# **Walking's Impact on Health**



FACT SHEET • October 2018

Walking is a basic form of transportation that has an impact on health, social equality, and economic and community development. Regular physical activity helps prevent and improve outcomes for heart disease, stroke, diabetes, and breast and colon cancer. It also supports positive mental health, emotional well-being, and improved cognitive skills. Arkansas's walkable infrastructure needs improvement, and initiatives such as Healthy Active Arkansas and Capitol Go! are raising awareness, providing guidance, and creating incentives to make walking a safe, easy choice. This fact sheet summarizes the impact of physical activity on health, describes the global-to-local emphasis on areas for action, and provides examples of community walkability efforts.

# HEALTH IMPACT OF WALKING

Global entities such as the World Health Organization (WHO) are looking at ways to improve people's health. For example, WHO envisions a more active world with a 10 percent reduction in physical inactivity by 2025 and a 15 percent reduction by 2030. The 2015 United States Surgeon General's *Step It Up!* report identified walking as an important health strategy to increase physical activity levels which will, in turn, reduce the risk of chronic disease and support positive mental health for people of all ages. Equivalent amounts of brisk walking and running are also associated with similar reductions in the risk of developing high blood pressure, diabetes, and high cholesterol. Walking generally does not require special skills or equipment, and Healthy Active Arkansas (HAA) is providing direction where necessary to help create communities that are not only walkable, but that support all forms of non-motorized transportation.

### **Negative Impact of Physical Inactivity**

Inadequate physical activity increases healthcare expenditures. Researchers at the Centers for Disease Control and Prevention (CDC) found the mean annual expenditure difference for inactive adults compared to active adults was \$1,437 per person, for an estimated annual U.S. total of \$117 billion.<sup>5</sup> A review of the 2016 Arkansas Employee Benefits Division healthcare claims data found an even greater difference between physically active and inactive employees — \$3,978 per person.<sup>6</sup>

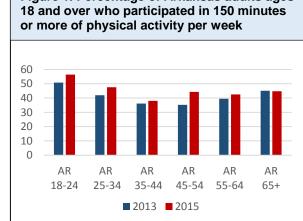
Inadequate physical activity also increases the risk of premature death. The same CDC research team found that nearly 8.5 percent of deaths among people aged 25 years or older were attributed to inadequate levels of physical activity. The impact was higher — about 10 percent — for adults aged 40 to 69.<sup>7</sup>

#### **Recommendations for Physical Activity**

The U.S. Department of Health and Human Services' 2008 Physical Activity Guidelines for Americans recommends that all adults should avoid inactivity and, for substantial health baselite, should applied at least

for substantial health benefits, should complete at least 150 minutes of moderate-intensity activity, such as brisk walking, each week. Children and adolescents should complete 60 minutes or more of physical activity each day.<sup>8</sup> The percent of U.S. adults who have reached the goal of 150 minutes or more has gradually increased from about 43.5 percent in 1997 to 52 percent in 2016.<sup>9</sup>

In 2016, Arkansas ranked worst with the highest percentage of physically *inactive* adults, at 32.5 percent, maintaining a six-year trend of being in the top three most *inactive* states. <sup>10</sup> Although most Arkansas adults do participate in some form of physical activity, and while the numbers are increasing, the percentage who meet the recommended 150 minutes is below the nationwide



average. Arkansas adults aged 35-44 had the lowest percentage of those meeting the goal.<sup>11</sup> (See Figure 1)

In addition, 21.5 percent of Arkansas high school students met the daily goal of 60 minutes of physical activity in 2017, 12 which is down from 28.6 percent in 2015 and 27.5 percent in 2013. 14

# **ARKANSAS'S WALKING REPORT CARDS**

A gloomy picture has been painted by several national assessments of the walkability of Arkansas communities, as well as state and local support to provide safe, accessible places for physical activity. The 2017 U.S. Report Card on Walking and Walkable Communities studied six factors that reflect community characteristics that influence walking behavior. Arkansas joined 13 states in not meeting any of the standards for pedestrian infrastructure, safety, pedestrian policies, institutional policies, public transportation, and walkable neighborhoods.<sup>15</sup>

The Alliance for Biking & Walking's 2016 benchmarking report addresses several of the above factors that influence walking in Arkansas. On the positive side, Arkansas has nearly 1,700 miles of trails, with more in development, and multiple funding sources for infrastructure development, as well as state, regional, and city bicycle and pedestrian plans. Conversely, safety is a concern that needs action — from 2005 to 2013, 7 percent of all traffic fatalities were pedestrian fatalities.<sup>16</sup>

Making Strides: 2018 State Report Cards on Support for Walking, Bicycling, and Active Kids and Communities provides an additional snapshot of state support for walking, bicycling, and physical activity. Arkansas is "Warming Up" — which translates to top scores for having a state plan, adopting goals to lower walking fatalities, use of active transportation funding, support of Safe Routes to School, and funding shared use of school facilities; mid-level scores for shared-use policy and school physical education requirements; and a minimal score for school siting and design.<sup>17</sup>

# SUPPORT FOR WALKING

A walkable community is one where it is safe and easy to walk and run, is inclusive of people with disabilities who rely on wheelchairs or other mobility aids and of children in strollers, and where pedestrian activity is encouraged. Goals and strategies have been developed by many organizations and agencies to promote walking and enhance accessibility. The World Health Organization, U.S. Surgeon General, National Physical Activity Plan, America Walks, Healthy Active Arkansas, and the Arkansas Department of Transportation have overlapping, interconnecting areas of focus.

Social Norms and Attitudes	Make walking a priority.
Spaces and Places	Design communities that make it safe and easy for all people to walk.
Programs and Opportunities	Create and promote programs that support walking where people live, learn, work, and play.
Governance and Policy	Develop and strengthen policy, expand advocacy, and cultivate financing.

Healthy Active Arkansas's *Capitol GO!* Challenge was launched to support physical activity through friendly competition. During the 2017 legislative session, teams representing the House of Representatives, Senate, and Governor's office participated in the walking program, logging daily steps. In conjunction with *Capitol Go!*, a resolution was passed in the House<sup>21</sup> and the Senate<sup>22</sup> to support a health-in-all-policies approach.

CDC's *BE Active: Connecting Routes* + *Destinations* provides help to organizations and agencies that are building more activity-friendly communities.<sup>23</sup> The Implementation and Visual Guides provide planning and implementation steps along with evaluation and sustainability proposals.<sup>24</sup>

# **Investments Supporting Community Walkability in Arkansas**

Pedestrian infrastructure such as sidewalks and trails have shown a return on investment of 10 jobs for each \$1 million spent on construction.<sup>25</sup> Government support has come through several avenues. Federal funding for walking and biking projects in Arkansas from 2009 to 2014 was over \$38,500,000 — putting the per capita spending over the U.S. average.<sup>16</sup> State funding has come from development impact fees, the state

gas tax, and the General Fund for a similar total of approximately \$39,000,000.<sup>26</sup> The Arkansas Department of Education awarded Joint Use Agreement grants to schools to promote physical activity, which in some school districts — such as Cedar Ridge, El Dorado, and Springdale — have been used to construct walking trails or tracks for both school and community use.<sup>27</sup>

Foundations are a source of funding too. The Blue & You Foundation for a Healthier Arkansas has provided over \$2 million in grants to communities, schools, and organizations across Arkansas that support walking.<sup>28</sup> The Walton Family Foundation has supported many projects, such as the Razorback Greenway in northwest Arkansas that provides a 36-mile trail connecting six towns with links to schools, businesses, parks, and residential areas;<sup>29</sup> and the Helena-West Helena Boys & Girls Club that provides a destination facility specifically located within walking distance of high-density public housing.<sup>30</sup>

#### Community Efforts to Promote Safe, Accessible Walking in Arkansas

Complete Streets policies create an integrated transportation system that supports safe travel for people of all ages and abilities, including pedestrians, bicyclists, motorists, and transit riders.<sup>31</sup> Policies have been adopted by several Arkansas cities: North Little Rock, Hot Springs, Little Rock, Conway, and Fayetteville.<sup>32</sup>

Additionally, Walk Audits have been conducted in some Arkansas communities. These on-street assessments look at the pedestrian environment: sidewalks, curb cuts and connectivity, street crossing markings and signals, driveways and safety, and comfort and appeal.<sup>33</sup> Findings from these audits can lead to better design and funding to support pedestrians.

# **Community Examples of Walkability Improvements**

#### **Batesville**

- Expanded trails and parks along the White River
- Main Street revitalization has improved streetscape, walking, and economic investment<sup>34</sup>

#### Camden

Created signage and promotions for a walkable downtown route that leads to the River Walk<sup>35</sup>

#### **Fayetteville**

- 2014 Active Transportation Plan included sidewalk and trail infrastructure<sup>36</sup>
- 2018 Mobility Plan outlined a safe, equitable, multimodal transportation network with infrastructure recommendations<sup>37</sup>

Hospitals throughout the state have supported walking for their staff as well as communities. Following the completion of their Community Health Needs Assessments, the following have incorporated Community Walking programs and/or access to walking trails at their facilities into their Implementation Plans: White River Health System in Batesville; Arkansas Methodist Medical Center in Paragould; Baptist Health in Little Rock, North Little Rock, Heber Springs, and Conway; CHI St Vincent in Little Rock, Hot Springs, Morrilton and North Little Rock; Levi Hospital in Hot Springs; Mercy Hospital Northwest in Rogers; Ouachita County Medical Center in Camden; and Saline Memorial in Benton. Others are exploring 5K running and walking events.<sup>38</sup>

#### CONCLUSION

Walking is the most prevalent form of physical activity. Its promotion must be a key element in the overall efforts to increase population-level exercise.<sup>39</sup> Arkansas has many positive examples of communities and organizations providing sidewalks and trails that support walking and physical activity for people of all ages and abilities. However, if all Arkansans are to have walkable neighborhoods, further work needs to be done to establish policies, improve pedestrian infrastructure, and address safety concerns at the state and local level.

#### REFERENCES

- <sup>1</sup> "Global Action Plan on Physical Activity 2018–2030: More Active People for a Healthier World," World Health Organization; Geneva 2018. http://apps.who.int/iris/bitstream/handle/10665/272722/9789241514187-eng.pdf?ua=1
- "Step It Up! The Surgeon General's Call to Action to Promote Walking and Walkable Communities," U.S. Department of Health and Human Services 2015. https://www.surgeongeneral.gov/library/calls/walking-and-walkable-communities/call-to-action-walking-and-walkable-communities.pdf
- 3 Williams PT, Thompson PD. "Walking Versus Running for Hypertension, Cholesterol, and Diabetes Mellitus Risk Reduction," Arterioscler Thromb Vasc Biol 2013;33(5):1085-1091
- <sup>4</sup> "Healthy Active Arkansas," Winthrop Rockefeller Institute October 2015. https://healthyactive.org/wp-content/uploads/2018/01/HAA-10-Year-Plan.pdf
  <sup>5</sup> Carlson SA, Fulton JE, Pratt M, Yang, Z, Adams EK. "Inadequate Physical Activity and Health Care Expenditures in the United States," *Progress in* Cardiovascular Diseases 2015;57(4):315-323
- <sup>6</sup> Employee Benefits Division State Health Plan Self-Reported Risks 2016. ACHI presentation to Employee Benefits Division, Quality of Care Subcommittee. September 12, 2017. https://www.dfa.arkansas.gov/images/uploads/ebdOffice/QOC201709.pdf
- Carlson SA, Adams EK, Yang Z, Fulton JE. "Percentage of Deaths Associated with Inadequate Physical Activity in the United States," Preventing Chronic Disease 2018;15(E38):170354
- 8 "2008 Physical Activity Guidélines for Americans," U.S. Department of Health and Human Services 2008 https://health.gov/paguidelines/pdf/paguide.pdf
- "Early Release of Selected Estimates Based on Data from the National Health Interview Survey: Leisure-time Physical Activity," U.S. Department of Health and Human Services September 2017 https://www.cdc.gov/nchs/data/nhis/earlyrelease/Earlyrelease201709\_07.pdf
- 10 "The State of Obesity: Physical Inactivity in the United States," Trust for America's Health 2017 https://stateofobesity.org/physical-inactivity
- 11 "BRFSS Prevalence & Trends Data: Arkansas Aerobic Activity," *Centers for Disease Control and Prevention* 2013-2015.

  12 Kann L, McManus T, Harris WA, et al. "Youth Risk Behavior Surveillance United States, 2017," MMWR Surveill Summ 2018;67(SS-8):1-115.

  13 Kann L, McManus T, Harris WA, et al. "Youth Risk Behavior Surveillance United States, 2015," MMWR Surveill Summ 2016;67(SS-8):1-115.
- <sup>14</sup> Kann L, Kinchen S, Shanklin SL, et al. "Youth Risk Behavior Surveillance United States, 2013," MMWR Surveilll Summ 2014;65(SS-6):1-180.
- <sup>15</sup> "The 2017 U.S. Report Card on Walking and Walkable Communities," National Physical Activity Plan Alliance 2017
- http://www.physicalactivityplan.org/projects/walking/Walking-report-card-FINAL.pdf
- 16 "Bicycling & Walking in the United States 2016," Alliance for Biking & Walking
   http://bikingandwalkingbenchmarks.org/backend/sites/default/files/2016benchmarkingreport\_web.pdf
   17 Lieberman M, Pasillas A, Pedroso M, Williams H, Zimmerman S. "Making Strides 2018: State Report Cards," Safe Routes to School National Partnership 2018 https://www.saferoutespartnership.org/sites/default/files/resource\_files/061218-sr2s-making-strides-2018\_final.pdf
- 18 "National Physical Activity Plan," National Physical Activity Plan Alliance 2016 http://www.physicalactivityplan.org/docs/2016NPAP Finalforwebsite.pdf
- 19 "Steps to a Walkable Community," Sam Schwartz Engineering PLLC and America Walks 2012 <a href="http://americawalks.org/wp-content/uploads/2014/12/261463434-Steps-to-a-Walkable-Community.pdf">http://americawalks.org/wp-content/uploads/2014/12/261463434-Steps-to-a-Walkable-Community.pdf</a>
  20 "Arkansas Bicycle and Pedestrian Transportation Plan," Arkansas Highway and Transportation Department January 2017
- https://www.arkansashighways.com/Trans\_Plan\_Policy/biking/Arkansas%20Bike-Ped%20Plan%20-%20FINAL%20-03312017.pdf
- 21 "HCR 1005 To Support Efforts of the Healthy Active Arkansas Initiative in Combating Obesity with a Systematic, Statewide Strategy," Arkansas 91st General Assembly - House February 10, 2017 <a href="http://www.arkleg.state.ar.us/assembly/2017/2017R/Bills/HCR1005.pdf">http://www.arkleg.state.ar.us/assembly/2017/2017R/Bills/HCR1005.pdf</a>
- <sup>22</sup> SCR 3 Supporting the Efforts of Healthy Active Arkansas in Combating Obesity," Arkansas 91st General Assembly Senate February 6, 2017 http://www.arkleg.state.ar.us/assembly/2017/2017R/Bills/SCR3.pdf
- "BE Active: Connecting Routes + Destinations, Centers for Disease Control and Prevention 2018 https://www.cdc.gov/physicalactivity/communitystrategies/beactive/index.html

  24 Kumar GS, Watson KB, Brown DR, Carlson SA. "Proportion of Adults Who Identified Walking as a US Surgeon General Priority," Prev Chronic
- Disease 2018:15:170417
- <sup>25</sup> Garrett-Peltier H. "Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts," Political Economy Research Institute University of Massachusetts, Amherst 2011. https://www.americantrails.org/files/pdf/PERI\_ABikes\_June2011.pdf
- <sup>26</sup> "Bicycling & Walking in the United States: 2016 Benchmarking Report interactive website." Alliance for Biking & Walking 2016 http://bikingandwalkingbenchmarks.org/?v=931056#/chart/dedicated-funds
- "Joint Use Agreement (JUA)," Arkansas Department of Education http://www.arkansased.gov/divisions/learning-services/school-health-services/jointuse-agreement-jua
- 28 "List of Grants Awarded," Blue & You Foundation for a Healthier Arkansas http://www.blueandyoufoundationarkansas.org/our-focus/foundation-grants-<u>awarded</u>

  29 "Linking Communities Through the Razorback Regional Greenway," *Dero* 2018 <a href="https://www.dero.com/case-study/linking-communities-razorback-">https://www.dero.com/case-study/linking-communities-razorback-</a>
- <sup>30</sup> Rolett, J. "Boys & Girls Club Expands Its Reach in Phillips County, Arkansas," Walton Family Foundation 2016
- https://www.waltonfamilyfoundation.org/stories/environment/boys-girls-club-expands-its-reach-in-phillips-county-arkansas
- 31 "What are Complete Streets?" Smart Growth America https://smartgrowthamerica.org/program/national-complete-streets-coalition/publications/whatare-complete-streets
- 32 "Complete Streets Policy Adoption," Smart Growth America June 27, 2018 https://smartgrowthamerica.org/app/uploads/2018/06/00-CS-Policy-Data-
- 33 "AARP Walk Audit Tool Kit," AARP 2016 https://www.aarp.org/content/dam/aarp/livable-communities/documents-2016/Walk-Audit-Tool-Kit/AARP-Walk-Audit-Tool-Kit-100416.pdf
- 34 "Revitalizing Main Street... 'To Keep Our Children in Town': Case Study Batesville, Arkansas," America Walks http://americawalks.org/batesville-case-
- study/
  35 "History: Southwest Arkansas Grant Projects," Arkansas Coalition for Obesity Prevention http://arkansasobesity.org/initiatives/growing-healthy-
- "Active Transportation Plan," City of Fayetteville, Arkansas 2014 https://www.fayetteville-ar.gov/DocumentCenter/View/8891/Final-Active-Transportation-Plan?bidId=
- 37 "Fayetteville Mobility," City of Fayetteville, Arkansas 2018 https://www.fayetteville-ar.gov/DocumentCenter/View/15415/Fayetteville-Mobility-Plan-Final-Report---March-2018?bidld=

  38 "Healthy Active Arkansas & Hospital Community Health Needs Assessment Priorities: Areas of Collaboration Potential," Arkansas Center for Health

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- <sup>39 "</sup>Promoting Walking & Walkable Communities," *National Physical Activity Plan*, March 15, 2018. http://www.physicalactivityplan.org/docs/NPAP\_Recommendations\_rept\_031518\_FINAL.pdf