

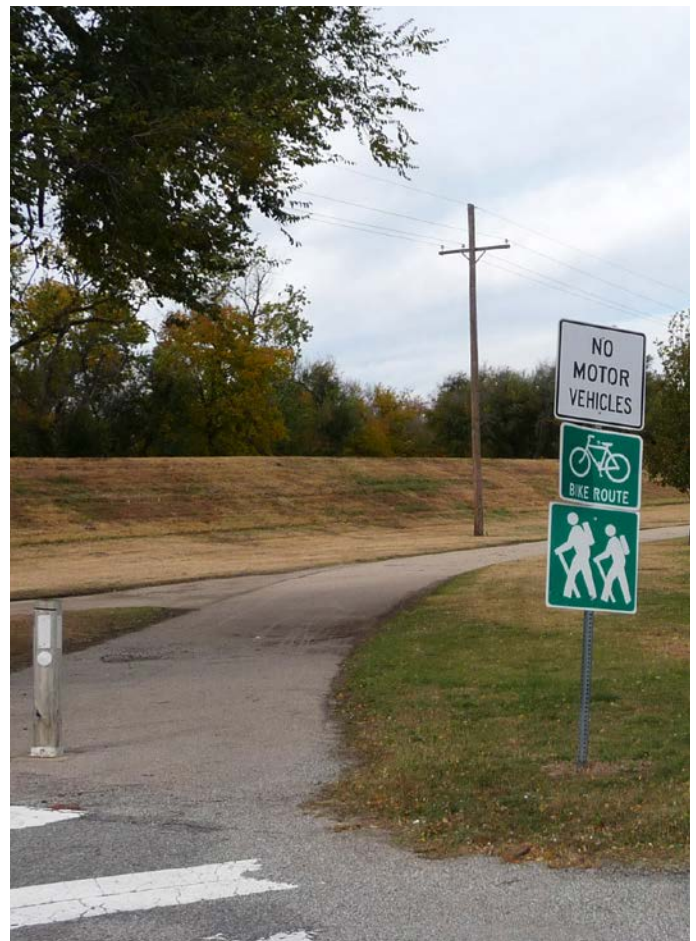
RURAL TRANSPORTATION: UNIQUE CONSIDERATIONS



Efficient transportation systems, especially those that include different forms of transportation, can help promote physical activity, encouraging social interaction, and increasing access to healthcare services and healthy food. By the same token, a lack of safe and efficient transportation can lead to negative health outcomes.

In rural communities, like those in Kansas, long distances paired with unreliable (or non-existent) public transportation make it more difficult to get to the supermarket or go to the doctor's office, leading to a greater risk of metabolic illness and barriers to diagnosis, treatment, and care for health issues.

Communities can improve transportation systems through a variety of strategies including: enhancing bicycle and pedestrian infrastructure along roadways with the help of state and



Off-road trails and walking paths provide safe and enjoyable opportunities for non-motorized transportation, especially in areas where there are few on-road sidewalks and bike paths.



Walkable streets supporting dense, mixed-use development create an inviting space for people using all forms of transportation. This type of development can also attract economic activity.

federal programs; obtaining grants to create a public transportation system, allowing people without a car to access retail, government service centers, healthcare providers, or recreational opportunities they otherwise would not be able to access; designing or redesigning roadways with the aim of calming traffic and promoting safety for pedestrians; or building trails that connect with existing street grids to allow for active transportation and social interaction. To help start these projects, residents and local officials in rural towns can form coalitions or committees to identify issues and priorities, funding sources, and develop a strategic plan. These kinds of organized grassroots efforts help to build capacity to address local transportation issues and offer a greater opportunity for success in securing funding and technical assistance.

Transportation can take various forms. Personal automobiles, buses, commuter rail, biking, and walking are all forms of transportation. In recent years, ridesharing and micro-mobility (e.g., e-scooters and bikeshare systems) have become important transportation alternatives. Strategies to increase access to transportation should start at the local level to ensure that proposed changes have community support and are tailored for community needs. Community groups and local governments who want to improve their local transportation systems should consider the unique characteristics and demographics of their communities and seek the perspectives of local partners and community members. It is up to community members, partners, planners, and elected officials to determine what is best for their communities.

Why is rural transportation important?

In Kansas, nearly half of all deaths are caused by heart disease, cancer, and chronic lower respiratory illnesses.¹ These illnesses are largely preventable, especially if people have easy access to healthy food, regular physical activity, social supports, and healthcare services. In rural communities, access to transportation is a key part of prevention—poor transportation systems can lead to social isolation, reduced opportunities to be physically active, limited access to healthy food, and rescheduled or missed doctor’s appointments, leading to higher rates of chronic diseases.²

Both healthy eating and physical activity are known to aid in preventing disease and improving health.³ One in every seven Kansas residents experiences food insecurity and one in five Kansas children is food insecure.⁴ In rural communities, access to healthy food can be especially challenging. Traveling to a fresh food retailer such as a grocery store or farmers’ market can be difficult, and food outlets may not have adequate and affordable access to distribution systems that can bring in large varieties of fresh produce and other healthy foods. Strategies linking transportation systems and healthy food outlets can help with this challenge.

Kansas residents living in rural areas also face many obstacles for incorporating physical activity into their lives.⁵ These obstacles include greater travel distances to access town centers or exercise facilities, and a lack of sidewalks, bike lanes, and safe trails to support biking and walking and promote connectivity to everyday destinations.⁶ Communities that thoughtfully approach transportation system design can encourage physical activity through active transportation.

Participation in social interactions is another important, but often overlooked, health factor. Interactions among community members can improve individual health and benefit the community.⁷ Communities with high levels of social interaction tend to be associated with community pride and greater motivation among residents to be physically active.⁸

Limited access to healthcare services, healthy foods, physical activity, and social interaction can lead to higher incidences of chronic disease in rural areas. The use of policy to improve transportation provides a comprehensive and cost-effective alternative to reducing the risk of chronic disease and improving public health.

What are the barriers and opportunities?

A good transportation system improves access to healthcare services, healthy foods, opportunities for physical activity and social interaction, and provides a foundation for a vibrant economy. Rural communities face unique barriers in realizing these benefits, however. For instance, rural communities typically have small population sizes, which may result in small

tax bases and lower funding capacity for road maintenance and expansion.⁹ If the roads in rural areas are not well-maintained or safe, community members cannot use them to access basic needs. One source of help is federal and state grant programs that exist to mitigate this funding need for rural communities. For more information about funding opportunities, please see the Rural Health Information Hub, an online resource with information, opportunities, and resources to improve rural health.¹⁰

Since the National Highway System was authorized in the mid-20th century, car-focused development patterns have benefited urban and suburban areas at the expense of rural communities. Disproportionate federal investment in interstates and U.S. highways continues to incentivize developers to invest in suburbs at the expense of small-town streets and the travelers who use them.¹¹ Rural towns may face the risk of a large four-lane divided highway cutting through their centers with little regard for the effects of such a project on their environmental, economic, or social health. Walkable streets supporting vibrant neighborhoods in rural areas face the risk of being converted into major highways with no sidewalks and high speed limits. Some local streets might already be designated as state routes, making it difficult for local jurisdictions to redesign them or add features such as crosswalks or pedestrian signage that would make them safer for walking. Additionally, state governments continue to focus funding on highway projects that connect urban centers or move goods from source to destination as quickly as possible. This lack of state funding support can make local community-driven projects, such as a streetscaping or Complete Streets projects, more difficult to pursue.¹²

Another challenge is that model strategies in transportation planning literature are typically designed with urban areas in mind. To create a quality transportation system, rural Kansas communities need strategies tailored to their circumstances. Model strategies may serve as a useful inspiration or starting point, but rural communities should create their own strategies by considering 1) cultural considerations unique to rural areas, 2) the socioeconomic statuses of community members, 3) the built and natural environment they are working in, and 4) transportation program goals tailored specifically to rural communities.¹³ Proactively seeking out and including opinions and priorities from a variety of community members and partners on each of these points is a key part of the process for establishing a good, effective transportation system.

This approach also creates opportunities to think creatively about community development and health equity, which also can help ensure the success and sustainability of a community's transportation initiatives. Using a health equity lens means taking into account fair and open access for all community members — and particularly people who are currently or historically underserved — to local transportation systems, so that everyone has the same opportunities to meet their health needs.¹⁴ Several resources are available to help communities in thinking about health equity goals as part of transportation planning (see “Health Equity in Transportation Planning” on page 6).



Separating bike lanes from motor vehicle lanes can improve the safety for everybody using the road.

A variety of resources is available to help rural communities enhance their transportation networks. The American Planning Association (APA) and U.S. Environmental Protection Agency (EPA) have each published resource guides that combine case studies and strategies for revitalizing small downtowns, with many strategies anchored in improving local transportation networks.¹⁵ The Federal Highway Association (FHWA), Smart Growth America, and the Rural Multimodal Network provide guidance documents on projects to make roads calmer, safer, and more welcoming for pedestrians and bicyclists.¹⁶ Rural communities are encouraged to contact non-profit groups that provide resources and technical assistance to support small and rural towns in developing their communities. Main Street America, for example, focuses on helping communities build capacity to create and develop vibrant neighborhoods,¹⁷ while Strong Towns seeks to implement evidence-based strategies to build cities and towns for people rather than for automobiles.¹⁸ These organizations and others like them partner with communities across the United States to develop strategies that enhance transportation networks and land use.

Health Equity in Transportation Planning

Many resources are available to aid in addressing health equity through transportation planning. The United States Department of Transportation, which funds most transportation projects throughout the country via the Federal Highway Administration (FHWA), recognizes the importance of considering health equity in transportation projects and planning, and provides resources to support this work.¹⁹ Additionally, the Kansas Department of Transportation requires that federally funded projects comply with Title VI of the Civil Rights Act (ensuring that projects will not disproportionately affect communities of color), the Americans with Disabilities Act (ADA), and the Older Americans Act.²⁰ The Federal Transit Administration also requires federally funded transit projects to comply with the ADA and Title VI in terms of service (reaching those who rely on transit), fare (making sure certain populations are not excluded from using transit because they do not have the money), and public outreach (ensuring everyone has a voice in how and where a local transit system operates).²¹ Even if a transportation plan is not federally funded, local jurisdictions can use methods and strategies suggested by these agencies to work toward transportation systems that support health equity at the local level.

Governmental Power & Transportation Efforts

Every level and type of government has a role in creating healthier environments for residents and visitors. School districts, parks and recreation departments, city councils, county commissions, the state legislature, federal agencies, and Tribal governments are all entities that can help effect change.²² Under Kansas law, local governments have the authority to implement a variety of policy initiatives to increase opportunities for transportation including bicycling, walking, and public transportation efforts that can improve health within communities.²³ Communities may reference *Kansas Local Road Management Handbook* for more information on how communities can improve local roads.²⁴ Tribal Nations also engage in active transportation initiatives such as Complete Streets or Safe Routes to School; enact zoning and land use laws that impact streets, sidewalks, Tribal roads, and other transportation infrastructure; and conduct transportation planning activities.²⁵ Tribes are eligible for federal funding to support transportation planning and projects for roads, bridges, and other facilities that provide access to or are located within Indian Country.²⁶ There are four Tribes with reservations that overlap with Kansas boundaries: Prairie Band of Potawatomi Indians, Kickapoo Nation of Kansas, Sac and Fox Nation of Missouri, and the Iowa Tribe of Kansas and Nebraska. All four Tribes are currently engaged in transportation projects.

Understanding the relationship between transportation and land use can be a powerful way of achieving governmental funding and technical assistance. If a local land use plan receives financing outside of local public revenue streams (e.g., Historic Tax Credits or private investment) to build a park, rezone industrial land, or rehabilitate blight, this can free up public dollars that can be dedicated to the roads and streets that serve these communities. The Kansas Department of Commerce publishes funding and technical assistance resources to aid in community development projects in rural areas.²⁷

Next Steps and Conclusion

Given that eighty percent of Kansas counties are categorized as rural by the U.S. Census Bureau, rural health initiatives are vital for improving Kansans' health overall.²⁸ One way that rural communities can take a comprehensive approach to reduce their community members' health risk factors and support a thriving community is by addressing transportation needs to improve access to healthcare services, healthy foods, physical activity, and social interaction simultaneously. To start this process, communities should assess their needs, gather and incorporate the input of community members and other partners, use a health equity lens, and review the Public Health Law Center's *Kansas Bicycling and Walking Resources* as a jumping off point.²⁹

Incorporating health into transportation planning can be a difficult task in rural areas, where capacity and resources are limited. However, federal and state agencies, along with a wide array of non-governmental organizations, offer resources and other assistance that can help rural communities in Kansas with this work. By considering all types of transportation, developing ways that transportation networks can better connect people to goods and services, and focusing on health equity, rural transportation networks can be improved to support rural communities where everyone has the same opportunities to thrive.

The Public Health Law Center thanks the following people for their assistance in developing this resource: Lisa Frey Blume, Community Health Specialist, Kansas Department of Health & Environment; Warren Hays, MPP; Physical Activity & Nutrition Program Manager; Kansas Department of Health & Environment; and Damaris Kunkler, Deputy Director-Community Engagement, Thrive Allen County.

This publication was prepared by the Public Health Law Center at Mitchell Hamline School of Law, St. Paul, Minnesota, made possible with funding from in part by the Pathways to a Healthy Kansas initiative from Blue Cross and Blue Shield of Kansas (BCBSKS). Blue Cross and Blue Shield of Kansas is an independent licensee of the Blue Cross and Blue Shield Association (BCBSA).

The Public Health Law Center provides information and legal technical assistance on issues related to public health. The Center does not provide legal representation or advice. This document should not be considered legal advice.

Endnotes

- 1 KAN. DEP'T OF HEALTH AND ENV'T, *Annual Summary of Vital Statistics* (2017), http://www.kdheks.gov/phi/as/2017/Annual_Summary_2017.pdf.
- 2 Samina T. Syed, Ben S. Gerber, Lisa K. Sharp, *Traveling Towards Disease: Transportation Barriers to Health Care Access*, 38 J. COMMUNITY HEALTH 38 (2013), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4265215/pdf/nihms646723.pdf>.
- 3 U.S. DEP'T HEALTH & HUM. SERVS., 2015-2020 DIETARY GUIDELINES FOR AMERICANS, 8TH ED. (2016), https://health.gov/dietaryguidelines/2015/resources/2015-2020_Dietary_Guidelines.pdf; U.S. DEP'T HEALTH & HUM. SERVS., PHYSICAL ACTIVITY GUIDELINES FOR AMERICANS, 2ND ED. (2018), https://health.gov/paguidelines/second-edition/pdf/Physical_Activity_Guidelines_2nd_edition.pdf.
- 4 Bryan Thompson, KAN. HEALTH INST., *Report Highlights Growing Food Insecurity Rates* (Apr. 29, 2016), <https://www.khi.org/news/article/report-highlights-growing-food-insecurity-rates>.
- 5 ACTIVE LIVING RES., *Using Active Living Principals to Promote Physical Activity in Rural Communities* (Feb. 2010 presentation), https://activelivingresearch.org/sites/activelivingresearch.org/files/2010_EvaluationMeasurement_Schwantes.pdf.
- 6 ACTIVE LIVING RES., *Using Active Living Principals to Promote Physical Activity in Rural Communities* (Feb. 2010 presentation), https://activelivingresearch.org/sites/activelivingresearch.org/files/2010_EvaluationMeasurement_Schwantes.pdf.
- 7 RURAL HEALTH INFO. HUB, *Healthcare Access in Rural Communities*, <https://www.ruralhealthinfo.org/topics/healthcare-access> (last visited Jan. 24, 2019).
- 8 AMERICA'S STATE PARKS, *Social & Community*, <https://www.stateparks.org/about-us/value-benefits/socialcommunity/> (last visited Jan. 24, 2019).
- 9 RURAL HEALTH INFO. HUB, *Barriers to Transportation in Rural Areas*, <https://www.ruralhealthinfo.org/toolkits/transportation/1/barriers> (last visited Jan. 24, 2019).
- 10 RURAL HEALTH INFO. HUB, <https://www.ruralhealthinfo.org> (last visited Jan. 24, 2019).
- 11 Kaid Benfield, *The Death — and Life — of Small Downtown America*, CityLab (Sept. 7, 2012), <https://www.citylab.com/life/2012/09/how-main-street-can-be-saved/3200/>.
- 12 Tony Dutzik, *Highway Spending is Eating the Budget*, Strong Towns (Jan. 19, 2017), <https://www.strongtowns.org/journal/2017/1/18/highway-spending-is-eating-the-budget>.
- 13 RURAL HEALTH INFO. HUB, *Considerations When Adapting a Program*, <https://www.ruralhealthinfo.org/toolkits/rural-toolkit/2/adapting-interventions> (last visited Jan. 24, 2019).
- 14 ROBERT WOOD JOHNSON FOUND., *Achieving Health Equity*, <https://www.rwjf.org/en/library/features/achieving-health-equity.html>, (last visited Jan. 24, 2019).
- 15 AM. PLAN. ASS'N, Michael A. Burayidi, *Downtown Revitalization in Small and Midsized Cities* (2018), https://planning-org-uploaded-media.s3.amazonaws.com/publication/download_pdf/PAS-Report-590.pdf; U.S. Env'tl. Prot. Agency, *How Small Towns and Cities Can Use Local Assets to Rebuild their Economies: Lessons from Successful Places* (2015), https://www.epa.gov/sites/production/files/2015-05/documents/competitive_advantage_051215_508_final.pdf.
- 16 U.S. DEP'T OF TRANSP. FED HIGHWAY ADMIN. (FHWA), *Road Diet Informational Guide* (2014), https://safety.fhwa.dot.gov/road_diets/guidance/info_guide/rdig.pdf; FHWA, *Small Town and Rural Multimodal Networks* (2016), https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/small_towns/fhwahep17024_lg.pdf; SMART GROWTH AM., *The Best Complete Streets Initiatives of 2017* (2018), <https://smartgrowthamerica.org/app/uploads/2018/03/Best-Complete-Streets-Initiatives-of-2017.pdf> (last visited Jan. 24, 2019).

- 17 MAIN STREET AM., <https://www.mainstreet.org/home>, (last visited Jan. 24, 2019).
- 18 STRONG TOWNS, <https://www.strongtowns.org/>, (last visited Jan. 24, 2019).
- 19 U.S. DEP'T OF TRANSP., *Equity*, <https://www.transportation.gov/mission/health/equity>, (last visited Jan. 24, 2019).
- 20 KAN. DEP'T OF TRANSP., *Transportation Planning: Title VI Brochure* (2009), <https://www.ksdot.org/bureaus/burTransPlan/pubtrans/Title-VI-Brochure---English.asp>.
- 21 FED. TRANSIT AUTH., *Regulations and Guidance*, <https://www.transit.dot.gov/regulations-and-guidance/regulations-and-guidance>, (last visited Jan. 24, 2019).
- 22 PUB. HEALTH LAW CTR., *Promoting Active Minnesota: Local Policy Options to Support Walking and Bicycling* (2017), <http://www.publichealthlawcenter.org/sites/default/files/resources/FGM-PolicyGuide-ActiveLiving-2017.pdf>.
- 23 PUB. HEALTH LAW CTR., *Policy Options for Local Governments in Kansas: Increasing Walking and Bicycling* (2015), <http://www.publichealthlawcenter.org/sites/default/files/resources/Policy%20Options%20for%20Local%20Governments%20in%20Kansas%20Increasing%20Walking%20and%20Bicycling.pdf>.
- 24 KAN. LOCAL TECHNICAL ASSISTANCE PROGRAM (LTAP), *Kansas Local Road Management Handbook: a Guide for Kansas County Road and Bridge Officials* (2011), <http://www2.ku.edu/~kutc/pdffiles/KLRMHandbook2011.pdf>.
- 25 See, e.g., Kelly Clifton, et al., *THE PATH TO COMPLETE STREETS IN UNDERSERVED COMMUNITIES, LESSONS FROM U.S. CASE STUDIES 6-10* (undated report) (describing Complete Streets and other active transportation work by the Sault Ste. Marie Tribe of Chippewa Indians, <https://www.smartgrowthamerica.org/app/legacy/documents/cs/resources/complete-streets-in-underserved-communities.pdf>; SAFE ROUTES TO SCHOOL NAT'L PARTNERSHIP, *WALKING AND BICYCLING IN INDIAN COUNTRY: SAFE ROUTES TO SCHOOL IN TRIBAL COMMUNITIES* (undated report), http://www.pedbikeinfo.org/pdf/Community_SRTSstate_TribalCommunities.pdf.
- 26 KAN. DEP'T OF COM., *Kansas Rural Development Resource Guide* (undated), <http://www.kansascommerce.com/DocumentCenter/View/258/RuralDevelopmentResourceDirectoryWeb?bidId=>.
- 27 KANSAS DEPARTMENT OF TRANSPORTATION (2018) *Federal Lands & Tribal Transportation*. Retrieved from the KsDOT website https://www.ksdot.org/Assets/wwwksdotorg/bureaus/burProgProjMgmt/STIP/Assetsfor2018STIP/5_Federal_Lands_&_Tribal_Transportation_Programs_2018_Draft_Revised-GOOD.pdf.
- 28 GOVERNOR'S BEHAVIORAL HEALTH SERVS. PLANNING COUNCIL: RURAL AND FRONTIER SUBCOMM., *2015 ANNUAL REPORT* (2016), https://www.kdads.ks.gov/docs/default-source/CSP/bhs-documents/GBHSPC/rural-and-frontier-subcommittee-annual-report-2016.pdf?sfvrsn=17493bee_0.
- 29 PUB. HEALTH LAW CTR., *Policy Options for Local Governments in Kansas: Increasing Walking and Bicycling* (2015), <http://www.publichealthlawcenter.org/sites/default/files/resources/Policy%20Options%20for%20Local%20Governments%20in%20Kansas%20Increasing%20Walking%20and%20Bicycling.pdf>; PUB. HEALTH LAW CTR., *Sidewalks in Kansas: Who Is Responsible?* (2016), <https://www.publichealthlawcenter.org/sites/default/files/resources/Kansas-Sidewalk-Liability-2016.pdf>.