

Creating Built Environments That Expand Active Transportation and Active Living Across the United States: A Policy Statement of the American Heart Association¹

What is Active Transportation?

Active transportation is any mode of transportation that is powered by the human body, such as walking, biking, skating and using mobility assistive devices such as wheelchairs and walkers, and accessing public transportation.¹

Why is Active Transportation Important?

Physical activity provides many benefits, including disease prevention, physical and mental well-being, and is crucial for the optimal health of everyone in the United States.² Many adults and children do not get enough physical activity in their daily lives. Only 26 percent of men, 19 percent of women and 20 percent of adolescents meet the aerobic and muscle-strengthening recommendation in the Physical Activity Guidelines for Americans.² According to the World Health Organization, physical inactivity has been identified as the 4th leading risk factor for global mortality – causing 6 percent of deaths worldwide.³ The amount of physical inactivity globally has widespread negative health, economic and social outcomes.⁴

One of the leading, evidence-based strategies to increase physical activity across all ages, incomes, racial/ethnic backgrounds, abilities and disabilities is promoting active transportation through policy, systems and environmental change. However, most

people in the United States, especially those living in under-resourced communities, do not live in areas accessible to active transportation. This can limit an individual's access to economic and social opportunities. ^{6,7} In order to provide more possibilities for active transport, there is a need for policy, environmental and systems interventions to connect people with safe, convenient and appealing public and private infrastructure. ⁸

The Importance of an Equity Focus

Studies have found that disparities across race and ethnicity and in communities with fewer resources lead to less physical activity.²
Historical inequities in U.S. transportation and

Land use, planning processes and zoning ordinances that Macroscale intentionally intermingle places where people live, work, play and pray. Policies like Complete Streets, Safe Routes to School and Open Streets Interventions for Active that create aualitu. Transportation comprehensive and connected networks for active transport Functional and inviting design details like traffic calming and safety Microscale measures for people who are walking, biking, or using public transit.

land use policies continue, with limited public investments in communities with greatest need to improve roads, sidewalks, lighting, and other transportation infrastructure.⁹

Equitable transportation policies are those that support the development of accessible, efficient, affordable, and safe alternatives to car travel; encourage high-density, mixed-use, mixed-income development and affordable housing with good access to transportation options, especially in low-income and underserved communities; connect all people to employment and other opportunities that can improve quality of life; and recognize that all segments of communities should be represented through the planning process, with an emphasis on engaging those who historically have been disenfranchised.¹⁰

¹ Young, DR. Cradock, AL. Eyler, AE. Fenton, M. Pedroso, M., Sallis, JF., Whitsel, LP. Creating Built Environments That Expand Active Transportation and Active Living Across the United. States: A Policy Statement of the American Heart Association. on behalf of the American Heart Association Advocacy Coordinating Committee. *Circulation*. August 13, 2020.

Characteristics of Effective interventions

Effective interventions to increase active transportation should require:

- Broad partnerships across federal, state and local governments; as well as stakeholders that represent a variety of
 professional disciplines, community perspectives and advocacy groups to help address differing priorities and improve
 accountability.¹¹
- Funding sources for improvements in transportation, infrastructure and site designs.
- Changes in routine practices and procedures to create walk, bike and transit-friendly settings.
- **Ongoing communication** with communities to build awareness, maintain community support and keep residents informed until active transportation projects are complete.

What the American Heart Association Supports

The American Heart Association supports safe, equitable active transportation policies in communities across the country that incorporate consistent implementation and outcome evaluation. Some recommended interventions include:

Pedestrian and Bicycle Infrastructure

Improvements to transportation systems can include street layout and design, improvements to public transit infrastructure, and creation of bicycle and pedestrian facilities, which are improvements that make it easier for localities to accommodate, encourage and enhance opportunities for active transportation. These improvements can include, pedestrian access routes, sidewalks, street crossings and furnishings such as benches, lighting or traffic control devices. Improvements for bicycling can include road space for bicycles, bicycle parking or storage facilities and bicycle sharing systems – and should also accommodate those who use wheelchairs or other mobility assistive devices. ^{12, 13} The goal for these improvements is to make pedestrian and bicycling convenient and socially acceptable ¹⁴, while reducing the risk of crashes ¹⁵ and improving safety. ¹⁶

Complete Streets

A Complete Streets approach requires that users of all ages, incomes, and abilities be considered in all roadway construction, repair, reconstruction and routine maintenance. Complete streets policies are associated with fewer collisions and injuries involving vehicles and bicyclists or pedestrians.¹⁷ It is also worth noting that streets designed to facilitate walking and bicycling appear to attract more active transportation.¹⁸

Safe Routes to Schools

Safe Routes to School is a federal and state funded transportation program that facilitates active, safe commuting to and from school with street scale improvements and other supports. ¹⁹ These initiatives include educating children how to safely walk, bicycle and roll. ²⁰ Schools located in under-resourced communities can particularly benefit from Safe Routes to School programs, since these communities have less safe infrastructure for active transportation and children living in these communities have a higher risk of traffic-related injuries and mortality. ²¹ Safe Routes to School programs can address equity by tailoring the interventions to the local school population.

Compact and Mixed Land Use and Development Patterns

People are much more likely to walk, bike and take transit for their daily needs when various destinations are nearby. Factors such as the proximity of parks and open space, the density of housing and transit network, a mix of shopping, services, schools, and employment opportunities all contribute to encouraging routine active transportation.²³ Municipal and regional comprehensive, growth, and transportation plans can and should identify these attributes as goals, and zoning ordinances, development guidelines and permitting procedures must be implemented to assure this mix and variety is available to residents of all incomes and backgrounds to live in more walkable and bike-friendly neighborhoods.²⁴

Resources for implementation and financing active transportation projects are found in Tables 1 and 6 of the paper.

References:

- 1. Centers for Disease Control and Prevention. Transportation Health Impact Assessment Toolkit.
- 2. U.S. Department of Health and Human Services. *Physical Activity Guidelines for Americans, 2nd edition*. Washington, D.C.: U.S. Department of Health and Human Services; 2018.
- 3. World Health Organization. Global strategy on diet, physical activity, and health.
- 4. Kohl HW, 3rd, Craig CL, Lambert EV, Inoue S, Alkandari JR, Leetongin G, Kahlmeier S and Lancet Physical Activity Series Working G. The pandemic of physical inactivity: global action for public health. *Lancet*. 2012;380:294-305.
- 5. de Nazelle A, Nieuwenhuijsen MJ, Anto JM, Brauer M, Briggs D, Braun-Fahrlander C, Cavill N, Cooper AR, Desqueyroux H, Fruin S, Hoek G, Panis LI, Janssen N, Jerrett M, Joffe M, Andersen ZJ, van Kempen E, Kingham S, Kubesch N, Leyden KM, Marshall JD, Matamala J, Mellios G, Mendez M, Nassif H, Ogilvie D, Peiro R, Perez K, Rabl A, Ragettli M, Rodriguez D, Rojas D, Ruiz P, Sallis JF, Terwoert J, Toussaint JF, Tuomisto J, Zuurbier M and Lebret E. Improving health through policies that promote active travel: a review of evidence to support integrated health impact assessment. *Environ Int*. 2011;37:766-77.
- 6. Thrun E, Perks, M, Chriqui, J. Prioritizing transportation equity through Complete Streets. Research Report. 2016.
- 7. Sandt L, Combs, T., Cohn, J. Pursuing equity in pedestrian and bicycle planning. 2016.
- 8. U.S. Department of Health and Human Services. Step It Up! The Surgeon General's Call to Action to Promote Walking and Walkable Communities. 2015.
- 9. Smart Growth America. The state of transportation and health equity. December 2019.
- 10. Malekafzali S. Healthy, equitable transportation policy. Recommendations and research.
- 11. Arena R, Guazzi M, Lianov L, Whitsel L, Berra K, Lavie CJ, Kaminsky L, Williams M, Hivert MF, Franklin NC, Myers J, Dengel D, Lloyd-Jones DM, Pinto FJ, Cosentino F, Halle M, Gielen S, Dendale P, Niebauer J, Pelliccia A, Giannuzzi P, Corra U, Piepoli MF, Guthrie G and Shurney D. Healthy Lifestyle Interventions to Combat Noncommunicable Disease-A Novel Nonhierarchical Connectivity Model for Key Stakeholders: A Policy Statement From the American Heart Association, European Society of Cardiology, European Association for Cardiovascular Prevention and Rehabilitation, and American College of Preventive Medicine. *Mayo Clin Proc.* 2015;90:1082-103.
- 12. U.S. Department of Transportation. FWHA Guidance: Bicycle and Pedestrian Provisions of Federal Transportation Legislation. Updated September 10, 2015.
- 13. U.S. Department of Transportation. Expand and Improve Bicycle and Pedestrian Infrastructure. December, 2015.
- 14. Zimmerman S, Kramer, K,. Getting the Wheels Rolling. A guide to using policy to create bicycle friendly communities
- 15. Harris MA, Reynolds CC, Winters M, Cripton PA, Shen H, Chipman ML, Cusimano MD, Babul S, Brubacher JR, Friedman SM, Hunte G, Monro M, Vernich L and Teschke K. Comparing the effects of infrastructure on bicycling injury at intersections and non-intersections using a case-crossover design. *Injury prevention: journal of the International Society for Child and Adolescent Injury Prevention*. 2013;19:303-10.
- 16. Federal Highway Administration. Making our roads safer one countermeasure at a time. 2017.
- 17. Anderson G, Searfoss, L, Cox, A, Dodds, A, Kikkawa, M, Kite, H, Millar, R, Murphy, C, Schilling, E, Seskin, S, Warlick, S, Zimmerman, C. Safer streets. stronger economies: Complete Streets project outcomes from across the country. March 2015.
- 18. Sallis JF, Cain KL, Conway TL, Gavand KA, Millstein RA, Geremia CM, Frank LD, Saelens BE, Glanz K and King AC. Is Your Neighborhood Designed to Support Physical Activity? A Brief Streetscape Audit Tool. *Prev Chronic Dis.* 2015;12:E141.
- 19. Muennig PA, Epstein M, Li G and DiMaggio C. The cost-effectiveness of New York City's Safe Routes to School Program. *American journal of public health.* 2014;104:1294-9.
- 20. Safe Routes to School National Partnership. 2020.
- 21. Safe Routes to School National Partnership. Fighting for Equitable Transportation: Why It Matters.