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U.S. Department of Transportation  
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Washington, DC 20950

**Docket Name: Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning**

**Docket Number: FHWA-2013-0037; FHWA RIN 2125-AF52; FTA RIN 2132-AB10**

The Partnership for Active Transportation would like to thank the U.S. Department of Transportation (U.S. DOT) and the Federal Highway Administration (FHWA) for the opportunity to comment on the notice of proposed rulemaking to regulations governing the Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning. While we applaud some of the new provisions relating to performance measures, we have a number of concerns and suggestions for improvements.

The Partnership for Active Transportation is concerned that the proposed rule does not include public health among the key issues that State departments of transportation (States), metropolitan planning organizations (MPO) and providers of public transportation are required to consider during the planning process. Some public health considerations are routinely overlooked in transportation decision-making. While there is precedent for regulating some health costs (e.g., air pollution from motor vehicles, and traffic injuries and fatalities), the role of transportation in engineering physical activity out of the daily routines of many Americans has been largely invisible to transportation decision-makers at all levels. Given the considerable impact of our transportation choices on physical activity levels, and consequently public health, it is shortsighted to continue to plan transportation systems without regard for the costs of disregarding this consequence. Omitting consideration of the public health effects of transportation decisions has harmed people and imposed substantial unnecessary costs on society.

Transportation policy has both positive and negative effects on the health of Americans. While roads provide critical access to jobs, education and services that enhance health, transportation and land use practices designed predominantly to accommodate motor vehicles have led to a more sedentary population. Transportation policies and plans shaped without consideration for health and equity outcomes are costing taxpayers hundreds of billions of dollars. Rails-to-Trails Conservancy has estimated that \$235 billion per year could be saved due to the prevention of premature deaths from increasing active transportation.<sup>1</sup>

By creating infrastructure that makes it less safe and convenient to walk or bicycle as part of routine daily behavior, federal transportation policy can unfortunately contribute to chronic-disease risk and mortality. About one-third of adults are estimated to be obese, and another third are overweight,<sup>2</sup> due in large part to sedentary lifestyles and the lack of opportunity for daily physical activity. Physical activity is associated with a reduced risk of all causes of mortality, including cardiovascular disease, diabetes, strokes, mental health, falls and injuries, and obesity

prevention.<sup>3</sup> Furthermore, public health efforts have found that the physical activity performed during active transportation is strongly associated with cardiovascular risk reductions. Normal walking for approximately 30 minutes per day, five days per week, leads to a 19 percent reduction in coronary heart disease risk.<sup>4,5</sup> Regular bicycling leads to a 25 percent to 35 percent reduction in mortality.<sup>6</sup>

Sedentary time increases the risks associated with insufficient physical activity. Each additional hour spent in a car per day was associated with a 6 percent increase in the likelihood of obesity, whereas each additional kilometer walked per day was associated with a 4.8 percent reduction.<sup>7</sup> New evidence identifies a relationship between too much time spent sitting and a number of adverse health outcomes.<sup>8</sup> In adults, too much sitting is related to risk for type 2 diabetes, cardiovascular disease, breast and colon cancer, and poor mental health outcomes.<sup>9,10,11</sup> Additionally, preliminary findings suggest that, in older adults, sitting is associated with cardio-metabolic health consequences.<sup>12</sup> In children, sedentary time is related to obesity, some cardiovascular risk factors (e.g., elevated systolic blood pressure) and poorer cognitive development (e.g., language delay).<sup>13</sup> Sitting time, together with a reduction in physical activity,<sup>14,15</sup> has increased significantly over the past several decades, due to a range of economic, social, environmental and technological changes, including increased motorized transport.<sup>16</sup>

Increasing motorized transportation and the associated air pollution can have negative health effects on children. Children benefit from time spent outdoors, but environmental pollution can have a disproportionate impact on children. Children breathe faster than adults, spend more time outside and have proportionately greater skin surface exposed to the environment, making them increasingly vulnerable to environmental contaminants.<sup>17</sup> Creating opportunities for children to *safely* walk, bike and play outdoors can have important public health benefits.

Total health care spending in the U.S. already consumes a significant portion of our nation's Gross Domestic Product and continues to increase rapidly, with spending of \$3.1 trillion in 2012, increasing to an estimated \$4.3 trillion by 2016.<sup>18</sup> The costs of obesity alone account for approximately nine percent of total U.S. health care spending (i.e., \$2.4 trillion in 2008, \$3.1 trillion estimated in 2012).<sup>19</sup> When the transportation, health, environmental and social benefits of active transportation are monetized, the economic incentives become clear. Improvements in safety, reductions of emissions and decreases in congestion also lead to health care improvements, so consideration of health care costs will capture the full benefit of these other improvements. With health care costs rising in the U.S., the health implications of transportation decisions can no longer be ignored. Factoring these costs into the transportation planning process could help us find ways to control health care costs, 21 percent of which are paid by the federal government.<sup>20</sup>

Language in the Moving Ahead for Progress in the 21st Century Act (MAP-21) suggests that Congress intended for transportation planners to consider health impacts of transportation decisions. In both sections, 1201(h) and 1202(h), Congress directed that both the metropolitan and nonmetropolitan planning processes shall consider projects and strategies that will "protect and enhance...quality of life" 23 U.S.C. §134(h); 23 U.S.C. § 135(h). MAP-21 sections covering

statewide, metropolitan and nonmetropolitan planning scope state the planning process shall provide for consideration of projects and strategies that will:

*(B) increase the safety of the transportation system for motorized and non-motorized users; (C) increase the security of the transportation system for motorized and non-motorized users; (D) increase accessibility and mobility of people and for freight; (E) protect and enhance the environment, promote energy conservation, improve the quality of life and promote consistency between transportation improvements and State and local planned growth and economic development patterns; (F) enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.*<sup>21</sup>

The new proposed rulemaking on Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning require:

*States, MPOs, and providers of public transportation to link investment priorities (the transportation improvement program of projects) to the achievement of performance targets that they would establish to address performance measures in the key areas such as safety, infrastructure condition, congestion, system reliability, emissions and freight movement.*<sup>22</sup>

Health also should be integrated into the planning process. This is consistent with the Congressional mandate in MAP 21, as health is fundamental to quality of life. Moreover, health is an important factor in any assessment of the safety, congestion and emissions of transportation systems. More work is needed to refine approaches to evaluating health in transportation planning, policy and decision-making. Several models have been developed and are being used, including the HEAT model from the World Health Organization,<sup>23</sup> and a large amount of data and research exists that can be used as the basis for the analysis. DOT should consider including performance measures relating to how transportation infrastructure promotes healthy living, such as miles of facilities dedicated to active modes of transportation, percentage of users who report commuting by foot or bike at least once a week for even a part of their trip, and the percentage of all trips of varying lengths that are traveled on foot or by bike. These performance measures are each obtainable and measurable by transportation planners and could enable targets to be set for consideration in future transportation planning decisions.

To enable MPOs and regional transportation planning organizations (RTPO) to better measure progress and obtain health goals, we ask that the proposed rulemaking require States, MPOs and RTPOs to collect and aggregate data relating to use of active transportation. This would ensure that residents in these areas have available to them, and are able to safely utilize, transportation infrastructure that promotes health through walking and bicycling. It would also help ensure that safe and effective walking and cycling networks are available in low-income areas, where people often cannot afford cars and are more likely to walk or bike as a primary means of transportation, and where a recent study found that pedestrian deaths are most likely to occur.<sup>24</sup> States, MPOs and RTPOs should gather this information and use it in the development of projects as laid out in sections 450.212 and 450.318.

We also have two suggestions on how the transportation planning process in both metropolitan and nonmetropolitan areas can better incorporate a multimodal approach that includes walking and bicycling whenever appropriate. First, the proposed revisions should specifically state that programmatic mitigation plans may include, under § 450.214(a)(2), “an assessment of opportunities to mitigate negative environmental impacts of the transportation infrastructure by expanding access to active transportation facilities and completing active transportation networks.” Use of active transportation has been directly linked to reductions in carbon emissions; in 2009, the estimated carbon dioxide not emitted due to walking and biking was 14 million tons of carbon dioxide.<sup>25</sup> Many communities have enacted bicycle and/or pedestrian plans as a way to connect active transportation networks and to provide a roadmap to encourage people to walk or bicycle whenever possible.<sup>26</sup>

The Partnership for Active Transportation strongly supports consideration of innovative financing methods in both the Long-Range Statewide Transportation Plan (sections 450.216) and the Metropolitan Transportation Plan (section 450.324). However, the proposed revisions should explicitly encourage consideration of innovative financing techniques in the context of active transportation. Currently, many transportation planners do not consider public-private partnerships as a way to finance pedestrian and bicycle projects. Private businesses, however, often receive considerable benefits from these projects, whether through increased revenue from tourism or increased quality of life in private developments.<sup>27</sup> The proposed revisions should encourage state, regional and metropolitan area planners to consider innovative techniques, such as tax increment financing, as a way to leverage public funding to further the impact of revenue dedicated to funding trails, walking and bicycling.

Finally, we support additional requirements for collaboration between MPOs and other agencies, such as transit agencies, to ensure that active transportation projects effectively connect pedestrians and bicyclists to transit services. Sections 450.216 and 450.324 of the proposed rules lay out requirements for the development of, respectively, long-range state transportation plans and metropolitan transportation plans. Section 450.324(g) requires that the MPO consult with State and local agencies responsible for land use management, natural resources, environmental protection, conservation and historical preservation concerning the development of the plan. Additionally, each MPO should be required to consult with public transit agencies to ensure that active transportation infrastructure is coordinated with the development of public transportation, and to provide better pedestrian access to public transportation.

We appreciate some of the advances made by the proposed rule, such as identifying safety as a key performance target area. However, the current proposed rule on planning does not differentiate between types of users and does not address the unique safety issues of active transportation users. Nevertheless, we are encouraged that there is explicit language and clarifications throughout which specifically mention non-motorized transportation and non-motorized transportation facilities, including pedestrian walkways and bicycle facilities.<sup>28</sup>

The Partnership for Active Transportation appreciates the opportunity to comment on U.S. DOT’s proposed rulemaking. If you have questions about our comments or wish to discuss the issue further, please do not hesitate to contact us via Elissa Southward at [elissa@railstotrails.org](mailto:elissa@railstotrails.org) or 202.974.5119.

Sincerely,  
The Partnership for Active Transportation



**rails-to-trails**  
conservancy



**America**  
**WALKS**

**LOCUS**



**Smart Growth America**  
Making Neighborhoods Great Together

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<sup>1</sup> Rails-to-Trails Conservancy - Active Transportation for America, (*Forthcoming, Fall 2014*); Calculation Assumptions: Based on the HEAT method: Mortality rate for 15 to -74 years old: 457/100,000 (for walking), Mortality rate for 15 to -64 years old: 310/100,000 (for cycling), Mortality reduction due to walking: 11 percent%/11.25METs (approximately. three3 hours per week at 3.3 miles per hour (mph), Mortality reduction due to cycling: 10 percent%/11.25METs (approximately. 90 minutes. per week at 11pmph), Each avoided premature death is valued at \$9.1 million in 2009 (thereafter increased by 1.07 percent% per year).

<sup>2</sup> Ogden, C.L., M.D. Carroll, L.R. Curtin, M.A. McDowell, C.J. Tabak, and K.M. Flegal. 2006. Prevalence of Overweight and Obesity in the United States. *Journal of the American Medical Association* 295(13):1549-1555.

<sup>3</sup> A.E. Bauman. (2004). Updating the evidence that physical activity is good for health: an epidemiological review 2000–2003, *Journal of Science and Medicine in Sport*, 7(1, Supp 1), 6-19. [http://dx.doi.org/10.1016/S1440-2440\(04\)80273-1](http://dx.doi.org/10.1016/S1440-2440(04)80273-1).

<sup>4</sup> Hamer, M., & Chida, Y. (2008b). Walking and primary prevention: a meta-analysis of prospective cohort studies. *British Journal of Sports Medicine*, 42(4), 238-243. doi: 10.1136/bjism.2007.039974

<sup>5</sup> Zheng, H., Orsini, N., Amin, J., Wolk, A., Nguyen, V. T. T., & Ehrlich, F. (2009). Quantifying the dose-response of walking in reducing coronary heart disease risk: meta-analysis. *European Journal of Epidemiology*, 24(4), 181-192. doi: 10.1007/s10654-009-9328-9

<sup>6</sup> Matthews, C. E., Jurj, A. L., Shu, X. O., Li, H. L., Yang, G., Li, Q., . . . Zheng, W. (2007). Influence of exercise, walking, cycling, and overall nonexercise physical activity on mortality in Chinese women. *American Journal of Epidemiology*, 165(12), 1343-1350. doi: 10.1093/aje/kwm088

<sup>7</sup> Frank, L. D. et al. 2004. Obesity relationships with community design, physical activity, and time spent in cars *American Journal of Preventive Medicine*, 27(2), 87 – 96.

<sup>8</sup> Owen N, et al. Sedentary behaviour and health: mapping environmental and social contexts to underpin chronic disease prevention. *Br J Sports Med*, 2014;48:174–177. doi:10.1136/bjsports-2013-093107.

<sup>9</sup> Veerman JL, Healy GN, Cobiac LJ, et al. Television viewing time and reduced life expectancy: a life table analysis. *Br J Sports Med* 2012;46:927–30.

<sup>10</sup> Owen N, Healy GN, Matthews CE, et al. Too much sitting: the population health science of sedentary behavior. *Exerc Sport Sci Rev* 2010;38:105–13.

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- <sup>11</sup> Tremblay MS, Colley RC, Saunders TJ, et al. Physiological and health implications of a sedentary lifestyle. *Appl Physiol Nutr Metab* 2010;35:725–40.
- <sup>12</sup> Gardiner PA, Healy GN, Eakin EG, et al. Associations between television viewing time and overall sitting time with the metabolic syndrome in older men and women: the Australian diabetes obesity and lifestyle study. *J Am Geriatr Soc* 2011;59:788–96.
- <sup>13</sup> Salmon J, Tremblay MS, Marshall SJ, et al. Health risks, correlates, and interventions to reduce sedentary behavior in young people. *Am J Prev Med* 2011;41:197–206.
- <sup>14</sup> Ng SW, Popkin BM. Time use and physical activity: a shift away from movement across the globe. *Obes Rev* 2012;13:659–80.
- <sup>15</sup> Lakerveld J, Dunstan D, Bot S, et al. Abdominal obesity, TV-viewing time and prospective declines in physical activity. *Prev Med* 2011;53:299–302.
- <sup>16</sup> Sugiyama T, Merom D, van der Ploeg HP, et al. Prolonged sitting in cars: prevalence, socio-demographic variations, and trends. *Prev Med* 2012;55:315–18.
- <sup>17</sup> Bearer, C. F. (1995). Environmental health hazards: how children are different from adults. *The Future of Children*, 11-26.
- <sup>18</sup> Keehan, S. et al. 2008. Health spending projection through 2017. *Health Affairs*. Web Exclusive W146:21. February 28
- <sup>19</sup> APHA, The Hidden Health Costs of Transportation; <http://www.apha.org/NR/rdonlyres/F84640FD-13CF-47EA-8267-E767A1099239/0/HiddenHealthCostsofTransportationShortFinal.pdf>
- <sup>20</sup> Congressional Budget Office, The 2014 Long-Term Budget Outlook. [http://www.cbo.gov/sites/default/files/cbofiles/attachments/45471-Long-TermBudgetOutlook\\_7-29.pdf](http://www.cbo.gov/sites/default/files/cbofiles/attachments/45471-Long-TermBudgetOutlook_7-29.pdf)
- <sup>21</sup> MAP 21; p. 103 & 114
- <sup>22</sup> FHWA Proposed Planning Guidelines; p. 31784
- <sup>23</sup> World Health Organization, Health economic assessment tool (HEAT) for cycling and walking. <http://www.euro.who.int/en/health-topics/environment-and-health/Transport-and-health/activities/guidance-and-tools/health-economic-assessment-tool-heat-for-cycling-and-walking>
- <sup>24</sup> Mike Maciag, “Pedestrians Dying at Disproportionate Rates in America’s Poorer Neighborhoods,” *GOVERNING*, August 2014, available at < <http://www.governing.com/topics/public-justice-safety/gov-pedestrian-deaths-analysis.html>>.
- <sup>25</sup> Rails-to-Trails Conservancy – Active Transportation for America, (*Forthcoming, Fall 2014*); Calculation Assumptions: CO2 emissions are 19.6 pounds- per- gallon of fuel saved, valued at \$10 per metric ton.
- <sup>26</sup> U.S. Federal Highway Administration, “Pedestrian and Bicycle Information: Sample Plans,” available at <[http://www.pedbikeinfo.org/planning/sample\\_plans.cfm](http://www.pedbikeinfo.org/planning/sample_plans.cfm)>.
- <sup>27</sup> See, e.g., East Central Florida Regional Council, “Economic Impacts of Trails in Orange County,” available at <<http://www.ecfrpc.org/Document-Library/Environment/Economic-Impact-of-Trails-in-Orange-County.aspx>>; Economy League of Greater Philadelphia et al., “The Economic Value of Protected Open Space in Southeastern Pennsylvania,” available at <[http://economyleague.org/files/Protected\\_Open\\_Space\\_SEPA\\_2-11.pdf](http://economyleague.org/files/Protected_Open_Space_SEPA_2-11.pdf)>, at 23 (estimating increased property value from proximity to Radnor Trail at approximately \$70,000 on average).
- <sup>28</sup> FHWA Proposed Planning Guidelines; p. 31792, 31802, 31816, 31819, 31824, 31829, 31830, 31831