The Connecting Communities and Promoting Health with Smart Participatory Parks project is transformational in its approach to the social determinants of health through enhanced environments that promote physical activity and community engagement for better overall population health.

Physical activity is one of the most important behaviors for improving or maintaining health, and collecting physical activity data through wearable devices is a potential opportunity for understanding individual and population behavior. Partnerships have been formed among community members, health providers, and researchers to improve the health of under-served communities through participatory practices. At the same time, legal issues and public policy surrounding data protection and privacy are rapidly evolving. The Centers for Disease Control and Prevention have focused on maximizing community health by developing tools to improve planning and design of the built environment.

Connecting Communities and Promoting Health with Smart Participatory Parks proposes a parks ecosystem model, wherein the parks physical infrastructure is enhanced with sensors, and a digital platform is accessible to engaged users in urban under-served communities to promote physical activity and improve population health.

The digital platform will leverage recent advances in big data analytics to gain actionable insights from users’ data. Analysis of the collected data will contribute to the understanding of how parks are used, and how programming improvements impact their use.

The research team builds on current research to capture and share behavioral data, and connects expertise in Public Policy and Law, Behavioral Sciences and Community Engagement, Design and Human factors, and Sensing and Information Technology, and leverages the natural collaboration between The University of Kansas, The University of Missouri-Kansas City, Kansas City, and Kansas City Missouri, as a bi-state regional collaboration and partner universities’ memberships in the MetroLab Network, a consortium of city-university partnerships focused on bringing data, analytics, and innovation to city government.

The project targets: Enhancing the education of future architects, lawyers, social scientists, engineers, and computer scientists toward collaboration and innovation; Promoting knowledge in human-centered design thinking, community-based participatory practices, urban sensing and health promotion; Improving design and programming processes for parks and public spaces including plazas, trails, and sidewalks, through community-based participatory practices; Scalability for replication of the parks ecosystem in other MetroLab cities.