

NEIGHBORHOOD FABRIC AND SOCIAL COMMUNITY CONNECTEDNESS

Overview

Neighborhood (or social) fabric is a metaphor used to describe a community's social connectedness. Social connectedness refers to the level at which community members connect and interact with one another and access support in formal (i.e., government services) and informal (i.e., community clubs or groups) ways through sustained elements. These elements include those that are inherent within the fabric of the community (e.g., mountains, lakes) and those that are consciously made by humans to create a more cohesive and supportive neighborhood (e.g., sidewalks, recreation centers), referred to as the built environment. Both can have far-reaching impacts on the health and safety of community members.

Social Connectedness and Health

The built environment includes elements such as housing and housing density, the presence of parks or green space, road quality, the availability of sidewalks, bike lanes, and hiking/walking trails, and "walkability". Natural geographic factors affect a built environment and include things like rural versus urban settings, natural population migration, and other physical geographic features.

The impact of the built environment on physical and mental health is well-documented by research mainly focused on the link between a neighborhood's "walkability" and residents' levels of obesity and chronic disease.^{1,2} Improved "walkability" has been shown to encourage residents to spend more time outside engaging in light to moderate physical activity,^{3,4,5} which directly impacts their overall physical health, most notably obesity and chronic disease.⁶ Although limited, there are also studies that show the impact of the built environment on mental health, particularly the relationship between neighborhood environments and depression.⁷

Perceived and real levels of safety and the condition and design of the built and inherent features of a community also influence if and how community members utilize their neighborhood environment.⁸ Inadequate lighting, cracked sidewalks, and eroded trails may deter community members from using them for physical activity.⁹ Risksapes, or the combination of distressed neighborhoods, characterized by vandalism, graffiti, debris, and environmental hazards resulting from inequitable planning and zoning; a

¹ Julian Marshall, Michael Brauer, and Lawrence Frank, "Healthy Neighborhoods: Walkability and Air Pollution," *Environmental Health Perspective* 117, no. 11 (2009): 1752-1759, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2801167/>

² Shobha Srinivasan, Liam O'Fallon, and Allen Dearry, "Creating Healthy Communities, Healthy Homes, Healthy People: Initiative a Research Agenda on the Built Environment and Public Health," *American Journal of Public Health* 93, no. 9 (2003), http://courseresources.mit.usf.edu/sgs/ph6934/webpages/CC/module_1/read/1446.pdf

³ Neville Owen et al., "Understanding Environmental Influences on Walking," *American Journal of Preventive Medicine* 27, no. 1 (2004): 67-79, doi:10.1016/j.amepre.2004.03.006

⁴ LD Frank et al., "The Development of a Walkability Index: Application to the Neighborhood quality of Life Study," *British Journal of Sports Medicine* 44, no. 13 (2009), <http://bjsm.bmj.com/content/44/13/924.long>

⁵ Eva Leslie et al., "Residents' Perceptions of Walkability Attributes in Objectively Different Neighbourhoods: a Pilot Study," *Health and Place* 11 (2005): 227-236, doi: 10.1016/j.healthplace.2004.05.005

⁶ Lawrence Frank, Martin Andresen, and Thomas Schmid, "Obesity Relationships with Community Design, Physical Activity, and Time Spent in Cars," *American Journal of Preventive Medicine* 27, no. 2 (2004): 87-96, doi 10.1016/j.amepre.2004.04.011

⁷ David Satcher, Martha Okafor, and LeConte J. Dill, "Impact of the Built Environment on Mental and Sexual Health: Policy Implications and Recommendations," *International Scholarly Research Network Public Health* (2012), doi: 10.5402/2012/806792

⁸ Gopal Singh, Mohammad Siahpush, and Michael Kogan, "Neighborhood Socioeconomic Conditions, Built Environments, and Childhood Obesity," *Health Affairs* 29, no. 3 (2010): 503-512, doi: 10.1377/hlthaff.2009.0730

⁹ James F. Sallis et al., "The Role of Built Environments in Physical Activity, Obesity, and CVD," *Circulation* 125, no. 5 (2012): 729-737, doi: 10.1161/CIRCULATIONAHA.110.969022

lack of access to safe recreational facilities; and socioeconomic stressors have been linked to adolescent sexual health, including risky sexual behaviors and sexual assault.¹⁰

Other elements of neighborhood fabric and social connectedness, such as social support, can influence overall mental health, levels of violence, and substance abuse within a community. When people belong to and participate in social networks, members of the community are more likely to adopt healthy behaviors and seek community support when they experience distress.¹¹ When people feel socially connected to others who engage in healthy behaviors, they too are more likely to adopt such behaviors—for example, engaging in physical activity or avoiding substance abuse.¹² The sense of belonging created through strong social support can also improve mental health and reduce violence because people feel more empowered, have greater self-esteem and are more likely to seek support when they experience problems.¹³

Improving Social Connectedness: Promising Models and Strategies

Notably, traditional cost-benefit assessment, which requires placing a monetary value on both the costs and benefits of intervention—for example, “feeling safer in one’s community”—are difficult to do with respect to interventions that address the social determinants of health. Implementation efforts to improve social cohesion and neighborhood fabric involve many complex elements, and it is difficult to measure and place monetary value on these elements and on both the direct and indirect effects of an intervention.

One way to approach the issue is to recognize the burden chronic disease, obesity, untreated mental illness, violence, and substance abuse exerts on the community, healthcare system, and individual. For example, it is estimated that nationally, the cost of obesity, diabetes, and/or those suffering from one or more chronic conditions cost upwards of \$147 billion annually.¹⁴ Although Colorado leads the nation in low obesity rates and performs better than the national average for diabetes rates and rates of one or more chronic conditions, it is estimated that people with these conditions cost the Colorado health system as much as \$1.6 billion annually.¹⁵ Compounding this cost burden on the health system is the strain of violence, untreated mental illness, and substance abuse. The stress of untreated mental illness and violence can lead to poor physical health, compound the effects of already present chronic illness, and exacerbate unhealthy choices and behaviors among adolescents and adults.¹⁶ In addition, the rate of substance abuse within Colorado has continued to rise rapidly, especially with illicit use of opioids and prescription drugs.¹⁷ As substance abuse gathers more attention nationwide, the true burden and cost it presents on the national health system can be seen not only in the medical costs associated with untreated

¹⁰Satcher, Okafor, and Dill, “Impact of the Built Environment on Mental and Sexual Health”, 2016

¹¹ Ichiro Kawachi and Lisa F. Berkman, “Social Ties and Mental Health,” *Journal of Urban Health: Bulletin of the New York Academy of Medicine* 78, no. 3 (2001): 458-467,

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3455910/pdf/11524_2006_Article_44.pdf

¹² Carl A Latkin and Amy R Knowlton, “Social Network Assessments and Interventions for health Behavior Change: a Critical Review,” *Journal of Behavioral Medicine* 41, no. 3 (2015): 90-97, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4786366/>

¹³ Kawachi and Berkman, “Social Ties and Mental Health”, 2001

¹⁴ Eric Finkelstein, Ian Fiebelkorn, and Guijing Wang, “National Medical Spending Attributable to Overweight and Obesity: How Much, and Who’s Paying?” *Health Affairs* (2003), <http://nepc.colorado.edu/files/CERU-0305-71-OWI.pdf>

¹⁵ “Overweight and Obesity in Colorado: Colorado Adults, Teens, and Children,” *Colorado Department of Public Health and Environment*, <http://www.chd.dphe.state.co.us/weight/Obesity-Infographic-Colorado-Data.pdf>

¹⁶ “The Power of Prevention: Chronic Disease, the Public Health Challenge of the 21st Century,” *CDC* (2009), <https://www.cdc.gov/chronicdisease/pdf/2009-power-of-prevention.pdf>

¹⁷ The Colorado Health Foundation, “Health Report Card,” (2016), <http://www.coloradohealth.org/sites/default/files/documents/2016-12/2016%20COHRC%20FINAL.pdf>

substance abuse (such as stroke, drug induced heart disease, overdose, etc.) but also in the strain on social services within the community, such as those that address homelessness and poverty.¹⁸

Described below are national efforts that have proved to be effective in improving social connectedness.

Santa Monica Wellbeing Project

The Santa Monica Wellbeing Project was an innovative program led by city officials to prioritize “wellbeing” in local policy making. The project initially partnered with the RAND organization to complete a comprehensive assessment of current wellbeing and to determine areas of change. As a unique project, the city found itself creating its own definitions and subsequent measures for capturing the city’s baseline wellbeing.¹⁹ While the project was holistic in the sense that its aim was to impact the city on multiple levels, one important measure of wellbeing that was included in the assessment, as well as in the program implementation and focus, was that of social connectedness and community environment.

During the assessment phase, the Wellbeing Project indexed personal behaviors that related to overall outlook. Having the opportunity to meet people socially, spending time outdoors, and getting enough sleep were all correlated with personal wellbeing. Measurement focused on three elements of community: 1) the sense of community; 2) how often people get out and support their community; and 3) how empowered people feel to influence their community. The project verified these elements by checking social media activity, including Twitter and Facebook. The researchers determined levels of connectedness to others through the number of followers one had and by assessing how often residents utilized the community environment through check-ins at dog parks or other neighborhood features.

Researchers also looked at demographic factors that affected residents’ sense of community. They found that younger members of the community felt a lower sense of community and put less time into being a part of it. Asian and African American populations also felt less connected with the community than did Hispanic and white community members. While the index did show a range of responses regarding social connectedness, most Santa Monica residents felt moderately disconnected, which prompted the city to use education as the primary means of addressing this issue.

The resulting education campaign focused on two areas: 1) disseminating the results of the study to bring attention to the shortfalls in perceived sense of social connectedness and underscore it as a community-wide issue and 2) sharing information on the impact social connectedness can have on overall wellbeing. In this way, the project shifted impetus to the community members with the hope that they would feel empowered to improve their own levels of social connectedness, ultimately creating a more cohesive community. To ensure that social cohesion efforts affected those residents who identified as being most severely disconnected (e.g., those experiencing feelings of loneliness), the report suggested strengthening the education campaign by modeling policy after methods used in the United Kingdom to address loneliness among elderly citizens, which centered on training local general practitioners to screen at-risk patients and connect them with active outreach programs meant to help them re-engage with the community.^{20,21}

¹⁸ “Projections of National Expenditures for Treatment of Mental and Substance Use Disorders, 2010-2020,” *SAMHSA*, <http://store.samhsa.gov/shin/content/SMA14-4883/SMA14-4883.pdf>

¹⁹ Anita Chandra, “Measuring Wellbeing to Help Communities Thrive,” *RAND Health* <https://www.rand.org/capabilities/solutions/measuring-wellbeing-to-help-communities-thrive.html>

²⁰ “Creating a City for Wellbeing: Key Findings about Wellbeing Perspectives and Assets in Santa Monica,” *Santa Monica Wellbeing Project* (2015), <https://wellbeing.smgov.net/Media/Default/docs/WellbeingProject-IndexFindings-April2015.pdf>

²¹ “Investing to Tackle Loneliness: a Discussion Paper,” *Social Finance* (2015), http://www.socialfinance.org.uk/wp-content/uploads/2015/06/Investing_to_Tackle_Loneliness.pdf

The Wellbeing Project's indexing efforts helped identify community features and experiences directly linked to personal wellbeing. Residents noted that feelings of belonging in a neighborhood, in addition to its being perceived as "beautiful," was an important factor in their overall wellbeing. This aspect of the index was measured through mobility, quality, access, and pride and use of place, with data collected from research, expert input, and stakeholder engagement. The research showed that high crime rates, poor housing, and physical features have a direct negative effect on wellbeing, and it found that satisfaction rates differ across ethnic communities. Self-reports of driving to work instead of using other means of available transportation were also used to indicate a potential stressor that might lead to a reduced sense of wellbeing. Utilization of community-available transportation not only enhances community cohesion and neighborhood connectedness but it also is indicative of physical activity that may reduce the incidence of chronic illness.

The Wellbeing Project also found higher scores of wellbeing among residents who lived in closer proximity to natural amenities or areas of green space. This finding suggests people who have the opportunity for physical activity in a safe and reserved space are more likely to be healthy and happy. Higher crime rates, access to unhealthy food, and prevalence of low-quality housing were directly related to feelings of lower wellbeing.

The final report indicates that the program is still very much in its infancy phase in terms of how to best address the underutilization of neighborhood amenities and space, especially among the Hispanic and elderly populations.²² Early suggestions for ways to target these populations include using a family approach to increase physical activity and the use of community space, but the researchers concede that further research is needed to identify why there is such a disparity in use.

In addition, researchers found that the consumption of healthy foods is surprisingly low among the Santa Monica population, especially given the proximity to healthy options. The report recommended an education campaign to increase food awareness, as well as partnering with local schools and providing innovative access points, such as pop-up markets and cooking courses especially targeted toward lower-income neighborhoods.²³

Kansas City Health Kids

Kansas City Health Kids (KC Health Kids) is a local collaborative agency that works in the greater Kansas City area to reduce childhood obesity through community partnerships and programs. Since their 2005 founding, they have expanded their mission on children's access to healthy foods. They have also broadened their scope of work to address other public health factors that indirectly affect childhood obesity, such as creating positive change at the community level.²⁴ One such initiative is their Health Communities Initiative, which developed a comprehensive Neighborhood Empowerment Toolkit.²⁵

The Neighborhood Empowerment Toolkit is a three-pronged approach to creating a more engaged and healthy community living environment: engage, educate, and empower.

Engage: Engagement is primarily achieved through community forums and focus groups, media, social media, and personal contact. Although engaging individuals and building community investment in improving the built environment is dependent on many individual community factors, the toolkit provides

²² "Creating a City for Wellbeing", 2015

²³ Anita Chandra, "Measuring Wellbeing to Help Communities Thrive," *RAND Health* <https://www.rand.org/capabilities/solutions/measuring-wellbeing-to-help-communities-thrive.html>

²⁴ "About," *KC Healthy Kids*, <https://www.kchealthykids.org/program/about/>

²⁵ "Neighborhood Empowerment Toolkit," *KC Healthy Kids*, <https://www.kchealthykids.org/neighborhood-empowerment-toolkit/#>

some innovative means of engagement, such as story circles, community ambassadors, and neighborhood surveys. The program emphasizes the importance of reaching individual community members and empowering them as the agents of change, while also noting the necessity of continual survey and evaluation so that unique neighborhood and community-level needs for a specific population are addressed in a way that is most appropriate.

Educate: The second prong of the toolkit focuses on using education to empower a community that might not be aware that their health is below average and may not know how to go about changing it. Education focuses on utilizing community members to reach out and educate their neighbors (akin to train the trainer), thereby creating more social cohesion through communal motivation to achieve a common goal.

Empower: The third prong of the toolkit is empowerment, which builds from the momentum of the previous steps and stresses the importance of adult and youth leadership building.²⁶

While the toolkit provides a step-by-step means through which a community can organize itself for change to improve its built environment and other factors impacting health, the KC Health Kids collaborative also engaged in several projects focused on fostering partnerships and stakeholder engagement to further community engagement and resource availability. This is exemplified through their work in minimizing food deserts within the greater Kansas City area, primarily through local partnerships to affect local policies.²⁷ Since 2011, the coalition has been instrumental in passing local ordinances and bills that promote the availability of healthy foods.²⁸ Some notable examples are updating local ordinances governing urban agricultural activity in collaboration with Cultivate Kansas City. This effort was advanced through subsequent policy efforts that not only created city ordinances to promote urban agriculture, but also allowed for more farmer's market vending, resources for community gardens, repurposing of unused space for agricultural resources, tax abatement for urban agricultural operations, tax exemption for farm products sold at farmer's markets and SNAP match pilot, and finally a farm-to-school program in 2014.²⁹

Positive Action for Today's Health (PATH) Study

The PATH program was a research-driven initiative that evaluated the success of a police-patrolled walking program promoted by social marketing strategies that encouraged walking and physical activity in low-income African-American communities.³⁰ The program began by using local resources, such as community centers, as the organizational hubs and meeting places for the walking groups. Walking groups were advertised through social marketing tools developed through stakeholder engagement and focus groups,³¹ which lead to the development of five specific messages that were uniquely targeted to distinct communities within the program.³² This allowed participants to tailor messages towards specific audiences, making the messages more effective in advertising the community environment, walking groups, and importance of physical activity.

²⁶ "Neighborhood Empowerment Toolkit,"

²⁷ "Kansas City, MO: 2015 Culture of Health Prize Winner," *Robert Wood Johnson Foundation* 2015), <http://www.rwjf.org/en/library/articles-and-news/2015/10/coh-prize-kansas-city-mo.html>

²⁸ "About the Greater Kansas City Food Policy Coalition," *KC Healthy Kids*, <https://www.kchealthykids.org/about-us/about-kansas-city-food-policy-coalition/>

²⁹ "Policy Achievements," *KC Healthy Kids*, <https://www.kchealthykids.org/policy-achievements-2/>

³⁰ Dawn Wilson et al., "The Results of the Positive Action of Today's Health (PATH) Trial for Increasing Walking and Physical Activity in Underserved African-American Communities," *Annals of Behavioral Medicine* 49, no. 3 (2015): 398-410, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4426390/>

³¹ Ibid.

³² Ibid.

The effectiveness of the social-marketing campaign was evidenced in the post-intervention evaluation, which showed that adherence to walking groups and increased physical activity was more pronounced and successful among communities where social marketing strategies were used.³³ As with the Santa Monica project, part of the social marketing campaign included an educational component that highlighted the physical and mental health benefits of engaging in walking activities. Information was spread through more traditional marketing such as calendars and door hangings, as well as by providing information at community events.³⁴

The inclusion of police-patrolling for the walking groups was a key factor in the success of the PATH intervention, as the intervention was implemented in areas with high crime rates, where a lack of feeling safe was a major barrier to community members utilizing their neighborhood environment for physical activity. Creating a safe environment is an essential step in combating issues of crime and violence that affect the time community members spend outside.³⁵ Essentially, the PATH intervention recognized that resources and amenities available in a built environment that may promote physical activity and wellbeing will not be effective or utilized if community members do not feel safe in their neighborhood.

The PATH intervention also made a point of actively engaging local community members in the development of social marketing strategies and empowered them as leaders to distribute the marketing materials and lead walking groups.³⁶ As seen in the other case studies, empowering local community members allows interventions to be more tailored to the needs of the community, which in turn ensures that the intervention will be more successful and widely accepted. In addition, the program worked to bring in local community members as leaders of the program and used already established community centers as the hub of operations.³⁷ The empowerment of a small group of designated community leaders put some of the responsibility for success in the hands of the community while encouraging more social connection and engagement through the intervention activities. Researchers noted that “providing opportunities for both skill-building and community connectedness can indirectly transform social norms by positively influencing social networks within communities³⁸ Further, the study found that social interaction among walkers and identification as a member of a regular walking group were predictive factors in the success of the walking group post intervention.³⁹ Social connectedness can be fostered through community-level empowerment and intervention and can also influence the success of programs by building a sense of group membership and responsibility.

The State of Neighborhood Fabric and Community Connectedness in Colorado

Colorado communities vary in population density, natural features, demographics, and services available at the community-level, so it is difficult to understand each neighborhood’s unique fabric and level of perceived social cohesion; though there are marked disparities between urban and rural areas. Colorado had almost 6.7 million residents in 2016, and although 47 of Colorado’s 64 counties are rural or frontier (encompassing 73 percent of Colorado landmass), almost 86 percent of Colorado’s population lives in

³³ Ibid.

³⁴ James Krieger et al., “High Point Walking for Health: Creating Built and Social Environments that Support Walking in a Public Housing Community,” *American Journal of Public Health* 99, no. 3 (2009):S593-S599, doi: 10.1007/s12160-14-9664-1

³⁵ Wilson et al., “The Results of the Positive Action of Today’s Health (PATH) Trial”, 2015

³⁶ Ibid.

³⁷ Ibid.

³⁸ Krieger et al., “High Point Walking for “, 2009

³⁹ Wilson et al., “The Results of the Positive Action of Today’s Health (PATH) Trial”, 2015

urban counties.^{40,41} The state has a relatively high poverty rate of almost 12 percent despite a median household income of \$61,234 (evidence of a high cost of living) and the median household income in rural areas is almost 27 percent lower than in urban areas at \$47,458.⁴² While Colorado continues to lead the nation in physical-health-related indicators, it falls short with respect to geographical and racial health disparities. Minority and rural populations fare the worst, with diabetes rates above the state average and incidence of chronic conditions that are often almost double rates seen in their non-Hispanic white counterparts.^{43,44}

Disparities between urban and rural areas in terms of access and availability of goods and services are exacerbated by income.⁴⁵ For example, income in Colorado is associated with overall neighborhood quality and access to and utilization of exercise facilities and food security; rural and low-income community members tend to live in neighborhoods that do not promote activity, offer access to exercise facilities, or offer healthy food options.^{46,47} In terms of mental health, Colorado experiences high rates of suicide⁴⁸, which is disproportionately higher for rural residents (38/100,000 compared to 25/100,000 statewide)⁴⁹, and has one of the highest rates of prescription drug abuse in the U.S., which is growing, though in line with the growing rates of substance abuse seen nationally.⁵⁰ Disparities are evident between urban and rural areas; between 2002-2014, opioid overdose deaths grew by 96 percent in urban areas compared to a growth of 140 percent in rural areas.⁵¹ Despite this, The Colorado Health Foundation Health Report Cards found that generally, Coloradans self-report relatively lower rates of depression and dissatisfaction with their lives in general, though rates are higher for those with lower income.⁵²

Self-reported levels of social support among Coloradans vary by race/ethnicity and income, with overall rates of approximately 83 percent for non-Hispanic white adults and about 74 percent to 78 percent for other ethnic/racial minorities.⁵³ As in much of the U.S., higher reported rates of violence are correlated with lower socioeconomic levels and vary across neighborhoods and counties.

Colorado Initiatives

Colorado is one of the healthiest states in the nation, but further action to improve health is warranted. In *Shaping a State of Health, Colorado's Plan for Improving Public Health and the Environment*, the Colorado Department of Public Health and Environment (CDPHE) prioritized mental health and the

⁴⁰ Colorado Department of Local Affairs, "Urban/Rural Population by County, 2010,"

<https://demography.dola.colorado.gov/census-acs/2010-census-data/>

⁴¹ Colorado Rural Health Center, "Snapshot of Rural Health in Colorado, 2017, <http://coruralhealth.wpengine.netdna-cdn.com/wp-content/uploads/2013/10/2017.1.4-Snapshot-FINAL-FINAL.pdf>

⁴² Ibid.

⁴³ Kelli Gruber, Amy Anderson Mellies, and Renee Calanan, "Disparities in the Prevalence of Adult Overweight and Obesity by Demographic Characteristics – Colorado BRFSS, 2011-2014," *CDPHE Health Watch* no. 98 (2016),

<http://www.chd.dphe.state.co.us/Resources/pubs/AdultOvereseDisparitiesFinal.pdf>

⁴⁴ Colorado Department of Public Health and Environment Data, *Health Indicator Tool*,

<http://www.chd.dphe.state.co.us/HealthIndicators/home/index>

⁴⁵ Colorado Department of Public Health and Environment, *VISION: Visual Information System for Identifying Opportunities and Needs Tool*, <https://www.colorado.gov/pacific/cdphe/vision-data-tool>

⁴⁶ Ibid.

⁴⁷ Ibid.

⁴⁸ "Health Report Card", 2016

⁴⁹ Colorado Rural Health Center, 2017.

⁵⁰ "Health Report Card," 2016

⁵¹ Colorado Rural Health Center, 2017.

⁵² Colorado Department of Public Health and Environment, *VISION: Visual Information System for Identifying Opportunities and Needs Tool*, <https://www.colorado.gov/pacific/cdphe/vision-data-tool>

⁵³ Ibid.

prevention of substance abuse and obesity through systems change that focuses on health inequities.⁵⁴ CDPHE, together with partners in the private and philanthropic sectors, have funded a number of initiatives focused on creating healthy communities. Many of these initiatives emphasize healthy eating and active living, including enhancements to the built environment. Some of these initiatives are implementing strategies likely to impact more than rates of obesity. Examples of the many initiatives in Colorado are described below.

SHARE Northeast Denver

The SHARE initiative focuses on five communities in northeast Denver. SHARE provides small grants to support local partners implementing programs that increase access to healthy foods and opportunities for physical activity. SHARE also supports social connections between neighbors and exposing neighborhood youth to health-promoting messages as a way to build the “collective power” of the community. SHARE prioritizes the importance of culture in the development of a healthy community.⁵⁵

LiveWell Huerfano County

LiveWell Huerfano County engages a large network of partners across education, health, business, and the community to address health in one of the state’s poorest counties. Community members created a community kitchen and a community recreation center in an old school building. LiveWell Huerfano has also partnered with the state to improve the safety of biking and walking paths in the community.⁵⁶

Globeville Elyria-Swansea(GES) LiveWell

GES LiveWell aims to increase access to healthy foods and active living in three Denver neighborhoods. GES LiveWell employs residents as “community connectors” to engage community members as leaders in advancing their mission.⁵⁷

Mile High Connects

The Mile High Connects initiative arose out of findings in another Colorado initiative called the Children’s Corridor. A funder of the Children’s Corridor, the Piton Foundation, was focused on addressing childhood poverty in a part of northeast Denver that includes 13 neighborhoods. The Children’s Corridor included other funders and efforts across health and education to support children at high risk for poor health and educational outcomes. The Piton Foundation found that as the prices for homes in Denver rose, community members in these 13 neighborhoods were moving out of the city, pushing poverty out to suburbs and exurbs.⁵⁸ To address this, the Piton Foundation and partners created an initiative to ensure that Denver’s regional transit system connected residents from low-income communities to affordable housing, jobs opportunities, quality education, and access to healthy foods and physical activity.⁵⁹

There is no evidence of the impact that these Colorado efforts have made on mental health, substance abuse, violence, or chronic disease outcomes, but research cited throughout this paper suggests that these initiatives would have a positive effect on the indicators of interest. Evaluation of the impact of these existing efforts on the indicators of interest would be worthwhile.

⁵⁴ Colorado Department of Public Health and Environment, “Healthy Colorado: Shaping a State of Health Colorado’s Plan for Improving Public Health and the Environment,” https://www.colorado.gov/pacific/sites/default/files/OPP_2015-CO-State-Plan.pdf

⁵⁵ “Healthy Communities”, LiveWell Colorado, <https://livewellcolorado.org/healthy-communities/partnerships/>

⁵⁶ Ibid.

⁵⁷ Ibid.

⁵⁸ Rachel Estabrook, “Poor Families in Metro Denver Move A Lot, Creating Challenges to Service,” *Colorado Public Radio*, May 28, 2015, <http://www.cpr.org/news/story/poor-families-metro-denver-move-lot-creating-challenges-service>

⁵⁹ “About Us”, Mile High Connects, <http://milehighconnects.org/about-us/>

Conclusion

Understanding the impact of the built environment and social connectedness on individual and population health is an important part of addressing the holistic needs of individuals and in improving health outcomes. For instance, to understand and address the growing rates of obesity within the U.S., we look to individual and community levels of physical activity as important indicators and predictors of overall health. Those who engage in mild to moderate physical activity have lower rates of obesity, which in turn results in lower rates of chronic disease.⁶⁰ Creating a physical environment that promotes exercise and making a conscious effort to increase community elements that encourage physical activity are crucial to helping individuals make healthy choices and commit to health behaviors that can and do have real impacts on their day-to-day health.⁶¹

In the Kansas City collaborative, communities were encouraged to work together to empower members to make healthy choices, especially in terms of healthy foods, as well as to invite local representatives to see the progress of their initiatives. Community members were encouraged to push for policies that would create more opportunity to get healthy food choices into food deserts, including providing tax exemptions for farmers selling their goods at farmer's markets, and expanded to promote utilization of abandoned community spaces to create urban farms, which were further supported through zoning codes.⁶² Their combined effort demonstrated the effectiveness and the necessity of including both community-run initiatives that work to promote healthy behavior and engaging policy makers to ensure that change is supported on all levels.⁶³

The PATH study reinforced the necessity for community empowerment to promote healthy behaviors through their research into helping individuals utilize the built environment and engage in mild-to-moderate physical activity.⁶⁴ While both initiatives have components that focus on individual-level intervention and empowerment, their work at the community and policy level are especially insightful for how to approach creating and empowering a community to utilize the built environment to create positive health outcomes.

The KC Healthy Kids and PATH case studies present real-world examples of how to target specific areas for change. In terms of the built environment, the first step is to understand unique community needs. Community leaders can assess needs through surveys, focus groups, general outreach, social media, and other means. Stakeholder input is crucial to the success of a community-based intervention because it first narrows the scope of change to meet the community's desired needs and wants, whether it be more green space or the inclusion of a bike lane.^{65,66} These activities also engage and empower the community members as they may feel a sense of agency and control over what happens in their neighborhood. Community engagement also drives actions towards interventions that the community will utilize.⁶⁷ For instance, a community that may be underutilizing a park may not be interested in creating more protected green space, but may instead want strategies that create a safer space within the park to promote physical activity and use. In this way, community engagement can prove vital for not only the development of an initiative but also utilization of neighborhood improvements.

⁶⁰ Srinivasan, O'Fallon, and Dearry, "Creating Healthy Communities", 2003

⁶¹ Wilson et al., "Positive Action of Today's Health (PATH) Trial", 2015

⁶² "Policy Achievements," *KC Healthy Kids*, <https://www.kchealthykids.org/policy-achievements-2/>

⁶³ "Neighborhood Empowerment Toolkit"

⁶⁴ Wilson et al., "Positive Action of Today's Health (PATH) Trial", 2015

⁶⁵ "Neighborhood Empowerment Toolkit"

⁶⁶ Wilson et al., "Positive Action of Today's Health (PATH) Trial", 2015

⁶⁷ "Creating a City for Wellbeing", 2015

A key element of both case studies is the recognition of significant disparities among racial/ethnic groups. In both the KC Healthy Kids and the PATH programs, leaders noted not only significant differences in built environment but also in the health of the communities themselves. Finding interventions that are culturally sensitive to the community they intend to serve is key to ensuring their success and ultimate utilization. By bringing in community members from the onset, a program can ensure that it is addressing the health and location disparities by listening to the wants and needs of community members.⁶⁸

The Santa Monica project demonstrates innovative ways that community investment can foster increased connectedness and resilience, which in turn, positively affects mental health and substance abuse outcomes.⁶⁹ The project emphasized the importance of establishing an adequate baseline understanding of connectedness and community cohesion, employing a variety of strategies to assess the level of connectedness as one dimension of overall community wellbeing.⁷⁰ While their project went beyond addressing public health outcomes, the strategies of utilizing social media to support individual engagement indicated their recognition of and commitment to improving their community's cohesion as a means of addressing population wellbeing. Given the demographics of their community, leaders determined that education and information on the community's level of social connectedness would be an effective way for the community to invest in building these connections themselves.⁷¹

The psychological and financial burden that chronic disease and untreated mental illness, substance abuse, and violence exert on the health system and community make it clear that there is a need for thoughtful interventions to improve the social fabric that are sensitive to the mechanisms through which health is shaped. A neighborhood's fabric, as it relates to the "walkability" of the built environment, has been shown to reduce obesity and diabetes rates, as well as the incidence of other chronic conditions, thus directly influencing the health of the community and reducing the financial burden on the health system.⁷² Creating a more "walkable" and safe environment can include building and maintaining sidewalks and walking/hiking paths, providing adequate lighting, and encouraging the use of green and open spaces. Investment in the built environment will vary based on the needs of the community and the manmade and natural features already present.

Investing in a neighborhood's social cohesion has been shown to have a mediating effect on untreated mental illness, violence, and substance abuse, as well as reinforcing physical activity through modeled behavior.⁷³ Social cohesion can be encouraged in many ways, including offering more activities via community-based clubs, groups, or organizations. However, as suggested in the PATH case study described above, the built environment can in and of itself positively impact levels of social cohesion only by offering safe places for groups to come together.⁷⁴

What is innovative in the Santa Monica approach is their recognition of the importance of self-efficacy and empowerment within the community when trying to affect change. Santa Monica leaders were confident that disseminating these findings to the community through an educational campaign would give community members enough information and self-efficacy to feel empowered to increase social networking within their neighborhoods, while recognizing disparities in feelings of social cohesion among the community's minority populations. City leaders invested in a strategy in which individuals

⁶⁸ Wilson et al., "Positive Action of Today's Health (PATH) Trial", 2015

⁶⁹ Chandra, "Measuring Wellbeing to Help Communities Thrive"

⁷⁰ "Creating a City for Wellbeing", 2015

⁷¹ Ibid.

⁷² Marshall, Brauer, and Frank, "Healthy Neighborhoods: Walkability and Air Pollution," 2009

⁷³ Kawachi and Berkman, "Social Ties and Mental Health," 2001

⁷⁴ Wilson et al., "Positive Action of Today's Health (PATH) Trial", 2015

became the essential change agents for community-level change.⁷⁵ In Colorado, this strategy could prove especially effective in rural communities with limited access to formal programs and resources targeted to improving social cohesion.

Research shows that the features of the built environment have important effects on community health. Many successful interventions and community-based programs have been formed and implemented based on these research findings. Addressing systemic issues of chronic disease, mental health, violence, and substance abuse through individual-level treatment is essential for a person's health, but that approach alone does not address system level elements that affect healthy behaviors, choices, and support. Public health interventions are those with broad scope that move beyond the individual level to affect community and population level change. In Colorado, the growth in minority populations and variety of community types (urban, rural, and frontier) necessitate community level interventions that work to reduce health disparities and create a healthier population. This is best done with interventions that encourage community members to engage in physical activities and create more cohesive social connections through community engagement and empowerment. The Santa Monica Wellness Project, KC Healthy Kids coalition, and the PATH study all demonstrate the importance of the built environment on community health and the effectiveness of innovative strategies that communities can use to improve their physical surroundings while also creating more meaningful, long-lasting social connections.

⁷⁵ Ibid.