



Active Transportation

Creating Spaces That Promote Active Living

OVERVIEW

The way communities are designed and developed can affect physical activity and obesity rates.^{1,2} Environments that are safe and built with walking, biking and other physical activities in mind are correlated with lower body weights and reduced cardiovascular disease.^{3,4} Conversely, a sedentary lifestyle puts people at risk for diabetes, heart disease and premature death.⁵

Integrating health considerations within community design – known as the built environment – can create more active communities and transportation options for healthier living.⁶ Parks, office buildings, walkways and urban spaces are also considered built environments. Community planning and health behavior research demonstrate that built environments influence people's decision to use public transport, drive, walk, or cycle to get to their destination.^{7,8} Designing community environments to include open spaces/parks/trails, mixed land use, trees/greenery, accessibility and street connectivity, building design, and workplace physical activity policies/programs have demonstrated significant co-benefits.⁹ These include physical health, mental health, safety/injury prevention, social benefits, economic benefits, and environmental sustainability.¹⁰

WHY IT MATTERS

Percent of obese adults (Body Mass Index of 30+)

0 - 9.9% 10 - 14.9% 15 - 19.9% 20 - 24.9% 25 - 29.9% 30 - 34.9% 35%+

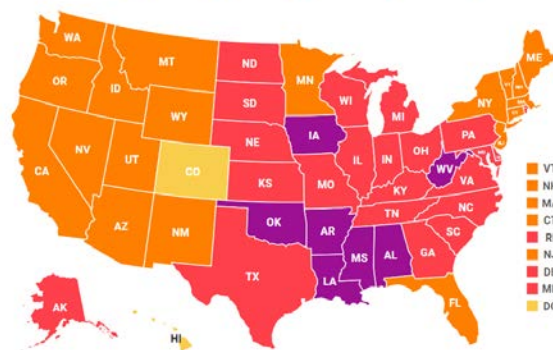


Figure 1: Adult Obesity Rate by State, 2017¹¹

Rates of obesity now exceed 20% in every state, with rates in 48 states above 25%; 29 states above 30%; and seven states above 35% (Figure 1).¹¹ According to current trends, 47% of adults will be obese by 2030.¹² Nearly 80% of US adults and 75% of adolescents do not get the recommended weekly amount of aerobic and

strengthening activity.^{13,14} When considering these data, it is imperative that today's built environments help increase physical activity opportunities.^{11,12}

BUILDING ACTIVE COMMUNITIES

People across the U.S. interact with their built environments constantly, affecting quality of life and years of healthy life lived.¹⁵ Sound built environments can influence health through design and program elements.¹⁶ Examples include¹⁶:

- **The Transportation Alternatives Program (TAP)** combines and replaces pre-MAP-21 programs including Transportation Enhancements, Recreational Trails, Safe Routes to School, and several other discretionary programs, wrapping them into a single funding source.
 - a. **Safe Routes to School** enables more children to safely walk and bike to school. Community leaders prioritize the safety of these routes and are working to reduce traffic congestion and improve health and the environment. They serve as great walking routes for others in the community, including seniors.
 - b. **Transportation Enhancements** activities offer funding opportunities to help expand transportation choices in communities, including pedestrian and bicycle infrastructure and safety programs, as well as conversion of abandoned railway corridors to trails.
 - c. **Recreational Trails Program (RTP)** provides funds to states to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses, including hiking, bicycling, in-line skating, equestrian use, and cross-country skiing.
- **Complete Streets** policies consider the needs of all users in all transportation projects incorporating walking, bicycling, public transportation, and driving.
- **Smart Growth Design** communities are designed with active living as the focus and are connected with street patterns that make it easy to walk or bike to destinations. Developers try to locate essential services like schools and stores closer to homes to encourage walking and provide green spaces for recreation.

- **Congestion Mitigation and Air Quality (CMAQ) Improvement Program** supports surface transportation projects and other associated initiatives that improve air quality and provide congestion relief in maintenance and non-attainment areas to address the most serious air pollutants.

INVESTING IN GOOD BUILT ENVIRONMENTS MAKES SENSE

Investing in the built environment can facilitate economic development in communities.^{17,18} Local economies advance when walking and cycling improvements provide access to employment and education opportunities, generate jobs, improve workforce productivity, and spur regional business activity.^{17,18} Additionally, studies show that community gardens and walking or biking trails have a positive impact on surrounding residential properties by increasing property value to boost economic development and create more tax revenue for local governments.^{18,19} A national survey reveals that the ability to walk or bike through a neighborhood is a strong factor in determining where to relocate when considering a move.²⁰

Other research indicates that building bike and pedestrian trails reduce health care costs associated with physical inactivity.²¹ *For every dollar invested in building trails, nearly three dollars in medical cost savings may be achieved.*²²

A SOUND BUILT ENVIRONMENT AFFECTS COMMUNITY HEALTH

People who have parks or recreational facilities nearby and live in communities with well-connected streets tend to be more physically active than those who do not have easy access.^{17,18} Community-based physical activity interventions are cost-effective, reducing new cases of many chronic diseases and improving quality of life.^{18,23}

THE ASSOCIATION ADVOCATES

The American Heart Association supports initiatives that create more livable and active communities and advocates for the following policy recommendations:

- Increase funding for the Transportation Alternatives Program (TAP), which includes Safe Routes to School, transportation enhancements projects, and the Recreational Trails Program.
- Increase funding through new resources that supplement current active transportation initiatives.
- Support the Congestion Mitigation and Air Quality (CMAQ) Improvement Program and assure that metropolitan planning organizations (MPOs) can spend appropriations on other air quality improvement initiatives like bike and pedestrian infrastructure once the MPO hits the air quality goal.
- Sustain funding at the state and federal level to assist communities in implementing active transportation networks.

- Require state departments of transportation, (MPOs), and cities to adopt Complete Streets policies that consider the needs of all users in all transportation projects - whether walking, bicycling, public transportation, or driving - and reduce the need to retrofit existing roads and paths.
- Incorporate health impact assessments into community planning.

¹ Zhang, X, et al. Neighborhood commuting environment and obesity in the United States: An urban-rural stratified multilevel analysis. 2014. Preventive medicine: 59; 31-36.

² Townsend T, et al. Obesogenic urban form: theory, policy And practice. 2009. Health & Place. 15, 909---916.

³ Papas MA, et al. The built environment and obesity. 2004. Epidemiologic Reviews, 29 (1), 129---143.

⁴ Urban Land. 2014. Open Spaces and Active Transportation. Retrieved on May 13, 2014: <http://urbanland.uli.org/planningdesign/open-spaces-and-active-transportation/>

⁵ Chomistek, AK., et al. The Relationship of Sedentary Behavior and Physical Activity to Incident Cardiovascular Disease: Results from the Women's Health Initiative. 2013. Journal of the American College of Cardiology.

⁶ Sallis, JF., et al. Role of built environments in physical activity, obesity, and cardiovascular disease. 2012. Circulation 125.5; 729-737.

⁷ Saelens B et al. Neighbourhood-based differences in physical activity: an environment scale evaluation. American Journal of Public Health, 2003, 93:1552-1558.

⁸ Ranchod, YK., et al. Longitudinal associations between neighborhood recreational facilities and change in recreational physical activity in the multi-ethnic study of atherosclerosis, 2000-2007. 2014. American journal of epidemiology 179.3: 335-343.

⁹ Sallis JF, Spoon C, Cavill N, et al. Co-benefits of designing communities for active living: an exploration of literature. International Journal of Behavioral Nutrition and Physical Activity. 2015. Feb; 12(1)

¹⁰ Van Dyck D, Cerin E, Conway TL, De Bourdeaudhuij I, Owen N, Kerr J, Cardon G, Frank LD, Saelens BR, Sallis JF. Perceived neighborhood environmental attributes associated with adults' transport-related walking and cycling: Findings from the USA, Australia and Belgium. International Journal of Behavioral Nutrition and Physical Activity. 2012. 9(70):1-14.⁹

¹¹ Mozaffarian, D., et al. Heart disease and stroke statistics-2015 update: a report from the American Heart Association. Circulation. 2015. 131(4): e29-e322.

¹² Centers for Disease Control and Prevention. National Health and Nutrition Examination Survey: 2011-2012: 2012. Available at:

<http://www.cdc.gov/nchs/nhanes/search/datapage.aspx?Component=Dietary>. Accessed on March 15, 2016.

¹³ Robert Wood Johnson Foundation. (2018, September). Adult Obesity in the United States. Retrieved December, 2018, from <http://stateofobesity.org/adult-obesity/>

¹⁴ Obesity Update 2017 - OECD. (2017). Retrieved January, 2019, from <https://www.oecd.org/els/health-systems/Obesity-Update-2017.pdf>

¹⁵ National Center for Health Statistics. National Health Interview Survey, 2017. Public-use data file and documentation.

https://public.tableau.com/profile/tina.norris#!/vizhome/FIGURE7_4/Dashboard7_4 NCHS tabulations. Accessed January, 2019.

¹⁶ Benjamin et al. Heart disease and stroke statistics - 2018 update: A report from the American Heart Association. Circulation. 2018; 137(12):e67-e492, doi: 10.1161/CIR.0000000000000558

¹⁷ Office of Disease Prevention and Health Promotion. (n.d.). Environmental Health. Retrieved January, 2019, from <https://www.healthypeople.gov/2020/topics-objectives/topic/environmental-health>

¹⁸ White House Task Force on Childhood Obesity. Report to the President. 2010. Available at: http://www.letsmove.gov/sites/letsmove.gov/files/TaskForce_on_Childhood_Obesity_May2010_FullReport.pdf

¹⁹ Litman, T. (2018, August). Evaluating Active Transport Benefits and Costs - vtpi.org. Retrieved October/November, 2018, from <http://www.vtpi.org/nmt-tdm.pdf>

²⁰ Pedroso, M. (2017, December). Investing in Walking, Biking, And Safe Routes to School. Retrieved October/November, 2018, from

https://www.saferoutespartnership.org/sites/default/files/resource_files/121117-sr2s-investing_report-final.pdf

²¹ Gough MZ, et al. Public Gardens as Sustainable Community Development Partners: Motivations, Perceived Benefits, and Challenges. 2013. Urban Affairs Review.

²² Handy SL, et al. Is support for traditionally designed communities growing? Evidence from two national surveys. 2008. Journal of the American Planning Association; 74(2): 209-221.

²³ Wang G, et al. A cost-benefit analysis of physical activity using bike/pedestrian trails. Health Promotion Practice: 2005; 6(2): 174-9.

²⁴ Mendoza, JA, et al., Ethnic Minority Children's Active Commuting to School and Association with Physical Activity and Pedestrian Safety Behaviors. 2010. Journal of Applied Research on Children. 1(1).

²⁵ Roux L., et al., Cost-effectiveness of community-based physical activity programs. 2008. American Journal of Preventive Medicine: 35(6):578-588.