

**Robert Wood Johnson Foundation  
Center to Prevent Childhood Obesity**

**POSITION STATEMENT ON THE INTERSECTION OF  
TRANSPORTATION AND HEALTH<sup>1</sup>**

PREPARED BY THE RWJF CENTER TO PREVENT CHILDHOOD OBESITY WORKING GROUP ON  
TRANSPORTATION

**TRANSPORTATION AND HEALTH OVERVIEW**

Transportation impacts more than just how Americans get from place to place. It influences physical activity, accessibility to goods and services, air pollution, greenhouse gases, stress levels, family budgets, and our amount of leisure time, as well as a host of other lifestyle and health variables. The federal surface transportation bill not only provides extensive funding for transportation projects and programs, it also communicates national policy priorities. The next authorization of this legislation presents an important opportunity to consider how transportation policies affect health, broaden cross-sector engagement, and institute equitable policy priorities and procedures. While transportation may not immediately be thought of as a key determinant of health, transportation policies and accompanying land use patterns have far-reaching implications for our risk of disease and injury. Policy decisions about transportation contribute to growing health disparities between the affluent and the poor and between whites and people of color.

The direct health consequences of U.S. transportation policies and practices are legion. They include: pollution-related asthma, pedestrian injury rates that greatly exceed those of other countries, reduced physical activity due to a built environment that does not support active transportation, and the associated rise in chronic diseases that stem from sedentary lifestyles and exposure to unhealthy air. Transportation also affects health indirectly, by providing—or failing to provide—connections to jobs, medical care, healthy food outlets, and other essential resources. Additionally, transportation lends a significant contribution to climate change—accounting for 28 percent of total U.S. greenhouse gas emissions.<sup>2</sup> Many of the strategies that will help address climate change issues—increasing transit ridership, reducing vehicle miles traveled, increasing non-motorized forms of transportation such as walking and biking—are the same strategies that will also help combat childhood obesity. Overall, walkable, bikeable, safe neighborhoods with convenient locations of goods and services are conducive to economic development and make cities more livable.

Physical inactivity is a primary factor in obesity, and transportation patterns are a primary factor influencing physical activity levels. The more time a person spends in a car, the more likely he or she is to be overweight.<sup>3</sup> Conversely, higher rates of walking and bicycling are associated with lower rates of obesity.<sup>4</sup> Many experts believe that walking and bicycling—not only for recreation but also for travel—are the most practical ways to improve fitness and one of few viable options for low-income people and people of color who live in neighborhoods without parks or access to other physical activity opportunities.<sup>5</sup> The links between physical activity and health are well established, with sedentary lifestyles estimated to contribute to as many as 255,000 preventable deaths per year and physical inactivity being a major contributor to the rising rates of a number of chronic illnesses such as Type II diabetes and heart disease.<sup>6</sup> Many overweight and obese children and adolescents are already at risk for these ailments, once considered “adult” maladies. Obesity is a major cost to private and public health care systems, accounting for one-third of cost increases in recent years.<sup>7</sup> Transportation policy affects some of the leading causes of death, disability, and health care costs; therefore, it is essential to fully consider the health impacts of transportation decisions. As the Robert Wood Johnson Foundation Center to Prevent Childhood Obesity (RWJF Center) and our partners work to achieve our goal of reversing the childhood obesity epidemic by 2015, advocates and experts from many spheres—public health, environmental justice, food policy, agriculture,



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labor, equity, and community development— must coalesce around a new vision of transportation, and push for policies that promote shared solutions to multiple goals.

## THE PROBLEM

Longstanding transportation policies and land use patterns are at odds with the serious health, environmental, and economic needs of our country, and of low-income communities and communities of color in particular. If properly integrated, however, transportation policies and land use patterns have the potential to positively affect health outcomes for all Americans, especially for the most vulnerable populations. Transportation policy *is*, in effect, health policy—and environmental, food, employment, and metropolitan development policy, each of which bears on health independently and in concert with the others. Transportation decisions can and should engage diverse voices, constituencies, disciplines, and fields in a systemic analysis, crafting sustainable solutions that benefit everyone. Transportation policy at all levels of government can be a vehicle to promote public health, sustainability, equitable opportunity, and the development of thriving metropolitan regions.

Historically, transportation policy in the United States has focused explicitly on the mobility of cars, and trillions of dollars have been spent on the pursuit of this single goal with little regard for the consequent health “side effects.” Policy reform has previously been attempted, but funding mechanisms and allocation formulas to states have continued to favor highway construction and car travel. Other modes remain underinvested. Approximately 80 percent of the surface transportation bill is spent on highways, while less than 20 percent is focused on public transportation. Only one percent of federal transportation funding has been spent on bicycle and pedestrian infrastructure; however these modes comprise nearly 10 percent of trips in the United States.<sup>8</sup>

Federal legislation *authorizes* a relatively high match for both highway and transit capital projects. However, under the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)* the federal government has provided a weak funding match for transit compared to a considerably more robust funding match for state highway construction. As a result, states and regions have had a strong incentive to build roads instead of public transportation. This inequitable situation must change. By leveling the funding playing field and ensuring that qualified public transportation projects will receive equal or greater funding, the federal government can eliminate bias, and encourage states and regions to select projects based on the outcomes they will produce rather than the amounts of federal funding they will attract. The bias towards automobile travel is so strong that pedestrian and bicycle travel is measured poorly or not at all. Improved measurement of these modes is critical to informed planning and funding decisions.

## THE OPPORTUNITY

Authorization of the surface transportation bill is an immense opportunity to forge a policy response to these unprecedented challenges and to invest in a healthy, sustainable, equitable transportation system. The act, which authorizes federal programs for highways, highway safety, bicycle and pedestrian infrastructure, and public transportation for approximately six years, marks the largest transportation expenditure in the United States.<sup>9</sup> The surface transportation bill establishes priorities, funding categories, requirements, and in some cases gives cities and metropolitan regions flexibility to shape strategies that address local needs. The law is a chance to design communities to maximize economic opportunity, health, accessibility, and sustainability—and to give all Americans clean, affordable, safe options for physical activity and to get where we need to go.

## THE VISION

The RWJF Center supports the vision of a transportation system that serves to foster healthy, opportunity-rich communities that allow everyone to participate and prosper. The center recommends a new transportation goal for America—a balanced transportation system that provides travel options for all citizens and contributes

positively to health and environmental sustainability.<sup>10</sup> This new policy approach prioritizes investments in travel modes that promote access to opportunity, physical activity, and environmental quality—specifically, public transportation, walking, bicycling, and mobility options for people with disabilities—including communities with the greatest need for affordable, safe, reliable transportation linkages: low-income communities and communities of color.

Healthy, equitable, transportation policy requires the development of accessible, efficient, affordable, and safe alternatives to automobile travel. These alternatives enable people to walk, travel on bicycle, and use public transportation more—in other words, to get around in ways that promote health, provide better access to jobs and grocery stores, and concurrently reduce dangerous pollutants. Healthy, equitable transportation policy emphasizes interconnected, high-density, mixed-use, mixed-income metropolitan development, as well as agricultural land preservation. Such policy also provides better access for rural communities – connecting rural residents with goods and services available in metropolitan hubs. In particular, transportation policy should promote innovative land use strategies that can yield the greatest improvements in health and focus much needed investment in underserved and economically isolated communities.

## RECOMMENDATIONS

Research shows that when communities are healthy, children are healthy. As members of Congress consider improving programs related to surface transportation, they have the opportunity to improve the environments where our children live, play, and learn. The RWJF Center believes the following recommendations provide opportunities to improve the health of children by creating healthy communities through transportation policy decisions.

### **Recommendation: Strengthen and Expand the Safe Routes to School Program**

The federal Safe Routes to School Program (SRTS) was created in August 2005 as part of SAFETEA-LU. A total of \$612 million was allocated for FY2005-2009 for infrastructure and non-infrastructure programs to “establish safer and fully accessible crossings, walkways, trails, and bikeways.”<sup>11</sup> State Departments of Transportation award the federal funds to cities, counties, and elementary and middle schools, and research has shown that schools that have implemented SRTS have enabled students to lead healthier lifestyles.<sup>12</sup> Studies have reported student increases in walking and bicycling at schools participating in SRTS programs in the range of 20 to 200 percent, with safety improvements of up to 49 percent.<sup>13</sup> Not only are students more active, but SRTS often re-routes traffic or decreases traffic speed surrounding schools, leading to cleaner air and less noise pollution.

### **Actions**

- *Work to ensure a greater percentage of schools are receiving the resources they need to create or fully develop a SRTS program, and increase the SRTS resources available to all schools.*
- *Give priority and provide capacity building opportunities and resources to disadvantaged communities so they are able to successfully apply for funding.*
- *Expand eligibility to high schools to allow students to continue their healthy habits.*
- *Require the Federal Highway Administration and states to ease administrative burdens posed by the federal government to avoid unnecessary delays.<sup>14</sup>*
- *Measure and evaluate the impact of the SRTS program at the local, state, and federal level.*

### **Recommendation: Prioritize transportation spending on projects and programs that connect low-income residents to economic opportunity and essential goods and services.**

Longstanding transportation and land use policies have especially detrimental effects on residents of low-income communities and communities of color. Rates of obesity and other chronic diseases are considerably higher in these communities, and low-income households spend a significantly greater percentage of their incomes on transportation compared to middle- and upper-income families.<sup>15</sup> Low-income communities and communities of

color experience the greatest need for affordable, safe, reliable transportation linkages to connect residents with access to jobs, healthy food outlets, medical assistance, and other critical goods and services. Accessibility should be at the forefront of transportation policy and planning, rather than a primary focus on mobility. Federal, state, and local transportation investments should target distressed and disadvantaged communities in order to address disparities and promote healthy opportunities among vulnerable populations.

#### **Actions**

- *Give priority consideration to transportation investments made to benefit disadvantaged communities.*
- *Require an assessment of the land use impacts of major transportation projects on low-income populations and require that decisions promote mixed-use developments accessible by multiple transportation modes.*

#### **Recommendation: Enact complete streets policies**

Complete streets ensure that all road users, including motorists, transit vehicles and riders, and bicyclists and pedestrians of all ages and abilities have safe and appropriate access to roads. Complete streets should not be limited to new infrastructure projects, but should also include retro-fitting older roads. Both new and retro-fitted projects should have standards for execution and outcomes.<sup>16</sup> Complete streets offer a high public benefit since they increase economic, environmental, and logistical efficiency of transportation infrastructure.<sup>17</sup> Studies show that people who drive the most have increased levels of obesity, a disease that costs America \$147 billion annually.<sup>18,19</sup> Sidewalks and bike facilities are strongly related to rates of walking and bicycling, warranting increased investment.<sup>20, 21</sup> Complete streets create options other than automobile transit, giving people the ability to choose healthier modes of transportation.

#### **Actions**

- *Require complete streets in every new transportation corridor project and roadway repair or reconstruction project.*
- *Provide funding to support retro-fitting communities with complete streets infrastructure such as sidewalks and bicycle facilities (including bicycle parking facilities), and features that improve accessibility for people with disabilities to connect homes, schools, public transit stops, and other destinations.*
- *Ensure pedestrian safety by requiring a safety assessment of new construction or improvements in highway, roadway, railroad, and river crossings.*
- *Improve measurement of pedestrian and bicycle trips and use of facilities, and use this information to prioritize funding to achieve a more balanced transportation system.*

#### **Recommendation: Support investments in public transportation**

High quality and affordable public transportation can address a variety of public health and equity issues. Additionally, investments in transit oriented, mixed-use development can reel in sprawling land use patterns while improving pedestrian safety, air quality, physical activity levels, access to fundamental goods and services, and reducing financial burdens. Physical inactivity is an important contributor to the rising rates of obesity, and transportation practices strongly influence physical activity habits. Walking to and from public transportation has been associated with increased levels of physical activity, especially among low-income communities and communities of color.<sup>22</sup> Current policies and planning priorities, however, fail to adequately support public transportation. Transportation financing is skewed in favor of roadway construction and maintenance. For example, approximately 80 percent of the surface transportation bill is spent on highways, while less than 20 percent goes to public transportation. Furthermore, current federal transportation investments focus on capital projects, yet operating costs for public transportation systems present significant challenges for many communities. In order for public transportation to achieve its full range of potential benefits, reforms in policy, planning, and funding are needed to allow significant new investments in public transportation.

## Actions

- *Shift a significant level of federal transportation spending from highway construction to public transportation to ensure that the millions of non-car users benefit from transportation investment.*
- *Re-establish federal support for public transit operating costs to maintain existing transit services and sustain their operation capacity.*
- *In order to promote equity, priority should be given to the needs of disadvantaged communities when funding capital expansion grants for public transit, investing in the repair and maintenance of existing infrastructure, and bolstering financial support for transit operating costs.*
- *Prioritize and incentivize transit oriented development projects.*

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<sup>1</sup> Informed by PolicyLink and Prevention Institute “The Transportation Prescription: Bold New Ideas for Health, Equitable Transportation Reform in America,” (2009) (Commissioned by the Healthy Eating, Active Living Convergence Partnership), and PolicyLink “Making Equity Central to Federal Transportation Policy,” (2009).

<sup>2</sup> US Department of Transportation. Transportation and Climate Change Clearinghouse. <http://climate.dot.gov/about/transportations-role/overview.html>

<sup>3</sup> Frank, L. D., Andresen, M., & Schmid, T. L., “Obesity Relationships and Community Design, Physical Activity, and Time Spent in Cars,” *American Journal of Preventive Medicine*. 2004. 27, no.2 (2004): 87–96.

<sup>4</sup> Bassett, D.R., Jr., et. al. Walking, cycling, and obesity rates in Europe, North America, and Australia. *Journal of Physical Activity and Health* 2008, 5:795-814. <http://policy.rutgers.edu/faculty/pucher/JPAH08.pdf>

<sup>5</sup> Gilbert, R. and O’Brien C. Child- and Youth-Friendly Land Use and Transport Guidelines. 2005. The Centre for Sustainable Transportation Development. [www.richardgilbert.ca/Files/2005/Guidelines,%20Ontario%20\(Web\).pdf](http://www.richardgilbert.ca/Files/2005/Guidelines,%20Ontario%20(Web).pdf)

<sup>6</sup> Transportation Research Board and Institute of Medicine. 2005. Does the Built Environment Influence Physical Activity? Examining the Evidence—Special Report 282. Washington, DC: National Academy Press.

<sup>7</sup> Finkelstien, E.A., Trogdon, J.G., Cohen, J.W., & Dietz, W. (2009). Annual Medical Spending Attributable to Obesity: Payer- and Service-Specific Estimates. *Health Affairs*. 5: w822-w831.

<sup>8</sup> Cradock, A.L. et al. (2009). Factors Associated with Federal Transportation Funding for Local Pedestrian and Bicycle Programming and Facilities. *Journal of Public Health Policy*. 30, S38-S72.

<sup>9</sup> For information on the current legislation, including authorizations and allocations, see [www.fhwa.dot.gov/safetealu/](http://www.fhwa.dot.gov/safetealu/)

<sup>10</sup> Litman, Todd. 2009. The Future Isn’t What it Used to Be: Current Trends and their Implications for Transport Planning. 2009. [www.vtpi.org/future.pdf](http://www.vtpi.org/future.pdf)

<sup>11</sup> [http://safety.fhwa.dot.gov/saferoutes/srtsguidance.htm#\\_Toc123542166](http://safety.fhwa.dot.gov/saferoutes/srtsguidance.htm#_Toc123542166)

<sup>12</sup> Safe Routes to School: A Transportation Legacy. A National Strategy to Increase Safety and Physical Activity among American Youth. *A report of the National Safe Routes to School Task Force*. 2008.

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<sup>13</sup> <http://repositories.cdlib.org/cgi/viewcontent.cgi?article=1042&context=its/tsc>

<sup>14</sup> [http://www.saferoutespartnership.org/media/file/SRTS\\_reauthorization\\_recommendations.pdf](http://www.saferoutespartnership.org/media/file/SRTS_reauthorization_recommendations.pdf)

<sup>15</sup> Lipman, B. (2006). A Heavy Load: The Combined Housing and Transportation Burdens of Working Families. A *Center for Housing Policy Report*,

<sup>16</sup> <http://www.completestreets.org/policies.html>

<sup>17</sup> [http://t4america.org/docs/T4\\_platform.pdf](http://t4america.org/docs/T4_platform.pdf)

<sup>18</sup> <http://www.apha.org/NR/rdonlyres/43F10382-FB68-4112-8C75-49DCB10F8ECF/0/TransportationBrief.pdf>

<sup>19</sup> Finkelstien, E.A., Trogdon, J.G., Cohen, J.W., & Dietz, W. (2009). Annual Medical Spending Attributable to Obesity: Payer-and Service-Specific Estimates. *Health Affairs*. 5: w822-w831.

<sup>20</sup> Sallis J, Bowles H, Bauman A, et al. "Neighborhood Environments and Physical Activity among Adults in 11 Countries." *American Journal of Preventive Medicine*, 36(6): 484-490, June 2009.

<sup>21</sup> Boarnet M, Day K., Anderson C, et al. "California's Safe Routes to School Program - Impacts on Walking, Bicycling, and Pedestrian Safety." *Journal of the American Planning Association*, 71(3): 301-317, September 2005.

<sup>22</sup> Besser, L.M. & Dannenberg, A.L. (2005). Walking to Public Transit: Steps to Help Meet Physical Activity Recommendations. *American Journal of Preventive Medicine*. 29(4): 273-280.

Responsibility for developing policy strategy recommendations for the RWJF Center frequently lies with working groups that include center staff and representatives of RWJF national programs and grantees. Transportation working group members are:

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