

Analytic Framework Description: Park, Trail, and Greenway Infrastructure Interventions to Increase Physical Activity, Improve Health, and Quality of Life

The analytic framework depicts postulated pathways through which park, trail, and greenway interventions implemented in communities may increase the use of locations for physical activity and active transportation, relaxation and mental health, and social interactions. Increased physical activity in the location may increase total physical activity, increase the percentage of people who meet recommended overall physical activity levels, and increase fitness. This would be expected to reduce morbidity and mortality. Park, trail and greenway use may also result in a change in injuries, possibly reducing rates of injury by providing a safe space for users to engage in physical activity.

Increases in all three types of space use (for physical activity, relaxation, and socialization) may also improve mental health and well-being (i.e., reduce depressive symptoms, stress, anxiety) and lead to improvements in social outcomes (i.e., perceptions of safety, measures of violence). Increased physical activity, improved mental health and well-being, improvements in social outcomes, and reductions in injuries might result in reductions in morbidity and mortality. Improved quality of life may also result from these outcomes as well as directly from use of parks, trails, and greenways for physical activity, relaxation, and social interactions.

Park, trail, and greenway interventions could also improve environmental outcomes (e.g., air and water pollution) which could reduce morbidity and mortality and improve quality of life as well.

Key potential effect modifiers include types and scale of location, types and scale of intervention, and population and community characteristics. A potential additional benefit of these interventions is increased community appeal and development. This could, however, lead to a potential harm by displacing residents with lower-incomes.