Walking is one of the most popular forms of physical activity in the US. Because walking does not require special skills or equipment, it’s an easy physical activity to maintain as part of an active lifestyle. And because walking is multipurpose (people walk for transportation, to improve their health, or to socialize with friends) it is an easy activity for people to incorporate into their lives.

Walkable communities are also more attractive places for businesses to locate and for families to live, helping local economies thrive (Department of Health and Human Services, 2015). Additionally, walkable communities increase residents’ physical activity and social interactions (Zhu, Lu, Yu, Lee, & Mann, 2014). Neighborhoods with features such as sidewalks and pleasant scenery are associated with increased rates of walking and physical activity. The presence of nonresidential destinations within walking distance of one’s residence is also strongly correlated with increased rates of walking (Kerr, Rosenberg, & Frank, 2012).

Living in high-walkability neighborhoods is associated with more physical activity, more social interactions, lower obesity, and fewer depressive symptoms. Additionally, walking can be especially beneficial for older adults, as it is low-impact and moderate intensity. In fact, even walking as little as eight blocks per week can decrease depressive symptoms and cardiovascular disease, as well as increase lung function in older women. Walking has also been associated with the prevention of osteoarthritis, diabetes, colon cancer, hypertension, and dementia (Kerr et al., 2012).

In 2017, The Jackson County Health Department (JACOHD) completed a Community Health Assessment (CHA) throughout Eastern Jackson County. In the assessment, only 36% of Buckner residents felt satisfied with the existing sidewalks throughout Buckner. This was consistent with the survey later conducted (see Methods), as 36% identified either feeling very happy, somewhat happy, or neutral about the existing sidewalks. Also in the assessment, 42% of Buckner residents identified overweight/obesity as one of three top health concerns.

During a focus group held by the JACOHD on rural health, a group member spoke out about walkability and sidewalks in Buckner, “Sidewalks are always a concern for the ability to walk. The park is phenomenal, and the main 24-Highway has gotten much better, but your main other passer-through street doesn’t have any sidewalks, so it’s extremely dangerous.”
Based on the 2017 CHA findings, the Health Department began conversations with the city of Buckner to further address walkability concerns. Throughout summer and fall of 2018, JACOHD met with former city administrator, Rick Childers, to determine a suitable plan to further assess community interests in sidewalks, as well as to concretely assess the condition of sidewalks in the city.

Mid-America Regional Council (MARC) provided guidance and resources of similar cities within their jurisdiction that have undertaken similar projects. Ultimately, the Louisburg Master Trail Plan was determined to be a similar project in regards to community population, community interest, and project capacity, and was used as a guide when planning the Buckner resident survey and physical assessment.

In September 2018, JACOHD staff created a survey to distribute to Buckner residents ages 18 and over. JACOHD held meetings with the Mid-Continent Library, Buckner Elementary, and the Live Well Clinic staff to share the project goals and to utilize all three organizations in distributing the surveys. Surveys were distributed to the organizations, as well as the city of Buckner, in October. The city sent each resident a survey in their water bill. The survey was also placed online. The city of Buckner linked the survey onto their main webpage and Buckner Elementary shared the survey on their school’s Facebook page. The Facebook link was then shared a number of times by various Buckner groups’ Facebook pages. Residents had the option to take the survey online or complete the paper survey and return it to one of the collection boxes that was placed at the library, school, clinic, and city hall. The survey was open from October 2018 through January 2019.

JACOHD staff assessed survey results in February 2019 and used the results of the survey to guide the physical assessment of sidewalks in Buckner.

In March 2019, JACOHD staff completed a sidewalk assessment of Route BB, Hudson, and Central streets. The Microscale Audit of Pedestrian Streetscapes (MAPS) Mini Survey was used to assess 59 blocks of Buckner streets. The MAPS Mini Survey is a 15 item audit tool that assesses walkability for a specific block. It accounts for street lights, benches or places to sit, shade, crosswalks, sidewalks, and the surrounding scenery. This tool was chosen because its short length made it a practical tool for JACOHD, and it’s been shown to be related to walking for transportation among all age groups.
RESULTS

DEMOGRAPHICS

119 Buckner residents took the survey.

One survey was thrown out as the address listed was in Sibley, not Buckner.

GENDER

Other / Non-binary 1.9%

Male 30.8%

Female 67.3%

AGE

40-49 9.2%

30-39 17.4%

20-29 6.4%

50-59 21.1%

60-69 25.7%

70+ 20.2%

HEALTH

Excellent 11.9%

Very Good 26.6%

Good 45.9%

Fair 7.3%

Poor 8.3%

PHYSICAL CONDITION THAT AFFECTS WALKING ABILITY

Yes 31.5%

No 68.5%

CHILDREN LIVING AT RESIDENCE

Age of Child / Children

None 66

Infant 6

Pre-School Age 12

Elementary Age 29

Pre-Teen / Teen 23

LOCATION OF RESPONDENTS’ RESIDENCES
Sixty-six percent of survey takers said they do not have sidewalks on the street they live on or the streets immediately surrounding their home. Sixty-three percent of survey takers said they were unhappy or very unhappy with the number and quality of sidewalks in their neighborhood. Sixty-six percent of survey takers identified living within a 10 minute walk of nonresidential destinations (library, store, bank, etc.). However, less than 25% stated that these destinations are fully connected to their homes by sidewalks.

Twenty-one percent of survey takers said they walk to the store most often, 15% said they walk to the library, and 11% walk to the post office. On the other hand, 16% said they would like to walk to the park, but cannot, and 12% said they would like to walk to the store but cannot. Many commented that while they can walk to many of these destinations, it would be easier and safer with sidewalks.

When asked what aspect of their community makes walking difficult, 43% named a lack of sidewalks. Seventy-six percent said if they could change one thing about their community's streets, sidewalks, or other walking features, they would add sidewalks. Sixty-one percent said if they could only improve or add sidewalks to one street in Buckner, they would choose Route BB.

Based on the results of this survey, JACOHD conducted a physical assessment of BB, Hudson, and Central streets. The physical assessment showed that there is a 17% likelihood that someone will choose walking as a mode of transportation on BB (from Neil Chiles to Steiner streets). There is a 19% likelihood that someone would choose walking as a mode of transportation on Central Street (between the south end of town and Stapleton). There is a 36% likelihood that someone will choose walking as a mode of transportation on Hudson Streets (between the south end of town and Dale). The average score on street segments in communities across the US is 37%.

BB and Central streets scored well on building maintenance, lack of graffiti, and presence of street lights. Hudson scored well on building maintenance, lack of graffiti, presence of street lights, and the presence of sidewalks between Washington and 24 Highway. All sections could be improved with (in addition to sidewalk infrastructure), ramps at intersections, benches, and additional trees or other coverage to provide shade.
57.9% of Buckner survey respondents identified a need for sidewalk infrastructure from E. Jefferson to E. Monroe St. (24 highway).

- 50.7 - 58.9%
- 42.5 - 50.7%
- 26.1 - 42.5%
- 9.7 - 26.1%
- Less than 9.7%

76% said if they could change one thing about their community’s streets, sidewalks, or other walking features, they would add sidewalks.

61% said if they could only improve or add sidewalks to one street in Buckner, they would choose Route BB.
As Buckner moves forward with an updated Comprehensive Plan, JACOHD recommends considering the following:

Survey results and conversations with community partners conveyed Buckner residents’ interest in the possibility of additional walking infrastructure. Community engagement is an important factor to consider whenever a project of this scale is being considered. Further action may require even more input from residents, so their engagement and willingness to work on this problem is an asset that the city of Buckner can and should leverage fully.

Buckner is eligible to apply for Federal Highway Administration funds that are suballocated through MARC. BB is classified as Principal Arterial making it eligible for Surface Transportation Program (STP) funding. Buckner could apply for STP funding as early as 2020 to qualify for FFY 2023-2024. The city of Buckner should communicate with MARC and MoDOT on any proposals to address sidewalk needs within the city limit of Buckner, (Mid-America Regional Council, 2019).

The Building a Healthier Jackson County initiative is a collaboration of stakeholders addressing the priority health issues impacting the residents of Eastern Jackson County. The Overweight and Obesity workgroup is actively working to increase physical activity and promote built environments that are conducive to active transportation options including sidewalks and bicycle lanes. JACOHD recommends a representative from the city of Buckner join the workgroup to stay informed about similar projects throughout the county, see examples of area cities’ comprehensive plans, receive support in steps needed to enhance built environment, and learn about potential programming and infrastructure grants.

Finally, the city of Buckner should continue to seek the support and input of both traditional and nontraditional resources including Buckner’s local businesses, community agencies, and regional partners such as MARC and JACOHD throughout the duration of any future walkability projects.

WORKS CITED


