IMPACT AND EFFECTIVENESS
TABLE 42

Availability of Parks, Playgrounds, Trails and Recreation Centers

EFFECTIVENESS TABLES

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
United States (Parks)				
Author Tester, Baker (2009) California **Design** Intervention Evaluation Before and after study **Duration** High 1 year	**Measures** *Accessibility in the neighborhoods* (access to community places to be physically active, access to staff at parks, increased quality in parks [artificial turf, new fencing, landscaping, lighting and picnic benches]) **Outcome(s) Affected** Moderate and vigorous intensity physical activity (System for Observing Play and Recreation in Communities [SOPARC])	**Net Positive for Physical Activity in Lower-income Individuals (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Net Positive for Park Use in Lower-income Individuals (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. In the two intervention parks combined, there were 1681 physically active visitors in the follow-up week, compared to a total of 360 at baseline. 2. In Park A (renovated park), there was a significant increase in the mean number of moderately active individuals observed from baseline to follow-up for both males (from 1.51 to 6.07, p≤0.05) and females (from 0.13 to 1.73, p≤ 0.05). Observations also found a significant increase in vigorous activity in males (from 1.04 to 2.21, p≤0.05) and females (from 0 to 0.29, p≤0.05). 3. In Park B (renovated park), there was a significant increase in the mean number of moderately active individuals observed from baseline to follow-up for both males (from 1.64 to 8.92, p≤0.05) and females (from 1.58 to 5.30, p≤ 0.05). Observations also found a significant increase in vigorous activity in males (from 0.36 to 3.08, p≤0.05) and females (from 0.29 to 1.1, p≤0.05). 4. In the control park, only the number of moderately active males increased significantly from baseline to follow-up (from 1.84 to 4.23, p≤0.05). 5. The overall proportion of sedentary visitors to the playfields increased in both intervention parks and decreased in the control park. In Park A, there was an increase in the number of sedentary males (from 2.02 to 10.46) and females (from 0.11 to 3.61, p≤0.05 for both). The same increase was seen in Park B for sedentary males (from 0.64 to 8.93) and females (from 0.2 to 5.02, p≤0.05 for both). The decrease in the number of sedentary individuals in the control park was not significant. OTHER: 6. There was a significant increase in playfield use, from 28 children counted in both intervention playfields combined at baseline, to 199 and 261 children, respectively, who visited the playfields in Parks A and B at follow-up. There was a nearly five-fold increase in the total adult visitors to the playfield in Park A, and a nine-fold increase in the total adult visitors to Park B. There were almost no seniors present on the playfield at baseline at all parks, and they increased significantly at Park B.	**Effective for Physical Activity in Lower-income Individuals** Study design = Intervention evaluation Duration = High Effect size = Net positive for physical activity in lower-income individuals	**Maintenance** Not Reported **Sampling / Representativeness** Not Reported
Author Floyd, Spengler (2008) Florida, Illinois **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to parks) **Outcome(s) Affected** Moderate and vigorous physical activity and walking (modified version of the System for Observing Play and Leisure Activity in Youth [SOPLAY])	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Greater access to parks will lead to increased levels of physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. For Tampa parks, the greatest energy expenditure was associated with tennis/racquetball and basketball courts (mean expenditure=0.098 and p<0.05 for both). Dog play areas (mean=0.057), picnic shelters (mean=0.059), and fishing piers (mean=0.060) were associated with the lowest energy expenditure (p<0.05 for all). 2. For Chicago parks, mean energy expenditure per person on basketball courts (mean=0.088), playgrounds (mean=0.088), and soccer fields (mean=0.094) was significantly higher than that observed on baseball/softball fields (mean=0.074) (p<0.05 for all).	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Zlot, Schmid (2005) United States **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to parks) **Outcome(s) Affected** Utilitarian and recreational walking and bicycling (1996 and 1998 Behavioral Risk Factor Surveillance System [BRFSS] and the 1995 Nationwide Personal Transportation Survey data)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Having more parklands available will increase walking and biking for transportation or recreation.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. A significant correlation was found between utilitarian walking and bicycling and parkland acreage (r=0.62, p<0.0001). 2. No significant correlation was observed between recreational walking and bicycling and utilitarian walking and bicycling or between recreational walking and bicycling and parkland acreage.	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Cohen, Ashwood (2006) Washington DC, Maryland, South Carolina **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to parks, presence of lighting, restroom, shaded areas, fountains, fencing, open spaces, playing fields, courts within the parks, and street connectivity) **Outcome(s) Affected** Moderate to vigorous physical activity (accelerometers)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Park proximity, park type, and park features lead to increased physical activity in adolescent girls.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. For the average girl having 3.5 parks within a 1-mile radius of home, accounted for an additional 68 minutes of non-school 3.0 MET MVPA and an additional 36.5 minutes of non-school 4.6 MET MVPA per 6 days. 2. For every park, regardless of type, within a half mile radius from home there was an increase in non-school MVPA by 33 minutes for 3.0 METs (coefficient estimate=0.02, p<0.005) and 17.2 minutes for 4.6 METs (coefficient estimate=0.03, p=0.04) per 6 days. Each additional park past the half-mile increased non-school MVPA by 12 minutes for 3.0 Mets (coefficient estimate=0.01, p<0.009) and 6.7 minutes for 4.6 Mets (coefficient estimate=0.01, p=0.09) per 6 days. 3. For the linear model, having either a neighborhood or community park within a half-mile of home was associated with 45.5 more 3.0 MET minutes (coefficient estimate=0.03, p<0.05) and 24.2 more 4.6 MET minutes (coefficient estimate=0.04; p<0.05) per 6 days. In the half-mile to 1-mile distance, MVPA increased by 29.6, 3.0 MET minutes (coefficient estimate=0.02, p<0.05) and 18.6, 4.6 MET minutes (coefficient estimate=0.03; p<0.05) per 6 days. 4. Additional non-school MVPA minutes increased when girls had neighborhood/community parks (3.0 MET 42 min, p<0.05; 4.6 MET 22 min, p<0.05), mini-parks (3.0 MET 92 min, p<0.05; 4.6 MET 40 min; p<0.10), natural resource areas (3.0 MET 36 min, p<0.05), walking paths (3.0 MET 59 min, p<0.05; 4.6 MET 13 min; p<0.05), and running tracks (3.0 MET 208 min, p<0.05; 4.6 MET 82 min; p<0.05) within a half mile of their homes. 5. Playgrounds (39 min for 3.0 MET; 28 min for 4.6 MET, p<0.05 for both), drinking fountains (24 min for 3.0 MET, p<0.05; 14 min for 4.6 MET, p<0.10), basketball courts (37 min for 3.0 MET, p<0.10; 30 min for 4.6 MET, p<0.05), multipurpose rooms (13 min for 3.0 MET and 4.6 MET, p<0.05 for both), park offices (14 min for 3.0 MET, p<0.10), an ice rink (28 min for 3.0 MET, p<0.10), a running track (208 min for 3.0 MET, p<0.05), a swimming area (32 min for 4.6 MET, p<0.05), and an amphitheater (16 min for 3.0 MET, p<0.10) were associated with increased MVPA. 6. Lawn games (-161 min for 3.0 MET, p<0.05; -55 min for 4.6 MET, p<0.10) and skateboard areas (-94 min for 3.0 MET; -48 min for 4.6 MET, p<0.05 for both) were negatively associated with increased MVPA. 7. Special use parks were negatively associated with both 3.0 MET and 4.6 MET MVPA (each p<0.05). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories. Metabolic equivalent–weighted moderate-to vigorous physical activity [MET MVPA] was calculated for the hours outside of school time using two different cut points: activity levels ≥3.0 metabolic equivalents and ≥4.6 metabolic equivalents, the latter indicating activity at the intensity of a brisk walk or higher.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported 20% Black and 6% Hispanic, and 10% of households were below poverty level (neighborhood average; ½ mile radius)

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Roemmich, Epstein (2007) New York **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (street connectivity, access to recreation areas, and residential density) **Outcome(s) Affected** Total physical activity (PA), moderate to vigorous physical activity and sedentary behavior (assessed with accelerometers and a 'Habit Book')	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Physical Activity for Boys (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Sedentary Behavior in Boys (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **No Association for Sedentary Behavior for Girls (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Street connectivity and greater access to places to be physically active lead to greater levels of physical activity and is inversely associated with greater screen time.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. For boys, percentage park area (coefficient=0.34) and percentage park and recreation area (coefficient=0.32) were positively correlated to total physical activity (p≤0.05 for all). 2. When combining the boys and girls into a single group, total physical activity was correlated to percentage park area (r=0.22, p≤0.04. SEDENTARY BEHAVIOR: 1. Percentage park area + recreation were inversely correlated with television watching in boys but not girls (p≤0.05). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** **Positive Association for Physical Activity for Boys** **Positive Assocaition for Sedentary Behavior for Boys** **No Association for Sedentary Behavior for Girls** Study design = Association Effect size = Positive association for physical activity in the study population and boys, positive assocation for sedentary behavior in boys and no association for sedentary behavior for girls.	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Norman, Nutter (2006) California **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (access to parks, size of parks, intersection and residential density, retail floor area ratio, land-use mix) **Outcome(s) Affected** Overweight/obesity (height and weight were used to calculate body mass index [BMI]) and total physical activity and moderate to vigorous physical activity (measured with accelerometers)	**No Association for Overweight/obesity in Boys (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Physical Activity in Girls (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Environmental variables, such as access to parks and community and street design, leads to increased levels of physical activity and decreased levels of overweight/obesity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** OVERWEIGHT/OBESITY: 1. BMI percentile was marginally correlated with number of recreation facilities for boys (r=0.08, p<0.11). PHYSICAL ACTIVITY: 2. For girls, significant correlations were found for total minutes/day of moderate-to-vigorous physical activity with number of recreation facilities (r=0.11, p<0.05) and number of parks (r=0.14, p<0.01). The number of recreation facilities (adjusted R2=0.25, beta=0.11, p=0.016) remained significant after multiple linear regression, but the number of parks became non-significant.	**No Association for Overweight/obesity in Boys** **Positive Association for Physical Activity in Girls** Study design = Association Effect size = No association for overweight/obesity in boys and positive association for physical activity in girls.	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Shores, West (2008) Eastern United States (mid-sized community) **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (presence, absence, and use of park equipment and features) **Outcome(s) Affected** Moderate and vigorous physical activity and sedentary activity (System for Observing Play and Recreation in Communities [SOPARC] assessed number of park visitors, mode of participation, use of built park environment [BPA])	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Sedentary Behavior in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Park Use in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Presence of certain equipment and features in parks increases physical activity levels.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. There were significant differences in activity intensity according to target area (X^2=28.71, p<0.01). Park visitors in target areas with playgrounds (81.21% vigorous intensity) and courts (72.14% vigorous intensity) were most active of all visitors, whereas visitors in sheltered target areas were least active (90.11% sedentary). 2. Moderate-intensity physical activity was observed in the highest proportion among visitors on sports fields (51.66%) and using paths (38.20%). SEDENTARY BEHAVIOR: 4. Park visitors were most often sedentary when observed in open green spaces (72.08%) and in shelter/picnic areas (90.11%) 5. Use of shelters was significantly negatively related to physical activity intensity (B=-0.578, β=-0.37, p<0.01). PARK USE: 6. Use of playgrounds (B=1.510, β=0.701, p<0.01), courts (B=1.140, β=0.524, p<0.01), and paths (B=0.768, β=0.114, p<0.05) was positively related to physical activity intensity.	**Positive Association for Physical Activity in the Study Population** **Positive Association for Sedentary Behavior in the Study Population** Study design = Association Effect size = Positive association for physical activity and sedentary behavior in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** High The proportion of racial and ethnic minorities observed was slightly higher than the local population.
Author Mowen, Confer (2003) Ohio **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Active neighborhoods/ walkability* (distance to park, perceptions of a newly constructed brownfield park in-fill) ibility (access to parks) **Outcome(s) Affected** Intention to visit the park (Questionnaire assessed short term and long term behavioral intentions related to the park [use and adoption])	**Not reported (for desired health outcomes)** **Positive Association for Stages of Change in the Study Population** **(Assumption: Greater access to parks in the neighborhood leads to increased intentions to utilize the park)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** STAGES OF CHANGE: 1. The less individuals perceived the park as compatible with surrounding communities, the more likely respondents intended to re-visit in the future (compatibility; beta= -0.211, p=0.014). 2. The shorter the distance between the park and nearby neighborhoods, the more likely early adopters were to indicate regular visitation intentions (beta= -0.208, p=0.002). 3. The more the park in-fill was perceived as accessible, convenient, and superior to other traditional neighborhood parks, the more likely visitors intended on visiting regularly (accessibility; beta=0.205, p=0.002, convenience; beta=0.206, p=0.009, superiority; beta=0.145, p=0.038). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**More Evidence Needed** Study design = Association Effect size = Not reported	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Cohen, McKenzie (2007) California **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to parks and quality and safety of parks) **Outcome(s) Affected** Total energy expended (METs), leisure exercising, and physical activity (System for Observing Play and recreation in Communities [SOPARC]) and urban park use (interviews)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Park Use in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Increased accessibility, safety and quality of parks leads to increased levels of physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Living within 1 mile of a park was positively associated with the frequency of leisure exercise (incident rate ratio= 1.38, 95%CI=1.04-1.84, p<0.001). 2. More residents living within 0.5 miles of the park reported leisurely exercising 5 or more times per week more often than those living more than 1 mile away (49% vs. 35%, p<0.01). 3. People who lived within 1 mile of the park had an average of 38% more exercise sessions per week than those living further away. PARK USE: 4. Living within 1 mile of a park was positively associated with park use (incident rate ratio=4.21, 95%CI=2.54-7.00, p<0.001). 5. People who lived within 1 mile of the park were 4 times as likely to visit the park once a week or more. (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Babey, Hastert (2008) California **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to parks and open spaces, population density, and park safety) **Outcome(s) Affected** Physical activity (self-reported survey)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Access to parks and increased safety and density within the neighborhood leads to higher levels of activity in children.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Stratified analyses revealed that access to a safe park was positively associated with regular activity (relative risk [RR]= 1.10, 95% CI= 1.01-1.17, p<0.05) and negatively associated with inactivity (RR=0.58, 95% CI= 0.39-0.86, p<0.01) for adolescents in urban areas, but not rural areas. 2. In stratified analyses, adolescents with access to a safe park were less likely to be inactive than those without access for example; (1) adolescents living in apartments (RR= 0.52, 95% CI= 0.28-0.96, p<0.05) but not houses, (2) adolescents living in neighborhoods perceived as unsafe (RR= 0.47, 95% CI= 0.23-0.93, p<0.05) but not those living in safe neighborhoods, and (3) adolescents from lower-income (RR= 0.62, 95% CI=0.39-0.97, p<0.05) but not higher income families. However, access to a safe park was not significantly associated with regular activity for these groups. (Note: Access to a park and access to a safe park overlapped placing these results in both Safety Interpersonal and Availability of Parks, Playgrounds, Trails, and Recreation Centers.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Gomez, Johnson (2004) Texas **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to recreational facilities and safety) **Outcome(s) Affected** Outdoor physical activity (recall questionnaire)	**Positive Association for Physical Activity in Boys (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Increased neighborhood safety and access to recreational facilities leads to lower levels of outdoor physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. As distance to the nearest open play area increased, outdoor physical activity for boys decreased significantly (β=-0.317, T= -2.823, p=0.006). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in Boys** Study design = Association Effect size = Positive association for physical activity in boys	**Maintenance** Not Applicable **Sampling / Representativeness** High The barrio is inhabited primarily by Mexican-Americans and is characterized by low-income household and high crime rates. The racial/ethnic composition of the study sample closely matched that of the school district to which the study schools, except the private school, belong, with 91% of the students in the district being Mexican-American.
Author Romero, Robinson (2001) California **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to parks, crime safety, and traffic safety) **Outcome(s) Affected** Physical activity Modified Self-administered Physical Activity Checklist [SAPAC]) and overweight/obesity (Height and weight (body mass index [BMI])	**Negative Association for Overweight/obesity in Lower-income Children (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Negative Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Individuals with greater access to parks and with fewer neighborhood hazards, both crime and traffic, will participate in more physical activity, which will lead to lower body mass index [BMI].)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** OVERWEIGHT/OBESITY: 1. Higher BMI was associated with the perception of fewer neighborhood hazards for children of lower SES (r= -0.13, p<0.05); this correlation was significant but low. PHYSICAL ACTIVITY: 2. Contrary to the hypothesis, the perception of more neighborhood hazards was positively correlated with more reported physical activity (r=0.13, p<0.001) 3. For children of higher SES, the perception of more neighborhood hazards was associated with more reported physical activity (r=0.18, p<0.05). (Note: Neighborhood hazard scales were a composite of accessibility and safety [traffic and crime] measures.)	**Negative Association for Overweight/obesity in Lower-income Children** **Negative Association for Physical Activity in the Study Population** Study design = Association Effect size = Negative association for overweight/obesity in lower-income children and negative association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Suminski, Poston (2005) Midwestern USA **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (construction/integrity of sidewalks and streets, neighborhood traffic volume and speed, lighting, crime, aesthetics, availability of shops, parks, work, and schools) **Outcome(s) Affected** Walking for transportation, exercise, and dog walking (questionnaire)	**Positive Association for Physical Activity in Women (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumptions: Having a safe neighborhood with destinations within walking distance and increased mixed land-use leads to increased physical activity and active transportation.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Women were 5.7 times more likely to walk for transportation if they indicated having an average number of available places (including shops, parks, et cetera) in and around their neighborhood to which they could walk (95%CI 1.63-19.73; p<0.01). (Note: Neighborhood "safety" was a composite score using traffic volume and speed, lighting, and crime. The "functional" feature of the neighborhood was represented by three items relted to the construction/integrity of neighborhood sidewalks and streets.)	**Positive Association for Physical Activity in Women** Study design = Association Effect size = Positive association for physical activity in women	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
International (Parks)				
Author Potwarka, Kaczynski (2009) Canada **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (access to paved trails, unpaved trails, paths, open spaces, playgrounds, meadows, wooded areas, water areas, soccer pitches, ball diamonds, tennis courts, basketball courts, and swimming pools, distance to locations) **Outcome(s) Affected** Overweight/obesity (BMI - parental report of height and weight)	**Positive Association for Overweight/obesity in Children (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Individuals with greater access to parks will participate in greater levels of physical activity, which will lead to lower levels of overweight/obesity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** OVERWEIGHT/OBESITY: 1. Of the 13 park facilities examined, only one variable was a significant predictor of a child's weight category. Children with a park playground within 1 km of their home were almost 5 times more likely to be classified as being of a healthy weight than those children without playgrounds in nearby parks (OR=4.92; 95% CI=1.36, 9.71; no p-value provided)). No significant associations were found for the other park facilities or when the 2 age sub-samples were examined. 2. Compared to at-risk or overweight children, none of the 3 park variables (distance to the closest park, number of parks within 1 km, or amount of park area within 1 km) was associated with significantly increased odds of being classified in the healthy weight category for either the entire sample or either of the 2 sub-age groups. 3. No significant associations were found for the other park facilities or when the two age sub-samples were examined. (Note: No p-values provided. Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Overweight/obesity in Children** Study design = Association Effect size = Positive association for overweight/obesity in children	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Timperio, Giles-Corti (2008) Australia **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to free public open spaces and recreational facilities) **Outcome(s) Affected** Moderate to vigorous physical activity (accelerometers)	**No Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Physical Activity in Boys (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Negative Association for Physical Activity in Girls (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Access to and increased number of parks and open spaces leads to increased physical activity in youth.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. There were no associations between any features of the child's closest public open space and younger boys' moderate-to-vigorous physical activity after school. 2. The presence of playgrounds was positively associated with younger boys' weekend moderate-to-vigorous physical activity (B=24.9 min/day; p<0.05). 3. The number of recreational facilities was inversely associated with younger girls' moderate-to-vigorous physical activity after school (B= -2.6 min/day, p<0.05) and on the weekend (B= -8.7 min/day, p<0.05). 4. There were no associations between any features of the closest public open space and adolescent boys' moderate-to-vigorous physical activity after school. 5. There were no significant associations between public open space features and adolescents boys' or girls' moderate-to-vigorous physical activity on the weekend.	**No Association for Physical Activity in the Study Population** **Positive Association for Physical Activity in Boys** **Negative Association for Physical Activity in Girls** Study design = Association Effect size = No association for physical activity in the study population, positive association for boys, and negative association for girls	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Witten, Hiscock (2008) New Zealand **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to open spaces, street connectivity, street functionality, level of urbanization) **Outcome(s) Affected** Overweight/obesity (self-reported height and weight used to compute body mass index [BMI]) and physical activity and sedentary behaviors (measured by the 2002 and 2003 New Zealand Health Survey)	**Positive Association for Overweight/obesity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **No Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Individuals with increased street connectivity to the beach and parks will have increased physical activity levels.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** OVERWEIGHT/OBESITY: 1. With regard to parks there was little difference in BMI across the access quartiles. 2. Respondents living in neighborhoods with best access to the beach had lower BMI (B=0.13, 95% CI=0.07-0.18). PHYSICAL ACTIVITY: 3. Neighborhood access to parks was not associated with BMI, sedentary behavior or physical activity, after controlling for individual-level socio-economic variables, and neighborhood-level deprivation and urban/rural status. (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Overweight/obesity in the Study Population** **No Association for Physical Activity in the Study Population** Study design = Association Effect size =Positive association for overweight/obesity and no association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Wendel-Vos, Schuit (2003) The Netherlands **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to places to be active, land utilization, amount of green and recreational space) **Outcome(s) Affected** Walking and cycling and active commuting (Short Questionnaire to Assess Health Enhancing Physical Activity [SQUASH] (frequency, duration, and intensity of 4 domains of physical activity [commuting activities, occupational physical activity, household activity, and leisure-time physical activity])	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Presence of green space and recreational space leads to increased walking and biking.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. No associations were found for attributes of green and recreational space and walking. 2. In a neighborhood defined as a cricle with a 300-m radius, inhabitants spent more time biking for leisure (β=0.04, 95%CI= 0.01-0.07, p<0.05) and commuting purposes (β=0.02, 95%CI= 0.01-0.04, p<0.05) when there was more square area of sports ground. 3. There was an association between square area of sports ground and total time spent biking and walking (β=0.06, 95%CI= 0.01-0.1, p<0.05) 4. The association between biking during leisure time and square area of sports grounds was not present in neighborhoods with a 500-m radius. 5. There was an association between biking for commuting purposes and the square area of parks in neighborhoods with a 300-m radius (β=0.02, 95%CI= 0.01-0.04, p<0.05). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Kaczynski, Potwarka (2009) Canada **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to quality of parks) **Outcome(s) Affected** Moderate to strenuous physical activity, park-based physical activity (7-day physical activity log booklet measured duration, intensity, location, and other details of physical activity)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Physical Activity in Women (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Physical Activity in Men (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Increased park space and features within a park increases physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Each additional hectare (i.e., 2.47 acres) of park area within 1 km increased the odds of participating in 150 or more minutes of total moderate-strenuous physical activity by 2% (OR=1.02, 95% CI= 1.01-1.03, p<0.05) and each additional park increased the odds of participating in 150 or more minutes of neighborhood-based moderate-strenuous physical activity by 17% (OR=1.17, 95% CI= 1.01-1.34, p < 0.05). 2. Both the number and total area of parks within one 1 km were significant predictors of "park-based moderate-to-strenuous physical activity," with each additional park within 1 km of participants' homes increasing the odds of engaging in some park-based physical activity by 15% (OR; 1.15, CI; 1.01-1.28, p<0.05). 3. Distance to the closest park did not play a significant role in predicting moderate-to-strenuous physical activity in any of the three contexts. 4. For neighborhood based activity, significant results were observed among females with each additional park and each additional hectare of park area within 1 km increasing their odds of engaging in 150 or minutes of moderate-to-strenuous physical activity by 19% and 2%, respectively (OR= 1.19, CI= 1.03-1.36 and OR= 1.02, CI= 1.01-1.03, respectively p<0.05 for both). 5. Among men, the odds of engaging in some amount of moderate-to-strenuous physical activity in parks increased 2% with each additional hectare of nearby parkland (OR= 1.02, CI= 1.01-1.03, p<0.05). 6. Among women, each additional hectare was related to a 3% increase and each additional park to a 17% increase in engaging in at least some moderate-to strenuous park-based physical activity (OR= 1.03, CI= 1.01-1.05, OR= 1.17, CI= 1.02-1.31, respectively, p<0.05 for both). 7. Both the number and total area of parks within 1 km of participants' homes increased the odds of engaging in some park-based moderate-to-strenuous physical activity among both the 18–34 year olds (number; OR= 1.19, CI= 1.03-1.33, and total; 1.03, CI= 1.01-1.04, n=107) and the 55 and older (number OR= 1.16, CI= 1.01-1.31, n=104 and total; OR= 1.04, CI= 1.03-1.05 age group (p<0.05 for all). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** **Positive Association for Physical Activity in Women** **Positive Association for Physical Activity in Men** Study design = Association Effect size = Positive association for physical activity in the study population, women and men	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Hume, Salmon (2005) Australia **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (places and things in the home and neighborhood environment, land-use mix) **Outcome(s) Affected** Low, moderate, and vigorous intensity physical activity (measured with accelerometers)	**Positive Association for Physical Activity in Girls (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Access to be active at home and in the neighborhood and positive perceptions of parks and green spaces leads to physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Among girls, physical activity opportunities in the neighborhood were positively associated with low intensity activity (F [1, 51] =5.29, p=0.03, r2=0.09). (Note: The perceived environment is a composite of 11 items including, but not limited to opportunities for sedentary behavior, land use mix, access to food in the neighborhood, number of streets in neighborhood, opportunities for physical activity in neighborhood and home, opportunities for socializing in the neighborhood. Access to food in the neighborhood may overlap in designated strategy categories as it relates to both distance and availability.)	**Positive Association for Physical Activity in Girls** Study design = Association Effect size = Positive association for physical activity in girls	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Giles-Corti, Broomhall (2005) Australia **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to places to be active) **Outcome(s) Affected** Meeting physical activity recommendations and walking (residential survey) Use of open spaces (The Public Open Space Tool [POST])	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Assocation for Public Open Space Use in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Having well-designed public open space (POS) in the community contributes to the health of local residents by increasing physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Based on POST audit and survey data, those who used public open spaces were nearly three times as likely as others to achieve recommended levels of activity (overall sufficient physical activity OR=2.66, 95%CI=2.10,3.37; >150 minutes of walking per week OR=2.78, 95%CI=2.19,3.54; >180 minutes of walking per week OR=2.82, 95%CI=2.17,3.67). 2. Based on POST audit and survey data, the accessibility of public open spaces was not significantly associated with achieving overall sufficient levels of physical activity as recommended. 3. Based on POST audit and survey data, those with good access to large, attractive public open spaces were 50% more likely to achieve high levels of walking, or >180 minutes per week (OR=1.50; 95%CI=1.06,2.13). PUBLIC OPEN SPACE USE: 4. Based on POST audit and survey data, overall use of public open spaces were positively associated with accessibility regardless of model used (p<0.0001). 5. Based on POST audit and survey data, compared to those with very poor access, those with very good access to large, attractive public open spaces were twice as likely to use public open spaces (OR=2.05, 95%CI=1.52,2.75; p<0.0001).	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Kaczynski, Potwarka (2008) Canada **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to places to be active) **Outcome(s) Affected** Park-based physical activity (7-day physical activity log)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Increased park size, number of features in the park, and decreased distance to a park from participants' homes will lead to increased physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Of the 3 park variables (i.e., size, features, distance), only the number of features was a significant predictor of a park being used for some physical activity (OR=1.45, 95% CI= 1.09-1.82, p=0.03). 2. Only the number of facilities was significantly associated with increased odds of at least some physical activity occurring in the park (OR=2.04, 95% CI= 1.05-3.96, p=0.03). 3. The presence of paved trails (OR=25.93, 95% CI=2.15-312.51, p=0.01) was significantly related to park-based physical activity. (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Duncan, Mummery (2005) Australia **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (distance, aesthetics, connectivity, street light density) **Outcome(s) Affected** Meeting physical activity recommendations, recreation walking (Active Australia Physical Activity Questionnaire)	**Negative Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Greater access to parks and paths (sidewalks) and having a clean and tidy neighborhood leads to increased levels of physical activity.)** **Availability** PHYSICAL ACTIVITY: 1. People with parkland just beyond a network distance of 0.6 k away were 41% more likely to achieve recommended levels of activity than those with parkland within this distance (OR=1.41, CI=1.01-1.97). (Note: Footpaths are equivalent to trails. Registered dog owners were examined as a proxy for unattended dogs. Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories. Not all p-values were provided.)	**Negative Association for Physical Activity in the Study Population** Study design = Association Effect size = Negative association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Carnegie, Bauman (2002) Australia **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (aesthetics, accessibility, safety, land-use mix) **Outcome(s) Affected** Walking behavior (1996 Physical Activity Survey for the State of New South Wales [NSW])	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Individuals with positive perceptions of accessible place to be active, aesthetics, and safety in their neighborhood will participate in greater amounts of physical activity, which will be reflected through the stages of change.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Those who walked for less than 20 minutes and those who walked for between 20 minutes and 2 hours both reported that shops, parks, and beaches were less near to their home than those who reported walking more than 2 hours per week (F (2, 1.168) = 11.24, p<0.001). 2. There was an independent association between the stage of change variable and the aesthetic environment (F (2, 1.168) = 5.67; p<0.01) and with the practical environment factor (F (2, 1.157) =12.05; p<0.001). (Note: The practical environment scale is a composite of items including access to shops, parks and beaches.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** High The demographic composition of the sample was very similar to that provided by the most recent national census data. Respondents aged 40-45 were slightly overrepresented (29.2%), and those aged 56-60 years were slightly underrepresented (20.1%). Two percent of the resident population within the target age range were sampled for this study.
United States (Playgrounds)				
Author Jago, Baranowski (2006); Jago, Baranowski (2005) Texas **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (access to playgrounds and transit, street connectivity and intersection density, and safety) **Outcome(s) Affected** Physical activity, light intensity activity, sedentary activity (accelerometer) and overweight/obesity (height and weight [body mass index])	**Negative Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Aesthetically pleasing and safe environments with accessible places for physical activity [both having access to places and having positive sidewalk and street characteristics]l lead to increased walking and cycling levels.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Walking and cycling ease was negatively associated with parks (r= -0.136, p=0.05).	**Negative Association for Physical Activity in the Study Population** Study design = Association Effect size = Negative association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Burdette, Whitaker (2004) Ohio **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Active neighborhoods/ walkability* (distance from home to nearest playground) **Outcome(s) Affected** Overweight/obesity (WIC program database [body mass index])	**No Association for Overweight/obesity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Residential proximity to places for physical activity and decreased crime will lead to increased physical activity, which will lead to decreased overweight/obesity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** OVERWEIGHT/OBESITY: 1. There was no difference in mean distance to the nearest playground when comparing children with a BMI ≥95th percentile to those with a BMI<95th percentile (playground: t=0.31 both, p=0.77) and when comparing children with a BMI ≥ 85th % to those with a BMI < 85th % (playground: t=0.31 both, p=0.32). 2. There was no significant correlation between children's BMI z scores and distance to the nearest playground. 3. When comparing overweight and non-overweight children, there was no difference in the percentage living in neighborhoods without playgrounds (3.3% vs. 4.1%, p=0.29). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**No Association for Overweight/ obesity in the Study Population** Study design = Association Effect size = No association for overweight/ obesity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
United States (Trails)				
Author Brownson, Baker (2004); Wiggs, Brownson (2006) Missouri, Arkansas, and Tennessee **Design** Intervention Evaluation Before and after study **Duration** Not Reported	**Measures** *Neighborhood walkability* (access to trails, access to equipment, access to smoke-free locations, physical activity programs in schools and churches) **Outcome(s) Affected** Walking for any purpose and physical activity (Electronic counting devices and Card reader, two Risk Factor Surveys [modified Behavior Risk Factor Surveillance System], one-page questionnarie, and interviews)	**Neutral for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. For the entire population, rates of 7-day walking for any purpose or for exercise declined slightly in the intervention communities (increased access) compared with comparison sites (net intervention effect [minutes]= -5.6, p=0.37). 2. No group showed a statistically significant net intervention effect. 3. Among persons who used trails at baseline (16.9% of the total population), 32.1% reported increases in physical activity since they began using the trail. It was not possible to quantify how much their activity increased.	**More Evidence Needed** Study design = Intervention evaluation Duration = Not reported Effect size = Neutral for physical activity in the study population	**Maintenance** Not Reported **Sampling / Representativeness** High The baseline sample was representative of overall population (31.5% African Americans in the sample versus 31.2% in the census) and the follow-up included a slightly higher percentage of African Americans (38.9%). Younger people and men were slightly underrepresented in the survey samples. Intervention and comparison samples were similar across socio-demographic categories. Compared with the rest of Missouri and the US, this region has significantly more poverty, is medically underserved, and has low educational levels.
Author Evenson, Herring (2005) North Carolina **Design** Intervention Evaluation Before and after study **Duration** High 12 months (survey administration); 12 months (from trail opening to end of study)	**Measures** *Neighborhood walkability* *Access to trails* *Other* (access to sidewalks, safety from crime) **Outcome(s) Affected** Moderate and vigorous intensity physical activity (phone survey)	**Net Positive for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. At follow-up, among those who had used the trail, 22.5% felt that the amount of time spent being active had increased and 26.6% felt that the number of times they were active increased. 2. Multivariable logistic model analysis showed that after the trail was constructed leisure activity, leisure activity near home, moderate activity, vigorous activity, and walking for transportation did not significantly change.	**Effective for Physical Activity in the Study Population** Design = Intervention evaluation Duration = High Effectiveness = Net positive for physical activity in study population	**Maintenance** Not Reported **Sampling / Representativeness** Not Reported Participants who completed both surveys did not differ from those who completed only the baseline survey in general health, education, or employment. Individuals completing only the baseline survey were more often younger, unpartnered, non-Hispanic white, and male.

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Johnson, Smith (2006) Washington **Design** Intervention Evaluation Before and after study **Duration** High April 2002 - August 2004	**Measures** *Neighborhood walkability* (access to trails, acess to amenities for trails [water facilities, bike racks, benches, restrooms, lighting, and trail maps], access to community gardens, access to supportive community breastfeeding environments) **Outcome(s) Affected** Trail use (laser counting system) and nutrition (evaluation surveys)	**Not Reported (for desired health outcomes)** **Net Positive for Trail Use in Lower-income Individuals (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** TRAIL USE: 1. Mean daily trail usewas 182 individuals in 2003 and 191 individuals in 2004, with a mean increase in trail use of 8.7 (SD=6.2) individuals per day. Control data were not available.	**More Evidence Needed** Study design = Intervention evaluation Duration = High Effect size = Not reported for desired outcomes	**Maintenance** Not Reported **Sampling / Representativeness** Not Reported In 2003, the unemployment rate was 9.6%. Of the estimated 7000 children enrolled in the school district, 54% of them were enrolled in the free and reduced price lunch program.
Author Krizek, Johnson (2006) Minnesota **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to neighborhood facilities for physical activity including on-and-off-road bicycle paths, distance to destinations) **Outcome(s) Affected** Walking and bicycling (2000 Twin Cities Metropolitan Area Travel Behavior Inventory (TBI) 24-hour diary [origins and destinations, modes of travel, duration of trips, primary activities])	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Closer proximity to retail and bicycle facilities leads to greater odds of walking and/or cycling.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. The odds of bicycle use did not differ significantly by proximity to any bicycle facility suggesting proximity to these facilities generally has no effect on bicycle use. 2. Using a logistic regression model, subjects living closest to an on-street bicycle facility (less than 400 meters away) had statistically significantly increased odds of bicycle use compared with subjects living more than 1600 meters from an on-street facility (OR=2.23, p<0.05). 3. Proximity to off-street bicycle trails had no effect on bicycle use (p>0.05). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported 5.2% of the sample reported at least on bike trip during the survey, which is a higher rate of cycling than the larger TBI sample and the nation, for which approximately 2% ride a bike on any given day.

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Wang, Macera (2004) Nebraska **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Cost-effectiveness* (construction, maintenance, and use of trails) **Outcome(s) Affected** Cost and trail usage (1998 Lincoln Recreational Trails Census Report [observations for user count, types of users], effectiveness [trail promotion of physical activity, trail promotion of activity for general, trail promotion of activity for weight loss, and cost-effectiveness [cost required for one unit of physical activity related outcome] and Department of Parks and Recreation of Nebraska provided trail construction costs and maintenance)	**Not Reported (for health outcomes of interest) (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Cost in the Study Population** **(Assumption: Trail use is a cost-effective method of increasing physical activity levels.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** COST: 1. Sensitivity analyses showed that when the number of trail users increased by 50%, the cost of trail development and maintenance was US $65 per user, who was more physically active since the user began visiting the trails; decreasing the number of users by 50% (to show variability) resulted in a cost of US$196. The cost for an individual who was more physically active since trail use began ranged from US$73 to US$253 when the life of trails decreased from 50 to 10 years. The range from best-case to worst-case scenarios was US$95–366 for an individual who was physically active for general health and US$590–2,287 for an individual who was physically active for weight loss.	**More Evidence Needed** Study design = Association Effect size = Not reported	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Troped, Saunders (2001) Massachusetts **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Walkability and bikability* (land-use, perceived steep hill and busy street barriers, distance to bikeway, and street network including sidewalks) **Outcome(s) Affected** Bikeway use (Arlington Physical Activity and Bikeway Survey)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Closer proximity to the Bikeway and decreased barriers between residence and the Bikeway leads to increased use.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Living within a 10-min walk of large parks (Report for children; 69.2% active, p<0.05, Report for adolescents; 55.9% active, p<0.01, Adolescent report; 47.6% active; p<0.01) and public open spaces (Report for children; 59.5% active, p<0.01, Report for Adolescents; 30.4% active, p<0.05, Adolescent report; 36% adolescents active, p<0.01) was associated with an increased likelihood of being active at those sites. (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** High The racial/ethnic composition of the study was consistent with that of the general Arlington population. A higher percentage of respondents were women (60% vs. 54%) and had a college degree (60% vs. 40%).

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Sharpe, Granner (2004) South Carolina **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (access to safe, pleasant places to be active and/or walk) ibility (access to parks) **Outcome(s) Affected** Meeting physical activity recommendations, physical activity(questionnaire assessed physical activity)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Access to safe and pleasant places for physical activity leads to increased levels of physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. For both unadjusted and adjusted linear models, the odds of meeting the physical activity recommendation were greater for higher numbers of known routes for walking or jogging in the county (least squares mean=1.41, F=5.28, p=0.02); numbers of known routes for bicycling in the county (least squares mean=0.58, F=9.45, p<0.01); number of days in a typical month respondents used a public track, trial, pathway, or mapped-out route for any type of physical activity (least squares mean =3.51, F=34.74, p<0.01); and number of days in a typical month respondents used public parks and other outdoor recreation areas for any type of physical activity (least squares mean=2.79, F=23.92, p<0.01) [statistics all from adjusted general linear model].	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Forsyth, Hearst (2008), Forsyth, Oakes (2007), Oakes, Forsyth (2007) Minnesota **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (access to places to be active, street pattern and residential density) **Outcome(s) Affected** Walking behavior and total physical activity (International Physical Activity Questionnaire and 7-day travel and walking diary)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Having greater access to places to be active increases levels of physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Using Spearman's correlations, there was a significant positive association with accelerometry physical activity and access to bicycle and pedestrian paths (data not shown). (Note: Social land uses came from parcel data and included daycare centres; medical clinics and offices; theatres; bowling alleys; lodge halls and amusement parks; sport/public assembly facility; (tax)exempt community recreational facilities; library; exempt property owned by board of education; exempt property owned by private schools; churches, etc. public worship.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Moudon, Lee (2005) Washington **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability and bikability* (park layer and bus ridership, traffic volume, posted speed, number of traffic and bicycle lanes] agglomerations of destinations [grocery, retail, restaurants, convenience store, office, mixed use, sports facility, school, bank, fast food, post office, church]) **Outcome(s) Affected** Bicycling (telephone survey)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Access to bicycle lanes and trails and increased land-use mix leads to increased levels of physical activity)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Perceived presence of recreational amenities (bicycle lanes/trails) is positively associated with the odds of cycling (Airline OR=1.704; p<0.01 and Network OR=1.729; p<0.01).	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** High The survey respondents are shown to be fairly representative of the sample frame.

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
International (Trails)				
Author Merom, Bauman (2003) Australia **Design** Intervention Evaluation Before and after study **Duration** Not Applicable	**Measures** *Neighborhood accessiblity* (addition of trails) **Outcome(s) Affected** Walking, cycling, and trail use (surveys [walking and cycling behavior, use of the new trail, bike counters [traffic volumes by type and speed, patterns of usage])	**Net Positive for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Net Positive for Trail Use in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Inner area cyclists increased mean cycling time by 11.9 min (+0.19 h, SD=90.9) while outer area cyclists decreased cycling time by 14.3 min (-0.24 h, SD=95) (F=4.4, p=0.035). 2. Stratifying by inner and outer residence indicated that only cyclists from non-English-speaking background who lived in the inner area (n=27) significantly increased their mean cycling time from 12 min (SD=34) in the pre survey to 76 min (SD=120) in the post-survey. This significant increase in means (t=2.17, p=0.039) was mainly due to longer rides taken by a small number of this group including commuting to work. 3. The percent of those who walked and cycled declined among inner pedestrians (42.4% vs. 34%, p=0.052, McNemar), slightly among inner cyclists, and did not change for cyclists in the outer area from pre-campaign to post-campaign. 4. 26.7% (n=120) of the cohort increased their total time of walking and cycling by at least 1 h (28.1% of inner cyclists, 25.8% outer cyclists, and 26.7% for pedestrians p=0.92). For inner residents the difference in the percentages who showed increased activity by an hour or more among trail users (n=22) compared to non users were significant (45.5% vs. 25.7%, Fisher exact p=0.04). TRAIL USE: 5. There was a significant increase in trail usage from 1.6% at baseline to 5.6% at follow-up (4.0%, McNemar p<0.005). 6. Trail use was significantly higher among bike owners than those without a bike (8.9% vs. 3.3%, p<0.014), but this association was moderated by proximity to the Trail; about one-fifth (20.5%) of bike-owners from the inner area had used the Trail compared to only 3.8% of bike owners from the outer area (p<0.001).	**More Evidence Needed** Study design = Intervention evaluation Duration = Not reported Effect size = Net positive for physical activity in the study population	**Maintenance** Not Reported **Sampling / Representativeness** Low Inner area residents (n=367); 57% male, 52% aged 35-55 years, 34% non-English-speaking background Outer area residents had significantly more males (64% vs. 53%, P=0.01), a higher percentage of cyclists, and a lower percentage of respondents from a non-English speaking background (17.2% vs. 43%, P=0.001). (evaluation sample) The samples from the two locations were similar in terms of age, educational attainment, and employment status
Author Garrard, Rose (2008) Australia **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to safe bike routes) **Outcome(s) Affected** Bicycling behavior (direct observations)	**Not Reported (for desired health outcomes)** **No Association for Facility Use in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Access to places to bicycle like off-road paths and bike lanes will increase cycling.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** FACILITY USE: 1. The proportion of female and male cyclists using on-road lanes and roads with no bicycle facilities were almost identical after adjustment for distance (OR=1.07, 95%CI: 0.90, 1.27; p=0.46).	**More Evidence Needed** Study design = Association Effect size =Not reported for desired outcomes	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
United States (Recreation Centers)				
Author Zenk, Wilbur (2009) Illinois **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (Public recreation center with an indoor track or treadmill, places to walk indoors, aesthetics, safety, and recreational open spaces, land-use mix, street connectivity, residential and public transit stop density) **Outcome(s) Affected** Adherence to walking plan (walking log books and heart rate monitors)	**No Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Neighborhood walkability and availability of walking facilities/spaces were hypothesized to positively influence adherence to a home-based walking intervention, whereas lower neighborhood safety and unpleasant neighborhood aesthetics were hypothesized to negatively affect adherence.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Neighborhood walkability, aesthetics, recreational open space, and safety were not statistically significantly associated with adherence to walking prescriptions. There was no evidence that the environment moderated the effect of intervention group on adherence (data not shown). (Note: The measure representing walkability score was a composite for multiple strategies with variables related to access of facilities and open spaces, aesthetics, safety, and connectivity.)	**No Association for Physical Activity in the Study Population** Study design = Association Effective size = No association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Dowda, Dishman (2009) South Carolina **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (equipment accessibility, access to activity facilities, perceived community social support) **Outcome(s) Affected** Vigorous physical activity (3-day Physical Activity Recall)	**Positive Association for Physical Activity in Females (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Proximity to commercial physical activity facilities leads to increased vigorous physical activity levels in adolescent girls.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Pearson correlations from the 0.75-mile buffer indicated that the number of multipurpose (coefficient=0.109, $p<0.001$) and individual (coefficient=0.089, $p<0.01$) physical activity commercial facilities (p=ns), had significant positive associations with vigorous physical activity. 2. Using a structural equation model to examine activity facilities within the 0.75-mile street network buffer showed significant ($p<0.05$) relationships with vigorous physical activity. Perceived access to physical activity facilities ($\beta=-0.07$) was negatively related to self-reported vigorous physical activity, while multipurpose commercial physical activity facilities ($\beta=0.07$), were positively associated with self-reported vigorous physical activity. Small but significant ($p<0.05$) indirect relationships with VPA were observed for perceived access to PA facilities ($\beta=0.01$).	**Positive Association for Physical Activity in Females** Study design = Association Effect size = Positive association for physical activity in females	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Rutt, Coleman (2005) Texas **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (access and distance to locations to be active, residential density, and intersection density) **Outcome(s) Affected** General walking (survey)	**Negative Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumptions: Perceived benefits of walking, more social support for walking, access to more facilities in the neighborhood, and less distance to facilities leads to more walking for exercise.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Among the subsample of subjects who reported walking for exercise in the past month, total time spent walking was related to older age and having fewer physical activity facilities in their neighborhood ($\beta=-0.24$, $p=0.05$) ($R2=0.11$). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Negative Association for Physical Activity in the Study Population** Study design = Association Effect size = Negative association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Powell, Chaloupka (2007) United States **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to physical activity facilities and level of urbanization) **Outcome(s) Affected** Physical activity and vigorous physical activity (Monitoring the Future Survey)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Physical Activity in Girls (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Physical Activity in Boys (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Availability of commercial physical activity-related facilities will lead to increased physical activity in adolescents.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. The estimated effect of the availability of commercial physical activity-related facilities was significantly associated with frequent vigorous exercise among adolescents (effect=0.0026, SE=0.001; p<0.05). The magnitude of the effect dropped slightly once neighborhood per capita income levels were accounted for (effect=0.0022, SE=0.001, p<0.05).The presence of one additional physical activity-related facility per 10,000 capita was statistically significantly associated with just over one-fifth of a percentage point increase in frequent vigorous exercise. 2. For the full-sample of all grade levels, greater numbers of local-area commercial physical activity-related facilities were statistically significantly associated with both physical activity outcome measures for girls but not for boys. The presence of an additional local-area commercial physical activity-related facility was associated with a 0.20 and 0.29 percentage point increase, respectively, in frequent physical activity and frequent vigorous exercise among female adolescents (p<0.05 for both). 3. The presence of an additional local area PA-related facility was associated with a 0.57 (p<0.01) and 0.55 (p<0.05) percentage point increase in frequent physical activity and frequent vigorous exercise, respectively among 12th grade girls. The presence of an additional local area PA-related facility was associated with a 0.52 percentage point increase in frequent vigorous exercise among 12th grade boys (p<0.05). 4. The simulation results showed that increasing availability from a low (1 facility) to a high (8 facilities) number of local-area facilities was associated with a 6.6% and 9.0% increase in frequent physical activity and frequent vigorous exercise among 12th-grade girls, respectively, and a 6.4% increase in frequent vigorous exercise among 12th-grade boys.	**Positive Association for Physical Activity in the Study Population** **Positive Association for Physical Activity in Girls** **Positive Association for Physical Activity in Boys** Study design = Association Effect size = Positive association for physical activity in the study population, girls and boys	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported Nationally representative sample of high school students in the coterminous U.S.
Author Diez-Roux, Evenson (2007) Maryland, New York, North Carolina **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to physical activity facilities) **Outcome(s) Affected** Physical activity (questionnaire)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Individuals with greater access to physical activity facilities will have more opportunities for physical activity and will participate in more activities.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Participants with the highest density of resources were significantly more likely to report engaging in physical activity during a typical week than those with lowest density of resources (prevalence ratio [PR]=1.14, 95%CI =1.03, 1.26, p-value not shown). 2. Density of resources was positively associated with physical activity for areas ranging from 1 mile to 5 miles around residential address (1-mile PR=1.07, 95%CI= 1.03, 1.26; 2-miles PR= 1.13, 95%CI= 1.00, 1.28; 5-miles PR= 1.28, 95%CI= 1.05, 1.55, p-values not shown). 3. When associations between resource density and physical activity were investigated separately for non-fee and fee resources, associations appeared to be present only for fee resources (1 mile non-fee PR=0.99, 95%CI=0.89, 1.09; 1-mile fee PR=1.17, 95%CI=1.05, 1.29; for 5-mile non-fee PR=0.92, 95%CI=0.80, 1.05; 5-mile fee PR=1.38, 95%CI=1.18, 1.60, p-values not shown). 4. Associations between resource density and physical activity were stronger among lower income than higher income participants (1-mile ρ=0.7, 2-mile ρ=0.3, 5-mile ρ=0.5) and stronger among non-Hispanic Black and Hispanic participants than among non-Hispanic White participants (1mile ρ=.001, 2-mile ρ=.100, 5-mile ρ=.070; p<0.1). 5. Five mile resource density was positively associated with weekly minutes of physical activity (difference in minutes for highest density = 29% (95%CI= -2%, 71%) vs. lowest density = 13% (95%CI= -4%, 33%) (p-values not shown). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported The racial/ethnic composition of the sample was roughly similar to that of the geographic area from which each sample was drawn.

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Reed, Phillips (2005) Not Reported **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to places to be active, parks and facilities, and home exercise equipment) **Outcome(s) Affected** Physical activity (Modified Godin Leisure Questionnaire-Time Exercise Questionnaire assessed frequency and duration of physical activity over a 7-day period)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Negative Association for Physical Activity in Male Students (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Physical activity intensity, duration, and frequency are associated with increased proximity to facilities, such as parks, and equipment.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. There was a significant relationship between intensity of physical activity and proximity for all students (r=0.106; p<0.05). 2. The correlation between duration of physical activity and proximity to facilities was statistically significant (r=0.119, p<0.05). 3. Frequency of physical activity showed a significant negative correlation (r=-0.195; p<0.05) with proximity in male students (n=unknown). 4. It appears that as distance between place of residence and exercise facility increase, the duration and intensity of physical activity also increase. 5. Total physical activity scores and frequency of physical activity revealed no relation to the distance from their residence that participants initiated their leisure-time physical activity. (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** **Negative Association for Physical Activity in Male Students** Study design = Association Effect size = Positive association for physical activity in the study population and negative association for physical activity in male students	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Grow, Saelens (2008) Massachusetts, Ohio, California **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to facilities, aesthetics, safety, street connectivity and land-use mix) **Outcome(s) Affected** Physical activity, walking and biking for transportation, swimming pool use (assessed with a survey)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Individuals with access to places to be active will increase their levels of physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Living within a 10-min walk of large parks (Report for children; 69.2% active, p<0.05, Report for adolescents; 55.9% active, p<0.01, Adolescent report; 47.6% active; p<0.01) and public open spaces (Report for children; 59.5% active, p<0.01, Report for Adolescents; 30.4% active, p<0.05, Adolescent report; 36% adolescents active, p<0.01) was associated with increased likelihood of being active at those sites. 2. Multivariate analysis of parent report revealed that site proximity was only associated with adolescents' swimming pool use (RR=2.1, p<0.05). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Gordon-Larsen, McMurray (2000) United States **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (use of recreational facilities and safety) **Outcome(s) Affected** Moderate to vigorous physical activity and inactivity (7-day recall)	**Not Reported (for desired health outcomes)** **Positive Association for Recreation Center Use in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Individuals that live in areas with high crime, those who do not use a recreation center, and have less physical education at school will be less likely to participate in physical activity than individuals living who do not have these characteristics.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** RECREATION CENTER USE: 1. Individuals using a recreation center were 75% more likely to fall in the highest category of moderate-vigorous physical activity (AOR: 1.75; 95%CI: 1.56-1.96; p≤0.00001).	**More Evidence Needed** Study design = Association Effect size = Not reported	**Maintenance** Not Applicable **Sampling / Representativeness** High The sample is a nationally representative sample of adolescents in the United States.

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Adkins, Sherwood (2004) Minnesota **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to recreational facilities and safety) **Outcome(s) Affected** Moderate-to-vigorous physical activity (accelerometers and psychosocial survey)	**No Association for Physical Activity in Girls (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Having access to recreational facilities and safe neighborhoods leads to higher levels of physical activity in girls)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Perceived neighborhood access to facilities for physical activity, as reported by the parent and daughter and the family environment reported by the parent, were not related to girl's activity level.	**No Association for Physical Activity in Girls** Study design = Association Effect size = No association for physical activity in girls	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Boehmer, Lovegreen (2006) Arkansas, Missouri, Tennessee **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (presence of quality sidewalks and shoulders, perceived recreational facilities, land use, barriers related to traffic safety and crime, aesthetics, neighborhood food environment) **Outcome(s) Affected** Overweight/obesity (BMI - self-report of height and weight)	**Positive Association for Overweight/obesity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Access to recreational facilities and positive perceptions of neighborhood safety and pleasantness will lead to increased physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** OVERWEIGHT/OBESITY: 1. Perceived lack of equipment for physical activity was associated with being obese (OR= 1.8, 95% CI= 1.3-2.4) and obese/inactive (OR= 1.8, 95% CI= 1.2-2.7) among only women. 2. Neighborhood perceptions of a lack of places to be physically active (OR=1.46, 95%CI= 1.1-1.94) and no available equipment (OR=1.55, 95%CI=1.19-2.02) was associated with being obese. 3. Furthest distance (>20 minutes) to the nearest recreational facility (OR=1.53, 95% CI= 1.1-2.11) was a neighborhood environmental perception associated with being obese. 4. Furthest distance (>20 minutes) to the nearest recreational facility (OR=2.74, 95% CI= 1.68-4.48) was a neighborhood environmental perception associated with being obese. (Note: Places to be active refers to recreational facilities. Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Overweight/obesity in the Study Population** Study design = Association Effect size = Positive association for overweight/obesity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported The communities in TN and AR were selected to match the MO sites on size, race/ethnicity, and proportion of the population living below the poverty level. 8 communities met the US Census definition of rural; 12 were located within a nonmetropolitan county.

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
International (Recreation Centers)				
Author Carver, Salmon (2005) Australia **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (distance of locations to house, accessibility of convenience stores, attended dogs, traffic safety, access to physical activity facilities) **Outcome(s) Affected** Walking (for recreation, exercise, transport and dog walking) (Questionnaire)	**Positive Association for Physical Activity in Girls (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Assocation for Physical Activity in Boys (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Increased access to stores, road safety, access to physical activity facilities, and decreased access to unatttended dogs will lead to increased physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Parents' perception that their neighborhood had good sports facilities for their child to use was positively associated with girls' frequency (β=0.115, p<0.01) and duration (β=0.092, p<0.05) of cycling for recreation of weekdays, girls' frequency of cycling for recreation on weekends (β=0.092, p<0.05), girls' frequency of walking the dog on weekends (β=0.123, p<0.05), and boys' frequency of cycling for transport on weekdays (β=0.155, p<0.05).	**Positive Association for Physical Activity in Girls** **Positive Association for Physical Activity in Boys** Study design = Association Effect size = Positive association for physical activity in girls and boys	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Brodersen, Steptoe (2005) England **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to places to be active) **Outcome(s) Affected** Physical activity (survey assessed frequency, intensity, and duration as well as time spent in sedentary behaviors)	**No Association for Physical Activity in Boys (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Physical Activity in Girls (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **No Association for Sedentary Behavior in Boys (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Sedentary Behavior in Girls (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Having access to places to be physically active will lead to increased levels of physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. The number of sports pitches in the borough was related to greater physical activity (β =0.004, 95% CI=0.00 to 0.01, p=0.007) and less sedentary behavior (β = -0.02, 95% CI= -0.04 to -0.001, p=0.038) in girls, but not in boys (gender interactions, p=0.022 and p=0.002, respectively). SEDENTARY BEHAVIOR: 2. Greater public spending on sport and recreational facilities was positively related to sedentary behavior in girls (β=0.13, 95% CI= 0.05 to 0.20, p=0.002), but not in boys (gender interaction, p<0.001).	**No Association for Physical Activity in Boys** **Positive Association for Physical Activity in Girls** **No Association for Sedentary Behavior in Boys** **Positive Association for Sedentary Behavior in Girls** Study design = Association Effect size = No association for physical activity or sedentary behavior in boys and positive association for physical activity and sedentary behavior in girls	**Maintenance** Not Applicable **Sampling / Representativeness** Low The average deprivation score of the sample was more deprived than the UK population in general. Girls were at a more advanced stage of puberty than boys and had fewer sport facilities in their neighborhoods than boys, but they spent more on leisure and open spaces.

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Santana, Santos (2008) Portugal **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (residential density, mixed-land use, street connectivity, aesthetics, crime and accident rates) **Outcome(s) Affected** Overweight/obesity, physical activity and fruit and vegetable intake (National Health Survey (NHS) 1998-1999 (height and weight [body mass index], leisure activities, fruit and vegetable intakes, vigorous and moderate intensity activity)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: 1) Increased neighborhood safety (traffic and interpersonal) and social support lead to increased physical activity and decreased overweight/obesity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY 1. Vigorous physical activity was negatively associated with lack of gymnasiums (OR=1.17, 95%CI: 1.01-1.36, p<0.05) and swimming pools (OR=1.17, 95%CI: 1.01-1.35, p<0.05).	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Kondo, Lee (2009) Japan **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (residential density, land-use mix [diversity and access], street connectivity, aesthetics, safety [perceptions of crime and traffic]) **Outcome(s) Affected** Leisure and transport walking (Accelerometers and the International Physical Activity Questionnaire [IPAQ])	**Positive Association for Physical Activity for Males in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Improved neighborhood walkability and perceived safety will increase physical activity)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. For females, mean total walking steps was significantly higher in the high scoring group than in the low scoring group for the walking places score (mean± standard error: 9488±511 vs. 7957 ± 538; p<0.05). 2. For males, mean walking time for leisure was significantly longer in the high scoring group than in the low scoring group for individuals with parks in the area compared to those without (26.2 ± 6.4 vs. 2.7 ± 6.9; p<0.05). 3. For males, mean cycling time for transport was significantly longer in the high scoring group than in the low scoring group for the number of land use types (mean ± standard error: 11.9 ± 3.0 vs. 0.8 ± 4.4; p<0.05) including post offices (12.1 ± 3.1 vs. 1.5 ± 4.2; p<0.05), banks/credit unions (15.4 ± 3.8 vs. 3.1 ± 3.3; p<0.05), gymnasiums/fitness facilities (31.9 ± 7.8 vs. 5.8 ± 2.5; p<0.01), and/or amusement facilities (16.4 ± 4.6 vs. 4.8 ± 3.0; p<0.05) in the area when compared to subjects without these facilities. (Note: Multiple GIS and perception measures were used to determine respondent's walkability score.)	**Positive Association for Physical Activity for Males in the Study Population** Study design = Association Effect size = Positive association for physical activity for males in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Low Those who responded to the questionnaire and wore accelerometers were significantly older than those who did not.
Author Hume, Timperio (2009) and Timperio, Crawford (2004) Australia **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (perceptions of traffic, strangers and overall safety, walking distance, road safety, sports facilities, public transport, neighborhood infrastructure and design, and aesthetics) **Outcome(s) Affected** Physical activity (parental questionnaire)	**Positive Association for Physical Activity in the Study Population** **(Assumption: Positive neighborhood perceptions of traffic, safety, social support and neighborhood infrastructure lead to increased active commuting.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: *Baseline* 1. A lower likelihood of walking or cycling among older girls was associated with child's belief that there were no parks or sports grounds near home (OR=0.5, 95% CI= 0.3, 0.8, p<0.01).	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Mota, Gomes (2007) Portugal **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (access to destinations, street connectivity, walking and cycling infrastructure, neighborhood safety, social environment, aesthetics, recreation facilities) **Outcome(s) Affected** Leisure Time Physical Activity (Leisure Time Physical Activity [LTPA] Questionnaire)	**Positive Association for Physical Activity in Girls (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Access to recreational facilities, aesthetic features, and increased personal safety lead to increased levels of leisure time physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. In girls, access to recreational facilities (Rho = 0.10, p≤0.02) was positively associated with leisure time physical activity.	**Positive Association for Physical Activity in Girls** Study design = Association Effect size = Positive association for physical activity in girls	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
United States (Joint Use)				
Author Farley, Meriwether (2007), Farley, Meriwether (2008) Louisiana **Design** Intervention Evaluation Non-randomized trial **Duration** High The intervention took place from May 2003 through April 2005 (23 months).	**Measures** *Neighborhood accessibility* (access to equipment and supervisied places to be active) **Outcome(s) Affected** Non-school time physical activity (System for Observing Play and Leisure Activity in Youth [SOPLAY] and self-reported surveys) and overweight/ obesity (anthropometric measures [height and weight=body mass index])	**Neutral for Overweight/obesity (BMI) in Lower-income, African-American Students (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Net Positive for Physical Activity in Lower-income, African-American Students (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Net Positive for Sedentary Behavior in Lower-income, African-American Students (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** OVERWEIGHT/OBESITY: 1. The mean BMI change increased 2.25 kg/m^2 in the intervention school (increased access) and 2.39 kg/m^2 in the comparison school (p=0.68) (n=160). PHYSICAL ACTIVITY: 2. For all 8 quarters combined, researchers observed 30% more active children in the intervention neighborhood (increased access) compared with the comparison neighborhood (50.4 vs. 38.7; p<0.001). 3. For the entire intervention period, 84% more children were outdoors and active in the intervention neighborhood (increased access) and schoolyard combined than were in the comparison neighborhood (71.1 vs. 38.7, p<0.001). 4. Children in the basketball and equipped concrete areas were more likely than children in the field to be "very active" (31% vs. 25%,p=0.05 and 34% vs. 25%, p<0.01, respectively). Children playing in the play structure area were nearly twice as likely as those in the field to be coded as "very active" (51% versus 25%, p<0.001). SEDENTARY BEHAVIOR: 5. From baseline to the 2 year follow-up, the percentage of children who reported watching television increased in the control school from 83% to 92% and decreased in the intervention school from 92% to 88% (p=0.018). The percentage who reported watching movies increased from 61% to 70% in the control school and decreased from 60% to 50% in the intervention school (p=0.004). The percentage who reported using video games increased from 55% to 61% in the control and decreased from 62% to 48% in the intervention school (p=0.001).	**Not Effective for Overweight/obesity in Lower-income, African American Students** **Effective for Physical Activity in Lower-income, African American Students** **Effective for Sedentary Behavior in Lower-income African-American Students** Study design = Intervention evaluation Duration = High Effect size = Neutral for overweight/ obesity in lower-income, African-American students, net positive for physical activity in lower-income, African-American students, and net positive for sedentary behavior in lower-income, African-American students	**Maintenance** Not Reported **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
United States (Multiple Strategies)				
Author Cohen, Sehgal (2009) California **Design** Intervention Evaluation Before and after study **Duration** High 3 years	**Measures** *Neighborhood accessibility* (access to places for physical activity, increased equipment to be physically active) **Outcome(s) Affected** Facility use, physical activity (intensity) and vigorous physical activity (System for Observing Parks and Recreation in Communities [SOPARC])	**Net Positive for Physical Activity in the Children Aged 14-18 (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. After renovations, the intervention skate park had increased intensity of activity (from about 55% of the time to about 62%) compared to the comparison park (from about 65% of the time to 50%). 2. In the intervention skate park, more vigorous activity was observed at follow-up (from about 35% of the time to about 40%), whereas in the comparison more sedentary behavior was observed (from about 33% of the time to about 28%). USE OF RESOURCES: 3. Use of both the comparison and intervention skate parks increased, but the increase was dramatically higher in the intervention skate park ($p<0.001$), which had six times as many users from baseline, an increase of 510% vs. a 77% increase in the comparison park. 4. The number of users at the senior center was significantly lower after renovation than at baseline (478 vs. 198). For the comparison center use did not statistically change (765 vs. 747). 5. The number of seniors observed using the walking paths also decreased from baseline to follow-up, from 97 to 28 in the renovated center ($p<0.01$) and from 70 to 36 in the comparison park (not significant).	**Effective for Physical Activity in Children Aged 14-18** Study design = Intervention evaluation Duration = High Effect size = Net positive for physical activity in children aged 14-18	**Maintenance** Not Reported **Sampling / Representativeness** Not Reported The comparison skate park was located within a large recreation facility.
Author Catlin, Simoes (2003) Missouri **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (indoor, and outdoor, trails, and parks, perceived criminal safety, traffic safety, pleasantness of neighborhood) **Outcome(s) Affected** Overweight/obesity (Missouri Cardiovascular Disease Survey - self-reported weight and height [body mass index])	**Positive Association for Overweight/obesity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Community and worksite infrastructure that promotes physical activity, such as indoor and outdoor places to walk [including trails], and the perception that the community is safe and pleasing are associated with increased levels of physical activity, which leads to decreased levels of overweight/obesity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** OVERWEIGHT/OBESITY: 1. The absence of public outdoor exercise facilities was significantly associated with overweight (OR=1.21; 95% CI: 1.00-1.45).	**Positive Association for Overweight/obesity in the Study Population** Study design = Association Effect size = Positive association for overweight/obesity in study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported Employed participants differed from the total sample in that there was a higher prevalence of men, younger age groups, post-high school education, and current smokers. A disproportionate stratified sampling design was used to randomly select households in the state of Missouri. Minority and low-income zip codes in urban centers were oversampled.

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Brownson, Housemann (2000) Missouri **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to community trails and paths, indoor facilities for physical activity, perceptions of safety on the trails) **Outcome(s) Affected** Walking behavior and trail use (Risk factor survey)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Trail Use in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Having greater access to trails leads to increased walking.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Persons who were regular walkers were more likely to have access to indoor exercise facilities (prevalence odds ratio=1.3, 95%CI=1.0-1.7). 2. Travel distance to walking trails appeared to have a slight perceived effect on walking. Those travelling 5-10 miles (prevalence odds ratio= 0.8, 95%CI= 0.4-1.9), 11-29 miles (prevalence odds ratio=0.8, 95%CI=0.3-2.1), or >30 miles to a trail (prevalence odds ratio=0.7, 95%CI=0.3-1.8) had a reduced likelihood of increasing their walking. TRAIL USE: 3. Among persons with access to walking trails, 38.8% had used the trails. (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Scott, Evenson (2007) Arizona, Maryland, Minnesota, South Carolina, California, Louisiana, North Carolina **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to physical activity facilities) **Outcome(s) Affected** Moderate to vigorous physical activity (accelerometers)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Greater physical activity facilities will lead to higher levels of physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Most objectively measured facilities had no relationship with physical activity. However, each additional basketball court within the first half mile was associated with 3% more non-school moderate to vigorous physical activity (MVPA) (21 minutes) per week for the average girl ($p<0.10$). Each additional court between a half-mile and a mile of the girls' homes translated to an additional 3% increase (19 minutes) in non-school MVPA per week for the average girl ($p<0.05$). 2. Perceived measures of facilities were associated with greater average non-school MVPA minutes per week including; basketball courts (10% or 68 minutes, $p<0.01$), golf courses (14% or 97 minutes, $p<0.01$), playing fields (10% or 69 minutes, $p<0.01$), running tracks (13% or 94 minutes, $p<0.01$), swimming pools (12% or 86 minutes, $p<0.01$), tennis courts (data not provided), and dance/gymnastics studios (6% or 44 minutes, $p<0.10$). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Addy, Wilson (2004); Wilson, Ainsworth (2007) South Carolina **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (walking/bike trails, swimming pools, recreation facilities, parks, playgrounds, sports fields, schools, malls, places of worship, waterways, and safety) **Outcome(s) Affected** Overweight/obesity (survey measured height and weight to determine body mass index) and walking behavior, physical activity, and meeting physical activity recommendations (telephone survey [items from Behavioral Risk Factor Surveillance System])	**Positive Association for Overweight/obesity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Individuals with increased perceptions of social [e.g., trust in neighbors] and environmental [e.g., presence of recreational facilities] supports have increased levels of physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** OVERWEIGHT/OBESITY: 1. Among participants not meeting the recommendation for regular moderate or vigorous physical activity (n= 723), trusting neighbors and having public recreation facilities were significantly associated with BMI status (p<.05). 2. Using walking/bicycling trails was significantly associated with BMI status (p<.05). 3. The presence of recreational facilities (OR=2.07, 95%CI= 95%CI: 1.13-3.77), and use of walking/bicycling trails (as opposed to not having trails available, OR=2.14, 95%CI= 1.01-4.52) were associated with approximately twice the odds of being overweight as opposed to obese. 4. Among participants who were not regular walkers (n=679), using trails (OR=2.72, 95%CI= 1.15-6.42, p<0.05) (as opposed to not having trails available) was associated with 2.7 times the odds of being overweight as opposed to obese in the subpopulation not engaging in regular recreational walking. PHYSICAL ACTIVITY: 5. Participants reporting the use of malls for physical activity were 2 times more likely to report engaging in irregular walking versus no walking (95% CI=1.11-3.77). 6. Participants using trails were 3.1 times more likely to be regularly active versus inactive (95% CI= 1.36-6.98) and 2.3 times more likely to be irregularly active versus inactive (95% CI= 1.04-5.16, p<0.05).	**Positive Association for Overweight/obesity in the Study Population** **Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for obesity and physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported Households were selected from each county census tract to guarantee a balance in racial and geographic distributions however, males and Caucasians were slightly over-represented.
Author Kerr, Frank (2007) Georgia **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (access to recreation facilities, residential density, mixed-land use, street connectivity) **Outcome(s) Affected** Walking behavior (Strategies for Metropolitan Atlanta's Regional Transportation and Air Quality [SMARTRAQ] household travel survey [including a 2-day diary])	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumptions: Increased diversity of land-use, street connectivity, and access to recreation space leads to increased levels of pedestrian walking.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Participants with more than 2 cars in the household were almost 3 times as likely to walk if they had access to recreation space (95%CI= 1.6-4.2, p<0.001). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Heinrich, Lee (2008); Heinrich, Lee (2007) Midwest United States **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (street connectivity and accessibility of safe and inviting pla*ces to be active)* **Outcome(s) Affected** Overweight/obesity (height and weight determined body mass index) and moderate and vigorous physical activity and walking (Pathways to Health study data [National Health Interview Survey and interviews])	**Positive Association for Overweight/obesity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumptions: Greater accessibility to physical activity resources, the presence of amenities, better street design, and greater safety lead to decreased overweight/obesity and increased physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** OVERWEIGHT/OBESITY: 1. At the aggregated neighborhood level (n=12), 71% of the variance in obesity prevalence was accounted for by accessibility (beta=-1.02, p=0.05), average feature quality (beta=1.05, p=0.09), average number of amenities per resource (beta=-1.19, p=0.03), and average incivilities per resource (beta=0.70, p=0.04), (F(4,11) 4.32, p<0.05). 2. Male gender and increased quality of features (F(11,407)37.19 and 12.66, p<0.001) predicted lower BMI among residents. 3. A statistically significant relationship was found between both the number of amenities per resource and obesity prevalence (r=-0.61, p=0.04) and amenity quality and obesity prevalence (r=-0.60, p=0.04). 4. As resource accessibility increased, obesity prevalence decreased (r=-0.51, p=0.09). PHYSICAL ACTIVITY: 5. A greater percent of accessible physical activity resources (β=0.584, p=0.046) was related to the number of days vigorous physical activity was performed during the past week [F=5.17 (2,11); p<0.05; R^2=0.34]. 6. Higher street connectivity (β=0.902, p=0.001) and fewer physical resources were correlated with meeting moderate physical activity guidelines [F=39.18 (2,11); p<0.001; R^2=0.90).	**Positive Association for Overweight/obesity in the Study Population** **Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for overweight/obesity and physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Erwin, Woods (2007) Midwestern County **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to physical activity opportunities in the home, neighborhood, school, convenient facilities, and mixed land-use) **Outcome(s) Affected** Overweight/obesity (height and weight to determine body mass index) and physical fitness (push-ups and basketball performance measured with 3-day physical activity recall and Five Fitness-gram [evaluating cardiovascular endurance, muscular endurance, muscular strength, flexibility])	**Negative Association for Overweight/obesity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Negative Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Increased access to physical activity facilities in the school and home environments leads to increased physical activity and decreased overweight/obesity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** OVERWEIGHT/OBESITY: 1. Higher BMI was significantly correlated with convenient facilities (r=0.36, p<0.01), and BMI tended to be higher if a participant reported access to more physical activity supports overall. Therefore, participants with access to more physical activity supports exhibited higher body composition levels. PHYSICAL ACTIVITY: 2. Children who had access to more physical activity supports in their neighborhood performed significantly fewer push-ups (r=-0.43, p<0.01) and completed fewer laps (r= -0.43, p<0.01). 3. Basketball performance was significantly correlated with overall access (r=0.37, p<0.01) and school access (r=0.40, p<0.01). 4. Basketball motor skills were negatively associated with neighborhood access, as was throwing (r=-0.40, p<0.01). (Note: Convenience examined access to physical activity opportunities.)	**Negative Association for Overweight/obesity in the Study Population** **Negative Association for Physical Activity in the Study Population** Study design = Association Effect size = Negative association for overweight/obesity and physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Kligerman, Sallis (2007) California **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (access to parks, land-use mix, retail, intersection, and residential density) **Outcome(s) Affected** Overweight/obesity (height and weight were used to calculate body mass index [BMI]) and moderate to vigorous physical activity (measured with accelerometers)	**No Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Environmental variables, including access to parks, leads to increased levels of physical activity and decreased levels overweight/obesity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. None of the recreation facilities variables were related to moderate-to-vigorous physical activity (data not shown).	**No Association for Physical Activity in the Study Population** Study design = Association Effect size = No association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Dunton, Jamner (2003) Location Not Reported **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (community and home access to exercise facilities) **Outcome(s) Affected** Cardiovascular fitness (Cardiovascular fitness and Vmax metabolic cart (peak oxygen consumption [VO2peak]) and vigorous physical activity (2-day Physical Activity Recall [2DPAR] assessed activities for the previous 2 days)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Perception of access to home items and community facilities increases adolescent's cardiovascular fitness and activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. As the number of community facilities (inter-correlation=0.266, $p<0.05$) perceived by adolescents increased, so did adolescent cardiovascular fitness. 2. Adolescents' perceptions of resource availability in both the home and community domains were positively associated with VO2 peak ($p<0.05$) but unrelated to vigorous physical activity, kilocalories, and lifestyle activities.	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Pate, Colabianchi (2008) South Carolina **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to places to be active) **Outcome(s) Affected** Physical activity, vigorous physical activity, and moderate-to-vigorous physical activity (3-day physical activity recall)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: An increased number of physical activity facilities leads to increased levels of physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. The number of colleges was significantly associated with total metabolic equivalent tasks (METs) (beta= 5.7, SE=2.3, $p=0.02$). 2. The number of parks (beta=0.071, SE=0.03, $p=0.04$) and the number of churches (beta=0.04, SE=0.02, $p=0.04$) were associated with the number of reported 30-minute blocks of vigorous physical activity (VPA) in the model. 3. The number of individual (beta=0.090, SE=0.04, $p=0.01$), multi-purpose (beta=0.201, SE=0.07, $p=0.01$), and total number of commercial facilities (beta=0.10, SE=0.03, $p<0.01$) was significantly related to the number of reported 30-minute blocks of VPA. 4. The commercial facilities variable was significantly associated with the number of blocks of VPA (beta=0.09, SE=0.04, $p=0.02$). 5. For white girls there was an increase in total METs with an increase in the number of parks. The interaction of parks with race was significantly associated with total METs (beta=3.34, SE=1.26, $p=0.01$). (Note: Parks, colleges, churches and commercial facilities are all considered places to be physically active.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Jilcott, Evenson (2007) North Carolina **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to places to be active, parks and facilities) **Outcome(s) Affected** Physical activity (PA) and moderate to vigorous physical activity (MVPA) (measured with accelerometers)	**No Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Greater access to physical activity resources will lead to increased levels of physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. No statistically significant relationships were found between activity and perceived or objectively measured proximity to parks. 2. There was no association between distance to resources identified through qualitative interviews and MVPA minutes, adjusting for age and BMI (standardized parameter estimate for GIS network distance = 0.06, p= 0.45). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**No Association for Physical Activity in the Study Population** Study design = Association Effect size = No association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Huston, Evenson (2003) North Carolina **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility and walkability* (places to be active, indoors and outdoors, trails, streetlights) **Outcome(s) Affected** Physical activity and meeting recommendations for leisure activith (2001 Behavioral Risk Factor Surveillance System [BRFSS])	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Presence of street lights and trails and access to places for activity leads to increased leisure-time physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Access to places was associated with any activity (OR=2.23; 95%CI=1.44–3.44; p<0.0001) and recommended activity (OR=2.15; 95%CI=1.23–3.77; p<0.01), and trails were associated with recommended activity (OR=1.51; 95%CI=1.00–2.28; p<0.05). 2. Individuals who reported access to both indoor and outdoor places for physical activity were more likely to engage in any activity and in recommended activity than those who reported no access to places for activity (77.2% vs. 48.9%, p<0.001). 3. Trails and streetlights were positively associated with acquiring recommended amounts of leisure activity before adjusting but became insignificant after controlling for all confounding variables.	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author McNeill, Wyrwich (2006) Missouri **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (access to safe, pleasant places to be active and/or walk) **Outcome(s) Affected** Moderate and vigorous physical activity (Behavioral Risk Factor Surveillance System Survey [BRFSS])	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Availability of physical activity facilities and increased quality of the neighborhood leads to increased levels of physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. When assessing the direct relationship between the physical environment and walking behaviors, availability of physical activity facilities was associated with more walking (β = 0.269, t = 6.74, p<0.05), but neighborhood quality was not. 2. Both neighborhood quality and availability were directly associated with moderate-intensity physical activity (neighborhood quality, β = 0.135, t = 2.57; availability, β= 0.137, t =3.42), though this effect is marginal (p<0.05). 3. Neighborhood quality was the only physical environmental correlate associated with vigorous-intensity activity (β = 0.104, t = 2.52, p<0.05). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Powell, Martin (2003) Georgia **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (access to safe, pleasant places to be active and/or walk) **Outcome(s) Affected** Meeting physical activity (2001 Georgia Behavioral Risk Factor Surveillance System [BRFSS])	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumptions: Having access to places to walk increases the likelihood of meeting current activity recommendations for physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Persons reporting a place to walk were significantly more likely to meet current recommendations for regular physical activity (41.5%, 95% CI= 39.4%, 43.6%) than were those reporting no place to walk (27.4%; 95% CI= 21.2%, 33.7%). 2. There was a positive significant relationship between places to walk and meeting current activity recommendations (some place to walk: 43% <10 min that participants walk to, 42.5% <10 minutes but participants do not walk to it, 38.1% ≥10 min that participants walk or drive to, p=0.04 for trend; not home based place to walk: 49.4% <10 minute that participants walk to, 42.5% <10 min but participants do not walk to it, ≥10 min away that participants walk or drive to, p=0.005). The same direct pattern was seen for other specified places, but the trend was not significant. (Note: P-values were not reported.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Hoehner, Brennan (2005) Missouri and Georgia **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (access to places to be active, land-use mix, street segments, sidewalks) **Outcome(s) Affected** Transportation activity, meeting physical activity recommendations (telephone survey)	**No Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Individuals with greater access to places to be physically active will participate in increased transportation and/or recreational physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Those who agreed that they had many places to exercise in their community and who reported more facilities within a 5-minute walk were slightly more likely to meet recommendations, but the direction of the trends and significance of the associations at different levels of these measures were inconsistent (data not shown).	**No Association for Physical Activity in the Study Population** Study design = Association Effect size = No association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported The sample was diverse with respect to age, ethnicity, and educational attainment, and slightly under-represented men.
Author Frank, Kerr (2007) Georgia **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (land use diversity and street connectivity [e.g., intersection density] and access to recreation space) **Outcome(s) Affected** Walking behavior (Strategies for Metropolitan Atlanta's Regional Transportation and Air Quality [SMARTRAQ])	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumptions: Individuals with increased access to recreation space, land use density, mix, and street connectivity will participate in greater levels of active transportation.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. In 9-11 year olds, only four or more recreation spaces (OR=2.6, CI= 1.3-5.4, p<0.01) were associated with an increased likelihood of walking, size of park was not related to walking behavior. 2. For 5-8 year olds, living near recreation or open space (walking ≥1 time per 2 days; OR=2.1, CI=1.3-3.4, p<0.001; walking ≥0.5 miles/day; OR=2.4, CI= 1.2-5.1, p<0.05) was significantly related to walking at least once over 2 days as well as walking ≥0.5 miles per day. 3. Having up to 5 acres of recreation space in a 1-km buffer was significantly related to walking (5-8 years; OR=2.2, CI=1.2-4.1, p<0.01) (12-15 years; OR=2.2, CI=1.3-3.7, p<0.01)(16-20 years; OR=2.6, CI=1.5-4.6, p<0.001), however more than 6 acres of recreation or open space did not appear to be related to walking. 4. In the multivariate analyses having access to recreation and open spaces (walking ≥1 time per 2 days; OR=1.9, CI=1.3-2.3, p<0.001; walking ≥0.5 miles/day; OR=1.7, CI=1.2-2.4, p<0.01) was significantly related to walking. 5. For the 16-20 year olds reporting that they had walked at least once over 2 days, recreation land use (OR=1.8, CI=1.1-2.9, p<0.01) was significant. 6. For those reporting that they had walked ≥ 0.5 miles per day, recreation land use (OR=2.1, CI=1.1-3.7, p<0.05) was a significant factor. (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Wen, Kandula (2007) California **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to parks and playgrounds) **Outcome(s) Affected** Meeting walking recommendations (the 2003 California Health Interview Survey)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Physical Activity for Caucasian Respondents (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Physical Activity for Hispanic Respondents (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Physical Activity for African-American Respondents (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **No Association for Physical Activity for Asian Respondents (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Increased perceptions of neighborhood safety and social cohesion, as well as access to places to be physically active, lead to increased total walking.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Neighborhood access to a park, playground, or open space (OR=1.26, 95% CI=1.16, 1.36) were both significantly associated with walking at recommended levels. 2. Access to a park, playground, or open space was positively correlated with walking at recommended levels among White (OR=1.29, 95% CI= 1.15-1.45; p<0.001), Black (OR=1.64, 95% CI= 1.16-2.32; p<0.001) and Hispanic (OR=1.21, 95% CI= 1.02-1.44, p<0.05) respondents, but not with Asian respondents.	**Positive Association for Physical Activity in the Study Population** **Positive Association for Physical Activity for Caucasian Respondents** **Positive Association for Physical Activity for Hispanic Respondents** **Positive Association for Physical Activity for African-American Respondents** **No Association for Physical Activity in Asian Respondents** Study design = Association Effect size = Positive association for physical activity in Caucasian, Hispanic and African American respondents, and the study population. No association for physical activity in Asian respondents	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Voorhees, Young (2003) Virginia **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (lack of lighting and sidewalks, neighborhood safety, distance to locations, access to places for physical activity) **Outcome(s) Affected** Physical activity and meeting physical activity recommendations (Women and Physical Activity Survey and Behavioral Risk Factor Surveillance System [BRFSS])	**Negative Association for Physical Activity in Hispanic Females (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumptions: Individuals with positive perceptions of neighborhood safety and access to places to be physically active will have increased levels of physical activity and will be more likely to meet recommendations for physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Women who reported having places to exercise in their neighborhood were less likely to meet activity recommendations (OR=0.56, 95% CI= 0.27-1.17) and be active (OR=0.54; 95% CI= 0.26–1.11). (Note: P-values were not reported. Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Negative Association for Physical Activity in Hispanic Females** Study design = Association Effect size = Negative association for physical activity in hispanic females	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Sanderson, Foushee (2003) Alabama **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (access to safe, pleasant places to be active and/or walk, presence of sidewalks) **Outcome(s) Affected** Physical activity and meeting physical activity recommendations (survey)	**No Association for Physical Activity in Women (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Individuals in neighborhoods with positive social dynamics and enablers for physical activity like safe and pleasant places to be active, and good quality sidewalks will have increased levels of physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Researchers found no physical environmental variables that were significantly associated with comparison of either activity-level group. (Note: Environmental variables include a composite score of distance to places to walk, safety from crime, street lighting, unattended dogs, persence of sidewalks, and traffic safety.)	**No Association for Physical Activity in Women** Study design = Association Effect size = No association for physical activity	**Maintenance** Not Applicable **Sampling / Representativeness** High Education level from the evaluation sample was similar to the Alabama BRFSS demographic data for African-American women, however, income level was somewhat lower.

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Wilson, Kirtland (2004) South Carolina **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (access to sidewalks and public recreation facilities, presence of traffic, street lighting, unattended dogs, safe neighborhoods, access to places to be physically active in the neighborhood) **Outcome(s) Affected** Meeting physical activity and walking recommendations (2001 Behavioral Risk Factor Surveillance System physical activity module) and access to places for physical activity (Perceptions of Environmental Supports Questionnaire)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Positive perceptions of places to walk and bike increases levels of physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Higher perceptions of having and using walking/bicycling trails were significantly associated with meeting the recommendations for physical activity among low-socioeconomic status respondents (OR=2.81, CI= 1.38-7.93, p=0.05) but not for high-socioeconomic status respondents. 2. In the low-socioeconomic status group, higher perceptions of having and using walking/bicycling trails were significantly associated with walking 150min/week (OR=3.04, CI= 1.24-7.48, p=0.052).	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Joshu, Boehmer (2008) and Brownson, Baker (2001) United States **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability and accessibility* (perceived barriers to physical activity including hills, lack of sidewalk, sprawl index; metropolitan counties gross population density, percentage of county population living in suburban and urban densities, net density, block size, percentage of blocks with less than 1/100 square miles) **Outcome(s) Affected** Overweight/obesity (body mass index) and physical activity (surveys)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Perceptions of barriers and heavy traffic increases odds of being obese and access to facilities, positive neighborhood characteristics, policies supporting physical activity and other perceptions are associated with increased levels of physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Access to parks (adjusted OR=1.95, 95% CI=1.52, 2.52), indoor gyms (adjusted OR=1.94, 95% CI=1.45, 2.60), and treadmills (adjusted OR=1.48, 95% CI=1.13, 1.93) were positively associated with physical activity. 2. Among individuals indicating some degree of physical activity, the following environmental supports were associated with reports of increases in activity: shopping malls (25.9%), parks (28.5%), walking and jogging trails (29.9%), treadmills (30.6%), and indoor gyms (33.7%). (Note: Perceived barriers to physical activity was a composite including hills, lack of sidewalks, personal barriers like fear of injury, limited time, and intensity and frequency of physical activity.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Kerr, Rosenberg (2006) Washington **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (residential density, proximity and ease of access to nonresidential land uses, street connectivity, walking or cycling facilities, aesthetics, pedestrian traffic safety, and crime safety) **Outcome(s) Affected** Active transit (survey)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Increased parental perceptions of neighborhood walkability will lead to more active commuting.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Perceived access to local stores and biking or walking facilities accounted for some of the effect of walkability on active commuting (OR=2.0, 95% CI=1.03-4.00, p<0.05). (Note: Parental concerns were based on a scale that included both interpersonal and traffic fears.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Handy, Cao (2008); Handy, Cao (2006) California **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (land-use mix and street connectivity) **Outcome(s) Affected** Physical activity, walking, biking (survey measured frequency of transport and leisure walking and walking to specific destinations in the past 30 days, change in walking and biking before the move [for movers] or from one year ago [for non-movers] and frequency/intensity of activity in the previous week)	**Positive Association for Physical Activity in Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Access to certain environmental characteristics is associated with increased levels of physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Individuals with higher perceptions of physical activity options (coefficient=0.0395, p=0.083) engaged in neighborhood physical activity more frequently. 2. Changes in perceptions of physical activity options (NPA coefficient=0.0586, p=0.046; walking coefficient=0.103, p<0.0001) were associated with increased neighborhood physical activity and walking. 3. The minimum distance to a health club (coefficient=0.071, p=0.045) had positive effects on changes in biking.	**Positive Association for Physical Activity in Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Low According to the 2000 US Census the evaluation sample tended to be older on average than neighborhood residents and the percent of households with children is lower among the evaluation sample for most neighborhoods. Median household income for the evaluation sample was higher than the census median for all but one neighborhood.

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Rutt, Coleman (2004) Texas **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (slope, land-use, street connectivity, distance to physical activity facilities, sidewalk availability, safety to exercise) **Outcome(s) Affected** Overweight/obesity (body mass index [BMI]) (Behavioral Risk Factor Surveillance System Survey - BRFSS) and light, moderate, and vigorous physical activity (San Diego Health and Exercise Survey)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Increased accessibility to physical activity facilities in neighborhoods leads to increased physical activity levels.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Time spent in vigorous physical activity was predicted by fruit and vegetable intake (p=0.04), younger age (p=0.0002) and increased distance to physical activity facilities (p=0.04, R-squared=0.14). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Motl, Dishman (2005) South Carolina **Design** Association Cross-sectional **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (unattended dogs, gangs, crime, traffic safety, sidewalks, proximity to playgrounds, parks, or gyms; access to equipment for physical activity) **Outcome(s) Affected** Physical activity (3-Day Physical Activity Recall [3DPAR])	**Positive Association for Physical Activity in the Study Population (Availabitility of Parks, Playgrounds, Trails and Recreation Centers)** **(Assumption: Equipment accessibility and increased neighborhood safety lead to increased levels of physical activity.)** **Availability of Parks, Playgrounds, Trails and Recreation Centers** PHYSICAL ACTIVITY: 1. With the baseline data, there was a statistically significant relationship from equipment accessibility to physical activity (gamma=0.33). 2. The path between the same latent variables across time (i.e., stability coefficients) was statistically significant for equipment accessibility (gamma=0.42). There were statistically significant correlations among the environmental variables at baseline (phi=0.50). 3. With the baseline data, there was a statistically significant relationship from equipment accessibility to self-efficacy (gamma=0.64). There was a statistically significant relationship from self-efficacy to physical activity (beta=0.35), but not from equipment accessibility to physical activity (gamma=0.13) or neighborhood safety to physical activity (gamma =0.01). Hence, self-efficacy mediated the effect of equipment accessibility on physical activity (indirect effect=0.22) in the baseline data. (Note: Neighborhood safety included safety from unattended dogs, gangs, crime, traffic safety, and presence of sidewalks. Equipment accessibility included access to sports equipment at home, such as balls and skates, as well as access to parks, playgrounds and facilities.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
International (Multiple Strategies)				
Author Giles-Corti, Donovan (2002); Giles-Corti, Donovan (2002); Giles-Corti, Donovan (2003); Giles-Corti, Macintyre (2003); McCormack, Giles-Corti (2007); McCormack, Giles-Corti (2008) Australia **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (access to destinations, land-use, road network distance, presence of sidewalks, distance to nearest public transit stations) **Outcome(s) Affected** Overweight/obesity (height and weight [body mass index]), physical activity (PA), meeting recommendations for walking, and walking behaviorr (survey)	**Positive Association for Overweight/obesity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Individuals with greater access to places for physical activity and active transportation will be more likely to participate in greater amounts of physical activity, which will lead to decreased levels of overweight/obesity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** OVERWEIGHT/OBESITY: 1. Overweight individuals were more likely to perceive no paths within walking distance (OR=1.42; 95% CI= 1.08-1.86). PHYSICAL ACTIVITY: 2. Having a beach within 1500 m was positively associated with irregular walking for recreation (OR=1.97, 95% CI=1.01-3.83, p<0.05) and regular vigorous physical activity (OR=1.93, 95% CI= 1.20-3.13, p<0.01). 3. Among individuals who frequented pay for use recreational destinations, each additional pay destination (OR=1.51, 95%CI=1.32-1.73, p<0.001) was associated with the use of pay-destinations located in the neighborhood. 4. Those who used a pay destination located within or outside (OR=8.46, 95%CI=3.98-18.00, p<0.001 and OR=3.48, 95%CI=2.59-4.66, p<0.001, respectively) the neighborhood were more likely than those who did not use a pay destination to achieve sufficient vigorous-intensity physical activity. 5. Respondents using free destinations within and outside (OR=1.56, 95%CI=1.00-2.33, p<0.05 and OR=2.13, 95%CI=1.56-2.89, p<0.001, respectively) the neighborhood were more likely to achieve sufficient levels of vigorous-intensity physical activity than those not using a free recreational destination. 6. The likelihood of walking for recreation was higher in residents in the top quartile of access to the beach (OR=1.49, 95%CI=1.14-1.93, p=0.003). 7. Respondents were more likely to walk as recommended if they were in top quartile of access to public open space (OR=1.43, 95%CI=1.07-1.91, p=0.015). 8. Those who exercised vigorously were more likely to be in the top quartile of access to the beach (OR=1.38, 95%CI= 1.07-1.79, p=0.013). 9. Individuals with poor access to 4 or more recreational facilities were 68% more likely to be obese compared with others (95%CI=1.11-2.55). 10. Respondents were more likely to walk for transportation if they were in top quartile of access to public open space (OR=1.35, 95%CI: 1.05-1.73, p=0.02).	**Positive Association for Overweight/obesity in the Study Population** **Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for overweight/obesity and physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Kamphuis, Van Lenthe (2008) The Netherlands **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to recreational facilities and safety) **Outcome(s) Affected** Participation in sports (Short Questionnaire to Assess Health-enhancing Physical Activity [SQUASH])	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Increased safety and having access to places for physical activity leads to an increase in sports participation.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Having insufficient places to go (OR=1.16, not significant) increased the likelihood of not participating in sports.	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author De Bourdeaudhuij, Sallis (2003) Belgium **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (residential density, land use mix, access to public transportation, availability of sidewalks and bike lanes, neighborhood aesthetics, perceived safety from crime and traffic, connectivity of the street network) **Outcome(s) Affected** Moderate and vigorous intensity physical activity, walking, and sedentary behavior (International Physical Activity Questionnaire-short form [IPAQ] and seven-page questionnaire) and Overweight/obesity (Height and weight [body mass index])	**Positive Association for Overweight/obesity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumptions: Increased perceptions of neighborhood safety and access to places to be physically active will lead to increased physical activity and decreased body mass index [BMI].)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** OVERWEIGHT/OBESITY: 1. Participants with a higher BMI reported fewer convenient physical activity facilities (Pearson r=-0.11, p<0.05). PHYSICAL ACTIVITY: 2. In males, vigorous intensity physical activity was related to more convenient physical activity facilities (semipartial correlate; 0.11, p≤0.05). In females, vigorous intensity physical activity was related to more convenient physical activity facilities (semi-partial correlate; 0.14, p≤0.05) and supportive worksite environment was related to more high intensity activity (semi-partial correlate; 0.12, p≤0.05).	**Positive Association for Overweight/obesity in the Study Population** **Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for overweight/obesity in study population; Positive association for physical activity in study population	**Maintenance** Not Applicable **Sampling / Representativeness** Low Respondents appear to have better jobs, have a higher education, are more often employed, and underrepresent the number of individuals living alone compared with the Flemish reference population.
Author Harrison, Gemmell (2007) United Kingdom **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (residential density, accessibility to transport, shopping, and leisure facilities; neighborhood disorder [crime, vandalism, assault], perceptions of traffic safety) **Outcome(s) Affected** Physical activity and meeting physical activity recommendations (Godin and Shephard instrument)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Having access to places to safely walk leads to greater levels of physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Persons reporting a place to walk were significantly more likely to meet current recommendations for regular physical activity (41.5%, 95% CI= 39.4%-43.6%) than were those reporting no place to walk (27.4%; 95% CI= 21.2%-33.7%). 2. There was a positive significant relationship between place to walk and meeting current activity recommendations (not home based: p=0.005; public park: p=0.02). The same direct pattern was seen for other specified places, but the trend was not significant.	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Lee, Kawakubo (2006) Japan **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (accessibility, safety, convenience, aesthetics) **Outcome(s) Affected** Walking time (questionnaire)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Positive perceptions of neighborhood safety, social support, convenience, and access to parks, trails, and active transportation lead to increased physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. In the high walkable region, those who had high scores for "There is a park nearby that is suitable for taking a walk in" (low perception mean [sd]: 190.8[195.0] vs. high perception mean [sd] 300.2[279.5], p<0.05), "There is a river (or a beach) within walking distance" low perception mean [sd]: 217.2[211.7] vs. high perception mean [sd] 299.1[283.6], p<0.05), and "The neighborhood is conducive for taking a walk" (low perception mean [sd]: 245.0[233.5] vs. high perception mean [sd] 323.4[308.5], p<0.05) spent significantly more walking time. (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Stahl, Rutten (2001); Rutten, Abel (2001) Germany, The Netherlands, Switzerland, Spain **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to places to be active) **Outcome(s) Affected** Physical activity and sedentary behavior (Lipid Research Clinic Questionnaire items [found valid; physical activity level, intensity, frequency, and type])	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Perceptions of opportunities of physical activity and social supports leads to increased activity levels.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Those who had high perception of local opportunities (75.1% vs. 63.7%; p<0.001) were more likely to be active than their counterparts. 2. In terms of a linear relation, physical activity is associated weakly but significantly with perceived opportunities (r=0.09).	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Humpel, Owen (2004) Australia **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (aesthetics, accessibility, safety, and weather) **Outcome(s) Affected** Neighbhorhood walking, walking for exercise, walking for pleasure (self-reported survey)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Perceptions of safety, close location of residence to coastal areas, and accessibility of facilities leads to increased walking)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. A higher proportion of those with the most positive perceptions for accessibility reported more walking for pleasure (45.2%; X^2=7.28, p<0.05). 2. Participants reporting that a beach/lake was within easy walking distance reported significantly more neighborhood walking minutes (M=224) than did those reporting a beach/lake was not within walking distance (M=139; F(2,379)=11.0, p<0.000); significantly more exercise walking (M=163 compared to M=100 minutes; F(2,382)=9.72, p<0.00); and significantly more walking for pleasure compared to those perceiving that a beach/lake is not within walking distance (M=33 and M=21, respectively; F(2,380)=3.88, p<0.02). 3. For men, accessibility of facilities for walking demonstrated a negative relationship with neighborhood walking (for high walkers: OR=0.30; 95% CI 0.09-0.91; p<0.05). 4. Women with moderately positive perceptions about accessibility were more than three times more likely to walk for pleasure (OR=3.51; 95% CI 1.64-9.15, p<0.01). 5. A higher proportion of those with the most positive perceptions for all four environmental perception categories reported more neighborhood walking (data not shown). 6. Significantly higher proportions of those walking for exercise were found among those with the most positive perceptions for all four environmental perception categories (results not shown) (Note: Environmental perceptions were based on aesthetics, accessibility, safety, and weather. Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Tucker, Irwin (2009) Ontario, Canada **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (land-use mix, opportunities for recreation) **Outcome(s) Affected** Physical activity (parent questionnaire and the Adapted Previous Day Physical Activity Recall)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Presence of neighborhood recreational facilities, land-use mix, and park coverage lead to increased levels of physical activity in youth.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Land-use mix and percentage of park coverage were not significant factors influencing physical activity level among London, Ontario adolescents. 2. Children with parent-reported recreation facilities in their neighborhood were 13.91 minutes more active after school than children without facilities (p=0.03). 3. Children whose parents reported access to neighborhood recreation facilities were 2.04 (95% CI=1.06-3.92, p=0.03) times more likely to fall within the upper quartile of after school physical activity (>180 minutes per day) than those in the bottom quartile (<60 minutes per day). 4. Students who had 2 or more recreational facilities in their neighborhood were 1.65 times (95% CI=1.09-2.50, p=0.02) more likely to be categorized in the upper quartile for after school physical activity. 5. Children with more than 2 recreation opportunities engaged in 16.49 (standard error 4.97, p=0.004) more minutes of physical activity than those with fewer than 2. (Note: Percentage of park coverage can be construed as access to parks as well as the development and design of the community, which will overlap between Community Design and Availability of Parks, Playgrounds, Trails, Recreation Centers.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Veugelers, Sithole (2008) Nova Scotia, Canada **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (opportunities for recreation, access to neighborhood shops) **Outcome(s) Affected** Overweight/obesity (height and weight [body mass index]), sports engagement (parent survey), eating behavior (the Harvard Food Frequency Questionnaire), and sedentary behavior (screen time, parent survey)	**Positive Association for Overweight/obesity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Sedentary Behavior in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Access to places for physical activity and greater land-use mix are related to children's diet, weight, and participation in physical and sedentary activities. Greater access leads to better behavioral and health outcomes.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** OVERWEIGHT/OBESITY: 1. Children in neighborhoods with good access to playgrounds and parks were 24% less likely to be overweight (OR=0.76, 95% CI=0.62-0.95) and 29% less likely to be obese (OR=0.71, 95% CI=0.53-0.99) than children in neighborhoods with poor access. 2. Children in neighborhoods with good access to recreational facilities were 29% less likely to be overweight (OR=0.71, 95% CI=0.56-0.90) and 42% less likely to be obese (OR=0.58, 95% CI=0.40-0.84) than children in with poor access. PHYSICAL ACTIVITY: 3. Children in neighborhoods with good access to playgrounds, parks and recreational facilities engaged more in sports with a coach than children in neighborhoods with poor access. (IR=1.64, 95% CI: 1.38-1.95; IR=1.76, 95% CI: 1.47-2.12, respectively). SEDENTARY BEHAVIOR: 4. Children in neighborhoods with good access to playgrounds, parks and recreational facilities spent less time in front of a computer or TV screen than children in neighborhoods with poor access (IR=0.72, 95% CI: 0.62-0.84; IR=0.64, 95% CI: 0.55-0.75, respectively). (Note: No p-values were reported.)	**Positive Association for Overweight/obesity in the Study Population** **Positive Association for Physical Activity in the Study Population** **Positive Association for Sedentary Behavior in the Study Population** Study design = Association Effect size = Positive association for physical activity, overweight/obesity, and sedentary behavior in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Mota, Almeida (2005) Portugal **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (street connectivity/access, aesthetic quality) **Outcome(s) Affected** Physical activity (questionnaire assessed physical activity)	**Positive Association for Physical Activity in Females (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Having access to stores in the neighborhood and places for physical activity will lead to greater amounts of physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Logistic regressions showed that neighbors with recreational facilities (OR = 1.30; 95% CI = 1.00– 1.70) were predictors of physical activity level ($p<0.05$).	**Positive Association for Physical Activity in Females** Study design = Association Effect size = Positive association for physical activity in females	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author De Vries, Bakker (2007) The Netherlands **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (residential vs. commercial space, type of residence, sports/recreation facilities and playgrounds, green space and water, safe walking and cycling, garbage and dirt, traffic safety, and the activity friendliness of the neighborhood) **Outcome(s) Affected** Physical activity (7-day physical activity log)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Having sport and recreation facilities, green space, water, and a safe and attractive neighborhood lead to increased levels of physical activity in children.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. No significant associations were found between children's physical activity levels and sports and recreation facilities, except for sports fields (B= 2.804, 95% CI= 1.555, 4.052, p<0.05). 2. Children's physical activity was negatively associated with the frequency of paved playgrounds (B= -1.372; 95% CI= -2.549, -0.195). 3. Children's physical activity was positively associated with the proportion of green space (B=0.865; 95% CI= -0.494, 2.225) and cycle tracks (B=2.445; 95%CI= 0.439, 4.451) in the neighborhood (p<0.05 for both).	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported No difference was found in weight, sex, or maternal education between the final and original samples.
Author Li, Dibley (2006) China **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (opportunities for recreation, safety, presence of sidewalks) **Outcome(s) Affected** Sedentary behavior (adolescent physical activity recall questionnaire)	**Positive Association for Sedentary Behavior in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Lack of opportunities for physical activity and unsafe neighborhood environments will lead to increased levels of inactivity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** SEDENTARY BEHAVIOR: 1. Access to public physical activity facilities (OR= 1.4, 95% CI=1.0-1.9, p=0.03 for moderate access and OR= 1.7, 95% CI=1.2-2.4, p<0.01 for difficult access) was positively associated with inactivity. 2. Lack of recreational facilities was associated with a higher percentage of inactivity in girls (OR=2.4, 95%CI= 1.6-3.5, p<0.001). 3. Adolescent boys living in surroundings without vacant fields were 1.7 times (95% CI= 1.2-2.5, p=0.01) more likely to be inactive.	**Positive Association for Sedentary Behavior in the Study Population** Study design = Association Effect size = Positive association for sedentary behavior in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Utter, Denny (2006) New Zealand **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to places to be active) **Outcome(s) Affected** Physical activity and vigorous activity (survey)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Increased perceived physical activity facilities and social motivation leads to increased physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Students were significantly less likely to engage in activity if they perceived there was nothing to do where they lived (OR=0.78, 95% CI= 0.7-0.9). 2. Students were significantly more likely to engage in regular vigorous activity when they lived within walking distance of the following perceived community features: a park (OR=1.17, 95% CI= 1.1-1.3), a skateboard ramp (OR=1.32, 95% CI: 1.2-1.5), a sports field (OR=1.59, 95% CI: 1.4-1.8), a swimming pool (OR=1.38, 95% CI: 1.2-1.5), a gym (OR=1.44, 95% CI: 1.3-1.6), and a bicycle track (OR=1.44, 95% CI: 1.3-1.6). [Note: Students could respond yes to more than one facility.] (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** High Participating students were demographically similar to the general New Zealand population of young people aged 13 to 17 years.

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Fein, Plotnikoff (2004) Canada **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to places to be active, safety, street characteristics) **Outcome(s) Affected** Energy expenditure (Godin Leisure-Time)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: High scores for the environmental resource composite [e.g., more roads, more sidewalks] will lead to increased energy expenditure.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. The environmental resource scales were positively correlated with energy expenditure (home r=0.16, neighborhood r=0.16, facilities r=0.12, school r=0.15, p<0.01) as were the perceived importance scores (home r=0.22, neighborhood r=0.16, facilities r=0.20m school r=0.27, p<0.01). 2. Perceived importance of the school environment was the only environmental measure showing a significant association (β=0.14, p<0.01) with energy expenditure. 3. Males were strongly associated with energy expenditure (β= -0.24, p<0.05) among respondents reporting high levels of perceived importance in the school environment. (Note: The environmental resource scales included availability of space (e.g., roads and sidewalks), convenient facilities and equipment.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported There was a relatively even distribution of participants across grades: Grade 9=21% Grade 10=28% Grade 11=26% Grade 12=25%
Author Burton, Turrell (2005) Australia **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood accessibility* (access to places to be active, safety, aesthetic quality, traffic, street lights, transit) **Outcome(s) Affected** Moderate and vigorous intensity physical activity and walking (Questionnaire)	**More Evidence Needed-Data Not Provided (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Individuals with greater access to places for physical activity and active transportation will be more likely to participate in greater amounts of physical activity, which will lead to decreased levels of overweight/ obesity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Environmental variables contributed the least to vigorous intensity activity (data not shown). (Note: The environmental scale was developed from a battery of items, which led to the inclusion in multiple strategies. Environmental variables include footpaths [sidewalks], public transport, street lighting, perceived safety, busyness of streets and traffic flow, facilities for activity, cleanliness, and friendliness.)	**More Evidence Needed** Study design = Association Effect size = More evidence needed	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported
Author Panter, Jones (2008) England **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (residential density, street connectivity, walking/ cycling facilities such as sidewalks and pedestrian/bike trails aesthetics and pedestrian traffic safety) **Outcome(s) Affected** Weekly activity and weekly aerobic activity (questionnaire)	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumptions: Access to places for physical activity in the community and increased street accessibility and dresidential density will lead to increased levels of physical activity.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Participants that reported 5 sessions of activity per week, lived closer to sports facilities (mean distance [standard error] = 1268.9 [104.99], p<0.05) and had higher neighborhood walkability scores (mean= 48.10 [0.79]. p<0.01) than their less active counterparts (mean distance= 1479.9 [34.25] and mean walkability scores= 44.46 [0.37]). 2. Individuals that reported 5 or more weekly aerobic activity sessions gave a higher neighborhood walkability score (mean= 46.05 [0.48]) than individuals who did not (mean =43.79 [0.54]), although this association was not apparent when walking alone was considered (p<0.01). 3. Respondents rating their neighborhood as having intermediate or good walkability were over 3 times as likely to report 5 or more sessions of physical activity per week compared to those who gave the lowest rating (OR= 3.14, p=0.02; and OR= 3.04, p=0.03 respectively). 4. Those who lived in the closest tertile to a park or green space were over twice as likely to report five or more sessions of physical activity (OR=2.17, 95% CI= 1.00-4.78, p≤0.05). 5. None of the associations with access to leisure facilities were statistically significant and were generally in a contrary direction to that expected; those living nearest to the facilities generally reported lower levels of activity than those farther away. (Note: Walkability was a composite score using mulitple variables like residential density, street connectivity, access to PA facilities, access to sidewalks and pavement, aesthetics, and traffic safety. Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Low When compared with 2001 census data for the neighborhoods from which the sample was drawn, respondents tended to be older and contain a greater percentage of females. Respondents also tended to be better educated with only 17.5% of local residents reporting a post-graduate qualification in the census compared with 29.4% of survey respondents.

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
Author Santos, Silva (2008) Portugal **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (access to destinations and aesthetics, residential density, street connectivity) **Outcome(s) Affected** Physical activity (International Physical Activity Questionnaire [IPAQ])	**Positive Association for Physical Activity in the Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Positively perceived neighborhood attributes like access to destinations and social cohesion lead to increased physical activity (PA) levels in Azorean adults.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Women with a positive overall perception of the dimension infrastructures; access to destinations, social environment, and aesthetics were 32.5% (95%CI=1.150-1.528; p<0.001) more likely to have a moderate physical activity level and 31.9% (95%CI=1.121-1.551; p<0.001) more likely to have a health enhancing physical activity (HEPA) level. 2. Normal weight women (BMI <25 kg/m2) with a positive overall perception of the dimension infrastructures; access to destinations, social environment, and aesthetics were 44.5% (95%CI=1.166-1.791; p<0.001) more likely to have moderate physical activity levels, whereas overweight/obese women (BMI ≥ 25 kg/m2) 22% (95%CI= 1.007-1.478; p<0.05) were more likely to have moderate physical activity levels and 34.5% (95%CI=1.3451.080-1.675; p<0.05) more likely to have HEPA levels. 3. Normal weight men (BMI<25kg/m2) with a positive perception of the dimension infrastructures; access to destinations, social environment, and aesthetics were 51.4% (95% CI=1.091-2.101; p<0.05) more likely to have moderate physical activity levels. (Note: Access to destinations refers to shops, sotes, markets, and free or pay recreation facilities within walking distance.)	**Positive Association for Physical Activity in the Study Population** Study design = Association Effect size = Positive association for physical activity in the study population	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported The nature of the sampling design was not random and generalizability is limited.
Author Humpel, Owen (2004); Humpel, Marshall (2004) Australia **Design** Association Cross-sectional study **Duration** Not Applicable	**Measures** *Neighborhood walkability* (perceptions of access to aesthetically pleasing and convenient places to be active, safety from traffic and crime) **Outcome(s) Affected** Physical activity and walking (survey assessed frequency and duration of neighborhood weekly walking, type of walking [e.g., transport] perceptions of neighborhood aesthetics, convenience, access to services, and traffic and the International Physical Activity Questionnaire [IPAQ]-short form items assessed intensity, frequency, and duration of physical activity, total physical activity)	**Positive Association for Physical Activity in Study Population (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Physical Activity in Men (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **Positive Association for Physical Activity in Women (Availability of Parks, Playgrounds, Trails, and Recreation Centers)** **(Assumption: Perceiving the environment as aesthetically pleasing, convenient, and perceiving traffic as not being a problem increases individual physical activity levels.)** **Availability of Parks, Playgrounds, Trails, and Recreation Centers** PHYSICAL ACTIVITY: 1. Men with the highest scores for convenience (OR=2.20, 95% CI=2.21-3.99, p<0.01) were more likely to walk in their neighborhood than individuals with lower scores. 2. Women with moderate convenience (OR=3.19, 95% CI=1.81-5.59, p<0.001) were more likely to report higher levels of walking and higher total physical activity. 3. Women with increased perceptions of convenience were twice as likely to report increased walking (any increase; OR=2.58; 95%CI=1.46-4.56, p<0.001, increase of 30 minutes or more; OR=2.31, 95% CI= 1.29-4.14, p<0.01, increase of 60 minutes or more; OR=2.01, 95%CI= 1.09-3.70, p<0.05) compared to those who did not positively change perceptions. 4. Participants with low baseline convenience scores reported a mean relative change increase of 0.79 (SD=0.87) and those with high baseline scores reported a relative change decrease of -0.21 (SD=0.22). 5. Participants with low baseline convenience scores reported a mean relative change increase of 0.79 (SD=0.87), and those with high scores reported a relative change decrease of -0.21 (SD=0.22). 6. Men with a high convenience score were 1.82 times more likely to engage in total physical activity than those with a lower score (95%CI= 1.02-3.24, p<0.05). 7. Men who increased their perception of convenience (OR=1.95, 95% CI=1.10-3.45, p<0.05) were more likely to have increased walking and twice as likely to have increased walking more than 30 minutes (convenience; OR=2.02, 95% CI=1.12-3.65, p<0.05) compared to men with no perception change. Men with increased perceptions of convenience were also 1.98 (95%CI 1.08-3.61; p<0.05) times more likely to have increased their walking to more than 60 minutes. 8. Women with a high convenience scores were 3.78 times more likely (95% CI=2.12-6.73, p<0.001) to report the highest levels of neighborhood walking in the neighborhood when compared to those with low scores. (Note: The composite score for access was comprised of access to shops and public transit. Convenience scores were a composite of the accessibility of paths, parks, and other walking opportunities.)	**Positive Association for Physical Activity in the Study Population** **Positive Association for Physical Activity in Men** **Positive Association for Physical Activity in Women** Study design = Association Effect size = Positive association for physical activity in the study population, men, and women	**Maintenance** Not Applicable **Sampling / Representativeness** Not Reported Participants did not differ in their responses whether they were part of the original sample or follow-up.

IMPACT TABLES

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
United States (Parks)						
Author Tester, Baker (2009) California	**Participation/ Potential Exposure** Participation = Not Reported Exposure = High Renovation occurred to 2 different parks within the community all residents were exposed. **High-Risk Population** High General population in a lower income neighborhood was observed	**Representative** Not Reported **Potential Population Reach** More Evidence Needed Participation = Not reported Exposure = High Representativeness = Not reported **Potential High Risk Popluation Reach** More Evidence Needed High-risk population = High Representativeness = Not reported	**Intervention Components** Complex Renovation of 2 parks including replacement of dirt fields with artificial turf, new fencing, landscaping, lighting and picnic benches. Park A also received permanent soccer goals and Park B restored a walkway around the field. COMPLEX: 1. Expanded hours of park operation 2. Professional training and skills development for park and recreation program staff 3. Expanded park programming **Feasibility** Intervention Feasibility = Low Policy Feasibility = High Intervention activities: Renovation of parks (replacement of dirt fields with artificial turf, new fencing, landscaping, lighting, picnic benches, soccer goals, and walkway), training of park staff, expanded park hours and programming Specialized expertise: Trained park staff Resources needed: Artificial turf, new fencing, landscaping materials, lighting, picnic benches, soccer goals, materials to restore the walkway, personnel for expanded park hours and programming, materials to train park staff, labor for improvements to the parks Costs: Not reported **Implementation Complexity** High Intervention components = Complex Feasibility = High	**Population Impact** More Evidence Needed Effectiveness = Not reported Potential population reach = More evidence needed Implementation complexity = High **High-risk Population Impact** More Evidence Needed Effectiveness for high-risk population = Effective for physical activity in lower-income population Potential high-risk population reach = More evidence needed Implementation complexity = High **Sustainability** Not Reported	Not Reported	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Floyd, Spengler (2008) Florida, Illinois	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data was provided. General Population	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data was provided. Neighborhood availability of parks **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	1. In Tampa, parks in neighborhoods with large concentrations of Hispanic Americans showed the highest mean energy expenditure per person (mean=0.069), followed by parks in predominantly white areas (mean=0.068) and parks in predominantly African-American areas (mean=0.067) (F=3.06, p=0.047). 2. In Chicago, users of parks in neighborhoods identified as African American showed the highest energy expenditure (mean=0.087), followed by parks in Hispanic (mean=0.082), and white (mean=0.082) neighborhoods (F=6.75, p=0.001). 3. In Tampa parks, differences in energy expenditure in parks of different racial/ethnic and income composition were statistically significant (F=8.96, p<0.001); energy expenditure was greatest in high-income Hispanic (mean=0.070) and low-income white neighborhood parks (mean=0.072) and lowest in high-income white (mean=0.066) and low-income Hispanic neighborhood parks (mean=0.066) (p<0.05 for difference between greatest and least energy expenditure) 4. In Chicago, energy expenditure in parks of different racial/ ethnic and income composition was statistically significant (F=10.16, p<0.001) with parks in neighborhoods identified as high-income African-American with higher energy expenditure (mean=0.096) than all the remaining ethnic-income neighborhood types.

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Zlot, Schmid (2005) United States	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. General Population	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to parkland acreage **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	Not Reported
Author Cohen, Ashwood (2006) Washington DC, Maryland, South Carolina	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 11-13 year old females	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to parks MULTI-COMPONENT: 1. Presence of streetlights and shaded areas 2. Distance from residence to parks **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** PHYSICAL ACTIVITY: 1. For the average girl having 3.5 parks within a 1-mile radius of home, accounted for an additional 68 minutes of non-school 3.0 MET MVPA and an additional 36.5 minutes of non-school 4.6 MET MVPA per 6 days. 2. For every park, regardless of type, within a half mile radius from home there was an increase in non-school MVPA by 33 minutes for 3.0 METs (coefficient estimate=0.02, p<0.005) and 17.2 minutes for 4.6 METs (coefficient estimate=0.03, p=0.04) per 6 days. Each additional park past the half-mile increased non-school MVPA by 12 minutes for 3.0 Mets (coefficient estimate=0.01, p<0.009) and 6.7 minutes for 4.6 Mets (coefficient estimate=0.01, p=0.09) per 6 days. 3. For the linear model, having either a neighborhood or community park within a half-mile of home was associated with 45.5 more 3.0 MET minutes (coefficient estimate=0.03, p<0.05) and 24.2 more 4.6 MET minutes (coefficient estimate=0.04; p<0.05) per 6 days. In the half-mile to 1-mile distance, MVPA increased by 29.6, 3.0 MET minutes (coefficient estimate=0.02, p<0.05) and 18.6, 4.6 MET minutes (coefficient estimate=0.03; p<0.05) per 6 days. 4. Additional non-school MVPA minutes increased when girls had neighborhood/community parks (3.0 MET 42 min, p<0.05; 4.6 MET 22 min, p<0.05), mini-parks (3.0 MET 92 min, p<0.05; 4.6 MET 40 min; p<0.10), natural resource areas (3.0 MET 36 min, p<0.05), walking paths (3.0 MET 59 min, p<0.05; 4.6 MET 13 min; p<0.05), and running tracks (3.0 MET 208 min, p<0.05; 4.6 MET 82 min; p<0.05) within a half mile of their homes. **Street Design** PHYSICAL ACTIVITY: 1. Shaded areas (20 min for 3.0 MET; 14 min for 4.6 MET, p<0.10 for both) and streetlights (28 min for 3.0 MET; 18 min for 4.6 MET, p<0.05 for both) were associated with increased MVPA. (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories. Metabolic equivalent–weighted moderate-to vigorous physical activity [MET MVPA] was calculated for the hours outside of school time using two different cut points: activity levels ≥3.0 metabolic equivalents and ≥4.6 metabolic equivalents, the latter indicating activity at the intensity of a brisk walk or higher.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Roemmich, Epstein (2007) New York	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 8-12 year olds (10.5±1,4); 9% Black; 2% Other; 89% White (evaluation sample) General Population	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to parks and recreation areas MULTI-COMPONENT: 1. Percentage of neighborhood park area 2. Neighborhood street connectivity **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Street Design** PHYSICAL ACTIVITY: 1. For boys, neighborhood street connectivity (coefficient=0.30) was positively correlated to total physical activity (p≤0.05 for all). 2. When combining the boys and girls into a single group, total physical activity was correlated to street connectivity (r=0.25, p≤ 0.05). 3. Street connectivity was correlated with MVPA (r=0.26, p≤0.05). 4. For boys, street connectivity (0.34) was positively correlated with moderate-to-vigorous physical activity (p≤ 0.05). **Community Design** PHYSICAL ACTIVITY: 1. For boys, neighborhood street connectivity (coefficient=0.30), percentage park area (coefficient=0.34), and percentage park and recreation area (coefficient=0.32) were positively correlated to total physical activity (p≤0.05 for all). 2. When combining the boys and girls into a single group, total physical activity was correlated to street connectivity (r=0.25, p≤ 0.05) and percentage park area (r=0.22, p≤0.04). SEDENTARY BEHAVIOR: 3. Percentage park area + recreation were inversely correlated with television watching in boys but not girls (p≤0.05). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	1. Home environment, rather than neighborhood environment, variables were correlated with sedentary behaviors in that the number of televisions in the home was related to television watching time (r=0.31, p≤0.01).
Author Norman, Nutter (2006) California	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Suburban, 11-18 year olds, 3.6% Asian/ Pacific Islander, 6.4% African American, 0.8% Native American, 13.1% Hispanic, 56.8% White, 19.3% Other (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to neighborhood parks and size of parks MULTI-COMPONENT: 1. Land-use, residential density, and retail floor area ratio 2. Street network and intersection density **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Street Design** PHYSICAL ACTIVITY: 1. For girls, significant correlations were found for total minutes/day of moderate-to-vigorous physical activity with intersection density (r=-0.14, p<0.01). 2. Intersection density (R2=0.25, beta=-0.127, p=0.006) remained significant after multiple linear regression. **Community Design** OVERWEIGHT/OBESITY: 1. No statistically significant correlations were found between environmental variables and BMI percentile for girls or boys. PHYSICAL ACTIVITY: 2. For boys, total minutes/day of physical activity was correlated only with retail floor area ratio (r=0.12, p<0.05). Retail floor area ratio remained a significant contributor after multiple linear regression (R2=0.23, beta=0.135, p=0.007). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Shores, West (2008) Eastern United States (mid-sized community)	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. General population, 50% Whites, 38% African Americans, 11% Hispanic, 52% Adults, 29% Children, 15% Teens, 5% Older adults (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Presence, absence, and use of park equipment and features (courts, paths, etc.) **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	1. When teens participated in moderately active pursuits, they were most often playing doubles tennis (men and women) or walking (women) (data not shown). 2. When adults were observed participating in more intense activities, it was often alongside their children; women, in particular, were most likely to be vigorously active with children (data not shown). 3. Older individuals were most frequently seen participating in sedentary activities (data not shown). 4. Boys achieved moderate activity levels through participation in baseball and doubles tennis; girls achieved the same levels through tennis or walking (data not shown).
Author Mowen, Confer (2003) Ohio	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. General population, 4% Minority, 2% African American, 2% Other (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Perceptions and intentions of use for a newly constructed brownfi MULTI-COMPONENT: 1. Distance to park from residence **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** PARK USE: 1. The shorter the distance between the park and nearby neighborhoods, the more likely early adopters were to indicate regular visitation intentions (beta= -0.208, p=0.002). 2. The more the park in-fill was perceived as accessible, convenient, and superior to other traditional neighborhood parks, the more likely visitors intended on visiting regularly (accessibility; beta=0.205, p=0.002, convenience; beta=0.206, p=0.009, superiority; beta=0.145, p=0.038). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Cohen, McKenzie (2007) California	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults (targeted sample) On average, the neighborhoods surrounding the parks were 63.5% Latino, 31.0% African American. 1.8% White and 30.4% lower income (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to public parks and park characteristics MULTI-COMPONENT: 1. Perceptions of park safety 2. Distance from residence to parks **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** PHYSICAL ACTIVITY: 1. Concerns about park safety were not associated with either park use or frequency of exercise. **Community Design** PHYSICAL ACTIVITY: 1. Living within 1 mile of a park was positively associated with the frequency of leisure exercise (incident rate ratio= 1.38, 95%CI=1.04-1.84, p<0.001) 2. More residents living within 0.5 miles of the park reported leisurely exercising 5 or more times per week more often than those living more than 1 mile away (49% vs. 35%, p<0.01). 3. People who lived within 1 mile of the park had an average of 38% more exercise sessions per week than those living further away. (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	1. Among observed park users, 43% lived within 0.25 mile, and another 21% lived between 0.25 and 0.5 mile of the park (p<0.001). Only 13% of park users lived more than 1 mile from the park. 2. Of local residents, 38% living more than 1 mile away were infrequent park visitors, compared with 19% of those living less than 0.5 mile away (p<0.001). 3. Younger age, being male, and living within 1 mile of a park were positively associated with park use (incident rate ratio=4.21, 95%CI=2.54-7.00, p<0.001). 4. People who lived within 1 mile of the park were 4 times as likely to visit the park once a week or more than those living further away. 5. Nearly all respondents (98%) living near the 2 parks with the lowest percentage of households in poverty indicated that they felt the parks were safe, compared with between 50% and 74% for parks in neighborhoods with over 40% of households in poverty (no p-values given).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Babey, Hastert (2008) California	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 12-17 year olds	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Distance and access to open spaces and parks MULTI-COMPONENT: 1. Perceptions of safe parks **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** PHYSICAL ACTIVITY: 1. Stratified analyses revealed that access to a safe park was positively associated with regular activity (relative risk [RR]= 1.10, 95% CI= 1.01-1.17, p<0.05) and negatively associated with inactivity (RR=0.58, 95% CI= 0.39-0.86, p<0.01) for adolescents in urban areas, but not rural areas. 2. In stratified analyses, adolescents with access to a safe park were less likely to be inactive than those without access, among those living in (1) apartments (RR= 0.52, 95% CI= 0.28-0.96, p<0.05) but not houses, (2) neighborhoods perceived as unsafe (RR= 0.47, 95% CI= 0.23-0.93, p<0.05) but not in safe neighborhoods, and (3) lower-income (RR= 0.62, 95% CI=0.39-0.97, p<0.05) but not higher income families. However, access to a safe park was not significantly associated with regular activity for these groups. (Note: Access to a park and access to a safe park overlapped placing these results in both Safety Interpersonal and Availability of Parks, Playgrounds, Trails, and Recreation Centers.)	Not Reported
Author Gomez, Johnson (2004) Texas	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Urban, Hispanic, 11-13 year olds (target) 94% Mexican-Americans, 2% non-Hispanic Whites, 3% African-Americans, and 1% Other ethnicity, 97.7% minority, Annual income ranged from $3927 to $15,887 (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to recreational facilities MULTI-COMPONENT: 1. Perceptions of neighborhood safety from crime 2. Distance to nearest open play areas from individual residence **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** PHYSICAL ACTIVITY: 1. As distance to the nearest open play area increased, OPA for boys decreased significantly (β=-0.317, T= -2.823, p=0.006). **Safety-Interpersonal** PHYSICAL ACTIVITY: 1. For girls, as violent crime within 1/2 mile of home increased, OPA significantly decreased (β= -0.34,T= -0.3.568, p<0.001) (accounted for 9.4% of variances in girls' OPA). While the perception of feeling safe in the neighborhood increased, OPA also increased significantly (β=0.223, T=2.343, p=0.021). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Romero, Robinson (2001) California	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 5-10 year olds, (Mean=9 [±0.37] years, 50% male, 49.9% Latino, 32.9% Asian, 8.1% Pacific Islander/Filipino, 5.5% European American, and 3.6% African American, 59% lower socioeconomic status (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to parks MULTI-COMPONENT: 1. Neighborhood perceptions of safety from crime 2. Neighborhood perceptions of traffic safety **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** OVERWEIGHT/OBESITY: 1. Higher BMI was associated with the perception of fewer neighborhood hazards for children of lower SES (r= -0.13, p<0.05); this correlation was significant but low. PHYSICAL ACTIVITY: 2. Contrary to the hypothesis, the perception of more neighborhood hazards was positively correlated with more reported physical activity (r=0.13, p<0.001) 3. For children of higher SES, the perception of more neighborhood hazards was associated with more reported physical activity (r=0.18, p<0.05). **Safety-Traffic** OVERWEIGHT/OBESITY: 1. Higher BMI was associated with the perception of fewer neighborhood hazards for children of lower SES (r= -0.13, p<0.05); this correlation was significant but low. PHYSICAL ACTIVITY: 2. Contrary to the hypothesis, the perception of more neighborhood hazards was positively correlated with more reported physical activity (r=0.13, p<0.001) 3. For children of higher SES, the perception of more neighborhood hazards was associated with more reported physical activity (r=0.18, p<0.05). (Note: Neighborhood hazard scales were a composite of accessibility and safety [traffic and crime] measures.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Suminski, Poston (2005) Midwestern USA	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, 89.7% White, 1.7% Hispanic, 1.5% African American, and 1.3% Asian American (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to neighborhood parks MULTI-COMPONENT: 1. Perceptions of neighborhood safety from crime 2. Access to shops and other neighborhood destinations within walking distance 3. Perceptions of neighborhood traffic safety 4. Neighborhood aesthetics and the integrity of streets and sidewalks **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** PHYSICAL ACTIVITY: 1. Women were 5.7 times more likely to walk for transportation if they indicated having an average number of available places in and around their neighborhood to which they could walk (95%CI=1.63-19.73; p<0.01). 2. Women with an average number of neighborhood destinations were more likely to walk for transportation in the neighborhood (OR=5.7, 95%CI=1.63-19.73) than women with a below average number of neighborhood destinations (p<0.01). **Safety-Interpersonal** PHYSICAL ACTIVITY: 1. Women were 4.5 times more likely to walk for exercise in their neighborhood if neighborhood safety was average compared to below average (95%CI=1.01-20.72; p<0.05). 2. Women were more likely (threefold) to walk their dog if neighborhood safety was average versus below average (95% CI=1.01-11.08; p<0.05). **Safety-Traffic** PHYSICAL ACTIVITY: 1. Women were 4.5 times more likely to walk for exercise in their neighborhood if neighborhood safety was average compared to below average (95%CI=1.01-20.72; p<0.05). 2. Women were more likely (threefold) to walk their dog if neighborhood safety was average versus below average (95% CI=1.01-11.08; p<0.05). **Street Design** PHYSICAL ACTIVITY: 1. Men were less likely to walk for transportation in the neighborhood if the functional (OR=0.22, 95%CI=0.06-0.89) or aesthetic (OR=0.17, 95%CI=0.03-0.89) features of the neighborhood were average versus below average (p<0.05). (Note: Neighborhood "safety" was a composite score using traffic volume and speed, lighting, and crime. The "functional" feature of the neighborhood was represented by three items relted to the construction/ integrity of neighborhood sidewalks and streets.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
International (Parks)						
Author Potwarka, Kaczynski (2008) Canada	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 2-17 year olds	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Proximity to parks and availability of park facilities in neighborhood MULTI-COMPONENT: 1. Access to parks and playgrounds **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** OVERWEIGHT/OBESITY: 1. Compared to at-risk or overweight children, none of the 3 park variables (distance to the closest park, number of parks within 1 km, or amount of park area within 1 km) was associated with significantly increased odds of being classified in the healthy weight category for either the entire sample or either of the 2 sub-age groups. 2. Of the 13 park facilities examined, only one variable was a significant predictor of a child's weight category. Children with a park playground within 1 km of their home were almost 5 times more likely to be classified as being of a healthy weight than those children without playgrounds in nearby parks (OR=4.92; 95% CI=1.36, 9.71; no p-value provided). (Note: No p-values provided. Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	Not Reported
Author Timperio, Giles-Corti (2008) Australia	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 5-18 year olds	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to and features associated with public open spaces near the home MULTI-COMPONENT: 1. Perceptions of safety from unguarded dogs 2. Neighborhood aesthetics **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Street Design** PHYSICAL ACTIVITY: 1. Adolescent girls had more moderate-to-vigorous physical activity after school if their closest public open space had trees that provided shade (B= 5.8 min/day, p<0.01) **Safety Interpersonal** PHYSICAL ACTIVITY: 1. Adolescent girls had more moderate-to-vigorous physical activity after school if their closest public open space had signage regarding dogs (B=6.8 min/day, p<0.05) compared with other girls. 2. Lighting along paths was inversely associated with weekend moderate-to-vigorous physical activity (B= -54.9 min/day, p<0.05).	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Witten, Hiscock (2008) New Zealand	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 15 years and older	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to public open spaces **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	Not Reported
Author Wendel-Vos, Schuit (2003) The Netherlands	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. General population 46% men, 54% women, 20-59 years old, mean age of 49 yrs (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Neighborhood availability of parks and recreational spaces MULTI-COMPONENT: 1. Access to green space and vegetation **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** PHYSICAL ACTIVITY: 1. There was an association between biking for commuting purposes and the square area of parks in neighborhoods within a 300-m radius (β=0.02, 95%CI= 0.01-0.04, $p<0.05$). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Kaczynski, Potwarka (2009) Canada	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults (18-88 years of age, mean age 45.8 ± 15.6 years) General Population, 62.8% Female (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Availability of parks, total size of parks, presence and absence of amenities MULTI-COMPONENT: 1. Proximity and density of local parks **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** PHYSICAL ACTIVITY: 1. Each additional hectare (i.e., 2.47 acres) of park area within 1 km increased the odds of participating in 150 or more minutes of total moderate-strenuous physical activity by 2% (OR=1.02, 95% CI= 1.01-1.03, p<0.05) and each additional park increased the odds of participating in 150 or more minutes of neighborhood-based moderate-strenuous physical activity by 17% (OR=1.17, 95% CI= 1.01-1.34, p < 0.05). 2. Both the number and total area of parks within one 1 km were significant predictors of "park-based moderate-to-strenuous physical activity," with each additional park within 1 km of participants' homes increasing the odds of engaging in some park-based physical activity by 15% (OR; 1.15, CI; 1.01-1.28, p<0.05). 3. Distance to the closest park did not play a significant role in predicting moderate-to-strenuous physical activity in any of the three contexts. 4. For neighborhood based activity, significant results were observed among females with each additional park and each additional hectare of park area within 1 km increasing their odds of engaging in 150 or minutes of moderate-to-strenuous physical activity by 19% and 2%, respectively (OR= 1.19, CI= 1.03-1.36 and OR= 1.02, CI= 1.01-1.03, respectively p<0.05 for both). 5. Among men, the odds of engaging in some amount of moderate-to-strenuous physical activity in parks increased 2% with each additional hectare of nearby parkland (OR= 1.02, CI= 1.01-1.03, p<0.05). 6. Both the number and total area of parks within 1 km of participants' homes increased the odds of engaging in some park-based moderate-to-strenuous physical activity among both the 18–34 year olds (number; OR= 1.19, CI= 1.03-1.33, and total; 1.03, CI= 1.01-1.04, n=107) and the 55 and older (number OR= 1.16, CI= 1.01-1.31, n=104 and total; OR= 1.04, CI= 1.03-1.05 age group (p<0.05 for all). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Hume, Salmon (2005) Australia	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 10.1 ± 0.4 years old (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Presence of parks and green spaces MULTI-COMPONENT: 1. Access to diverse locations in the neighborhood 2. Access to food stores and restaurants **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Neighborhood Availability of Food Stores and Restaurants** PHYSICAL ACTIVITY: 1. Food locations drawn within the neighborhood showed a significant positive association with moderate intensity activity [F (1, 48) =4.16, p=0.05, r2=0.08). **Community Design** PHYSICAL ACTIVITY: 1. Food locations drawn within the neighborhood showed a significant positive association with moderate intensity activity [F (1, 48) =4.16, p=0.05, r2=0.08). 2. There were no associations between perceived environmental variables and low or moderate intensity activity among boys. 3. Sedentary and vigorous intensity activity was not associated with any environmental variables among girls. (Note: The perceived environment is a composite of 11 items including, but not limited to opportunities for sedentary behavior, land use mix, access to food in the neighborhood, number of streets in neighborhood, opportunities for physical activity in neighborhood and home, opportunities for socializing in the neighborhood. Access to food in the neighborhood may overlap in designated strategy categories as it relates to both distance and availability.)	Not Reported
Author Giles-Corti, Broomhall (2005) Australia	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 18-59 years, 48.5% lower income	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to public open spaces (POS) and presence/ absence of features associated with public open spaces (play equipment) **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	1. Observational data indicated that high-scoring public open spaces were more likely to attract walkers, joggers, and those seeking passive pursuits.

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Kaczynski, Potwarka (2008) Canada	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, 18-88 years old with mean age of 45.8 years, 36.2% men (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to parks and park amenities (water fountain, toilet, trash can, bench, bike rack) MULTI-COMPONENT: 1. Distance to neighborhood parks **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** PHYSICAL ACTIVITY: 1. Of the 3 park variables (i.e., size, features, distance), only the number of features was a significant predictor of a park being used for some physical activity (OR=1.45, 95% CI= 1.09-1.82, p=0.03). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	Not Reported
Author Duncan, Mummery (2005) Australia	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. General population, Ages 18 and older	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access and distance to opportunities for physical activity MULTI-COMPONENT: 1. Neighborhood safety 2. Street connectivity and aesthetics 3. Distance to footpaths and parks COMPLEX: 1. Social support **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety Interpersonal** PHYSICAL ACTIVITY: 1. Environmental variables contributed the least to vigorous intensity activity (data not shown). **Street Design** PHYSICAL ACTIVITY: 1. Environmental variables contributed the least to vigorous intensity activity (data not shown). 2. Neighborhood aesthetics contributed more to walking (Nagelkerke R2=0.4%), and the barrier of family obligations contributed more to total and moderate-intensity activity. **Community Design** PHYSICAL ACTIVITY: 1. Environmental variables contributed the least to vigorous intensity activity (data not shown). 2. The proportion of unique variation (Nagelkerke R2) accounted for in walking, moderate-intensity, vigorous-intensity activity, and total physical activity by the environmental correlate group is 0.6, 1.1, 0.4, and 1.2, respectively. (Note: Footpaths are equivalent to trails. Registered dog owners were examined as a proxy for unattended dogs. Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories. Not all p-values were provided.)	1. People reporting high levels of self-efficacy were 93% more likely to attain sufficient activity than those people reporting low levels of self-efficacy (OR=1.93, CI=1.40-2.64). 2. People reporting high levels of social support for activity were 65% more likely to participate in recreational walking than those people who reported low levels of social support [OR=1.65, CI=(1.17-2.34)]. (No p-values provided)

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Carnegie, Bauman (2002) Australia	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data was provided. General population, Adults 40-60 years old, 57.4% Female (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data was provided. Access to open spaces (beaches and parks) MULTI-COMPONENT: 1. Perceptions of neighborhood traffic safety 2. Land-use mix 3. Neighborhood aesthetics 4. Perceptions of neighborhood safety (dogs barking) COMPLEX: 1. Friendliness of neighborhood **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** PHYSICAL ACTIVITY: 1. The "dogs barking" variable showed no relationship with walking activity nor did the "safety at night" question. 2. The "feel safe walking at night" question was much more of an issue for women than men (M=3.7 for women and 2.4 for men, p<0.001), showing that women felt much less safe than men walking at night. **Safety-Traffic** PHYSICAL ACTIVITY: 1. Those who walked more than 2 hours per week (M=2.96, SD=1.1) strongly agreed that they perceived traffic to be bothersome more than those who walked less than 20 minutes per week (M=3.15, SD=1.12; F(2, 1.168)=5.19; p=0.006). **Community Design** PHYSICAL ACTIVITY: 1. There was an independent association between the stage of change variable and the aesthetic environment (F (2, 1.168) = 5.67; p<0.01) and with the practical environment factor (F (2, 1.157) =12.05; p<0.001). 2. Those who walked for less than 20 minutes and those who walked for between 20 minutes and 2 hours both reported that shops, parks, and beaches were less near to their home than those who reported walking more than 2 hours per week (F (2, 1.168) = 11.24, p<0.001). **Street Design** PHYSICAL ACTIVITY: 1. There was an independent association between the stage of change variable and the aesthetic environment (F (2, 1.168) = 5.67; p<0.01) and with the practical environment factor (F (2, 1.157) =12.05; p<0.001). 2. Those who did little waking (20 min or less per week) reported more negative perceptions of their aesthetic environment than those who reported walking for between 20 min and 2 hr and those who reported walking for more than 2 hr (F (2, 1.163)= 5.19, p<0.01). (Note: The practical environment scale is a composite of items including access to shops, parks and beaches.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
United States (Playgrounds)						
Author Jago, Baranowski (2006); Jago, Baranowski (2005) Texas	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Male, 10-14 year olds (mean age=12.8), 69% Anglo-American, 3.3% African-American, 18.6% Hispanic, 9.1% Other ethnicity (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Proximity to playgrounds MULTI-COMPONENT: 1. Availability of sidewalks in good condition, street connectivity and intersection density 2. Perceptions of neighborhood safety from crime and unattended dogs **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Street Design** PHYSICAL ACTIVITY: 1. Only sidewalk characteristics were associated with physical activity, there was a positive association with light intensity physical activity (r=0.204, p=0.003) and a negative association with sedentary behavior (r= -0.199, p=0.004) was found. 2. In the spatial regression model, sidewalk characteristics were significantly negatively associated with minutes of sedentary activity (t= -2.70, p=0.008). 3. Sidewalk characteristics were positively (t= 2.85, p=0.005) associated with minutes of light-intensity physical activity. 4. Walking and cycling ease was negatively associated with street access and condition (r= -0.197, p=0.005). **Safety-Interpersonal** PHYSICAL ACTIVITY: 1. Walking and cycling ease was positively associated with tidiness (r=0.198, p=0.004) and negatively associated with crime (r= -0.325, p<0.001).	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Burdette, Whitaker (2004) Ohio	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 3-4 year-olds 100% lower-income 76% Black, 23% White (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Proximity to nearest playground MULTI-COMPONENT: 1. Perceptions of neighborhood safety 2. Distance to fast food restaurants 3. Distance to nearest playground from residence **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Neighborhood Availability of Restaurants** OVERWEIGHT/OBESITY: 1. There was no difference in mean distance to fast food restaurant when comparing children with a BMI ≥95th percentile to those with a BMI<95th percentile (fast food: t=0.70 and 0.69, respectively, p=0.91) and when comparing children with a BMI ≥ 85th % to those with a BMI < 85th % (fast food: t=0.69 and 0.70, respectively, p=0.43). 2. There was no significant correlation between children's BMI z scores and distance to the nearest fast food restaurant. 3. When comparing overweight and non-overweight children, there was no difference in the percentage living in neighborhoods without fast food restaurants (44.0% vs. 44.5%, p=0.84). **Safety-Interpersonal** OVERWEIGHT/OBESITY: 1. The prevalence of children with BMI ≥ 95th percentile and BMI ≥ 85th percentile did not differ statistically across the quintiles of neighborhood crime rate, but did differ significantly for 911 call rate. % BMI ≥95th percentile ranged from 10.7% in the lowest quintile to 9.4% in the highest quintile (p=0.04). %BMI ≥85th percentile ranged from 22.7% in the lowest quintile of call rate to 22.1% in the highest quintile (p=0.02). There was no clear trend suggesting that lower levels of neighborhood safety were associated with a higher prevalence of overweight. 2. After controlling for poverty ratio (as a measure of SES), child race, and child sex, the 3 environmental predictor variables (playground proximity, fast food restaurant proximity and neighborhood safety) were still not significantly associated with childhood overweight. **Community Design** OVERWEIGHT/OBESITY: 1. There was no difference in mean distance to the nearest playground when comparing children with a BMI ≥95th percentile to those with a BMI<95th percentile (playground: t=0.31 both, p=0.77) and when comparing children with a BMI ≥ 85th % to those with a BMI < 85th % (playground: t=0.31 both, p=0.32). 2. There was no significant correlation between children's BMI z scores and distance to the nearest playground. (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
United States (Trails)						
Author Brownson, Baker (2004); Wiggs, Brownson (2006) Missouri, Arkansas, and Tennessee	**Participation/ Potential Exposure** Participation = Low 16.9% of the total population used the trail Exposure = Not Reported **High-Risk Population** Low Adults, Lower-income (target population) 30.2% minority, 29.1% Black, 1.1% Other ethnic group (intervention), 33.8% Black, 1.9% Other ethnic group (control) [evaluation sample]	**Representative** Not Reported **Potential Population Reach** More Evidence Needed Participation = Low Representativeness = Not reported Exposure = Not reported **Potential High Risk Popluation Reach** More Evidence Needed High-risk population = Low Representativeness = Not reported	**Intervention Components** Complex Development of 6 walking trails, mostly located in residential parks within city limits and covered with asphalt (83%) or gravel (17%), and vary from 0.13 miles to 2.38 miles (mean=0.68 miles) in length COMPLEX: 1. Tailored newsletters, announcement for community events, and 2 messages tailored to each participant) 2. Free walking clubs for social support, providing participation incentives and organized around activities. **Feasibility** Intervention Feasibility = Low Policy Feasibility = High Intervention activities: Coalitions designed community events and programs to promote trail use. Key stakeholders were convened by coalition coordinators to identify what would be required to plan and implement the necessary actions to develop the trail. Land for trails was donated by churches, schools, and local governments. Trails were developed. Specialized expertise: Not reported Resources: Incentives (t-shits, etc), newsletters, land donated for trails, funding to develop trails, materials to develop trails, community coalition, walking clubs Costs: Not reported **Implementation Complexity** High Intervention components = Complex Feasibility = High	**Population Impact** More Evidence Needed Effectiveness = More evidence needed Potential population reach = More evidence needed Implementation complexity = High **High-risk Population Impact** More Evidence Needed Effectiveness for high-risk population = Not reported Potential high-risk population reach = More evidence needed Implementation complexity = High **Sustainability** Not Reported	Not Reported	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Evenson, Herring (2005) North Carolina	**Participation/ Potential Exposure** Participation = Not Reported Exposure = High 28,304 people lived in the project area, the trail was available to those living in the area. **High-Risk Population** High 41.2% Black, 47.3% white (intervention population) 58.5% non-Hispanic white, 34.2% non-Hispanic black (evaluation sample)	**Representative** Not Reported **Potential Population Reach** More Evidence Needed Exposure = High Participation = Not reported Representativeness = Not reported **Potential High Risk Popluation Reach** More Evidence Needed High-risk population = High Representativeness = Not reported	**Intervention Components** Simple Multi-use trail (rails-to-trails project) **Feasibility** Intervention Feasibility = Low Policy Components Feasibility = High Intervention activities: Construction of a trail Specialized expertise: Not reported Resources needed: Funds for resources to develop the trail (paved path, labor, tools for maintenance, etc) Costs: Not reported **Implementation Complexity** Low Intervention components = Simple Feasibility = High	**Population Impact** More Evidence Needed Effectiveness = Effective for physical activity in the study population Potential population reach = More evidence needed Implementation complexity = Low **High-risk Population Impact** More Evidence Needed Effectiveness for high-risk population = Not reported Potential high-risk population reach = More evidence needed Implementation complexity = Low **Sustainability** Not Reported	Not Reported	1. At follow-up 11.3% had not heard of the trail, and 23.9% of individuals had heard of the trail and used it at least once.

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Johnson, Smith (2006) Washington	**Participation/ Potential Exposure** Participation = Not Reported Exposure = High Residents living close to the trails and gardens were exposed to the intervention. **High-Risk Population** Low Moses Lake population (self-identified): 80% White, 26% Hispanic, 2% African American, 1% American Indian or Asian, 3% two or more races. In 2003, the unemployment rate was 9.6%. Of the estimated 7000 children enrolled in the school district, 54% of them were enrolled in the free and reduced price lunch program.	**Representative** Not Reported **Potential Population Reach** More Evidence Needed Exposure = High Participation = Not reported Representativeness = Not reported **Potential High Risk Popluation Reach** More Evidence Needed Potential high-risk population = Low Representativeness = Not reported	**Intervention Components** Multi-Component Enhancement of the network of linked walking/ biking trails as part of the broader Washington State Nutrition and Physical Activity Plan (Healthy Communities Moses Lake) MULTI-COMPONENT: 1. Established community gardens, provided classes and consultations. COMPLEX: 1. Improvements in signage, safety features and amenities; improvements in existing trails; donation of land by businesses; modifications in regulations to include trail development as part of construction projects. 2. Increased breastfeeding among women through promotion, education, training and access to supportive environments for breastfeeding. **Feasibility** Intervention Feasibility = Low Policy Feasibility = High Intervention activities: Charettes led by the National Park Service, master plan for integrated trail system, adoption of trail system, community gardens Specialized expertise: An advisory committee participated in the planning process. An ad hoc work group was formed to develop policies for Healthy Communities in Moses Lake, selecting 3 projects for the area, a timeline, and short and long-term goals. An action plan was written with technical assistance from NPS, UW and DOH staff. The Moses Lake Breastfeeding Coalition implemented the activities focused on breastfeeding. Resources needed: 1. Trail amenities (water facilities, bike racks, benches, restrooms, lighting, and trail maps) 2. Breastfeeding coalition activities (web site, training of licensed child care providers, luncheon for human resources staff, breastfeeding equipment, awards for employers, and nursing rooms) 3. Community garden resources (gardens, gardeners, volunteers, tool shed, soil, tools, and watering system) Costs: Not reported **Implementation Complexity** High Intervention components: Multi-component Feasibility: High	**Population Impact** More Evidence Needed Effectiveness = Not reported Potential population reach = Not reported Implementation complexity =High **High-risk Population Impact** More Evidence Needed Effectiveness for high risk population = Not reported Potential high-risk population reach = More evidence needed Implementation complexity = High **Sustainability** Yes A local leadership team has sustained the program (leaders from each of the projects, representatives from Moses Lake and the Grant County Public Health District and the Moses Lake Business Bureau). Local government plans and budgets for trails and community gardens have been established. Moses Lake received $340,000 from an outdoor recreation grant for the Heron trail project. There are now several projects in the design and funding stages that will result in 10 or more miles of new trails and connections between existing trails.	**Community Gardens** NUTRITION: 1. Out of 61 gardeners, 29 completed surveys. Of these 29, gardening plots were reserved by 21. More than half of the gardeners reported eating more fruits and vegetables while participating in the garden (data not shown).	1. 17 of the 21 participants who responded to a question about finances stated that they used the garden to stretch their food dollars. 2. The garden built a sense of community and provided access to garden space. 3. Job corps participants advocated for changes at the job corps campus (e.g., serving fresh fruits and vegetables in the dining room; healthy snacks in the vending machines).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Krizek, Johnson (2006) Minnesota	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, Urban, 48% Male, 36% < $50,000 annual household income (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to neighborhood facilities for physical activity including on-and-off-road bicycle paths MULTI-COMPONENT: 1. Access to neighborhood retail **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** PHYSICAL ACTIVITY: 1. Using a logistic regression model, for walking behavior found those living within 200 meters of retail establishments had statistically significantly increased odds of walking compared to those in the most distant category (OR=2.51, p<0.05). 2. The odds of bicycle use did not differ significantly by proximity to any bicycle facility suggesting proximity to these facilities generally has no effect on bicycle use. 3. Using a logistic regression model, subjects living closest to an on-street bicycle facility (less than 400 meters away) had statistically significantly increased odds of bicycle use compared with subjects living more than 1600 meters from an on-street facility (OR=2.23, p<0.05). 4. Proximity to off-street bicycle trails had no effect on bicycle use (p>0.05). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	Not Reported
Author Wang, Macera (2004) Nebraska	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. General Population (targeted population) 19-88 years old, 43 years old (mean age), 50% (questionnaire respondents)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Trail usage and cost-effectiveness for maintenance and construction of trail system **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	1. Of the 3,986 trail users, 2,950 individuals were more physically active since they began using the trails. Of these users 2,037 individuals were physically active for general health, and 327 individuals were physically active for weight loss. The corresponding cost-effectiveness ratios were US$98, US$142, and US$884.

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Troped, Saunders (2001) Massachusetts	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, 6% minority [evaluation sample]	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to a community rail-trail (Minuteman Bikeway) MULTI-COMPONENT: 1. Perceptions of traffic safety 2. Land use diversity **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Traffic** TRAIL USE: 1. Based on survey data, respondents who reported that they did not have to cross a busy street to access the Bikeway were about 2 times more likely to be Bikeway users than those who reported this barrier (OR=2.01, 95%CI=1.11-3.63). 2. Physical activity limitation and the busy street barrier, both of which showed a statistically significant association with Bikeway use in the model based on self-reported data only (and in unadjusted analyses), were not retained in the GIS predictive model. **Community Design** TRAIL USE: 1. Self-reported distance was inversely associated with use of the Bikeway. Survey participants were 0.65 times as likely to use the Minuteman Bikeway for every 0.25-mile increase in self-reported distance from the trail (95% CI=0.54-0.79). 2. Survey participants located further from the trail as measured by GIS road network distance in the GIS multivariate model were less likely to use the Bikeway (OR=0.58, 95%CI=0.45-0.73). (Note: P-values not reported in all cases. Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	1. In the GIS multivariate model, respondents who did not have to traverse a steep hill were almost twice as likely to be Bikeway users compared to those who had to cross a steep hill (OR=1.90, 95%CI=1.09-3.32).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Sharpe, Granner (2004) South Carolina	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, General population, 63.1% White, 36.9% African-American (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to places for physical activity MULTI-COMPONENT: 1. Access to sidewalks in good condition 2. Neighborhood perceptions of safety **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Street Design** PHYSICAL ACTIVITY: 1. Prior to adjustment, significant associations with physical activity included perceived condition of neighborhood sidewalks for walking or jogging (data not shown). After adjustment, odds ratios remained significant for perceived condition of neighborhood sidewalks for walking or jogging (OR=2.04, 95%CI=1.25-3.35, p<0.05). While the presence or absence of a sidewalk on at least one side of neighborhood streets was not significantly associated with greater odds of meeting the physical activity recommendation, the perception of well-maintained neighborhood sidewalks among the 27.6% of respondents who reported the presence of sidewalks in their neighborhoods was significantly associated with physical activity (adjusted OR=2.04, 95%CI=1.25-3.35). **Safety-Interpersonal** PHYSICAL ACTIVITY: 1. Prior to adjustment, significant associations with physical activity included perceived safety of areas in the county to walk, job, ride a bike, or do other physical activities (data not shown).	1. The odds ratios for gender, race, and across levels of age and income were significantly associated with decreased likelihood of meeting physical activity recommendations (data not shown). 2. Prior to adjustment, significant associations with physical activity included knowledge of mapped-out bicycling routes in the county; knowledge of mapped-out routes for walking or jogging on sidewalks or beside roadways in the county; and some worksite supports (data not shown). 3. After adjustment, odds ratios remained significant for worksite-provided sports teams (OR=1.30, 95%CI=1.02-1.64, p<0.05). 4. Prior to adjustment, significant associations with physical activity included knowledge of mapped-out bicycling routes in the county and knowledge of mapped-out routes for walking or jogging on sidewalks or beside roadways in the county (data not shown). After adjustment, odds ratios remained significant for knowledge of mapped-out bicycling routes in the county (OR=1.39, 95%CI=1.10-1.76, p<0.05) and knowledge of mapped-out walking or jogging routes in the county (OR=1.33, 95%CI=1.09-1.62, p<0.05).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Forsyth, Hearst (2008), Forsyth, Oakes (2007), Oakes, Forsyth (2007) Minnesota	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, 65% Female, 81% Caucasian (evaluation sample)	**Representative** Not Applicable Only cross-sectional data provided. Study participants appear relatively homogenous with respect to SES but heterogeneous with respect to density and street connectivity. The northern sector of the Minneapolis-St. Paul metropolitan area was chosen for its environmental diversity. **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to places for physical activity MULTI-COMPONENT: 1. Neighborhood land-use mix 2. Street connectivity and presence of sidewalks 3. Perceptions of safety from crime 4. Access to public transit COMPLEX: 1. Social environment **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** PHYSICAL ACTIVITY: 1. High density areas have twice the odds of increased travel walking as low density areas (OR=1.99; 95%CI=1.29, 3.06), but block size has no similar effect. For the negative binomial model, the odds ratio was 1.47 (p<0.10). 2. There are small positive correlations between mean and median accelerometer counts of total physical activity with straight-line and network distances to the nearest video store, hardware store, and pharmacy, although not to other destinations (results not shown). 3. Park distance was negatively correlated with accelerometer readings, however while the values were significant they were low (results not shown). 4. Using Spearman's correlations there was significant positive association with accelerometry physical activity and having places to go in walking distance from their home, hills, and nearness to book stores and participant's job (although significant, r values were low with the highest being r=0.13 for closeness to job or school) (results not shown). 5. Regression models reveal high density areas are marginally associated with an increase in total walking and, in some cases, total physical activity for racial minorities, those without college degrees, the less healthy, and the obese (results not shown). 6. There are very few correlations with the 3 measures of total physical activity and these are all negative correlations with measures of retail (accelerometer mean; CE; -0.3488) and commercial uses (accelerometer mean; CE: -0.3473) (p<0.05). 7. Notably absent were any positive correlations with mixed use-apart from a modest one with miscellaneous retail (CE: 0.3505, p<0.05). 8. Travel walking measured both by survey and diary was positively correlated with social land uses (IPAQ; CE: 0.4166; Diary; CE: 0.3379, p<0.05). 9. Leisure walking was negatively correlated with tax exempt land uses (IPAQ CE: -0.4214, p<0.05). **Street Design** PHYSICAL ACTIVITY: 1. Larger blocks seem to increase odds ratios for leisure walking by about 40% (OR=1.40; 95%CI=0.96, 2.05, p-value not reported). 2. Total walking in mean miles per day is positively correlated with sidewalks (length per unit area; CE: 0.4510; length divided by road length; CE: 0.3449), street lights (CE: 0.4874), traffic calming (CE: 0.3629), and several of our many measures of connected street patterns (signs vary) (p<0.05). 3. Travel walking measured both by survey and diary was positively correlated with sidewalks (length per unit (lpu)/IPAQ; CE: 0.4866; lpu Diary; CE: 0.6224; length/road(l/r) IPAQ; CE: 0.5282; l/r Diary; CE: 0.5945) and connected street patterns (# access pts./IPAQ; CE: 0.5176, # pts/Diary; CE: 0.5384; intersections IPAQ; CE: 0.4052, int. Diary; CE: 0.5279; 4-way IPAQ; CE: 0.4602; 4-way Diary; CE: 0.5782; nodes IPAQ; CE:; 0.4284, nodes Diary; CE: 0.4673; ratio 4-way IPAQ; CE: 0.4164, 4-way Diary; CE: 0.4698) (all p<0.05). 4. Leisure walking was negatively correlated with sidewalks (length/road IPAQ CE: -0.3318, p<0.05) and street lights and connected street patterns (IPAQ # access points CE: -0.3349; IPAQ connected nodes CE: -0.3643, p<0.05) *(continued next page)*.	1. Using Spearman's correlations there was significant positive association with accelerometry physical activity, hills, and whether people spoke to others in their neighborhood (data not shown). 2. Travel walking measured both by survey and diary was positively correlated with social land uses (IPAQ; CE: 0.4166; Diary; CE: 0.3379, p<0.05)

(Continued from previous study)						
					Transportation PHYSICAL ACTIVITY: 1. Travel walking measured both by survey and diary was positively correlated with transit (IPAQ; CE: 0.3716, Diary; CE: 0.4652, $p<0.05$). 2. Leisure walking was negatively correlated with transit stop density (IPAQ CE: -0.4882; Diary CE: -0.3360; $p<0.05$ for both). **Safety-Interpersonal** PHYSICAL ACTIVITY: 1. Using Spearman's correlations there was significant positive association with accelerometry physical activity perceptions of crime (data not shown). 2. Travel walking measured both by survey and diary was positively correlated with litter and graffiti (IPAQ; CE: 0.3325; Diary; CE: 0.5238, $p<0.05$). (Note: Social land uses came from parcel data and included daycare centres; medical clinics and offi ces; theatres; bowling alleys; lodge halls and amusement parks; sport/public assembly facility; (tax)exempt community recreational facilities; library; exempt property owned by board of education; exempt property owned by private schools; churches, etc. public worship.)	

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Moudon, Lee (2005) Washington	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided Adults, general population, urban (target population)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross sectional data provided Access to recreational amenities (bicycle lanes and trails) MULTI-COMPONENT: 1. Perceptions of distance and land-use mix **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** PHYSICAL ACTIVITY: 1. Summed area of convenience store parcels (Airline; OR= 0.822, Network; OR= 0.784, p<0.01), number of parcels within the closest NC10 [office, fast food, and hospital] (Airline; OR= 2.160, Network; OR= 1.238, p<0.01, p<0.05, respectively), and distance to the closest trail (Airline; OR= 0.801, Network; OR= 0.728, p<0.01) were significantly positively associated with the odds of cycling. 2. Most parcels in the closest NC10 (office+fast food+hospital) from home are moderately related to the increased odds of cycling (Airline OR= 1.160, p<0.1, Network OR= 1.238, p<0.05). 3. Variables that capture the perception of problems related to automobiles (such as traffic congestion) and the perceived presence of auto-oriented facilities (such as large parking lots in the neighborhood) show a curvilinear relationship with cycling for both Airline and Network models (p<0.10 and p<0.05, respectively). Those who responded neutrally to these factors had the highest likelihood of cycling, compared to those who disagreed or agreed. 4. Perceived presence of destinations (grocery stores and schools) is negatively associated with the odds of cycling (Airline OR=0.702; p<0.10 and Network OR=0.718; p<0.10).	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
International (Trails)						
Author Merom, Bauman (2003) Australia	**Participation/ Potential Exposure** Participation = Not reported Exposure = High 1. Over 17,000 brochures were distributed through local organizations, factories, high schools, and motor registries. 2. 15,000 brochures were distributed to commuters over 4 days at the launch event and on-site promotion at the rail stations. **High-Risk Population** Not Reported Adults, 18-55 years old Inner area residents (n=367); 57% Male, 52% aged 35-55 years, 34% non-English-speaking background Outer area residents had significantly more Males (64% vs. 53%, p=0.01), a higher percentage of cyclists, and a lower percentage of respondents from a non-English speaking background (17.2% vs. 43%, p=0.001). (evaluation sample)	**Representative** Not Reported **Potential Population Reach** More Evidence Needed Exposure = High Representativeness = Not reported Participation = Not reported **Potential High Risk Popluation Reach** More Evidence Needed High-risk population = More evidence needed Representativeness = Not reported	**Intervention Components** Complex Construction and impact of a Trail cycle-way and use. MULTI-COMPONENT: Not reported COMPLEX: 1. Map of the trail, Newspaper ads (6 community papers), Local radio ads 2. Full-color brochures were distributed to local organizations, high schools, and motor registries 3. Launch event 4. Promotional campaign launched to develop awareness of the facility and its location and encourage use. **Feasibility** Intervention Feasibility = Low Policy Feasibility = High Intervention activities: Construction of the Rail Trail , as part of a statewide "Bike Plan" to encourage alternative modes of transport. A local promotional campaign was undertaken in 4 local government areas. Localized activities to promote the Rail Trail included the launch event and on-site promotion at 9 City Rail stations. Specialized expertise: Not reported Resources: Funds to build the trail, land for the trails, funds for the media campaign, brochures, newspapers, maps, media advertisements (radio), supplies and funding for the Launch event Costs: Not reported **Implementation Complexity** High Intervention components = Complex Feasibility =High	**Population Impact** More Evidence Needed Effectiveness = More evidence needed Potential population reach = More evidence needed Implementation complexity = High **High-risk Population Impact** More Evidence Needed Effectiveness for high-risk population = Not reported Potential high-risk population reach = More evidence needed Implementation complexity = High **Sustainability** Not Reported	Not Reported	UNINTENDED CONSEQUENCES: 1. Qualitative analysis revealed that the main messages recalled in both surveys were related to other media campaigns (14.6% at baseline, 7.5% at post-survey) or the promotion of exercise equipment, local gym classes, and programs (11.8% at baseline, 10.4% at post-survey). AWARENESS: 2. 198 (44%) respondents at baseline could not recall any generic message promoting PA and/or bike riding compare to 153 (34%) at post campaign (excluding those who could not specify any message) ($p<0.001$, McNemar categorical test) 3. From pre- (1.8%) to post-test (4.7%), there was an increase of 2.9% in unprompted awareness of the trail ($p<0.01$, McNemar categorical test) 4. Inner cyclists were almost 3 times more likely to be aware of the trail (51%, AOR=2.75, 95%CI= 1.52-4.98) than inner pedestrians (30.1%, AOR=1.27, 95%CI= 0.74-2.18) and outer cyclists (29.3%, $p<0.001$). 5. Significant differences were observed among local government areas, with awareness highest in the most residential parts of the trail (Fairfield; 48%, Holroyd; 42%), and lower in the business districts (Liverpool; 32.7%, Parramatta; 16.4%, $p<0.001$). OTHER: 6. Two Poisson regression models, one for each suburb, were created to test the effect of the period on bike counts. Time period seemed to have significant effect in both suburbs; the effect was greater in Cabramatta (OR=1.36, p=0.0001) than in Guildford (OR=1.26, p=0.0004). Weekends were positively and significantly associated with daily counts in both suburbs (Cabramatta: OR=1.64, p=0.0001; Guildford: OR=1.35, p=0.0001), while the holiday period had no significant effect.

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Garrard, Rose (2008) Australia	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Cyclists, General population, 79.4% Male, 20.6%, Female (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to bicycle routes that provide separation from motor vehicle traffic and use of these routes **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	1. Female cyclists showed a preference for off-road paths over roads with no bicycle facilities (OR=1.43, 95% CI=1.12, 1.83; p=0.004). 2. Females preferred off-road paths over on-road lanes (OR=1.34, 95%CI=1.03, 1.75, p=0.023). 3. Males were observed cycling at a greater average distance [average km (Standard deviation)=3.91 (1.64) km] from the general post office than females [average km (Standard deviation)= 3.43 (1.50) km]; p<0.001. 4. The majority of cyclists (2869, 43.5%) were observed using on-road lanes. 5. The proportion of female cyclists that were observed cycling varied according to the type of bicycle facility (No bicycle facility =20.7% female, On-road lane= 24.1% female, Off-road lane= 16.4% female).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
United States (Recreation Centers)						
Author Zenk, Wilbur (2009) Illinois	**Participation/ Potential Exposure** Not Applicable On average, participants completed 38.1% of the prescribed walks, including an average of 44.5% and 28.8% of the prescribed walks for the enhanced intervention group and minimal intervention group, respectively (t=-3.487, p=0.001). **High-Risk Population** Not Applicable Only environmental data collected cross-sectional. 40-65 year olds, African-American, Females, Urban and Suburban; 100% Minority (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access and availability to places for leisure activity MULTI-COMPONENT: 1. Perceptions of neighborhood safety 2. Walkability to recreational facilities and open spaces and neighborhood aesthetics COMPLEX: 1. Tailored walking prescription (2 times per week for first 4 weeks, progress to 4 times per week for 20-30 min) 2. Motivational workshops (enhanced group). 3. Support telephone calls **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** PHYSICAL ACTIVITY: 1. Neighborhood walkability and safety were not statistically significantly associated with adherence to walking prescriptions. There was no evidence that the environment moderated the effect of intervention group on adherence (data not shown). **Street Design** PHYSICAL ACTIVITY: 1. Neighborhood walkability and aesthetics were not statistically significantly associated with adherence to walking prescriptions. There was no evidence that the environment moderated the effect of intervention group on adherence (results not shown). (Note: The measure representing walkability score was a composite for multiple strategies with variables related to access of facilities and open spaces, aesthetics, safety, and connectivity.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Dowda, Dishman (2009) South Carolina	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 17-18 year old Females, 55.1% Black (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Perceived access to physical activity facilities MULTI-COMPONENT: Not reported COMPLEX: 1. Perceived social support **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	1. There was a small, positive correlation (r=0.064) between vigorous physical activity and perceived access among girls having high self-efficacy and high social support (n=433) but a small inverse correlation (r=-0.11) among girls having high self-efficacy and low social support (n=198). When the structural equation modeling was tested separately in these two groups, the relation between multipurpose facilities and vigorous physical activity remained significant ($p<0.05$) in each group ($\beta=0.11$ to 0.16). 2. Pearson correlations from the 0.75-mile buffer indicated that the perceived equipment accessibility (coefficient=0.122, $p<0.001$), perceived social support (coefficient=0.383, $p<0.001$), and barriers to self-efficacy (coefficient=0.312, $p<0.001$) had significant positive associations with vigorous physical activity.

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Rutt, Coleman (2005) Texas	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Availability of physical activity facilities MULTI-COMPONENT: 1. Land-use mix, population density and neighborhood walking **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** PHYSICAL ACTIVITY: 1. For the entire sample, walking duration was related to living in a more residential area (β= -0.11, p=0.04) (R2=0.08). 2. Among the subsample of subjects who reported walking for exercise in the past month, walking frequency was related to older age, fewer physical activity facilities (β=-0.24, p=0.05), and living in a more commercial neighborhood (β=0.19 p=0.02) (R2=0.11). None of the variables were significantly related to walking duration (R2=0.09). 3. For all participants, no environmental variables were statistically significantly related to total time walking or walking frequency. (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	1. For the entire sample, total time spent walking for exercise was related to higher socio-economic status, walking frequency was related to fewer perceived barriers (β= -0.11, p=0.03, R2=0.07), and walking duration was related to higher socio-economic status, better overall health (β= -0.12, p=0.40), and fewer perceived barriers to physical activity (β= -0.11, p=0.02).
Author Powell, Chaloupka (2007) United States	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 14-18 year olds	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Availability of commercial physical activity-related facilities **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	Not Reported
Author Diez-Roux, Evenson (2007) Maryland, New York, North Carolina	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 45-84 year olds, 58% minority	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to recreational facilities **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	1. Density of recreational resources was positively correlated with population density, with the correlation increasing as the project area radius increased (Spearman correlation coefficients were 0.79, 0.82, 0.86, and 0.89 for the 0.5-, 1-. 2-, and 5-mi radius, respectively).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Reed, Phillips (2005) Not Reported	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to physical activity facilities MULTI-COMPONENT: 1. Distance from residence to physical activity facilities **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** PHYSICAL ACTIVITY: 1. There was a significant relationship between intensity of physical activity and proximity to facilities for all students ($r=0.106$; $p<0.05$). 2. The correlation between duration of physical activity and proximity to facilities was statistically significant ($r=0.119$, $p<0.05$). 3. Frequency of physical activity showed a significant negative correlation ($r=-0.195$; $p<0.05$) with proximity in male students (n=unknown). 4. It appears that as distance between place of residence and exercise facility increase, the duration and intensity of physical activity also increase. 5. Total physical activity scores and frequency of physical activity revealed no relation to the distance from their residence that participants initiated their leisure-time physical activity. (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Grow, Saelens (2008) Massachusetts, Ohio, California	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 11-18 year old adolescents Parents: 80.5% White, 9.2% Black, and 5.7% Other Adolescents: 75.0% White, 18.8% Black, 2.7% Asian/Pacific Islander, and 3.6% Other (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to recreational facilities MULTI-COMPONENT: 1. Neighborhood traffic safety 2. Neighborhood land-use mix 3. Street connectivity and pedestrian infrastructure 4. Perceptions of safety from crime **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Traffic** PHYSICAL ACTIVITY: 1. Adolescents who usually walked/biked to at least 5 sites (site median) had higher scores on perceived pedestrian infrastructure and on traffic safety both by parent report and self-report and had higher land use mix and street connectivity for adolescent report only (data not shown). 2. Parents and adolescents who usually walked/biked to at least 5 sites reported higher perceptions for pedestrian infrastructure and traffic safety. Only adolescents reported higher land-use mix and street connectivity (data not shown). 3. On the basis of adolescent and parent report multivariate regression models revealed that positive estimates were found for street connectivity, pedestrian infrastructure, and traffic safety and a negative estimate was found for crime threat in relation to the number of sites to which adolescents walked/biked. After adding proximity to the model, only traffic safety remained highly significantly associated with usual walking/biking to sites for both parent (β=0.55, p<0.01) and adolescent (β=0.3, p<0.01) reports. **Street Design** PHYSICAL ACTIVITY: 1. Adolescent and parent report multivariate regression models revealed that positive estimates were found for street connectivity and pedestrian infrastructure in relation to the number of sites to which adolescents walked/biked. **Safety Interpersonal** PHYSICAL ACTIVITY: 1. Adolescent and parent report multivariate regression models revealed a negative estimate was found for crime threat in relation to the number of sites to which adolescents walked/biked. **Community Design** PHYSICAL ACTIVITY: 1. Adolescents who usually walked/biked to at least 5 sites reported higher land-use mix (data not shown). 2. Living within a 10-min walk of large parks (Report for children; 69.2% active, p<0.05, Report for adolescents; 55.9% active, p<0.01, Adolescent report; 47.6% active; p<0.01) and public open spaces (Report for children; 59.5% active, p<0.01, Report for Adolescents; 30.4% active, p<0.05, Adolescent report; 36% adolescents active, p<0.01) were associated with increased likelihood of being active at those sites. 3. Multivariate analysis of parent report revealed that site proximity was only associated with adolescents' swimming pool use (RR=2.1, p<0.05). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	1. Parents reported that children walking/biking to the site was significantly associated with active use of most recreation sites: indoor recreation sites (72.7% active, p<0.05), basketball courts (45.5% active, p<0.01), walking/running tracks (68.8% active, p<0.01), school recreation site (70.8% active, p<0.01), small (73.7% active, p<0.01) and large public parks (68.8% active, p<0.05), public playgrounds (71.1% active, p<0.05), and open space (63% active, p<0.01). The same trend was found for parental report for adolescents (indoor recreation facilities: 54.5% active, p<0.05; basketball courts: 57.5% active, p<0.01; walking/running tracks: 62.5% active, p<0.01; school recreation site: 56.7% active, p<0.01; small parks: 52.4% active, p<0.01; large parks: 59% active, p<0.01; playgrounds: 43.1% active, p<0.01; open spaces: 45.5% active, p<0.01) and adolescent self-report (indoor recreation facilities: 53.8% active, p<0.05; basketball courts: 43.4% active, p<0.01; walking/running tracks: 56.8% active, p<0.01; school recreation sites: 44.4% active, p<0.01; small parks: 50% active, p<0.01; large parks: 48.1% active, p<0.01; playgrounds: 37.3% active, p<0.01; open spaces: 50% active, p<0.01). 2. Multivariate analysis of self-reported data revealed that walking/biking was the frequent transport for 9 of 12 sites (swimming pools: RR=1.9, p<0.05; basketball courts, RR=2.1, p<0.05; walking/running tracks: RR=3.3, p<0.01; school recreation sites: RR=2.3, p<0.05; small parks: RR=6.9, p<0.01; large parks: RR=2.9, p<0.05; playgrounds: RR=5.1, p<0.05; bike/hike/walk trails: RR=4.7, p<0.01; open spaces: RR=9.8, p<0.01) and also 8 of 12 by parent report (basketball courts: RR=4.5, p<0.01; walking/running tracks: RR=4.6, p<0.01; school recreation sites: RR=4.4, p<0.01; small parks: RR=6, p<0.01; large parks: RR=4.1, p<0.01; playgrounds: RR=5, p<0.01; bike/hike/walk trails: RR=3.7, p<0.01; open spaces: RR=7.3, p<0.01). *(continued next page)*.

(Continued from previous study)						
						3. Adolescents who usually walked/biked to at least 5 sites (site median) had higher scores on perceived pedestrian infrastructure and had higher street connectivity for adolescent report only (no statistics). 4. For adolescents, walking/biking to sites was associated with use of play fields and courts (parental report only: 54.5% active, $p<0.05$), swimming pools (self-report only: 58.5% active, $p<0.01$), beach/lack/river/creek (parent report: 42.9% active, $p<0.01$; self report: 48.5% active, $p<0.01$), and bike/hike/walk trail (parent report: 52% active, $p<0.01$; self-report: 49.1%, $p<0.01$).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Gordon-Larsen, McMurray (2000) United States	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 11-21 year olds, 50.8% Male, 49.2% Female, 66.7% non-Hispanic White, 16.7% non-Hispanic Black, 12.7% Hispanic, 4% Asian, 32.3% low family income (>$26,200), 37% middle family income ($26,200-50,000), 30.6% high family income (+$50,000) [evaluation sample]	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Use of community recreation centers MULTI-COMPONENT: 1. Perceptions of safety related to serious neighborhood crime 2. Access to physical education classes and overall time spent in participating in physical activity **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** PHYSICAL ACTIVITY: 1. Individuals residing in high crime levels were less likely to fall in the highest category of moderate-to-vigorous physical activity (adjusted odds ratio [AOR]: 0.77, 95%CI=0.66-0.91, p≤0.002). 2. Using a logistic regression revealed that females living in high crime areas were more likely to fall into the highest category of inactivity (AOR: 1.29, 95%CI=1.03-1.62, p≤0.027). **School Physical Activity and Environment Policies** PHYSICAL ACTIVITY: 1. Having physical education 1 to 4 times per week and 5 times per week was associated with a substantial increase in likelihood of falling in the highest category of moderate-to-vigorous physical activity (AOR: 1.44, 95% CI=1.09-1.92; p≤0.01 and AOR: 2.21; 95%CI=1.82-2.68; p≤0.00001, respectively). 2. Participation in physical education was not significantly associated with likelihood of engaging in high levels of inactivity.	Not Reported
Author Adkins, Sherwood (2004) Minnesota	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Female 8-10 year olds, average age: 8.8[±0.9], 100% identified themselves as African-American; Parent composition: African-American (83%), biracial (4%), and White (13%) (evaluation sample).	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional or descriptive data provided Access to facilities for physical activity MULTI-COMPONENT: 1. Perceptions of neighborhood safety COMPLEX: 1. Social factors (self-efficacy and family support) **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** PHYSICAL ACTIVITY: 1. Perceived neighborhood safety, as reported by the parent and daughter and the family environment reported by the parent, was not related to girl's activity level.	PHYSICAL ACTIVITY: 1. BMI was inversely correlated with moderate-to-vigorous physical activity (r= -0.35, p<0.01), whereas parent's self-efficacy for supporting daughter to be active was positively correlated with activity (r=0.45, p<0.001). 2. There was a trend for parent's reported support of daughter's activity level to be associated with activity (r= 0.26, p<0.06).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Boehmer, Lovegreen (2006) Arkansas, Missouri, Tennessee	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, 74.4% Female, 93.4% White, 36.8% income <$25,000, 59.1% income >$25,000; 27% obese; 31% overweight (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to recreational facilities MULTI-COMPONENT: 1. Land-use mix and destinations near residence 2. Aesthetically pleasing environment and access to sidewalks and shoulders on the street 3. Perceptions of neighborhood traffic safety 4. Perceptions of safety from crime 5. Neighborhood access to fruits and vegetables and distance to supermarkets **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** OVERWEIGHT/OBESITY: 1. Women had stronger associations between obesity and feeling slightly or not at all safe from crime (OR= 2.4; 95% CI= 1.6-3.5). 2. Feeling unsafe from crime (OR=2.91, 95%CI= 1.86-2.55, p<0.05) was more strongly associated with the odds of being obese/inactive. 3. Feeling unsafe from crime (OR=2.09, 95%CI= 1.5-2.92, p<0.05) and having an unmaintained community (OR=1.48, 95%CI=1.09-1.99) were more strongly associated with the odds of being obese. 4. Feeling unsafe from crime (OR=2.59, 95% CI= 1.56-4.28) was a neighborhood environmental perception associated with being obese and inactive vs normal and active. 5. Feeling unsafe from crime (OR=1.71, 95% CI= 1.19-2.46) was a neighborhood environmental perception associated with being obese vs. normal weight. 6. Having an unmaintained community (OR=1.48, 95%CI=1.09-1.99) was associated with being obese. **Safety-Traffic** OVERWEIGHT/OBESITY: 1. Feeling unsafe from traffic (OR=2.46, 95%CI= 1.63-3.71, p<0.05) was more strongly associated with the odds of being obese and inactive than normal and active. 2. Feeling unsafe from traffic (OR=1.65, 95%CI=1.2-2.27, p<0.05) was more strongly associated with the odds of being obese than normal weight. **Neighborhood Availability of Food Stores** OVERWEIGHT/OBESITY: 1. The availability and quality of fresh fruits and vegetables was not significantly associated with obesity. Further distance to the nearest supermarket was associated with increased odds of obesity (OR: 1.8, 95% CI= 1.3-2.4). **Street Design** OVERWEIGHT/OBESITY: 1. Having no sidewalks or shoulders on most streets was not significantly associated with obesity. 2. Finding the community somewhat pleasant (OR=1.44, 95%CI= 1.13-1.92) or not pleasant (OR=1.85; 95%CI=1.31-2.59, p<0.05) was associated with being obese. 3. Women had stronger associations between obesity and indicators of poor aesthetics (OR= 1.3, 95% CI= 1.0-1.7 for interesting things; OR= 1.7, 95% CI= 1.2-2.3 for well-maintained). 4. Finding the community somewhat pleasant (OR=1.73, 95%CI= 1.28-2.34) or not pleasant (OR=2.02, 95% CI= 1.29-3.15, p<0.05) was all associated with being obese/inactive. **Community Design** OVERWEIGHT/OBESITY: 1. In a stratified analysis neighborhood perceptions of having no or a few destinations within close proximity (3-6 destinations: OR=2.03, 95%CI= 1.33-3.09; 1-2 destinations: OR=1.72,95%CI= 1.13-2.62; none: OR=1.63, 95%CI= 1.07-2.5) was associated with being obese/inactive. 2. In a stratified analysis further distance to the nearest supermarket was associated with increased odds of obesity (OR: 1.8, 95% CI= 1.3-2.4). 3. In a stratified analysis few or moderate number of destinations within close proximity (3-6 destinations: OR=1.49, 95%CI= 1.08-2.06; 1-2 destinations: OR=1.42,95%CI= 1.03-1.97) was associated with being obese. 4. Using a multivariate analysis showed that furthest distance (>20 minutes) to the nearest recreational facility (OR=2.74, 95% CI= 1.68-4.48) and having 3-6 destination types near home (OR=1.76, 95%CI= 1.09-2.84) were neighborhood environmental perceptions associated with being obese. 5. Using a multivariate analysis showed that furthest distance (>20 minutes) to the nearest recreational facility (OR=1.53, 95% CI= 1.1-2.11) was a neighborhood environmental perception associated with being obese. (Note: Places to be active refers to recreational facilities. Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	1. Perceived lack of equipment for physical activity was associated with being obese (OR= 1.8, 95% CI= 1.3-2.4) and obese/ inactive (OR= 1.8, 95% CI= 1.2-2.7) among only women.

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Santana, Santos (2008) Portugal	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, General Population, 53.5% Female, 46.5% Male (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to gymnasiums and swimming pools MULTI-COMPONENT: 1. Neighborhood safety (property crime) **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** OVERWEIGHT/OBESITY: 1. BMI increased in association with crimes against property (OR=1.02, 95% CI= 1.01-1.03, p<.05) while the odds of being obese or overweight reduced when there were public health services available (OR= 0.84, 95% CI= 0.74-0.95, p<.05). PHYSICAL ACTIVITY: 2. There was a negative association between moderate physical activity and crimes against property (OR=0.98, 95% CI= 0.97-0.99, p<0.05). NUTRITION: 3. Fruit and vegetable intake was negatively associated with the number of crimes against property (OR= 0.98, 95% CI=0.98-0.99), p<0.05).	1. Strong positive associations were found between moderate physical activity and social cohesion (OR=1.28, 95%CI=1.09-1.52, p<0.05) and availability of public health services (OR=1.38, 95%CI=1.14-1.66, p<0.05). 2. Vigorous physical activity was negatively associated with weaker social cohesion (OR=1.24, 95%CI=1.01-1.52, p<0.05).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
International (Recreation Centers)						
Author Carver, Salmon (2005) Australia	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 12-13 year olds, mean age 13.0 ±0.2 (evaluation sample) General Population	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to sports facilities MULTI-COMPONENT: 1. Neighborhood perceptions of safety (unattended dogs) 2. Access to convenience stores 3. Neighborhood perceptions of traffic safety COMPLEX: 1. Social support **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Traffic** PHYSICAL ACTIVITY: 1. Girls' perception of road safety was positively associated with frequency (β=0.179, p<0.05) and duration (β=0.183, p<0.01) of walking for transport on weekdays, frequency of walking for exercise on weekdays (β=0.094, p<0.01), duration of walking for exercise on weekends (β=0.184, p<0.05), and frequency of walking the dog on weekends (β=0.128, p<0.05). 2. Parents' perception that there was so much traffic that it was difficult/unpleasant to go for a walk was negatively associated with girls' frequency (β=-0.164, p<0.01) and duration (β=-0.161, p<0.05) of cycling for recreation on weekends, girls' frequency (β=-0.190, p<0.01) and duration (β=-0.188, p<0.01) of walking for exercise on weekdays, girls' duration of cycling for recreation on weekdays (β=-0.109, 0.05), girls' duration of walking to school (β=-0.128, p<0.01), and boys' frequency of walking for transport on weekdays (β=-0.138,p<0.05). **Community Design** PHYSICAL ACTIVITY: 1. Girls' perception of convenience stores near home was negatively associated with frequency (β= -0.157, p<0.01) and duration (β= -0.15, p<0.01) of walking for transport on weekends. **Safety-Interpersonal** PHYSICAL ACTIVITY: 1. Boys' worry about roaming dogs was negatively associated with frequency (β= -0.213, p<0.05) and duration (β= -0.194, p<0.05) of walking for exercise on weekdays, duration of walking for exercise on weekends (β= -0.189, p<0.05), and duration of walking for transport on weekdays (β=-0.159, p<0.05). 2. Girls' worry about roaming dogs was negatively associated with frequency (β= -0.164, p<0.01) and duration (β= -0.153, p<0.05) of cycling for recreation on weekends, frequency (β= -0.219, p<0.01) and duration (β= -0.183, p<0.05) of cycling for recreation on weekdays, and frequency of walking the dog on weekends (β= -0.138, p<0.05).	1. Boys' perception of having lots of boys/girls the same age to hang out with was positively associated with duration (β=0.27, p<0.01) and frequency (β=0.242, p<0.01) of cycling for recreation on weekdays, frequency of cycling for transport on weekdays (β=0.141, p<0.05), and duration of walking for transport weekdays (β=0.129, p<0.05). 2. Boys' perception of waving/talking to neighbors most days was positively associated with duration (β=0.108, <0.05) and frequency (β=0.149, p<0.05) of walking for transport on weekdays. 3. Girls' reports of waving/talking to neighbors most days were positively associated with frequency (β=0.119, p<0.05) and duration (β=0.103, p<0.01) of walking for transport on weekdays and frequency (β=0.16, p<0.01) and duration (β=0.156, p<0.01) of walking for exercise on weekdays. 4. Girls' perception of having many friends in the neighborhood was positively associated with frequency (β=0.078, p<0.05) and duration of walking (β=0.119, p<0.01) for transport on weekdays, frequency (β=0.193, p<0.01) and duration (β=0.189, p<0.01) of walking for transport on weekends, and frequency (β=0.211, p<0.01) and duration (β=0.23, p<0.01) of walking to school. 5. Girls' perception of having lots of boys/girls the same age to hang out with was positively associated with frequency (β=0.118, p<0.01) and duration (β=0.1, p<0.01) of walking to school and frequency of cycling for recreation on weekends (β=0.164, p<0.01). 6. Girls' perception of having friends close to home was positively associated with frequency of walking for transport on weekdays (β=0.069, p<0.05).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Brodersen, Steptoe (2005) England	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 11.8 years of age (average), 35% total minority (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to places for physical activity **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	1. Boys and girls who reported poor self-rated health were less physically active (girls; β= -0.34, 95% CI= -0.45 to -0.22, p=0.001, boys; β=-0.39, 95% CI=-0.62 to -0.16, p=0.002) and more sedentary. In multivariate analysis, poor self-rated health remained associated with less physical activity for both genders (boys; β= -0.39, 95% CI= -0.57 to -0.22, p=0.001, girls; β=-0.31, 95% CI= -0.50 to -0.11, p=0.004). 2. There was a positive association between perceived stress and sedentary behavior in girls (β=0.13, 95% CI= 0.05 to 0.20, p=0.002). 3. Multivariate analysis showed that pro-social scores on the SDQ were positively related to physical activity in boys (β=0.14, 95% CI= 0.09 to 0.20, p=0.001) and girls (β=0.10, 95% CI=0.03 to 0.16, p=0.004), while conduct problems were positively associated with physical activity. 4. In multivariate analysis, older age and ethnic minority status were positively related to sedentary behavior in boys (age; β=1.75, 95% CI=0.51 to 2.98, p=0.006, ethnic; β=1.34, 95% CI=0.40 to 2.28, p=0.005) and girls (ethnic; β=2.55, 95% CI=0.84 to 4.26, p=0.005, no age statistic shown), while minority status was associated with less physical activity in girls (β= -0.20, 95% CI= -0.38 to -0.01, p<0.05). 5. Students from more affluent schools engaged in less sedentary behavior, and (for girls only) more physical activity (gender x school type interaction, p=0.01). Multivariate analysis showed that boys studying at less affluent schools and girls living in more deprived neighborhoods reported more hours of sedentary behavior. (more results in text associated with deprivation, age, weather, emotional stress, gender, and physical activity/sedentary behavior)

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Hume, Timperio (2009) and Timperio, Crawford (2004) Australia	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data was provided. 5-18 year olds; mean age=9.1±0.3 years (younger children), mean age= 14.5±0.6 years (adolescents), 47% Male (2004 evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data was provided. Access to sports facilities MULTI-COMPONENT: 1. Access to public transportation 2. Neighborhood perceptions of traffic safety **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Traffic** PHYSICAL ACTIVITY: *Baseline* 1. Five to six year old boys whose parents believed that there was heavy traffic in their area were 2.8 times more likely (95% CI=1.1, 6.8, p<0.05) to walk or cycle at least three times per week than other children. 2. Ten to twelve year old boys whose parents believed that there were no lights or crossings for their child to use were 60% less likely to walk or cycle (OR=0.4, 95% CI=0.2, 0.7, p<0.01). 3. A lower likelihood of walking or cycling among older girls was associated with parent's belief that their child needed to cross several roads to reach play areas (OR=0.4, 95% CI=0.2, 0.8, p<0.01). *Follow-up* 4. Adolescents whose parents reported that there were no traffic lights or crossings available were only half as likely (OR=0.4; CI=0.2, 0.8; p=0.01) to increase their active commuting, while those whose parents were satisfied with the number of pedestrian crossings in their neighborhood were twice as likely (OR=2.4; CI=1.1, 5.4; p=0.03) to increase their active commuting. **Transportation** PHYSICAL ACTIVITY: *Baseline* 1. Five to six year old girls whose parents owned more than one car and whose parents believed that public transport was limited in their area were 70% (95% CI=0.1, 0.8) and 60% less likely (95% CI=0.2, 0.9) than other children to walk or cycle at least three times per week (p<0.05 for both). 2. A lower likelihood of walking or cycling among older girls, was associated with parent's belief that there was limited public transport in the area (OR= 0.7, 95% CI=0.4, 0.97, p<0.05).	*Baseline* 1. Five to six year old girls whose parents owned more than one car and whose parents believed that public transport was limited in their area were 70% (95% CI=0.1, 0.8) and 60% less likely (95% CI=0.2, 0.9) than other children to walk or cycle at least three times per week (p<0.05 for both). *Follow-up* 2. Active commuting significantly increased between 2004 and 2006 among children (Mean increase=1.04 trips/ week, SD=3.15, p=0.0004) and adolescents (mean increase=0.65 trips/week, SD=3.66, p=0.02). 3. Children whose parents knew many people in their neighborhood were more likely to increase their active commuting (OR=2.6, CI=1.2, 5.9; p=0.02) compared with other children. *Follow-up* 3. Active commuting significantly increased between 2004 and 2006 among children (Mean increase=1.04 trips/ week, SD=3.15, p=0.0004) and adolescents (mean increase=0.65 trips/week, SD=3.66, p=0.02).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Kondo, Lee (2009) Japan	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data was provided. Adults, 30-69 years old (evaluation sample)General Population	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data was provided. Access to gymnasiums and fitness facilities MULTI-COMPONENT: 1. Residential density and land use mix-diversity 2. Perceptions of neighborhood traffic safety 3. Street connectivity and neighborhood aesthetics 4. Perceptions of neighborhood safety from crime **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Street Design** PHYSICAL ACTIVITY: 1. There were no significant differences in walking steps related to land use type, length of streets or sidewalks, number of intersections, and width of streets between the high and low scoring groups. There were no differences in walking time for leisure or transport associated with objective neighborhood measures between the high and low scoring groups. 2. For males, there were no differences in walking steps between the high scoring group and the low scoring group for residential density, land use mix-diversity, land use mix-access, street connectivity, and safety. 3. For females, mean total walking steps was significantly higher in the high scoring group than in the low scoring group for the walking places score (mean± standard error: 9488±511 vs. 7957 ± 538; p<0.05). 4. For males, mean walking time for leisure was significantly longer in the high scoring group than in the low scoring group for the aesthetics score (mean ± standard error: 20.6 ± 6.0 vs. 0.6 ± 6.7; p<0.05) and for individuals with parks in the area compared to those without (26.2 ± 6.4 vs. 2.7 ± 6.9; p<0.05). **Safety-Interpersonal** PHYSICAL ACTIVITY: 1. For males, there were no differences in walking steps between the high scoring group and the low scoring group for safety. **Community Design** PHYSICAL ACTIVITY: 1. There were no significant differences in walking steps related to land use type, length of streets or sidewalks, number of intersections, and width of streets between the high and low scoring groups. 2. Mean total walking steps was significantly higher for subjects with bookstores (10568 ± 898 vs. 6983 ± 881; p<0.01) or rental video stores (10336 ± 962 vs. 7422 ± 873; p<0.05) in the area (within 10-minute walk) than for subjects without these facilities. 3. For females, mean cycling time for transport was significantly longer in the high scoring group than in the low scoring group for the number of land use types (mean ± standard error: 11.9 ± 3.0 vs. 0.8 ± 4.4; p<0.05) including post offices (12.1 ± 3.1 vs. 1.5 ± 4.2; p<0.05), banks/credit unions (15.4 ± 3.8 vs. 3.1 ± 3.3; p<0.05), gymnasiums/fitness facilities (31.9 ± 7.8 vs. 5.8 ± 2.5; p<0.01), and/or amusement facilities (16.4 ± 4.6 vs. 4.8 ± 3.0; p<0.05) in the area when compared to subjects without these facilities. 4. For males, there were no differences in walking steps between the high scoring group and the low scoring group for residential density, land use mix-diversity, land use mix-access, street connectivity, and safety. 5. For females, mean total walking steps was significantly higher in the high scoring group than in the low scoring group for the walking places score (mean± standard error: 9488±511 vs. 7957 ± 538; p<0.05). **Safety Traffic** PHYSICAL ACTIVITY: 1. There were no differences in mean walking time for transport or cycling time for transport related to neighborhood environment perception scores between the high and low scoring groups. 2. For males, there were no differences in walking steps between the high scoring group and the low scoring group for residential density, land use mix-diversity, land use mix-access, street connectivity, and safety. 3. For females, mean total walking steps was significantly higher in the high scoring group than in the low scoring group for the walking places score (mean± standard error: 9488±511 vs. 7957 ± 538; p<0.05). (Note: Multiple GIS and perception measures were used to determine respondent's walkability score.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Mota, Gomes (2007) Portugal	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable General population, Urban, 11-18 year olds, average age: 14.7 (±1.6) years, (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to recreation facilities MULTI-COMPONENT: 1. Access to destinations 2. Perceptions of neighborhood safety COMPLEX: 1. Social environment **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** PHYSICAL ACTIVITY: 1. In girls, personal safety (crime rate) was significantly and negatively (Rho = -0.10, p≤0.02) associated with leisure time physical activity. 2. Logistic regression analysis (data not shown) showed that girls who agreed that "the crime rate in my neighborhood makes it unsafe or unpleasant to walk in my neighborhood" were more likely to be non-leisure time physically active (OR = 0.60, 95% CI = 0.39–0.91, p =0.02). **Street Design** PHYSICAL ACTIVITY: 1. In girls, access to aesthetics features (Rho= 0.12, p≤0.006) was positively associated with leisure time physical activity. 2. Logistic regression analysis showed that girls who agreed that "there are many interesting things to look at while walking in my neighborhood" were more likely to be leisure time physically active (OR = 1.59, 95% CI = 1.07–2.34, p ≤ 0.02).	1. In girls, screen time (TV watching: Rho = -0.09, p ≤0.05, p=0.007; computer use: Rho = -0.10, p ≤ 0.05, p=0.006) was negative and significantly associated with leisure time physical activity (LTPA). 2. Social environment for boys (Rho= 0.11, p≤0.05) and girls (Rho = 0.08, p≤0.02) showed to be significantly associated with LTPA.
Author Catlin, Simoes (2003) Missouri	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, 71% White, 27.3% Black, 1.8% other ethnicity, 35.2% overweight, 23.9% obese, 52% Female (sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to facilities for physical activity (indoor and outdoor, trails, parks) MULTI-COMPONENT: 1. Perceived criminal safety 2. Presence and absence of sidewalks and shoulders 3. Perceived traffic safety **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** OVERWEIGHT/OBESITY: 1. Individuals who perceived their neighborhood or community as having 1, 2, or 3 negative characteristics were 14% (95%CI= 0.93-1.4), 23% (95%CI=0.91-1.66), and 56% (95%CI=3.06-2.28) more likely to be overweight, respectively, than individuals who perceived their neighborhood to be safe and pleasant. **Safety-Traffic** OVERWEIGHT/OBESITY: 1. Individuals who perceived their neighborhood or community as having 1, 2, or 3 negative characteristics were 14% (95%CI= 0.93-1.4), 23% (95%CI= 0.91-1.66), and 56% (95%CI=3.06-2.28) more likely to be overweight, respectively, than individuals who perceived their neighborhood to be safe and pleasant. 2. Employed persons with 1 or 2 negative community perceptions were 1.45 times more likely to be overweight (95%CI= 1.07-1.96 and 95%CI= 0.92-2.26, respectively). Those with 3 negative perceptions were 2.83 times more likely to be overweight (95%CI=1.53-5.24). **Street Design** OVERWEIGHT/OBESITY: 1. Employed persons reporting the absence of sidewalks and shoulders were 1.74 times more likely to be overweight (95% CI=1.26-2.40). (Note: A four level composite variable was computed for perceived community factors, with zero representing an environment that is crime safe, traffic safe, and pleasant.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Brownson, Housemann (2000) Missouri	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data was provided. Adults	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data was provided. Availability of places to walk and be physically active, and barriers and enablers for trails and use of trails MULTI-COMPONENT: 1. Perceptions of safety from crimewhile using the trails 2. Distance from residence to trails **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** PHYSICAL ACTIVITY 1. Concerns about safety did not appear to be a barrier to use, as 86.9% of trail users felt very safe when using trails. **Community Design** PHYSICAL ACTIVITY: 1. Travel distance to walking trails appeared to have a slight perceived effect on walking. Those travelling 5-10 miles (prevalence odds ratio= 0.8, 95%CI= 0.4-1.9), 11-29 miles (prevalence odds ratio=0.8, 95%CI=0.3-2.1), or >30 miles to a trail (prevalence odds ratio=0.7, 95%CI=0.3-1.8) had a reduced likelihood of increasing their walking. (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	1. Persons using longer trails (>0.25 miles) were more likely to report an increase in physical activity (0.25 to 0.50 miles in length: prevalence odds ratio= 2.8, 95%CI=1.1-7.2; >0.50 miles in length: prevalence odds ratio= 13.2, 95%CI= 1.4-124.6). 2. Among persons who had used the trails, 55.2% reported that they had increased their amount of walking since they began using the trail. 3. Women were more than twice as likely (prevalence odds ratio= 2.1, 95%CI=1-4.4) as men to report that they had increased the amount of walking since they began using the trails. 4. Lower-income groups were more likely to have increased walking due to trail use than were higher income persons ($15-35K: prevalence odds ratio= 0.9, 95%CI=0.4-2; ≥ $35K: prevalence odds ratio= 0.4, 95%CI= 0.2-1) 5. African Americans were more likely to have increased walking due to trail use (prevalence odds ratio= 1.9, 95%CI= 0.5-7.7) than were Caucasians.

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
United States (Joint Use)						
Author Farley, Meriwether (2007), Farley, Meriwether (2008) Louisiana	**Participation/ Potential Exposure** Participation = Not Reported Children's attendance after school was measured but not reported. Exposure = High The entire intervention school was exposed to the intervention (enrollment between 366 and 381 each school year). The school yard was open to neighborhood children after school and on the weekends. **High-Risk Population** High 6-14 year olds, Lower income, 99% African-American, Urban, 37% house-holds headed by women (intervention population)	**Representative** Not reported Children in the community not enrolled in the school may have been exposed. **Potential Population Reach** More Evidence Needed Exposure = High Representativeness = Not reported Participation = Not reported **Potential High Risk Popluation Reach** More Evidence Needed High-risk population = High Representativeness = Not reported	**Intervention Components** Complex After school and weekend access to safe, supervised schoolyards COMPLEX: 1. Playground supplied with footballs, basketballs, jump ropes, Frisbees, balls, hoops, parachutes, a music player, and sprinkler 2. Attendants supervised playgrounds when open 3. Publicized availability of the schoolyard for free play **Feasibility** Intervention Feasibility = High Policy Feasibility = High Intervention activities: The intervention schoolyard was open and supervised during non-school hours after school (3:00PM to 5:30 PM/dark) on weekdays and on weekends (Saturday: 10:00 AM-3:00PM, Sunday: 12:00-3:00 PM). Attendants (3-4), almost all of whom were teachers, were paid to provide supervision and verify consent and age. Attendants did not organize, require, or suggest specific activities to children. Specialized expertise: Not reported Resources needed: Personnel to supervise, equipment, funding for personnel Costs: Not reported **Implementation Complexity** High Intervention components = Complex Feasibility = High	**Population Impact** More Evidence Needed Effectiveness (general population) = More Evidence Needed Potential population reach = More evidence needed Implementation complexity = High **High-risk Population Impact** More Evidence Needed Effectiveness for high-risk population = Not effective for overweight/ obesity in lower-income, African-American students and effective for physical activity and sedentary behavior in lower-income, African-American students Potential high-risk population reach = More evidence needed Implementation complexity = High **Sustainability** Not Reported	Not Reported	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
United States (Multiple Strategies)						
Author Cohen, Sehgal (2009) California	**Participation/ Potential Exposure** Participation = Not Reported Exposure = High An estimated 165,394 people reside in neighborhoods within a 1 mile radius of all 4 parks evaluated. **High-Risk Population** Low 14-18 year olds and the Elderly (target sample) 11.6 % poverty, 32% Hispanic, 53.1% non-Hispanic White, 2.3% African-American (intervention skate park neighborhood) 8.4% poverty, 21.4% Hispanic, 61.9% non-Hispanic White, 5.3% African American (comparison skate park neighborhood)	**Representative** Not Reported **Potential Population Reach** More Evidence Needed Exposure = High Representativeness = Not reported Participation = Not reported **Potential High Risk Popluation Reach** More Evidence Needed High-risk population = Low Representativeness = Not reported	**Intervention Components** Complex (2 different interventions) Use of a skate park and senior center before and after renovations and predictive factors, like safety, for use <u>COMPLEX:</u> 1. Skate park: improvements limited to the skate surfaces. No improvements were made to parking, lighting, or the office facility. 2. Senior center: improvements made to the entrance, courtyard areas, and gymnasium to make it one suited for physical activity with exercise equipment. **Feasibility** Intervention Feasibility = Low Policy Components Feasibility = Low Intervention activities: $3.5 million was spent to expand a skate park and $3.3 million was invested to renovate a senior center in Los Angeles. Both facilities were closed for 2 years during renovation. Specialized expertise: Not reported Resources: Labor and materials for renovations of skate surfaces, senior courtyards, entrances, walking paths, and gymnasiums, exercise equipment and weights, personnel labor costs for extended hours at the senior center Costs: Not reported - some costs are reported above **Implementation Complexity** High Intervention components = Complex Feasibility = Low	**Population Impact** More Evidence Needed Effectiveness = Effective for physical activity in children aged 14-18 and not effective for physical activity in the elderly Potential population reach = More evidence needed Implementation complexity = High **High-risk Population Impact** More Evidence Needed Effectiveness for high-risk population = Not reported Potential high-risk population reach = More evidence needed Implementation complexity = High **Sustainability** Not Applicable	Not Reported	1. At the renovated skate park, hours of operation increased and one more class was added to the weekend schedule. Staff members were added which provided 3 per shift and increased the staff to child ratio during the camp offered in the summer to 1:7. 2. The renovated senior center had a new director. Hours of operation increased slightly from baseline but the amount of time scheduled for senior programming decreased from 30.8 to 16.5 hours. A monthly fee was also added ($10 for the machines, $15 for using both the machines and weights). 3. At baseline, most respondents reported the park areas were safe or very safe. At follow-up the percentage of people who thought the park areas were very safe (as opposed to safe) nearly doubled for the parks with senior centers, increased by 72% for the renovated skate park, and increased four-fold for the comparison skate park ($p<0.0001$).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Scott, Evenson (2007) Arizona, Maryland, Minnesota, South Carolina, California, Louisiana, North Carolina	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data was provided. 11-13 year old Females	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data was provided. Availability and access to places to be physically active **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	1. The frequency with which family members provided transportation to sites for recreation (range of odds ratios; from OR=1.11 for martial arts studio to OR= 1.37 for playing field, p<0.01 for all but martial arts studio; p<0.10) strongly predicted the perception of each facility as accessible. 2. The number of facilities within the first half mile of a participant's home strongly predicted girls' perceptions of accessibility (basketball court: OR=1.30, 95% CI=1.01-1.68, p<0.05, golf course: OR=1.95, 95%CI= 1.25-3.05, p<0.01, playing field: OR=1.46, 95% CI=1.11-1.92, p=0.01; running track: OR=2.10, 95%CI=1.37-3.21, p=0.01; skating rink: OR=1.87, 95% CI=1.09-4.20, p<0.05, swimming pool: OR=2.05, 95%CI=1.33-3.15, p<0.01; tennis court: OR=2.07, 95%CI=1.60-2.69, p<0.01). 3. Facilities located within the second half mile of a participant's home predicted whether girls' had perceptions of easy access (golf course: OR=1.62, 95% CI= 1.15-2.28, p<0.01; playing field: OR=1.44, 95%CI= 1.05-1.98, p<0.05; running track: OR=1.43, 95%CI= 1.04-1.95, p<0.05; swimming pool: OR=1.48, 95%CI=1.04-2.11, p<0.05). 4. Participation in facility-specific community classes or teams (range of odds ratios; from OR=1.59 for playing field to OR=3.71 for martial arts studio, all p<0.01) predicted perception of each facility as accessible.

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Addy, Wilson (2004); Wilson, Ainsworth (2007) South Carolina	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, 18-75 years old	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to recreational facilities MULTI-COMPONENT: 1. Presence or absence of built environment features (e.g., sidewalks), aesthetically pleasing environment COMPLEX: 1. Perceptions of social support **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Street Design** PHYSICAL ACTIVITY: 1. Participants reporting the presence of neighborhood sidewalks were 1.9 times more likely to report engaging in irregular walking versus no walking (95% CI=1.11-3.11, p<0.05).	1. Participants reporting trust in their neighbors were found to be 2.8 times more likely to be regularly active versus inactive (95% CI: 1.48-5.44, p<0.05) and were 4.4 times more likely to be irregularly active versus inactive (95% CI: 2.32-8.29, p<0.05). 2. Participants who reported living in a pleasant neighborhood were 1.9 times more likely to be regularly active versus inactive (95% CI: 1.08-3.52, p<0.05) and were 2.1 times more likely to be irregularly active versus inactive (95% CI: 1.22-3.72, p<0.05). 3. Among participants not meeting recommendations for regular moderate or vigorous physical activity (n=723), trusting neighbors (OR=2.19, 95%CI: 1.01-4.74, p<0.05), was associated with approximately twice the odds of being overweight as opposed to obese.

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Kerr, Frank (2007) Georgia	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 5-18 year olds, ~33% non-White, 50% Male, 50% with annual household income >$60,000	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to recreation spaces in the neighborhood MULTI-COMPONENT: 1. Residential density and land-use mix in the neighborhood 2. Intersection density in the neighborhood **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Street Design** PHYSICAL ACTIVITY: 1. Intersection density was significantly related to walking in both males and females. The relationship between urban form and walking appeared to be stronger in females for intersection density (OR=1.8, 95%CI= 1.2-2.7, p<0.01) than males (intersection density: OR=1.5, 95%CI= 1.1, p<0.05) 2. Intersection density was strongly and significantly related to walking in white participants in the expected direction at the p<0.001 level (OR=1.9, 95% CI= 1.4-2.8). **Community Design** PHYSICAL ACTIVITY: 1. Residential density and mixed land use were significantly related to walking in both males and females. The relationship between urban form and walking appeared to be stronger in females for the variables land use mix (OR=2.2, 95%CI= 1.5-3.1, p<0.001), and commercial land use (or=2.1, 95%CI= 1.5-3.1, p<0.001) than males (land use mix: OR=1.5, 95%CI= 1.1-2.1, p<0.01; commercial land use: OR=1.6, 95%CI= 1.1-2.2, p<0.01). 2. High residential density (OR=2.5, 95%CI= 1.6-3.8, p<0.001) appeared to have a stronger association among males with than females (OR=2.3, 95%CI= 1.5-3.5, p<0.001). 3. The following urban form variables were strongly and significantly related to walking in white participants in the expected direction at the p<0.001 level :residential land use (OR=3.2, 95% CI= 2.2-4.5); mixed land use (OR=1.8, 95% CI= 1.4-2.5); at least 1 commercial land use (OR=2.0, 95% CI= 1.5-2.7); at least 1 recreation/open space land use (OR=2.7, 95% CI= 2.0-3.6), all p<0.001. 4. Land use mix (OR=1.7; 95% CI= 1.1-2.7; p<0.05) was significantly related to walking in non-whites 5. In households with 1 car, only land use mix (OR=2, 95%CI= 1.1-3.5, p<0.05) and commercial land use (OR=2, 95%CI= 1.2-3.6, p<0.05) were significantly related to walking. (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	1. Participants were significantly more likely to walk if they had fewer than 3 cars; 25% as opposed to 8.9% walked at least once over the 2 days. 2. Access to recreation space (OR=2.3, 95%CI= 1.7-3.2, p<0.001) appeared to have a stronger association among males than with females (access to recreation: OR=1.7, 95%CI= 1.2-2.4, p<0.001). 3. Access to recreation spaces (OR=1.4; 95% CI= 1.0-2.0, p<0.05) was significantly related to walking in non-whites.

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Heinrich, Lee (2008); Heinrich, Lee (2007) Midwest United States	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, 18-93 years old, 100% Lower income	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to neighborhood places to be physically active MULTI-COMPONENT: 1. Neighborhood access and street connectivity 2. Perceptions of neighborhood incivilities and affects on neighborhood safety **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** OVERWEIGHT/OBESITY: 1. At the aggregated neighborhood level (n=12), 71% of the variance in obesity prevalence was accounted for by accessibility (β=-1.02, p=0.05), average feature quality (β=1.05, p=0.09), average number of amenities per resource (β=-1.19, p=0.03), and average incivilities per resource (β=0.70, p=0.04), (F(4,11) 4.32, p<0.05). 2. Male gender and increased quality of features (F(11,407)37.19 and 12.66, p<0.001) predicted lower BMI among residents. PHYSICAL ACTIVITY: 3. Greater neighborhood street connectivity (β=0.672, p=0.001) and fewer average incivilities per neighborhood (β=-0.54, p=0.005) were associated with more days walked per week [F=21.8 (2,11); p<0.001; R2=0.83]. **Street Design** OVERWEIGHT/OBESITY: 1. Neighborhoods with greater connectivity had residents with lower average BMI (r=-0.58, p=0.05). PHYSICAL ACTIVITY: 2. Greater neighborhood street connectivity (β=0.672, p=0.001) and fewer average incivilities per neighborhood (β=-0.54, p=0.005) were associated with more days walked per week [F=21.8 (2,11); p<0.001; R2=0.83]. 3. Higher street connectivity (β=0.902, p=0.001) and fewer physical resources were correlated with meeting moderate physical activity guidelines [F=39.18 (2,11); p<0.001; R2=0.90). 4. Having greater street connectivity was linked to a 1.2 to 3.3 greater chance of meeting moderate physical activity guidelines (OR=1.987, 95%CI= 1.21-3.263, p=0.007). 5. Greater street connectivity resulted in 1-2 more days walked per week (OR=1.553, 95%CI= 1.105-2.183, p-0.011).	Not Reported
Author Erwin, Woods (2007) Midwestern County	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 6-13 year olds, 70% Male, 64% Caucasian, 36% Minority: 13% Asian, 13% African-American, 4% Hispanic, and 6% Other (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to physical activity opportunities in the neighborhood and school **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Kligerman, Sallis (2007) California	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 14-18 year olds (mean age 16.2 years), 61.2% Mexican- American (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to parks and recreational facilities MULTI-COMPONENT: 1. Land-use mix, residential density, retail floor area ratio, and number of schools 2. Intersection density **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Street Design** PHYSICAL ACTIVITY: 1. Land-use mix (r=0.285, p<0.004) and the walkability index (r=0.168, p<0.098) for the 0.5-mile buffer were the only measures to yield significant or marginal bivariate correlations with moderate-to-vigorous physical activity. 2. In a linear regression, the walkability index was related to minutes of moderate to vigorous physical activity within 0.5 mile of homes, explaining approximately 4% of variance. **Community Design** OVERWEIGHT/OBESITY: 1. All correlations between environmental variables and BMI were low and non-significant (no statistics). PHYSICAL ACTIVITY: 2. Land-use mix (r=0.285, p<0.004) and the walkability index (r=0.168, p<0.098) for the 0.5-mile buffer were the only measures to yield significant or marginal bivariate correlations with moderate-to-vigorous physical activity. 3. In a linear regression, the walkability index was related to minutes of moderate to vigorous physical activity within 0.5 mile of homes, explaining approximately 4% of variance. (Note: The walkability index contains multiple factors that may overlap in categories)	Not Reported
Author Dunton, Jamner (2003) Location Not Reported	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Female, 14-17 years (mean=15.02 ± 0.72 years), 48% Caucasian, 27% Hispanic/Latino, 14% Asian, 1% African-American, 10% Other/mixed ethnicity (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Perceptions of community access to exercise facilities **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Pate, Colabianchi (2008) South Carolina	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 17.7 ± 0.6 years of age, 56% African American, Median household income $40,531 ± 15,175 (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Availability of neighborhood physical activity resources including colleges and universities, schools, churches, parks, and commercial facilities **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	Not Reported
Author Jilcott, Evenson (2007) North Carolina	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, Females	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Proximity to physical activity resources use (e.g., cost and safety) and locations including public parks, gyms and recreation centers, and public schools MULTI-COMPONENT: 1. School siting and distance to parks **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** PHYSICAL ACTIVITY: 1. No statistically significant relationships were found between activity and perceived or objectively measured proximity to parks. 2. There was a statistically significant association between the number of schools within the 1-mile buffer and minutes of MVPA (objective model: n=155, adjusted standardized parameter estimate= -0.16, p=0.04, adjusted R^2=0.11; objective and perceived model: n=155, adjusted standardized parameter estimate = -0.17, p=0.03, adjusted R^2=0.10). For example, if examining two women with the same age (53 years) and BMI (31 kg/m2), the woman with no school within her 1-mile buffer averaged 105.3 minutes of MVPA per day while the other woman with two schools within her 1-mile buffer averaged 83.2 minutes of MVPA per day (p=0.04). 3. There was no association between distance to PA resources identified through qualitative interviews and MVPA minutes, adjusting for age and BMI (standardized parameter estimate for GIS network distance = 0.06, p= 0.45). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	1. Women who wore the accelerometer all 7 days had a lower average BMI than women who wore it 4 to 6 days (p = 0.006, data not shown). 2. The association between number of schools within the 1-mile buffer and MVPA minutes was stronger and statistically significant for women who wore the accelerometer for 7 days (adjusted standardized parameter estimate = −0.38, p≤ 0.01, n = 44) compared with women who wore it 4 to 6 days (standardized parameter estimate = −0.08, p = 0.36, n = 111).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Huston, Evenson (2003) North Carolina	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults age 18 years and older (sample) Median age=30.4–42.7 years; Median annual family income=$36,900–$71,300); Population density=134.2–809.7 persons per square mile (County Range) White=32.8%–92.5%, Black=3.1%–33.6%; population of one county is 38% American Indian (County Range)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to places to be physical active (indoor and outdoor) MULTI-COMPONENT: 1. Presence of streetlights **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Street Design** PHYSICAL ACTIVITY: 1. Trails and streetlights were positively associated with acquiring recommended amounts of leisure activity before adjusting but became insignificant after controlling for all confounding variables.	Not Reported
Author McNeill, Wyrwich (2006) Missouri	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, mean age 33 ± 13.1 years old, 43.2% African American, lower and middle-income, 67% Female (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to places to be physically active MULTI-COMPONENT: 1. Availability of physical activity facilities COMPLEX: 1. Social support **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** PHYSICAL ACTIVITY: 1. When assessing the direct relationship between the physical environment and walking behaviors, availability of physical activity facilities was associated with more walking (β = 0.269, t = 6.74, p<0.05), but neighborhood quality was not. 2. Both neighborhood quality and availability were directly associated with moderate-intensity physical activity (neighborhood quality, β = 0.135, t = 2.57; availability, β= 0.137, t =3.42), though this effect is marginal (p<0.05). 3. Neighborhood quality was the only physical environmental correlate associated with vigorous-intensity activity (β = 0.104, t = 2.52, p<0.05). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	1. All paths between emotional support and social pressure (β=0.382, t=6.52), peer acceptance (β=0.350, t=6.32), and intrinsic motivation (β=0.492, t=10.71) were positive and statistically significant. 2. The association between social support and self-efficacy was not statistically significant.

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Powell, Martin (2003) Georgia	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Proximity to convenient places for walking and physical activity **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	1. An estimated 91.8% (95%CI=90.8%, 92.8%) of Georgians had a place where they would feel safe walking for exercise or recreation. 2. The most commonly reported places for walking were neighborhood streets or sidewalks (32%; 95%CI=30.2%, 33.8%), followed by public parks (26.8%; 95%CI=25%, 28.6%), school tracks (10.2%; 95%CI=9.1%, 11.4%), gyms or fitness centers (7.8%; 95%CI=6.6%, 9%), walking or jogging trails (6.6%; 95%CI=5/7%, 7.6%), treadmills at home (4.1%; 95%CI=3.3%, 4.9), or shopping malls (2.9%; 95%CI=2.2%, 3.5%). 3. If individuals whose place to walk was their neighborhood or treadmill at home were omitted, then 49.7% (95%CI=47.2%, 52.3%) reported that they could reach their walking place in less than 10 minutes, while 75.9% (95%CI=73.6%, 78.1%) reported that they would drive there, and 22.4% (95%CI=20.2%, 24.6%) reported that they would walk. 4. Including persons whose place to walk was their neighborhood or home treadmill, 47.1% (95%CI=45.1%, 49.1%) of persons could walk to their place in less than 10 minutes. Fewer than 15% of the persons whose place was a public park, school track, gym or fitness center, or shopping mall could walk to their place in less than 10 minutes.

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Hoehner, Brennan (2005) Missouri and Georgia	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, 18 to 96 years old, 63.6% White, 32.6% Black, 3.8% other minority (sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to recreational areas MULTI-COMPONENT: 1. Land-use mix, access to locations, and neighborhood features 2. Presence or absence of sidewalks 3. Access to public transportation 4. Presence of neighborhood physical disorder **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** PHYSICAL ACTIVITY: 1. People in the highest quartile for the total number of non-residential destinations were two to three times more likely to engage in any transportation activity (OR=3.5, 95%CI= 2.3-5.5) or meet recommendations (OR=3.3, 95%CI= 2.0-5.4) through transportation activity than respondents in the lowest quartile (p<0.05 for trend). **Transportation** PHYSICAL ACTIVITY: 1. Those in the top quartile for street segments of bus stops were 1.5 times more likely to engage in transportation activity (95%CI=1.0-2.3) and 1.6 times more likely to meet recommendations through transportation activity (95%CI= 0.99-2.6) compared to those in the lowest quartile as assessed by the audit (p<0.05 for trend). **Safety-Interpersonal** PHYSICAL ACTIVITY: 1. Those in the highest quartile for segments with minimal garbage, litter, or broken glass were 0.4 times less likely (95%CI=0.3-0.7) to engage in transportation activity and 0.4 times less likely (95%CI= 0.2-0.7) to meet recommendations through transportation activity than those in the lowest quartile (p<0.05 for trend). 2. Those in the highest quartile of physical disorder were 0.5 (95%CI=0.3-0.8) and 0.4 (95%CI= 0.2-0.7) times less likely to engage in transportation activity or meet recommendations through transportation activity, respectively (p<0.05 for trend). **Street Design** PHYSICAL ACTIVITY: 1. Levelness of sidewalks as assessed by the audit showed a significant negative association (OR=0.6, 95%CI=0.4-0.9) for engaging in any transportation activity and with meeting recommendations (OR=0.5, 95%CI=0.3-0.8) through transportation activity (p<0.05 for trend).	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Wen, Kandula (2007) California	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 18 years and older, 63% White, 6.4% Black, 17% Hispanic, 8.6% Asian, 4.4% other and 13% lower income (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to parks and playgrounds in the neighborhood MULTI-COMPONENT: 1. Perceptions of neighborhood and park safety COMPLEX: 1. Neighborhood social cohesion **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** PHYSICAL ACTIVITY: 1. Neighborhood factors (i.e., social cohesion, availability of parks/ playgrounds, safety) did not seem to mediate racial/ethnic differences in walking at recommended levels. 2. Neighborhood safety was not significantly associated with walking at recommended levels in any subgroup analysis.	1. Social cohesion was positively associated with walking at recommended levels among Whites (OR=1.06 95% CI=1.01, 1.12, p<0.001) and Hispanics (OR=1.14 95% CI=1.02, 1.27, p<0.05).
Author Voorhees, Young (2003) Virginia	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data was provided. Urban, Female, Hispanic, Adults (target sample) 31.9 years old [mean age], 44.0% Spanish speaking only (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data was provided. Access to place for physical activity MULTI-COMPONENT: 1. Perceptions of neighborhood traffic safety 2. Perceptions of neighborhood safety from crime and unattended dogs 3. Distance to neighborhood locations **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** PHYSICAL ACTIVITY: 1. Neighborhoods in which women reported that unattended dogs were not a problem were less likely to be active (OR=0.91, 95% CI=0.54-1.54) and meet recommendations (OR=0.79; 95% CI= 0.44–1.41). 2. Women who perceived their neighborhood as safe from crime (either extremely or somewhat safe) were also more likely to be active (OR=1.34, 95% CI=0.81-2.20) and meet recommendations (OR=1.69; 95% CI= 0.82–3.47). **Safety-Traffic** PHYSICAL ACTIVITY: 1. Women were more likely to be active (OR=1.36, 95% CI= 0.50–3.66) and meet recommendations (OR=1.66, 95% CI= 0.70–3.94) if vehicular traffic is light in the neighborhood. **Community Design** PHYSICAL ACTIVITY: 1. Women who reported having places within walking distance were less likely to be active (OR=0.87; 95% CI= 0.31–2.44) and meet activity recommendations (OR=1.58, 95% CI= 0.64-3.90). (Note: P-values were not reported. Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Sanderson, Foushee (2003) Alabama	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data was provided. Rural, Female, Adults, 20-50 years old, 75-77% African American (evaluation sample) The data was collected from a predominately impoverished rural area.	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data was provided. Access to places for physical activity and access to places within walking distance MULTI-COMPONENT: 1. Presence or absence of sidewalks 2. Perceptions of safety from crime and presence of lighting 3. Perceptions of traffic safety 4. Distance to neighborhood places to walk COMPLEX: 1. Neighborhood social support and self-efficacy **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Street Design** PHYSICAL ACTIVITY: 1. Researchers found no physical environmental variables that were significantly associated with comparison of either activity-level group. **Safety-Traffic** PHYSICAL ACTIVITY: 1. Researchers found no physical environmental variables that were significantly associated with comparison of either activity-level group. **Safety-Interpersonal** PHYSICAL ACTIVITY: 1. Researchers found no physical environmental variables that were significantly associated with comparison of either activity-level group. 2. Women reporting good lighting at night were less likely (OR=0.48, 95% CI= 0.27- 0.88) to report any physical activity. **Community Design** PHYSICAL ACTIVITY: 1. Researchers found no physical environmental variables that were significantly associated with comparison of either activity-level group. (Note: Environmental variables include a composite score of distance to places to walk, safety from crime, street lighting, unattended dogs, persence of sidewalks, and traffic safety. Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	1. Women meeting recommendations (n=221) compared to women who did not (n=346) were more than twice as likely to see people exercising in the neighborhood (87.2%, OR=2.02, CI=1.08-3.77) and to attend religious services (84.9%, OR=2.10, CI=1.21-3.65). 2. Women who reported any activity (n=481) compared with inactive women (n=86) were more likely to know people who exercise (OR=1.82, 95% CI=1.06-3.15), have higher social issue scores (OR=1.29, 95% CI=1.11-1.49), and were more than 3 times as likely to report attending religious services (OR=3.82, 95% CI=2.16-6.75).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Frank, Kerr (2007) Georgia	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided 5-20 year olds (target sample) 38% Minority 20% Lower income 20% had a household income less than $30,000 ~50% Female (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided Access to open and recreation spaces MULTI-COMPONENT: 1. Land use diversity 2. Street connectivity **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Street Design** PHYSICAL ACTIVITY 1. Living in the top tertile for street connectivity (3rd tertile; walking ≥ 1 time per 2 days; OR=1.7, CI=1.3-2.2, p<0.001; walking ≥ 0.5 miles/day; OR=1.8, CI= 1.2-2.7, p<0.01) was significantly related to both walking outcomes, specifically when the odds ratio for density was greater for walking 0.5 mile or more. 2. For 12-15 year olds reporting that they walked at least once over 2 days, number of intersections (OR=1.7, CI=1.1-2.8, p<0.05) was significant. 3. For 12-15 year olds reporting that they walked ≥0.5 miles/day, number of intersections (OR=2.4, CI=1.1-5.1, p<0.05) was significant. 4. For the 16-20 year olds reporting that they had walked at least once over 2 days, intersection density (OR=2.0, CI=1.1-3.6, p<0.05) was significant. 5. For those reporting that they had walked ≥ 0.5 miles per day, intersection density (OR=3.1, CI=1.3-7.4, p<0.01) was significant. **Community Design** PHYSICAL ACTIVITY: 1. Living in the top tertile for residential density (walking ≥ 1 time per 2 days= 2nd tertile; OR= 1.4, CI=1.0-1.9, p<0.05; 3rd tertile; OR= 2.4, CI=1.8-3.2, p<0.001; walking ≥0.5 miles/day; 3rd tertile; OR=2.7, CI=1.7-4.4, p<0.001) was significantly related to both walking outcomes, specifically when the odds ratio for density was greater for walking 0.5 mile or more. 2. Land-use mix (walking ≥ 1 time per 2 days; OR=1.8, CI=1.4-2.3, p<0.001; walking ≥ 0.5miles per day; OR=1.9, CI=1.3-2.9, p<0.001), commercial destinations (walking ≥1 time per 2 days; OR=1.8, CI=1.4-2.3, p<0.001; walking ≥0.5 miles/day; OR=1.8, CI=1.2-2.7, p<0.01), and recreation destinations (walking ≥1 time per 2 days; OR= 2.1, CI=1.7-2.6, p<0.001; walking ≥0.5 miles/day; OR=2.1, CI=1.5-2.9, p<0.001) within 1-km were all significantly related to walking. *Results for only top tertile;* 3. For 9-11 year olds reporting that they had walked at least once over 2 days, residential density (OR=2.3, CI=1.2-4.3, p<0.05) and living near recreation or open space (OR=1.8, CI=1.1-2.9, p<0.05) were significant. None of the variables was significantly related to walking ≥0.5 miles per day for this age group. 4. For 12-15 year olds reporting that they walked at least once over 2 days, density (OR=3.7, CI=2.2-6.4, p<0.001), mixed land use (OR=2.5, CI=1.6-3.8, p<0.001), at least one commercial use (OR=2.6, CI=1.7-4.0, p<0.001), and at least one recreation/open space (OR=2.5, CI=1.7-3.6, p<0.001) were significant factors. 5. For 12-15 year olds reporting that they walked ≥0.5 miles/day, highest density (OR=4.9, CI=2.1-11.4, p<0.001), mixed land use (OR=2.7, CI=1.4-5.3, p<0.01), at least one commercial use (OR=2.7, CI=1.4-5.4, P<0.001), and at least one recreation/open space (OR=2.4, CI=1.3-4.2, p<0.001) were significant factors. 6. For the 16-20 year olds reporting that they had walked at least once over 2 days, mixed land use (OR=1.9, CI=1.0-3.2, p<0.05),was significant. 7. For those reporting that they had walked ≥ 0.5 miles per day, residential density (OR=3.2, CI=1.1-9.1, p<0.05), was a significant factor. *(continued next page)*.	Not Reported

(Continued from previous study)						
					8. In the multivariate analyses, having greater residential density (walking ≥1 time per 2 days; OR=1.7, CI=1.1-2.3, p<0.01; walking ≥0.5 miles/day; OR=1.8, CI=1.0-3.1, p<0.05) was significantly related to walking. 9. Intersection density, land use mix, commercial land usage, gender, and household size were not significant in the multivariate model. 10. For 5-8 year olds, living near recreation or open space (walking ≥1 time per 2 days; OR=2.1, CI=1.3-3.4, p<0.001; walking ≥0.5 miles/day; OR=2.4, CI=1.2-5.1, p<0.05) was significantly related to walking at least once over 2 days as well as walking ≥0.5 miles per day. 11. Having up to 5 acres of recreation space in a 1-km buffer was significantly related to walking (5-8 years; OR=2.2, CI=1.2-4.1, p<0.01) (12-15 years; OR=2.2, CI=1.3-3.7, p<0.01)(16-20 years; OR=2.6, CI=1.5-4.6, p<0.001), however more than 6 acres of recreation or open space did not appear to be related to walking. (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Wilson, Kirtland (2004) South Carolina	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, General population, 18-96 years of age, 41.5% Lower income (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to physical activity facilities (trails and pools) COMPLEX: 1. Social environment **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	1. For high-socioeconomic status respondents, having and using places of worship that offered physical activity opportunities was significantly associated with being more likely to walk 150 min/week (OR=1.77, CI= 0.86-3.65, p=0.013). 2. Respondents from low-socioeconomic status (vs. high-socioeconomic status) areas report higher perceptions of unpleasantness of neighborhoods, unattended dogs, neighborhood crime, and untrustworthy neighbors (p<0.01). 3. Respondents from low-socioeconomic status areas reported lower perceptions of access to public recreation facilities (p<0.01) but higher perceptions of access to sidewalks in their neighborhoods than those from high-socioeconomic status areas (p<0.01). No other group differences were significant.

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Joshu, Boehmer (2008) and Brownson, Baker (2001) United States	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, 45.7% Minority: 54.3% White, 29.4% Black, 2.1% Asian/Pacific Islander, 2.7% Indian/ Alaskan native, 11% Other, 0.4% missing/ unknown, 39.3% Lower-income 67.1% Female (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to places to exercise (e.g., shopping malls, parks, trails) MULTI-COMPONENT: 1. Presence of sidewalks and neighborhood characteristics (e.g., enjoyable scenery, hills) 2. Population density 3. Perceptions of traffic barriers (safety) COMPLEX: 1. Social and personal barriers **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Traffic** OVERWEIGHT/OBESITY: 1. Heavy traffic was associated with obesity within large metropolitan (adjusted OR= 1.9, 95% CI: 1.3-2.9), micropolitan (adjusted OR= 2.2, 95% CI: 1.03-4.5) and rural areas (adjusted OR= 1.7, 95% CI: 0.8-3.3). PHYSICAL ACTIVITY: 2. Heavy traffic (OR=1.28, 95% CI=1.04, 1.58) was positively associated with physical activity. **Community Design** OVERWEIGHT/OBESITY: 1. Hierarchical linear modeling found that the effect of sprawl on BMI is greater for individuals who report a greater number of personal barriers. The effect of sprawl on BMI increased by -0.006 with each additional personal barrier. **Street Design** OVERWEIGHT/OBESITY: 1. An increase in the number of perceived neighborhood barriers increased the odds of being obese (chi-square for linear trend, p<0.05). PHYSICAL ACTIVITY: 2. Neighborhood characteristics, including the presence of sidewalks (OR=1.28, 95% CI=1.02, 1.59) and enjoyable scenery (OR=1.46, 95% CI=1.13, 1.88) were positively associated with physical activity. (Note: Perceived barriers to physical activity was a composite including hills, lack of sidewalks, personal barriers like fear of injury, limited time, and intensity and frequency of physical activity.)	1. The presence of sidewalks was the most important neighborhood variable among those with higher incomes (OR = 1.46, 95% CI= 1.08, 1.97). 2. Hills (OR=1.28, 95% CI=1.04, 1.58) were positively associated with physical activity. 3. Among those with lower incomes, the most important neighborhood variable for physical activity was enjoyable scenery (OR = 1.53, 95% CI = 1.07, 2.18). 4. An increase in the number of personal barriers increased the odds of being obese (chi-square for linear trend, p<0.001). 5. Obese individuals in small metropolitan (adjusted OR= 2.3, 95% CI= 1.05-5.2) and micropolitan areas (adjusted OR= 4.8, 95% CI=1.6-14.2) were more likely to report being self-conscious about the appearance while active. 6. Obesity residents of micropolitan areas were more likely to report no time for activity (adjusted OR= 2.6, 95% CI= 1.1-6.1), and fear of injury (adjusted OR= 4.1, 95% CI= 1.2-14.1) and dislike of exercise (adjusted OR= 3.9, 95% CI= 1.3-11.7) were strongly associated with obesity in rural areas compared with other areas. 7. Two policy variables were positively associated with physical activity: believing that employers should provide time for exercise (adjusted OR=1.27, 95% CI=1.01, 2.01), and support for the use of local government funds for walking or jogging trails (adjusted OR=1.42, 95% CI=1.00, 2.01).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Kerr, Rosenberg (2006) Washington	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Parents: 20-65 years old, 83.3% White, 16.7% Minority Children: 45.9% were >12 years old (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to local biking and walking facilities MULTI-COMPONENT: 1. Perceptions of neighborhood safety (crime) 2. Perceptions of neighborhood traffic 3. Street connectivity and neighborhood aesthetics 4. Diverse land use mix **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Traffic** PHYSICAL ACTIVITY: 1. Parents of children aged 12-18 had significantly fewer concerns about active commuting (p=0.004) than parents of children 5-11 years old. 2. Parent concerns were independently associated with active commuting (parent concerns; OR= 5.2, 95%CI= 2.71-9.96, p<0.05). 3. A parental concerns scale was most strongly associated with child active commuting (OR=5.2, 95% CI= 2.71-9.96, p<0.05). 4. Parent concerns were independently associated with active commuting (parent concerns; OR=4.9, 95% CI=2.54-9.40, p<0.05). **Safety-Interpersonal** PHYSICAL ACTIVITY: 1. Parents of children aged 12-18 had significantly fewer concerns about active commuting (p=0.004) than parents of children 5-11 years old. 2. Parent concerns were independently associated with active commuting (parent concerns; OR= 5.2, 95%CI= 2.71-9.96, p<0.05). 3. A parental concerns scale was most strongly associated with child active commuting (OR=5.2, 95% CI= 2.71-9.96, p<0.05). 4. Parent concerns were independently associated with active commuting (parent concerns; OR=4.9, 95% CI=2.54-9.40). **Street Design** PHYSICAL ACTIVITY: 1. Neighborhoods aesthetics were independently associated with active commuting (aesthetics; OR=2.5, 95% CI=1.33-4.80, p<0.05). 2. Neighborhood aesthetics were independently associated with active commuting (aesthetics; OR=2.4, 95% CI=1.23-4.56, p<0.05). **Community Design** PHYSICAL ACTIVITY: 1. Having stores within a 20-min walk were independently associated with active commuting (store distance; OR= 3.2, 95%CI= 1.68-6.01, p<0.05). 2. Perceived access to local stores and biking or walking facilities accounted for some of the effect of walkability on active commuting (OR=2.0, 95% CI=1.03-4.00, p<0.05). (Note: Parental concerns were based on a scale that included both interpersonal and traffic fears.)	1. Parent concerns about their child walking or biking to school were significantly inversely associated with residential density and neighborhood-level walkability (OR= 2.0, 95%CI= 1.08-3.84, p<0.05 and OR=1.7, 95%CI=1.00-2.85, p<0.05, respectively).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Rutt, Coleman (2005) Texas	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, 73% Hispanic, 29% Caucasian	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Land-use diversity MULTI-COMPONENT: 1. Access to places to be active **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** OVERWEIGHT/OBESITY: 1. Significant direct predictors of BMI were moderate intensity physical activity (p=0.05), overall health (p=0.0004), SES (p=0.0003), and living in an area with more mixed land use (p=0.03). PHYSICAL ACTIVITY: 2. Time spent in vigorous physical activity was predicted by fruit and vegetable intake (p=0.04), younger age (p=0.0002) and increased distance to physical activity facilities (p=0.04, R^2=0.14). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	OTHER: 1. The only significant predictor of time spent in light physical activity was number of co-morbidities (p=0.02, R^2=0.06). 2. Other findings included increased fruit and vegetable consumption (p=0.04) and younger age (p=0.02) as predictors of time spent in moderate physical activity (R^2=0.10).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Motl, Dishman (2005) South Carolina	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 13.6 ± 0.6 years (mean age), Female, 40.6% African-American, 38.9% Caucasian, 3% Other, 17.5% not reporting racial composition (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to local parks, playgrounds and gyms. MULTI-COMPONENT: 1. Perceptions of safety from traffic 2. Neighborhood perceptions of safety and crime **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Traffic** PHYSICAL ACTIVITY: 1. With the baseline data, there was not a statistically significant relationship neighborhood safety to physical activity (gamma=-0.03). 2. The path between the same latent variables across time (i.e., stability coefficients) was statistically significant for neighborhood safety (gamma=0.59), and physical activity (beta=0.46). There were statistically significant correlations among the environmental variables at baseline (phi=0.50). 3. With the baseline data, there was not a statistically significant relationship from neighborhood safety to self-efficacy (gamma=-0.14). There was a statistically significant relationship from self-efficacy to physical activity (beta=0.35), but not from equipment accessibility to physical activity (gamma=0.13) or neighborhood safety to physical activity (gamma =0.01). Hence, self-efficacy mediated the effect of equipment accessibility on physical activity (indirect effect=0.22) in the baseline data. **Safety-Interpersonal** PHYSICAL ACTIVITY: 1. With the baseline data, there was not a statistically significant relationship from neighborhood safety to physical activity (gamma=-0.03). 2. The path between the same latent variables across time (i.e., stability coefficients) was statistically significant for neighborhood safety (gamma=0.59) and physical activity (beta=0.46). There were statistically significant correlations among the environmental variables at baseline (phi=0.50). 3. With the baseline data, there was not a statistically significant relationship from neighborhood safety to self-efficacy (gamma=-0.14). There was a statistically significant relationship from self-efficacy to physical activity (beta=0.35), but not from equipment accessibility to physical activity (gamma=0.13) or neighborhood safety to physical activity (gamma =0.01). Hence, self-efficacy mediated the effect of equipment accessibility on physical activity (indirect effect=0.22) in the baseline data. (Note: Neighborhood safety included safety from unattended dogs, gangs, crime, traffic safety, and presence of sidewalks. Equipment accessibility included access to sports equipment at home, such as balls and skates, as well as access to parks, playgrounds and facilities.)	1. With the baseline data, there was a statistically significant relationship from equipment accessibility to self-efficacy (gamma=0.64), but not from neighborhood safety to self-efficacy (gamma=-0.14). 2. There was a statistically significant relationship from self-efficacy to physical activity (beta=0.35), but not from equipment accessibility to physical activity (gamma=0.13) or neighborhood safety to physical activity (gamma =0.01). Hence, self-efficacy mediated the effect of equipment accessibility on physical activity (indirect effect=0.22) in the baseline data.

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Handy, Cao (2008); Handy, Cao (2006) California	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, General population, Urban, Suburban (target sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to places to be active MULTI-COMPONENT: 1. Distance to retail 2. Perceptions of safety (crime) 3. Street connectivity **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** PHYSICAL ACTIVITY: 1. Objective measures for minimum distance to a bank (coefficient=0.082, p=0.035), number of banks within 800m (coefficient=0.091, p=0.005), and number of types of businesses within 1600m (coefficient=0.073, p=0.040) were positively associated with increased walking. 2. Individuals living in mixed-use neighborhoods (coefficient=0.0471, p=0.017) and living farther from health clubs (coefficient=0.0561, p=0.004) had higher neighborhood physical activity. 3. Individuals with higher perceptions of stores within walking distance (coefficient=0.0549, p=0.004) engaged in neighborhood physical activity more frequently. 4. The current number of household maintenance businesses within 1600 m (coefficient=0.090, p=0.012) and the minimum distance to a health club (coefficient=0.071, p=0.045) had positive effects on changes in biking. 5. Changes in perceptions of attractiveness (NPA coefficient=0.151, p<0.01) were associated with increased neighborhood physical activity and walking. 6. A significantly higher share of residents in traditional neighborhoods reported walking to a store at least once in the last 30 days compared to suburban neighborhoods (data not shown). Over 86% of residents in traditional neighborhoods strolled at least once in the last 30 days versus 79% of residents in suburban neighborhoods, with an average frequency of 10.1 strolls compared to 7.7 strolls. **Street Design** PHYSICAL ACTIVITY: 1. Respondents who preferred to have cul-de-sacs (coefficient=-0.065, p=0.084) walked less frequently, suggesting a self-selection effect. After controlling for all effects, distance to potential destinations, both objective (coefficient=-0.144, p<0.001) and perceived (coefficient=0.268, p<0.001) remained positively associated with neighborhood walking. Perceived safety (coefficient =-0.071, p=0.029) remained negatively associated with walking and attractiveness (coefficient=0.078, p=0.038) remained positively associated. 2. Compared to suburban residents, residents in traditional neighborhoods perceived their neighborhoods on average as having higher accessibility (mean=0.15 vs. mean=-0.18, p=0.00), opportunities for socializing (mean=0.09 vs. mean=-0.12, p<0.01), and attractiveness (mean=0.28 vs. mean=-0.33, p<0.001). 3. Changes in perceptions of accessibility (walking coefficient=0.103, p<0.001) were associated with increased neighborhood physical activity and walking. **Safety-Interpersonal** PHYSICAL ACTIVITY: 1. Respondents who preferred to be safe (coefficient=-0.102, p=0.008) walked less frequently, suggesting a self-selection effect. After controlling for all effects, distance to potential destinations, both objective (coefficient=-0.144, p<0.001) and perceived (coefficient=0.268, p<0.001) remained positively associated with neighborhood walking. Perceived safety (coefficient =-0.071, p=0.029) remained negatively associated with walking and attractiveness (coefficient=0.078, p=0.038) remained positively associated. 2. Residents in suburban neighborhoods on average perceived their neighborhoods as having greater safety (mean=0.16 vs. mean=-0.14, p=0.00) and outdoor spaciousness (mean=0.06 vs. mean=-0.05, p=0.02). 3. Changes in perceptions of current safety (NPA coefficient=0.0672, p=0.025; walking coefficient=0.15, p<0.001) were associated with increased neighborhood physical activity and walking.	1. Compared to suburban residents, residents in traditional neighborhoods perceived their neighborhoods on average as having higher attractiveness (mean=0.28 vs. mean=-0.33, p<0.01). Residents in suburban neighborhoods on average perceived their neighborhoods as having greater outdoor spaciousness (mean=0.06 vs. mean=-0.05, p=0.02). 2. Travel-minimizing attitude (coefficient=-0.077, p=0.014), pro-transit attitude (coefficient=-0.121, p<0.001), and preference for spaciousness (coefficient=-0.111, p=0.002) were all negatively associated with changes in biking, while attractiveness preference (coefficient=0.074, p=0.019) was positively associated. 3. Changes in perceptions of socializing (NPA coefficient=0.0549, p=0.052; walking coefficient=0.14, p<0.001) were associated with increased neighborhood physical activity and walking.

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
International (Multiple Strategies)						
Author Giles-Corti, Donovan (2002); Giles-Corti, Donovan (2002); Giles-Corti, Donovan (2003); Giles-Corti, Macintyre (2003); McCormack, Giles-Corti (2007); McCormack, Giles-Corti (2008) Australia	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, 18-59 years old (evaluation sample) The sample was comprised of relatively young, healthy, sedentary workers and homemakers living in high or low SES areas.	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to recreation destinations MULTI-COMPONENT: 1. Access to transit stations 2. Neighborhood perceptions of traffic safety 3. Access to destinations and land-use mix 4. Road network distance and presence of sidewalks 5. Perceived neighborhood safety **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Street Design** OVERWEIGHT/OBESITY: 1. Overweight individuals were more likely to live on highways (OR=4.24; 95%CI= 1.62-11.09), streets with no sidewalks (OR=1.4, 95%CI= 1.01-1.95), streets with sidewalks on one side only (OR=1.32; 95%CI= 0.98-1.79) and perceive no paths within walking distance (OR=1.42; 95% CI= 1.08-1.86). PHYSICAL ACTIVITY: 2. In comparison with those who had no sidewalk and no shop on their street, those who had access to either or both of these attributes were about 25% more likely to achieve recommended levels of walking (combined OR=1.25, 95%CI= 0.90-1.74). 3. Respondents were more likely to walk for transport if they perceived that their neighborhood had sidewalks (OR=1.65, 95%CI= 1.12-2.41, p=0.011). 4. The likelihood of walking for recreation was higher in residents in the top quartile of access to the beach (OR=1.49, 95%CI= 1.14-1.93, p=0.003) and those who perceived their neighborhood as being attractive, safe and interesting (OR=1.49, 95%CI= 1.14-1.95, p=0.003), and that there was support for walking locally (OR=1.8, 95%CI: 1.36-2.4, p<0.001) 5. Respondents were more likely to walk as recommended if they were in the top quartile of access to public open space (OR=1.43, 95%CI: 1.07-1.91, p=0.015) and perceived their neighborhood as being attractive, safe, and interesting (OR=1.50, 95%CI= 1.08-2.09, p=0.017), and supportive of walking locally (OR=1.52, 95%CI= 1.09-2.11, p=0.014). 6. Those who exercised vigorously were more likely to perceive their neighborhood as being attractive, safe, and interesting (OR=1.39, 95%CI= 1.08-1.79; p=0.01) and to claim that there were sidewalks in the neighborhood (OR=1.52, 95%CI= 1.05-2.21, p=0.027). **Community Design** OVERWEIGHT/OBESITY: 1. Obese individuals were nearly twice as likely as others to perceive that there was no shop within walking distance (OR=1.84, 95%CI= 1.01-3.36). PHYSICAL ACTIVITY: 2. Residing within 1500 m of destinations including schools (OR=1.75, 95% CI= 1.28-2.39, p<0.001), convenience stores (OR=1.89, 95% CI= 1.26-2.84, p<0.001), shopping malls (OR=2.07, 95% CI= 1.43-3.00, p<0.001), newsagents (OR=2.20, 95% CI= 1.60-3.03, p<0.001), and transit stations (OR=2.38, 95% CI= 1.67-3.39, p<0.001) was significantly associated with regular walking for transport. 3. Having a transit station located within 1500 m was positively associated with regular walking for recreation (OR=1.50, 95% CI: 1.09-2.05, p<0.05) 4. Having a beach within 1500 m was positively associated with irregular walking for recreation (OR=1.97, 95% CI= 1.01-3.83, p<0.05) and regular vigorous physical activity (OR=1.93, 95% CI= 1.20-3.13, p<0.01). 5. For each additional different type of destination (including recreational and utilitarian destinations) within 400 and 1500 m, the odds of regular walking for transport increased by 43% (95% CI= 1.27-1.61, p<0.001) and 41% (95% CI= 1.26-1.58, p<0.001) and the odds of irregular walking for transport increased by 27% (95% CI= 1.12-1.44, p<0.001) and 23% (95% CI= 1.12-1.35, p<0.001). *(continued next page)*.	1. Walking at recommended levels was significantly associated with perceived behavioral control, frequency of a behavioral skill used in past month, intention to be active (high vs. low, OR=1.83, 95%CI= 1.14-2.94, p=0.13), having a club membership (OR=0.53, 95%CI= 0.39-0.74, p<0.01), owning a dog (OR=1.58, 95%CI= 1.19=2.09), social support for physical activity in the past 3 months, and being in the top quartile of access to attractive public open space (OR=1.47, 95%CI= 1-2.15, p=0.048). 2. Those who always had access to a motor vehicle were about half as likely to be obese as those who never had access to a motor vehicle (OR=0.56, 95%CI= 0.32-0.99). 3. Relative to respondents in the lowest determinant score categories, the odds of achieving recommended levels of walking were 3.1 times higher among those in the high individual determinant score category (95%CI= 2.2-4.37, p<0.001), 2.79 times higher among those in the high social environmental determinant score category (95%CI= 2-3.9, p<0.001), and 2.13 times higher among those in the high physical environmental determinant score category (95%CI= 1.54-2.94, p<0.001). 4. The greater the number of significant others who exercised weekly with the respondent, the more likely recommended levels of activity were achieved (four or more vs. none, OR=1.37m 95%CI= 0.83-2.25) test for trend p<0.001). *(continued next page)*.

					6. For each additional type of destination located within 1500 m the odds of regular walking for recreation increased by 16% (95% CI: 1.06-1.27, p<0.01), while the odds of irregular walking increased by 12% (95% CI= 1.01-1.26, p<0.05). 7. The mix of utilitarian destinations within 1500 m was positively associated with regular walking for recreation (OR=1.17, 95% CI= 1.05-1.29, p<0.01). 8. Destination mix was not associated with time spent walking for recreation or vigorous physical activity. 9. In comparison with those who had no sidewalk and no shop on their street, those who had access to either or both of these attributes were about 25% more likely to achieve recommended levels of walking (combined OR=1.25, 95% CI= 0.90-1.74). 10. Among individuals who frequented pay for use recreational destinations, each additional pay destination (OR=1.51, 95%CI= 1.32-1.73, p<0.001), having access to a motor vehicle (OR=0.51, 95%CI= 0.26-0.99, p<0.05), and having a club membership (OR=6.83, 95%CI= 3.39-13.73, p<0.001) were associated with the use of pay-destinations located in the neighborhood. 11. Respondents were more likely to walk for transport if they were in the top quartile for access to attractive public open space (OR=1.35, 95%CI= 1.05-1.73, p=0.02) and if they had a shop within walking distance (OR=3, 95%CI= 2.04-4.4, p<0.001) **Transportation** PHYSICAL ACTIVITY: 1. Residing within 1500 m of transit stations (OR=2.38, 95% CI= 1.67-3.39, p<0.001) was significantly associated with regular walking for transport. 2. Having a transit station located within 1500 m was positively associated with regular walking for recreation (OR=1.50, 95% CI= 1.09-2.05, p<0.05). **Safety-Interpersonal** PHYSICAL ACTIVITY: 1. The likelihood of walking for recreation was higher in residents who perceived their neighborhood as being attractive, safe and interesting (OR=1.49, 95%CI= 1.14-1.95, p=0.003). 2. Respondents were more likely to walk as recommended if they perceived their neighborhood as being attractive, safe, and interesting (OR=1.50, 95%CI= 1.08-2.09, p=0.017). 3. Those who exercised vigorously were more likely perceive their neighborhood as being attractive, safe, and interesting (OR=1.39, 95%CI= 1.08-1.79; p=0.01). 4. The likelihood of walking for recreation was higher in residents who perceived their neighborhood as being attractive, safe and interesting (OR=1.49, 95%CI= 1.14-1.95, p=0.003), and that there was support for walking locally (OR=1.8, 95%CI= 1.36-2.4, p=0.000) 5. Respondents were more likely to walk as recommended if they perceived their neighborhood as being attractive, safe, and interesting (OR=1.50, 95%CI= 1.08-2.09, p=0.017), and supportive of walking locally (OR=1.52, 95%CI= 1.09-2.11, p=0.014). 6. Those who exercised vigorously were more likely to live in high SES areas (OR=1.00), to be in the top quartile of access to the beach (OR=1.38, 95%CI= 1.07-1.79, p=0.013), to perceive their neighborhood as being attractive, safe, and interesting (OR=1.39, 95%CI= 1.08-1.79; p=0.01); and to claim that there were sidewalks in the neighborhood (OR=1.52, 95%CI= 1.05-2.21, p=0.027). **Safety-Traffic** PHYSICAL ACTIVITY 1. Respondents were more likely to walk for transport if they perceived more traffic and busy roads (OR=1.26, 95%CI=1.01-1.56, p=0.038). 2. In comparison with those who had major traffic and no trees on their street, the odds of achieving recommended levels of walking were nearly 50% higher among those who lived on a street with one or both of these features (combined)R=1.49, 95%CI=0.96-2.33).	5. Those who used a pay destination located within or outside (OR=8.46, 95%CI= 3.98-18.00, p<0.001 and OR=3.48, 95%CI= 2.59-4.66, p<0.001, respectively) the neighborhood were more likely than those who did not use a pay destination to achieve sufficient vigorous-intensity physical activity. 6. Respondents using free destinations within and outside (OR=1.56, 95%CI= 1.00-2.33, p<0.05 and OR=2.13, 95%CI= 1.56-2.89, p<0.001, respectively) the neighborhood were more likely to achieve sufficient levels of vigorous-intensity physical activity than those not using a free recreational destination. 7. Among individuals who frequented pay for use recreational destinations, having access to a motor vehicle (OR=0.51, 95%CI= 0.26-0.99, p<0.05) and having a club membership (OR=6.83, 95%CI= 3.39-13.73, p<0.001) were associated with the use of pay-destinations located in the neighborhood. 8. The likelihood of walking for recreation was higher in those who perceived their neighborhood as having support for walking locally (OR=1.8, 95%CI= 1.36-2.4, p<0.001) 9. Respondents were more likely to walk as recommended if they perceived their neighborhood as being supportive of walking locally (OR=1.52, 95%CI= 1.09-2.11, p=0.014).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Kamphuis, Van Lenthe (2008) The Netherlands	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, 25-75 years old Compared with higher educational groups, people in the lowest education group were more likely to be female, and to be born in a country other than the Netherlands. (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to places for physical activity MULTI-COMPONENT: 1. Neighborhood safety 2. Neighborhood aesthetics COMPLEX: 1. Social disorder and support **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** PHYSICAL ACTIVITY: 1. Unsafe neighborhood (OR=1.77, 95%CI= 1.18-2.65, p=0.005) increased the likelihood of not participating in sports. 2. In the full model, two neighborhood factors (safety and social cohesion), three household factors (material deprivation [crowding] and social deprivation [going out fortnightly and going on holiday yearly], and nine individual factors (six outcome expectancies, social support modeling, self-efficacy, and intention) remained statistically significant. Compared with the basic model, all factors together reduced the odds of doing no sports among the lowest educational group by 57% (OR=2.29, 95%CI= 1.7-3.07), for the second-lowest by 48% (OR=1.62, 95%CI= 1.34-1.96), and for the second-highest by 26% (OR=1.48, 95%CI= 1.23-1.78). **Street Design** PHYSICAL ACTIVITY: 1. Unattractive neighborhoods (OR=1.45, 95%CI: 1.2-1.75, p<0.001) increased the likelihood of not participating in sports.	In the full model, two neighborhood factors (safety and social cohesion), three household factors (material deprivation [crowding] and social deprivation [going out fortnightly and going on holiday yearly], and nine individual factors (six outcome expectancies, social support modeling, self-efficacy, and intention) remained statistically significant. Compared with the basic model, all factors together reduced the odds of doing no sports among the lowest educational group by 57% (OR=2.29, 95%CI= 1.7-3.07), for the second-lowest by 48% (OR=1.62, 95%CI= 1.34-1.96), and for the second-highest by 26% (OR=1.48, 95%CI= 1.23-1.78).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author De Bourdeaudhuij, Sallis (2003) Belgium	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data was provided. Adults,18-65 year olds (target sample) 41 ± 12.22 (mean) years, 48.3% Female, 70.1% employed, 39.3% urban dwellers, 54.9% suburban, 5.9% countryside (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data was provided. Access to physical activity facilities MULTI-COMPONENT: 1. Quality and access to sidewalks and bike lanes 2. Access to shops, residential density, land use mix, connectivity 3. Access to public transportation 4. Perceptions of neighborhood safety from crime **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Street Design** PHYSICAL ACTIVITY: 1. Greater availability of sidewalks in the neighborhood was associated with walking in males (semi-partial correlate; 0.14, p≤0.05). **Community Design** OVERWEIGHT/OBESITY: 1. Participants with a higher BMI reported fewer convenient physical activity facilities (Pearson r=-0.11, p<0.05). PHYSICAL ACTIVITY: 2. In males, moderate intensity activity was related to more satisfaction with neighborhood services (semi-partial correlate; 0.15, p≤0.05). In females, more moderate intensity physical activity was related to better access to shopping in local stores (semi-partial correlate; 0.16, p≤0.05). 3. In males, vigorous intensity physical activity was related to more convenient physical activity facilities (semi-partial correlate; 0.11, p≤0.05). In females, vigorous intensity physical activity was related to more convenient physical activity facilities (semi-partial correlate; 0.14, p≤0.05) and supportive worksite environment was related to more high intensity activity (semi-partial correlate; 0.12, p≤0.05). 4. In females, more walking was associated with longer distances to shops and businesses (semi-partial correlate; 0.15, p≤0.05). SEDENTARY ACTIVITY: 5. In males, the amount of sitting was related to higher perceived criminality in the neighborhood (semi-partial correlate; -0.22, p≤0.01), longer distances to shops and businesses (land use mix, diversity) (semi-partial correlate; 0.14, p≤0.05), and more convenience of shopping in local stores (land use mix, access to local shopping) (semi-partial correlate; 0.15, p≤0.01). **Safety-Interpersonal** OVERWEIGHT/OBESITY: 1. Participants with a higher BMI reported less safety from crime (Pearson r= -0.11, p<0.05). SEDENTARY BEHAVIOR: 2. In males, the amount of sitting was related to higher perceived criminality in the neighborhood (semi-partial correlate; -0.22, p≤0.01), longer distances to shops and businesses (land use mix, diversity) (semi-partial correlate; 0.14, p≤0.05), and more convenience of shopping in local stores (land use mix, access to local shopping) (semi-partial correlate; 0.15, p≤0.01). For females, less emotional satisfaction with the neighborhood was associated with greater amounts of sitting (semi-partial correlate= -0.15, p≤0.05). **Transportation** PHYSICAL ACTIVITY: 1. In females, more walking was associated with greater ease of the walk to public transportation stops (semi-partial correlate; 0.16, p≤0.05).	1. For females, less emotional satisfaction with the neighborhood was associated with greater amounts of sitting (semi-partial correlate= -0.15, p≤0.05). 2. In males, moderate intensity activity was related to more satisfaction with neighborhood services (semi-partial correlate; 0.15, p≤0.05). 3. Participants with a higher BMI reported less physical activity equipment in the home (Pearson r= -0.15, p<0.001).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Harrison, Gemmell (2007) United Kingdom	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data was provided. Adults, 95.5% White, 4.5% Minority, 95.5% Male, mean age 49.8 years (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data was provided. Availability of leisure facilities (parks) MULTI-COMPONENT: 1. Perceptions of neighborhood safety from crime and vandalism 2. Perceptions of neighborhood traffic safety **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** PHYSICAL ACTIVITY: 1. People who felt unsafe out and about in their neighborhood during the day (relative prevalence 0.70, 95% CI= 0.59 to 0.82) and during the night (relative prevalence 0.82, 95% CI=0.78 to 0.88) were significantly less likely to be defined as physically active compared with those who felt safe during these times. 2. There was no association among physical activity and people stating that vandalism, and assaults or muggings were a problem in their neighborhood. Also, there was no association among people who had or not been victims of personal crime during the past year. **Safety-Traffic** PHYSICAL ACTIVITY: 1. People who thought that there was some problem with speeding traffic in their neighborhood (relative prevalence 1.08, 95% CI=1.10 to 1.14) were more likely to be physically active, but this was not consistent to this being a serious problem.	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Lee, Kawakubo (2006) Japan	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data was provided. Adults, 56% Female (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data was provided. Access or parks and trails MULTI-COMPONENT: 1. Perceptions of neighborhood safety from crime 2. Street connectivity (alternate routes to locations) and neighborhood aesthetics 3. Proximity to parks or beaches from residence 4. Perceptions of neighborhood traffic safety **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Traffic** PHYSICAL ACTIVITY: 1. In the safety category, the score for "Vehicular traffic does not hinder taking a walk" was significantly higher in the low walkable region (high mean [sd]: 2.49[1.48], vs. low: 3.08[1.55], p<0.01). **Street Design** PHYSICAL ACTIVITY: 1. Those who had high scores for "There are sidewalks suitable for walking in the neighborhood" (high walkable: low perception mean [sd] 191.7[200.6] vs. high perception mean [sd]: 302.9[279.7], p<0.05) (low walkable: low perception mean [sd]: 125.9[182.1] vs. high perception mean [sd]: 211.3[234.5], p<0.05) spent significantly more walking time in both regions. 2. In the low walkable region, those who had high scores for "There are several ways to get to one place" (low perception mean [sd]: 124.9[139.9] vs. high perception mean [sd]: 201.4[249.4], p<0.05), "It is easy to cross streets" (low perception mean [sd]: 145.1[162.7] vs. high perception mean [sd]: 214.6[270.2], p<0.05), "The sidewalks have few inclines and are easy to walk on" [low perception mean [sd]: 89.7[88.2] vs. high perception mean [sd]: 215.6[245.9], p<0.01) and "The sidewalks are wide enough to walk on" (low perception mean [sd]: 132.2[138.8] vs. high perception mean [sd]: 232.8[284.5], p<0.01) spent significantly more walking time. 3. In the high walkable region, those who had high scores for "The neighborhood is conducive for taking a walk" (low perception mean [sd]: 245.0[233.5] vs. high perception mean [sd]: 323.4[308.5], p<0.05) spent significantly more time walking. **Community Design** PHYSICAL ACTIVITY: 1. In the high walkable region, those who had high scores for "There is a park nearby that is suitable for taking a walk in" (low perception mean [sd]: 190.8[195.0] vs. high perception mean [sd]: 300.2[279.5], p<0.05) and "There is a river (or a beach) within walking distance" low perception mean [sd]: 217.2[211.7] vs. high perception mean [sd]: 299.1[283.6], p<0.05) spent significantly more walking time. **Safety Interpersonal** PHYSICAL ACTIVITY: 1. In the safety category the variable, "The sidewalk is well-lit even at night", showed significantly higher scores in the high walkable region (high; mean [sd]: 2.97[1.32] vs. low; 2.11[1.42], p<0.01). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	1. Those who had high scores for "Residents in the neighborhood are friendly" spent significantly more walking time in both regions (high walkable: low perception mean [sd]: 234.2[212.2] vs. high perception mean [sd]: 381.0[254.5], p<0.01) (low walkable: low perception mean [sd]: 135.9[157.1] vs. high perception mean [sd]: 228.3[271.0], p<0.05). 2. In the convenience category, the score for "The sidewalks are wide enough to walk on" was significantly higher in the low walkable region (high mean [sd]: 2.54[1.50] vs. low: 3.04[1.50], p<0.01), whereas that for "The walking map of the neighborhood is useful" was significantly higher in the high walkable region (high mean [sd]: 3.58[1.29], vs. low: 2.45[1.64], p<0.01).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Humpel, Owen (2004) Australia	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, 57% Female	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to areas for physical activity (beach, lake, facilities) MULTI-COMPONENT: 1. Perceptions of neighborhood safety 2. Neighborhood aesthetics and accessibility 3. Destinations within walking distance from the residence **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** PHYSICAL ACTIVITY: 1. No evidence of a relationship between safety and neighborhood walking was found for men or women. 2. Men who perceived their environment as highly safe for walking were less likely to walk for pleasure (OR=0.22; 95% CI= 0.06-0.78; p<0.05). 3. A higher proportion of those with the most positive perceptions for all four environmental perception categories reported more neighborhood walking (data not shown). 4. Significantly higher proportions of those walking for exercise were found among those with the most positive perceptions for all four environmental perception categories (results not shown). **Street Design** PHYSICAL ACTIVITY: 1. A higher proportion of those with the most positive perceptions for all four environmental perception categories reported more neighborhood walking (data not shown). 2. Higher proportions of neighborhood walkers were found among those with high perceptions for aesthetics (66.7%; X2=17.08, p<0.001). 3. Significantly higher proportions of those walking for exercise were found among those with the most positive perceptions for all four environmental perception categories (data not shown). 4. Men with the most positive perceptions about the aesthetic nature of the environment were more than seven times more likely to be high neighborhood walkers (OR=7.43; 95%CI= 1.92-28.82; p<0.05). 5. Men with a high score on aesthetics were nearly four times as likely to walk for exercise (OR=3.86; 95%CI= 1.03-14.46; p<0.05). **Community Design** PHYSICAL ACTIVITY: 1. Participants reporting that a beach/lake was within easy walking distance reported significantly more neighborhood walking minutes (M=224) than did those reporting a beach/lake was not within walking distance (M=139; F(2,379)=11.0, p<0.001); significantly more exercise walking (M=163 compared to M=100 minutes; F(2,382)=9.72, p<0.001); and significantly more walking for pleasure compared to those perceiving that a beach/lake is not within walking distance (M=33 and M=21, respectively; F(2,380)=3.88, p<0.02). (Note: Environmental perceptions were based on aesthetics, accessibility, safety, and weather. Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Tucker, Irwin (2009) Ontario, Canada	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 11-13 year olds Parent demographics 75.3% White, 1.5% Black, 6.6% Latin-American, 5.8% Asian, 8.8% Other, 9 % lower income (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Presence of neighborhood recreational opportunities (percentage of park space) MULTI-COMPONENT: 1. Land-use mix **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** PHYSICAL ACTIVITY: 1. Land-use mix and percentage of park coverage were not significant factors influencing physical activity level among London, Ontario adolescents. (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	Not Reported
Author Veugelers, Sithole (2008) Nova Scotia, Canada	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 5-13 year olds, 10.8% lower-income (income <20,000) [evaluation sample]	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Neighborhood access to parks, playgrounds and recreational facilities MULTI-COMPONENT: 1. Access to stores with fruits and vegetables 2. Access to shops (mixed land-use) 3. Perceptions of safety from crime **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** OVERWEIGHT/OBESITY: 1. Children in neighborhoods with good access to shops were 26% less likely to be overweight (OR=0.74. 95% CI=0.60-0.91) and 33% less likely to be obese (OR=0.67, 95% CI=0.48-0.94) than children from neighborhoods with poor access to shops. NUTRITION: 2. Children in neighborhoods with the best access to shops (highest one-third) reported more consumption of F&V (incremental risk [IR]=1.04, 95% CI= 1.00-1.09), substantially less consumption of dietary fat (IR=0.51, 95% CI= 0.33-0.78), and a higher diet quality index (IR=2.26, 95% CI= 1.09-4.69) in comparison to neighborhoods with the poorest access to shops (lowest one-third). **Safety-Interpersonal** OVERWEIGHT/OBESITY: 1. No association between neighborhood safety and overweight and obesity. PHYSICAL ACTIVITY: 2. Children in safe neighborhoods engaged more in sports without a coach than children in unsafe neighborhoods (OR=1.23, 95% CI: 1.04-1.46). **Neighborhood Availability of Food Stores** NUTRITION 1. Children in neighborhoods with the best access to shops (highest one-third) reported more consumption of F&V (incremental risk [IR]=1.04, 95% CI= 1.00-1.09), substantially less consumption of dietary fat (IR=0.51, 95% CI= 0.33-0.78), and a higher diet quality index (IR=2.26, 95% CI= 1.09-4.69) in comparison to neighborhoods with the poorest access to shops (lowest one-third). (Note: No p-values were reported.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Mota, Almeida (2005) Portugal	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 14.6 years (±1.6), 52.6% Female	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to recreation facilities MULTI-COMPONENT: Not reported COMPLEX: 1. Perceptions of social support **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	1. No significant results were found for social environment (OR = 1.16; 95% CI =0.87–1.26). 2. A significantly greater proportion of active participants compared to non-active participants agree with the importance of the social environment (75.0 vs. 68.5% respectively, chi square 5.31, p=0.02). 3. A significantly greater proportion of active participants compared to non-active participants agree with the importance of shop accessibility (55.6 vs. 48.9% respectively, chi-square 4.75, p=0.03), the social environment (75.0 vs. 68.5% respectively, chi square 5.31, p=0.02), neighborhoods having recreational facilities (49.3 vs. 41.6% respectively, chi square 6.19, p=0.01), and aesthetics (50.1 vs. 39.8% respectively, chi square 10.89, p=0.001).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Stahl, Rutten (2001); Rutten, Abel (2001) Germany, The Netherlands, Switzerland, Spain	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, 18 years or older, General population, 56.9% Female (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Perceptions of local opportunities for physical activity COMPLEX: 1. Social support **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	Not Reported	PHYSICAL ACTIVITY: 1. Those who were well informed about programs and actions (75.3% vs. 61.4%; p<0.001), perceived high support from health policy for physical activity and sports (p<0.001), and had high social support from personal environment (75.5% vs. 62.3%; p<0.001) were more likely to be active than their counterparts. 2. People who felt that health policy doesn't promote people's physical activity and sport were 57% more likely to be inactive compared to those who felt that health policy promotes people's physical activity and sport (OR=1.57 95%CI 1.28-1.91; p<0.001). After including the country variable, opportunity and health policy lost predictive power. 3. Those who perceived low social support from personal environment were over twice as likely to be sedentary than those who reported high social support from personal environment (37.7% vs. 24.5%; p<0.001). 4. Low social support from the "media environment" in turn was "protective" for active behavior, since those who reported low media support were half as likely to be sedentary compared to those with high social support from media environment (27.7% vs. 34.5%; p<0.001). 5. Those who were poorly informed about programs and actions for sport and physical activity were 77% more likely to be inactive compared to those who were well informed (38.6% vs. 24.7%; p<0.001).

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author De Vries, Bakker (2007) The Netherlands	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 8.3 ± 1.4 year olds (mean), 6-11 years old (range)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to neighborhood recreation spaces MULTI-COMPONENT: 1. Land-use mix and residential density 2. Intersection density 3. Perceptions of neighborhood traffic safety COMPLEX: 1. Friendliness of neighborhood **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Street Design** PHYSICAL ACTIVITY: 1. Children's physical activity was also positively associated with the frequency of parallel parking spaces (B=2.152; 95%CI= 1.408, 2.897) and parking lots (B=3.169; 95% CI=2.055, 4.284) (p<0.05 for both). 2. Children's physical activity was negatively associated with intersections in the neighborhood (B= -1.035; 95% CI= -1.825, -0.246). **Community Design** PHYSICAL ACTIVITY: 1. Children's physical activity was also positively associated with the residential density (B=0.009; 95% CI= 0.001, 0.017, p<0.05). 2. Children's physical activity was negatively associated with the frequency of staircase entrance flats (3-4 stories without elevator) (B= -1.472; 95% CI= -1.992- -0.953) and unoccupied (boarded up) houses (B= -3.080; 95% CI= -4.625, -1.535) (p<0.05 for both). 3. Children's physical activity was positively associated with the frequency of terrace houses (B=1.508; 95% CI=0.726, 2.290) and blocks of flats with fewer than 6 stores (B=-1.472; 95%CI=-1.992, -0.953) in the neighborhood (p<0.05 for all). 4. Children's physical activity was negatively associated with the frequency of paved playgrounds (B= -1.372; 95% CI= -2.549, -0.195). **Safety Traffic** PHYSICAL ACTIVITY: 1. Children's physical activity was negatively associated with the frequency of heavy traffic (lorry and bus) (B= -2.356; 95% CI= -3.587, -1.125) and the frequency of striped crossings (B= -1.815; 95% CI -2.854, -0.776) (p<0.05 for all). 2. Children's physical activity was positively associated with the proportion of 30-km speed zones (B=1.815; 95% CI=0.700, 2.929, p<0.05) in the neighborhood. (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Li, Dibley (2006) China	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 11-17 year olds	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to recreational facilities (playgrounds, gyms, sports equipment, and public open spaces) MULTI-COMPONENT: 1. Perceptions of safety 2. Access to sidewalks 3. Availability of shops 4. Recess and activities at school **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** PHYSICAL ACTIVITY: *Community Level* 1. Concerns about neighborhood safety (OR= 2.1, 95% CI=1.1-4.1, p=0.03) was positively associated with inactivity. 2. Perceived unsafe neighborhoods were associated with a higher percentage of inactive adolescents, but the difference was not statistically significant (p=0.08). **Street Design** PHYSICAL ACTIVITY: 1. Adolescents living in a house without sidewalks were 30% more likely to be inactive (OR= 1.3, 95% CI= 1.0-1.6, p=0.01). 2. Lack of sidewalks around the house was associated with physical inactivity in girls (OR= 1.5, 95% CI= 1.04-2.0, p=0.03). **Community Design** PHYSICAL ACTIVITY: 1. Unavailability of video game shops around the home was associated with a higher percentage of inactive boys (OR=1.5, 95% CI= 1.1-2.1, p=0.02). **School Physical Activity Policies** PHYSICAL ACTIVITY: 1. Lack of recess exercise or sports meetings was associated with higher percentages of inactivity in boys (OR=2.2, 95% CI= 1.2-4.0, p=0.02 and OR=1.5, 95% CI= 1.0-2.2, p=0.05, respectively). 2. For boys, lack of class recess sports (OR= 2.2, 95% CI=1.2-4.0, p=0.02) and sports meetings (OR= 1.5, 95% CI= 1.0-2.2, p=0.05) were associated with low levels of physical activity, and boys at schools forbidding bike riding to school were 60% less likely to be inactive (OR= 0.4, 95% CI= 0.2-0.8, p=0.02).	Not Reported
Author Utter, Denny (2006) New Zealand	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data was provided. 13-17 year olds No racial/ethnic demographics given.	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data was provided. Accessibility of community-based recreational facilities and physical activity resources MULTI-COMPONENT: 1. Neighborhood safety 2. Distance to recreational facilities **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Interpersonal** PHYSICAL ACTIVITY: 1. Neighborhood safety was positively associated with participation in regular physical activity (OR=1.46, 95% CI= 1.3-1.6, no p-value given). **Community Design** PHYSICAL ACTIVITY: 1. Students were significantly more likely to engage in regular vigorous activity when they lived within walking distance of the following perceived community features: a park (OR=1.17, 95% CI= 1.1-1.3), a skateboard ramp (OR=1.32, 95% CI: 1.2-1.5), a sports field (OR=1.59, 95% CI= 1.4-1.8), a swimming pool (OR=1.38, 95% CI= 1.2-1.5), a gym (OR=1.44, 95% CI= 1.3-1.6), and a bicycle track (OR=1.44, 95% CI= 1.3-1.6). (Note: Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Fein, Plotnikoff (2004) Canada	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. 14-18 year olds, 62% Female (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to convenient facilities and equipment for physical activity MULTI-COMPONENT: 1. Neighborhood availability of roads and sidewalks **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Street Design** PHYSICAL ACTIVITY: 1. The environmental resource scales were positively correlated with energy expenditure (home r=0.16, neighborhood r=0.16, facilities r=0.12, school r=0.15, p<0.01) as were the perceived importance scores (home r=0.22, neighborhood r=0.16, facilities r=0.20, school r=0.27, p<0.01). (Note: The environmental resource scales included availability of space (e.g., roads and sidewalks), convenient facilities and equipment.)	1. Boys (r= -0.17, p<0.01), those in lower grades (r= -0.08, p<0.05), and those with higher peer (r=0.31, p<0.01), family (r=0.23, p<0.01) and physical education teacher relationship (r=0.08, p<0.05) scores were significantly correlated with energy expenditure.
Author Burton, Turrell (2005) Australia	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults, 18-64 years old	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to recreation facilities MULTI-COMPONENT: 1. Perceptions of neighborhood traffic safety 2. Presence of street lights 3. Presence of neighborhood aesthetics 4. Access to public transportation COMPLEX: 1. Social support in the neighborhood 2. Self-efficacy for physical activity **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Traffic** PHYSICAL ACTIVITY: 1. Environmental variables contributed the least to vigorous intensity activity (data not shown). 2. The proportion of unique variation (Nagelkerke R2) accounted for in walking, moderate-intensity, vigorous-intensity activity, and total physical activity by the environmental correlate group is 0.6, 1.1, 0.4, and 1.2, respectively. **Safety Interpersonal** PHYSICAL ACTIVITY: 1. Environmental variables contributed the least to vigorous intensity activity (data not shown). **Transportation** PHYSICAL ACTIVITY: 1. Environmental variables contributed the least to vigorous intensity activity (data not shown). **Street Design** PHYSICAL ACTIVITY: 1. Neighborhood aesthetics contributed more to walking (Nagelkerke R2=0.4%), and the barrier of family obligations contributed more to total and moderate-intensity activity. (Note: The environmental scale was developed from a battery of items, which led to the inclusion in multiple strategies. Environmental variables include footpaths [sidewalks], public transport, street lighting, perceived safety, busyness of streets and traffic flow, facilities for activity, cleanliness, and friendliness.)	1. The proportion of unique variation (Nagelkerke R2) accounted for in walking, moderate-intensity, vigorous-intensity activity, and total physical activity by the environmental correlate group is 0.6, 1.1, 0.4, and 1.2, respectively.

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Panter, Jones (2008) England	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Access to indoor and outdoor facilities for physical activity, access to green space and biking and walking facilities for physical activity MULTI-COMPONENT: 1. Residential density and distance to neighborhood facilities 2. Street connectivity and neighborhood aesthetics 3. Perceptions of traffic safety **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Community Design** PHYSICAL ACTIVITY: 1. Participants that reported 5 sessions of activity per week, lived closer to sports facilities (mean distance [standard error] = 1268.9 [104.99], p<0.05) and had higher neighborhood walkability scores (mean= 48.10 [0.79]. p<0.01) than their less active counterparts (mean distance= 1479.9 [34.25] and mean walkability scores= 44.46 [0.37]). 2. Individuals that reported 5 or more weekly aerobic activity sessions gave a higher neighborhood walkability score (mean= 46.05 [0.48]) than individuals who did not (mean =43.79 [0.54]), although this association was not apparent when walking alone was considered (p<0.01). 3. Respondents rating their neighborhood as having intermediate or good walkability were over 3 times as likely to report 5 or more sessions of physical activity per week compared to those who gave the lowest rating (OR= 3.14, p=0.02; and OR= 3.04, p=0.03 respectively). 4. Those who lived in the closest tertile to a park or green space were over twice as likely to report five or more sessions of physical activity (OR=2.17, 95% CI= 1.00-4.78, p≤0.05). 5. None of the associations with access to leisure facilities were statistically significant and were generally in a contrary direction to that expected; those living nearest to the facilities generally reported lower levels of activity than those farther away. **Street Design** PHYSICAL ACTIVITY: 1. Individuals that reported 5 or more weekly aerobic activity sessions gave a higher neighborhood walkability score (mean= 46.05 [0.48]) than individuals who did not (mean =43.79 [0.54]), although this association was not apparent when walking alone was considered (p<0.01). 2. Respondents rating their neighborhood as having intermediate or good walkability were over 3 times as likely to report 5 or more sessions of physical activity per week compared to those who gave the lowest rating (OR= 3.14, p=0.02; and OR= 3.04, p=0.03 respectively). **Safety Traffic** PHYSICAL ACTIVITY: 1. Individuals that reported 5 or more weekly aerobic activity sessions gave a higher neighborhood walkability score (mean= 46.05 [0.48]) than individuals who did not (mean =43.79 [0.54]), although this association was not apparent when walking alone was considered (p<0.01). 2. Respondents rating their neighborhood as having intermediate or good walkability were over 3 times as likely to report 5 or more sessions of physical activity per week compared to those who gave the lowest rating (OR= 3.14, p=0.02; and OR= 3.04, p=0.03 respectively). (Note: Walkability was a composite score using mulitple variables like residential density, street connectivity, access to PA facilities, access to sidewalks and pavement, aesthetics, and traffic safety. Distance to nearest PA resource and access to nearest PA resources may overlap in their designated strategy categories.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Santos, Silva (2008) Portugal	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. Adults (18 years and older) Azorean	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Availability of places to be active MULTI-COMPONENT: 1. Access to destinations (land-use mix) and residential density 2. Neighborhood aesthetics **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Street Design** PHYSICAL ACTIVITY: 1. Women with a positive overall perception of the dimension infrastructures; access to destinations, social environment, and aesthetics were 32.5% (95%CI= 1.150-1.528; p<0.001) more likely to have a moderate physical activity level and 31.9% (95%CI= 1.121-1.551; p<0.001) more likely to have a health enhancing physical activity (HEPA) level. 2. Normal weight women (BMI <25 kg/m2) with a positive overall perception of the dimension infrastructures; access to destinations, social environment, and aesthetics were 44.5% (95%CI= 1.166-1.791; p<0.001) more likely to have moderate physical activity levels, whereas overweight/obese women (BMI ≥ 25 kg/m2) 22% (95%CI= 1.007-1.478; p<0.05) more likely to have moderate physical activity levels and 34.5% (95%CI= 1.3451.080-1.675; p<0.05) more likely to have HEPA levels. 3. Normal weight men (BMI<25kg/m2) with a positive perception of the dimension infrastructures; access to destinations, social environment, and aesthetics were 51.4% (95% CI= 1.091-2.101; p<0.05) more likely to have moderate physical activity levels. **Community Design** PHYSICAL ACTIVITY: 1. Women with a positive overall perception of the dimension infrastructures; access to destinations, social environment, and aesthetics were 32.5% (95%CI= 1.150-1.528; p<0.001) more likely to have a moderate physical activity level and 31.9% (95%CI= 1.121-1.551; p<0.001) more likely to have a health enhancing physical activity (HEPA) level. 2. Normal weight women (BMI <25 kg/m2) with a positive overall perception of the dimension infrastructures; access to destinations, social environment, and aesthetics were 44.5% (95%CI= 1.166-1.791; p<0.001) more likely to have moderate physical activity levels, whereas overweight/obese women (BMI ≥ 25 kg/m2) 22% (95%CI= 1.007-1.478; p<0.05) more likely to have moderate physical activity levels and 34.5% (95%CI= 1.3451.080-1.675; p<0.05) more likely to have HEPA levels. 3. Normal weight men (BMI<25kg/m2) with a positive perception of the dimension infrastructures; access to destinations, social environment, and aesthetics were 51.4% (95% CI= 1.091-2.101; p<0.05) more likely to have moderate physical activity levels. (Note: Access to destinations refers to shops, sotes, markets, and free or pay recreation facilities within walking distance.)	Not Reported

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
Author Humpel, Owen (2004); Humpel, Marshall (2004) Australia	**Participation/ Potential Exposure** Not Applicable **High-Risk Population** Not Applicable Only cross-sectional data provided. General, Population (target sample) Ages ranged from 18 to 71 years of age (mean age 43 years), 49.8% women (evaluation sample)	**Representative** Not Applicable **Potential Population Reach** Not Applicable **Potential High Risk Popluation Reach** Not Applicable	**Intervention Components** Not Applicable Only cross-sectional data provided. Accessibility of paths, parks, and other walking opportunities MULTI-COMPONENT: 1. Perceptions of traffic safety 2. Access to public transit 3. Perceptions of community convenience to facilities 4. Neighborhood aesthetic quality **Feasibility** Not Applicable **Implementation Complexity** Not Applicable	**Population Impact** Not Applicable **High-risk Population Impact** Not Applicable **Sustainability** Not Applicable	**Safety-Traffic** PHYSICAL ACTIVITY 1. Men who perceived traffic as being less of a problem were found to be less likely to have increased their walking across all three outcome variables (any increase in walking; OR=0.40, 95%CI=0.22-0.72, p<0.01, increase of 30 minutes; OR=0.29, 95%CI=0.15-0.54, p<0.001, increase of 60 minutes; OR=0.39, 95%CI= 0.21-0.73, p<0.01). 2. Increased perceptions that traffic was not a problem were significantly associated with women being 1.76 (95%CI=1.01-3.05, p<0.05) times more likely to have increased their walking for 30 minutes or more. 3. Participants with low baseline scores reporting traffic as a problem had a relative change increase of 1.13 (SD=1.83), whereas those with high initial scores reported a decrease of -0.2 (SD=0.22). **Transportation** PHYSICAL ACTIVITY: 1. Men with high scores for access (OR=1.98, 95CI=1.12-3.49, p<0.05) were more likely to walk in their neighborhood than individuals with lower scores. 2. Compared to women with low scores, women with moderate access were more likely to report higher levels of walking (OR=1.92, 95% CI=1,10-3.37, p<0.05) and higher total physical activity (non-significant, p>0.05). 3. Women with high access scores were 52% less likely (OR=0.48, 95% CI=0.27-0.87, p<0.05) to walk in the neighborhood when compared to those with low scores. **Community Design** PHYSICAL ACTIVITY: 1. Men with high scores for access (OR=1.98, 95CI=1.12-3.49, p<0.05) were more likely to walk in their neighborhood than individuals with lower scores. 2. Women with moderate access (OR=1.92, 95% CI=1,10-3.37, p<0.05) were more likely to report higher levels of walking and higher total physical activity. Women with high access scores were 52% less likely (OR=0.48, 95% CI=0.27-0.87, p<0.05) to walk in the neighborhood when compared to those with low scores. 3. Women with high access scores were 52% less likely (OR=0.48, 95% CI=0.27-0.87, p<0.05) to walk in the neighborhood when compared to those with low scores. **Street Design** PHYSICAL ACTIVITY: 1. Men with moderate (OR=1.77, 95% CI=1.06-2.97, p<0.05) and high aesthetic scores (OR=1.91, 95% CI=1.08-3.37, p<0.05) were more likely to walk in their neighborhood than individuals with lower scores. 2. Men who increased their perception of aesthetics (OR=2.25, 95% CI= 1.24-4.05, p<0.01) were more likely to have increased walking and twice as likely to have increased walking more than 30 minutes (aesthetics; OR=2.0, 95%CI=1.12-3.79, p<0.05) compared to men with no perception change. (Note: The composite score for access was comprised of access to shops and public transit. Convenience scores were a composite of the accessibility of paths, parks, and other walking opportunities.)	1. Participants with low initial access scores reported a mean relative change increase of 0.35 (SD=2.14), and a decrease score of -0.24 (SD=0.24) was reported for those with an initial high score. 2. Participants with a low aesthetic scores at baseline reported a mean relative increase of 0.42 (SD=0.46), whereas those with a high initial scores reported a decrease, with a relative change score of -0.16 (SD=0.18). 3. Participants with low baseline convenience scores reported a mean relative change increase of 0.79 (SD=0.87) and those with high baseline scores reported a relative change decrease of -0.21 (SD=0.22). 4. Participants with low aesthetic scores at baseline reported a mean relative change increase of 0.42 (SD=0.46), whereas those with high scores reported a decrease, with a relative change of -0.16 (SD=0.16). 5. Participants with low baseline convenience scores reported a mean relative change increase of 0.79 (SD=0.87), and those with high scores reported a relative change decrease of -0.21 (SD=0.22). 6. Participants with low baseline scores for traffic as a problem reported a relative change increase of 1.13 (SD=1.83), whereas those with high initial scores reported a decrease of -0.2 (SD=0.22).