groups, including people with disabilities.

A CLOSER LOOK AT TPB PLANNING ACTIVITIES RELATED TO PUBLIC HEALTH

The four key areas where TPB is working to improve public health outcomes related to public health are discussed more broadly below. The technical details of these activities are discussed in full within each topic's part of the Visualize 2050 planning and programming process documentation.

Air Quality Implications to Public Health

The Clean Air Act requires that transportation and air quality planning be integrated in areas like the National Capital Region, where the region has not previously complied with National Ambient Air Quality Standards for ozone. Nitrogen oxides (NO_x) and volatile organic compounds (VOCs) are two key ingredients that form ozone. Motor vehicles are currently a significant source of NO_x and VOC emissions in the region, but with cleaner fuels and vehicles, mobile source emissions have decreased significantly in the past decades and are expected to continue to decline moving forward. Ozone can impact people's health when inhaled potentially impacting people's lungs, throat, and respiratory health potentially aggravating asthma or contributing to asthma development.

Federal funding and approval for transportation projects is only available if transportation activities meet the region's air quality goals. The TPB must show that anticipated future vehicle-related emissions will remain below regional limits. Read more about TPB's Air Quality Planning Process in Part 3.

Bicycle, Pedestrian, Micromobility Implications to Public Health

Physical activity is one of the most effective ways for people to improve their health, stave off chronic disease, and prevent early death. Unfortunately, in the United States only about one in four adults and one in six high school students fully meet the [recommendations](#) in the CDC's [Physical Activity Guidelines for Americans](#).¹

People are more likely to engage in physical activity consistently when it is integrated into their daily lives, in the form of walking, biking, or climbing stairs. Walkable neighborhoods have been shown to increase physical activity, with strong positive effects on their residents' health.² Cities that have high rates of active transportation have lower rates of obesity and related medical conditions.³ Exercise also improves mental health and acuity, especially for the elderly.⁴

The Center for Disease Control recommends that communities act to connect people to destinations by building sidewalks and bike paths, planting shade trees, mixing land uses to give

¹ Office of Disease Prevention and Health Promotion (September 2019). *Physical Activity Guidelines for Americans 2nd Edition*. https://odphp.health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf

² Endocrine Society (February 24, 2022). *Walkable neighborhoods can reduce prevalence of obesity, diabetes*. <https://www.endocrine.org/news-and-advocacy/news-room/2022/walkable-neighborhoods-can-reduce-prevalence-of-obesity-diabetes>

³ U.S. Centers for Disease Control and Prevention (January 17, 2025). *Strategies for Physical Activity Through Community Design*. <https://www.cdc.gov/physical-activity/php/strategies/increasing-physical-activity-through-community-design-prevention-strategies.html>

⁴ Roe et al. (September 23, 2020). *The Urban Built Environment, Walking and Mental Health Outcomes Among Older Adults: A Pilot Study*. <https://pmc.ncbi.nlm.nih.gov/articles/PMC7538636/>

people more destinations within walking distance, and using smaller blocks and narrower streets to reduce pedestrian travel distances.

The member jurisdictions of the TPB have been working for decades to make our communities more walkable and bikeable. Member actions have included:

- Adoption and implementation of Complete Streets policies that mandate the provision of bicycle and pedestrian facilities.
- Concentration of development in walkable, bikeable activity centers connected by mass transit.
- Development of local and regional shared-use path networks which connect people to jobs, shopping, schools, and recreation.
- Adoption of agency bicycle, pedestrian, and trail plans to inform capital improvement decisions.
- Expansion of bike and e-scooter sharing services to enhance local mobility.

The TPB has helped build a consensus around these policies and has supported its members' efforts with the following actions:

- Adoption of The TPB Vision (1998) that endorsed the concentration of development in walkable mixed use activity centers.
- Identification of effective walk sheds around high-capacity transit stations.
- Adoption of a regional model Complete Streets policy (2012), and encouragement of the TPB members to adopt their own policies.
- Adoption and periodic renewal of a Bicycle and Pedestrian Plan for the National Capital Region, which summarizes what is being done for biking, walking, and micromobility.
- Adoption as a TPB priority the planning and construction of a regional National Capital Trail Network, which will form a continuously connected network of low-stress bicycle and pedestrian facilities, suitable for people of all ages and abilities.
- Funding small planning and design projects that serve TPB goals through programs such as Transportation Land Use Connections, Transportation Alternatives, Transit within Reach, and the Regional Roadway Safety program.
- Maintenance of the Bicycle and Pedestrian Subcommittee of the TPB Technical Committee, which advises the TPB's bicycle, pedestrian, and micromobility planning efforts, and served as a forum for information exchange and coordination for such planning by the member agencies.

All these activities support public health by encouraging active transportation. Read more about TPB's Bicycle, Pedestrian, and Micromobility Planning Process in Part 21.

Congestion Management Implications to Public Health

As part of the TPB's ongoing efforts to monitor and mitigate congestion, the quarterly Congestion Reports and biannual Congestion Management Process Technical Reports highlight the dynamic nature of traffic congestion in the National Capital Region. Beyond its economic and infrastructure implications, congestion can have public health consequences, particularly in the areas of mental health and environmental health.

Mental Health Impacts

- Chronic congestion exposes travelers to prolonged stress, anxiety, and frustration, potentially contributing to decreased emotional well-being and mental health.
- Repeated experiences of aggressive driving, congestion, and unpredictability can lead to increased levels of cortisol, blood pressure, and heart rate.

- TPB’s Congestion Management Process aims to alleviate these stressors by identifying and implementing effective mitigation strategies, as well as promoting a safer and more reliable transportation environment.

Environmental Health Impacts

- Motor vehicle-related air pollution, exacerbated by congestion, poses significant risks to respiratory health, including asthma, cardiovascular disease, and other pulmonary conditions.
- TPB’s biannual Technical Reports explore congestion reduction strategies that also improve air quality, such as optimizing traffic signal timing, promoting alternative modes of transportation, and encouraging sustainable land use practices.

By addressing congestion through the Congestion Management Process, TPB aims to:

- Enhance mental health and well-being through reduced stress and travel time uncertainty.
- Improve environmental health by mitigating air pollution from motor vehicles.
- Foster a safer, healthier, and more sustainable transportation system for our region.

Read more about TPB’s Congestion Management Process in Part 6.

Safety Implications to Public Health

Roadway safety is recognized as a public health challenge in the US and abroad. According to the U.S. Centers for Disease Control and Prevention (CDC), motor vehicle crashes are a leading cause of death in the U.S.,⁵ and the World Health Organization (WHO) notes that they are the leading cause of death among children and young adults aged 5 to 29 years globally.⁶ In addition, many more individuals suffer from crash-related injuries, some of which are disabling, and survivors of crashes may suffer from negative psychological and emotional effects.

Because of the public health impacts of roadway safety, various organizations and public agencies strive to reduce the number of roadway safety crashes that result in fatalities and injuries. In 2020, the TPB reaffirmed its commitment to roadway safety through Resolution R3-2021, which acknowledges that the number of fatalities and serious injuries on the region’s roadways are unacceptably high and urges members to prioritize roadway safety in their projects, programs, and policies, with consideration for equity. The resolution complements various safety planning activities undertaken by the TPB to reduce roadway safety fatalities and serious injuries, including:

- **Regional safety studies**, which span multiple years and evaluate regionwide crash data to gain insight into the location, type, frequency, and contributing factors of regional fatal and serious injury crashes. The 2020 Safety Study also examined the distribution of crashes inside and outside of Equity Emphasis Areas (EEAs).⁷ An update to the 2020 study is being conducted in 2024-2025 which will examine regional crash data for years 2018 through 2023.
- **Street Smart Safety Campaign**, a COG program, which has been running for 20 years and is focused on reducing the number of pedestrian and bicyclist injuries and deaths in the region.

⁵ U.S. Centers for Disease Control and Prevention (November 19, 2024). *About Transportation Safety*. <https://www.cdc.gov/transportation-safety/about/index.html>

⁶ World Health Organization (December 13, 2023). *Road traffic injuries*. <https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries>

⁷ National Capital Region Transportation Planning Board (July 22, 2020). *TPB Safety Study Resources and Safety Policy*. <https://www.mwcog.org/documents/2020/07/22/tpb-safety-study-resources-safety-policy-federal-performance-measures-highways-roads-traffic-safety/>

- **Regional Roadway Safety Program (RRSP)**, which encourages jurisdictions to implement roadway safety improvements by providing technical assistance for local, small-scale planning or preliminary engineering projects focused on roadway safety.
- **Special work sessions focused on safety**, during which safety officials brief the TPB on their recent safety outcomes, strategies, and programs.
- **Special safety-related events**, such as the 2024 Regional Roadway Safety Summit to highlight regional concern around roadway safety and to provide TPB members the opportunity to discuss opportunities for regional coordination.
- **TPB Transportation Safety Subcommittee**, which provides local transportation practitioners to exchange best practices, learn about emerging trends and developments in roadway safety, and coordinate on regional roadway safety matters. The subcommittee has been operating since 2012.

Read more about TPB's Safety Planning Process in Part 15.