INTEGRATING PUBLIC HEALTH AND TRANSPORTATION PLANNING: PERSPECTIVES FOR MPOs AND COGs
Introduction

Metropolitan planning organizations (MPOs) and regional councils of governments (COGs) address eight distinct factors in their transportation planning process that include asset management, economic vitality, safety and environmental quality, among others. While these planning factors are mandated by federal transportation law (23 U.S.C., §134), the challenge that many MPOs and COGs face is how to address factors that, while not federally mandated, are of interest to their constituents. For example, public health has gained popularity recently and several regions have begun to examine it in their transportation planning process. In order to develop the capacity of MPOs and COGs to understand and, where appropriate, promote this type of transportation planning, the National Association of Regional Councils (NARC) examined how select regions are integrating public health into transportation planning. This report includes a review of current opinion, select examples of MPOs conducting this work, and ways in which MPOs can leverage this concept against other transportation planning activities.

Research Supports a Relationship Between Health, Safety, and Transportation

A large and growing body of research exists that links the built environment to the safety and health of its residents. One recent neighborhood impact study published by the American Journal of Preventive Medicine (AJPM) concluded that obesity levels were lowest in neighborhoods with a closer proximity to healthy food outlets, lower density of fast-food restaurants, streets that were more conducive to non-motorized travel and access to parks. Organizations such as the National Complete Streets Coalition (NCSC) are working with MPOs, engineers and residents to develop streets that promote physical activity in addition to automobile usage with the goal of establishing policy that facilitates the consideration of public health and safety when determining regionally selected projects.

Additionally, research exists that links access to healthy foods with increased public health. The AJPM study also concluded that obesity rates in children were higher in neighborhoods further from grocery stores, as well as in those neighborhoods with more fast-food restaurants. The study suggested that transportation planners that focus on public health could survey the amount and types of food outlets in their region when designing pedestrian and bicycle pathways as one way to link these two topics.

While safety is already one of the federally mandated planning factors, the conversation on integrating public health into the transportation planning process involves more complex health considerations. For example, automobile accidents can be measured by their location and occurrence, but the comfort and mental duress of accident victims are more difficult to gauge. In addition, the Transportation Research Board (TRB) recently concluded that a disproportionate amount of minorities, elderly, and the poor often postpone or miss preventative, non-emergency healthcare visits when accessibility and transportation options are lacking. TRB compared the costs and benefits of providing non-emergency medical transportation to those who lack access to it and studied how improving access to healthcare for the transportation-disadvantaged will lead to improved quality of life and an overall decrease in healthcare costs.

Photo Courtesy of the Chicago Metropolitan Agency for Planning, 2012.
Similarly, air pollutants that may cause respiratory disorders are already controlled through regulations such as the National Environmental Policy Act (NEPA) and the Clean Air Act. However, the U.S. Environmental Protection Agency (EPA) recommends additional research that explores the association between mobile-source exposure to pollutants at an early age and its role in induction of asthma. While EPA admits that the causes of asthma are still unknown, it maintains that the air pollutants that exacerbate conditions like asthma necessitate greater examination of transportations role in public health issues.

Finally, organizations like Transportation for America have recommended making Health Impact Assessments (HIAs) a mandatory tool by which communities evaluate environmental and transportation impacts of transportation projects to encourage the creation of more non-motorized options.

**MPOs Integrate Public Health into Transportation Planning at Varying Levels**

An MPOs regional vision incorporates direct input from residents as well as demographic data to help planners prioritize current needs and set future goals. If an MPO includes these factors in their long-range transportation plans (LRTPs), MPOs could develop corresponding improvement strategies if those factors show a decline in public health. For example, the Mid-America Regional Council (MARC) incorporated public health as a goal in their LRTP, Transportation Outlook 2040 after the Metropolitan Kansas City Obesity Report found that 57% of adults in Kansas City were overweight or obese. In addition to their LRTP, MARC integrated public health concerns into many levels of their transportation planning process, this includes:

- creating development standards that support active modes of transport,
- designating physical health as a performance factor in project development, and
- directing funding into programs that reduce exposure to harmful vehicle emissions.

Additionally, the Metropolitan Washington Council of Governments (MWCOG) is working with the National Complete Streets Coalition and the Sierra Club, among others, to establish performance standards with measurable safety and health outcomes.

Similarly, The Wasatch Front Regional Council (WFRC) recently established an Active Transportation Committee, comprised of elected officials, Utah Department of Transportation (DOT), Utah Transit Authority and the Utah Department of Health, to ensure that public health is considered when establishing transportation measures. The establishment of the committee stems from WFRC’s vision statement in its LRTP, Wasatch Choice for 2040, which cites improved public health, and more active neighborhoods as benefits of its transportation plan.

Non-profit organizations also offer support for MPOs and their local governments to incorporate public health into the transportation planning process. Complete Streets offers guides and workshops for individuals and MPOs to help establish more walkable neighborhoods, where citizens have reported increased health and well-being. The National Center for Safe Routes to Schools created SRTS programs, in association with community members and all levels of government to increase safety and reduce air pollutants. Often the goal of many of these organizations is to generate an awareness of the link between health and transportation planning, so that
MPOs and cities can include them in their regional and vision goals, and hopefully be incorporated into an MPOs Transportation Improvement Programs (TIPs) and performance measurement process.

In fact, integrating public health factors into TIPs does not appear to be an uncommon step in connecting public health with transportation planning. The Boston Region MPO’s central vision statement supports sustaining a “healthy and pleasant environment,” and its short-term Transportation Improvement Plan (TIP) aligns its transportation planning activities with other planning activities like the Massachusetts Healthy Transportation Compact (HTC), which aims to “achieve positive health outcomes through the coordination of land use, transportation, and public health policy.”16 By aligning the MPO’s vision with the HTC legislation, Boston can develop and utilize HIAs, support the complete streets initiatives in construction projects, and increase opportunities for physical activity in all transportation programs.17

The Nashville MPO is a recognized leader in integrating public health with its transportation planning. They have formed policy, directed funding, and conducted research that facilitates positive health outcomes for their residents18. After Tennessee ranked fourth highest in the nation for obesity, the Nashville Area MPO took steps to develop active environments and identify food deserts, which are defined as areas with a high concentration of low income populations, devoid of full-service grocery stores, and have little access to transit, walking and bicycling facilities19. The MPO developed a transportation plan that incentivized active living by prioritizing constituent health based on their activity level and developed criteria measures for their 2035 Regional Transportation Plan (RTP). After this change, their RTP now includes a “Health and Environment” section that evaluates projects based on their ability to increase accessibility for low-income and minority communities, transportation choices for the disabled and the aging population, the promotion of physical activity, transportation choices in health impact areas, and the ability to reduce vehicle emissions, among others20.

Further, the Nashville Area MPO funded projects that promoted public health by awarding $2.5 million in 2012 under their Active Transportation Program, which targets 15% of available Urban Surface Transportation Program resources for walking, bicycling, or transit-supportive projects that may not have otherwise received funding through more traditional revenue streams21. Their program:

- conducts training for walking and bicycling safety,
- road restriping to allow bike lanes and access to trailheads,
- aligns with its Safe Routes to Schools program,
- general pedestrian and bicycle connectivity and streetscape landscaping and lighting to make pedestrian travel more appealing, and
- the creation of a mini-greenway containing fitness stations and benches, among other activities22.

Fig.1) Adapted from the Metropolitan Transportation Planning Process Model: U.S. Department of Transportation Federal Highway Administration (http://www.planning.dot.gov/documents/BriefingBook/BBook.htm)
Connecting with a COG: Additional Regional Planning Activities

Regional Food Systems Planning

One way for regional transportation planning organizations to integrate public health into their planning activities is to do so through the metropolitan transportation planning process. However, many COGs have responsibilities that extend beyond regional transportation planning. These organizations have also begun integrating public health concerns into their work plans. In Philadelphia, PA and Columbus, OH, the Delaware Valley Regional Planning Commission and the Mid-Ohio Regional Planning Commission have developed reports to evaluate the state of their local and regional food systems, as well as plans to promote the continued development of robust food systems. One of the major benefits from a strong and robust regional food system is providing access to healthy, safe food for a region’s residents, which serves as a foundation for establishing healthy eating habits and lifestyles. These food system plans often integrate land use planning to preserve farmland, economic development planning to strengthen food production, processing and distribution industry clusters, and transportation planning, to ensure that food is efficiently and safely transported from farm to consumer.

Green Infrastructure - Open Space Preservation

Additionally, planning for green infrastructure and open space preservation often also incorporates public health concerns at a regional level. The preservation of open space and promotion of green infrastructure often includes public health benefits such as improved air and water quality, and the protection of recreational space promotes healthy and active lifestyles for regional citizens. For example, MARC maintains MetroGreen, a greenprint for metropolitan trails that connect urban and rural green corridors throughout the region. The action plan and resulting environmental corridors absorb floodwaters to reduce economic losses from flooding, while also promoting public health and providing an alternative transportation system for non-motorized travel. Initiatives such as these exist across the country with dual benefits – preserving the environment and promoting public health.

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In addition to the resources referenced here, the following documents provide additional and useful information that can help COGs, MPOs and their local governments and regions understand the relationship between public health and transportation planning better.


National Association of County & City Health Officials. (2012). Health Impact Assessment Resources. [Link]

National Association of County & City Health Officials. (2010). Public Health in Land Use Planning & Community Design. [Link]

National Association of County & City Health Officials. (2010). Working with Elected Officials to Promote Healthy Land Use Planning & Community Design. [Link]

State of Hawaii. (n.d.). Key Land Use & Transportation Planning Policies and Processes: Strategic Points for Integrating Health Into Community Design. [Link]

Transform. (2012). Creating Healthy Regional Transportation Plans. [Link]

Works Cited

http://www.ajpmonline.org/webfiles/images/journals/amepre/AMEPRE_3373%5B3%5D-stamped.pdf.


3. Ibid.

4. Ibid.


http://www.epa.gov/ord/ca/quick-finder/pm-health-asthma.htm.


10. Ibid.


17. Ibid.

http://www.nashvillempo.org/regional_plan/health/.

19. Ibid.

Nashville Area Metropolitan Planning Organization: 


22. Ibid.

http://www.dvрc.org/Food/.


The National Association of Regional Councils (NARC), representing local elected officials and their regional planning organizations, serves as a national voice for regionalism by advocating for regional cooperation as the most effective way to address a variety of topics including transportation, economic and community development, environment and homeland security. NARC’s member organizations are composed of multiple local governments that work together to serve American communities - large and small, urban and rural. For additional information, please visit www.NARC.org.

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