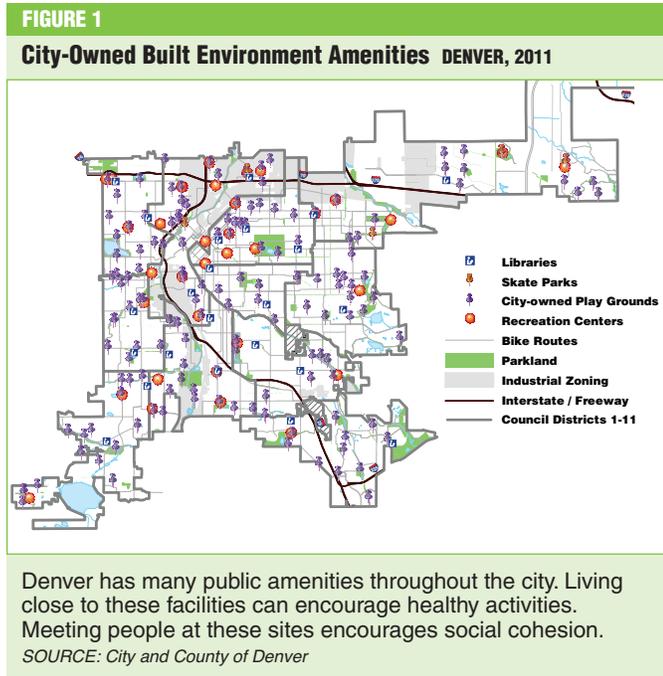


BUILT ENVIRONMENT

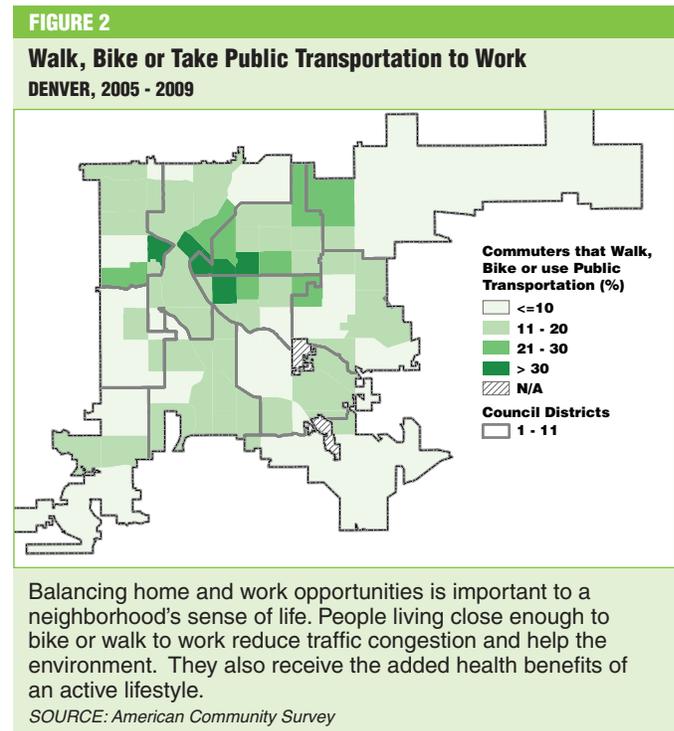
Overview

The built environment connects people with their community. Better community resources typically lead to a healthier lifestyle (FIGURE 1). Factors that affect how favorable a public area is for people to visit, play, or exercise include sidewalk quality, street safety, crime risk perception, and physical barriers like highways. The built environment includes many concepts: land use, public amenities, crime, transportation, and social cohesion. Each of these components can alter a person's relationship with the local environment and affect overall health.



Active living and built environment factors vary across Denver and are best evaluated at a local scale. For example, while some areas provide easy walking access to a grocery store, other areas require a vehicle to reach healthy food options. The environment influences whether a person walks, bikes, or takes public transportation to work (FIGURE 2). Unfortunately, in Denver there are few data to be able to effectively evaluate the built environment at the local scale. Furthermore, concepts such as social cohesion or the perception of safety are abstract and difficult to measure. The built environment does not affect all individuals in the same way. What may feel walkable to one person may be out of reach for another (FIGURE 3). Perceptions of safe and unsafe areas can vary greatly. The perception of an unsafe environment may prevent healthy behaviors (FIGURE 4). Perception is as important as reality (FIGURE 5).

continued



Cost Facts



Denver budgeted \$1.37 million for graffiti vandalism in 2010. By November, Public Works crews removed 4,594,500 square feet of graffiti. That was up 25% over the prior year.⁷⁴ The most heavily tagged areas in Denver were to the west (FIGURE 4). In particular, graffiti was heaviest in the areas from West Colfax to West Alameda Avenues, and Federal to Sheridan Boulevards. To help businesses and residents, Denver offers free graffiti removal assistance and free graffiti removal supplies.

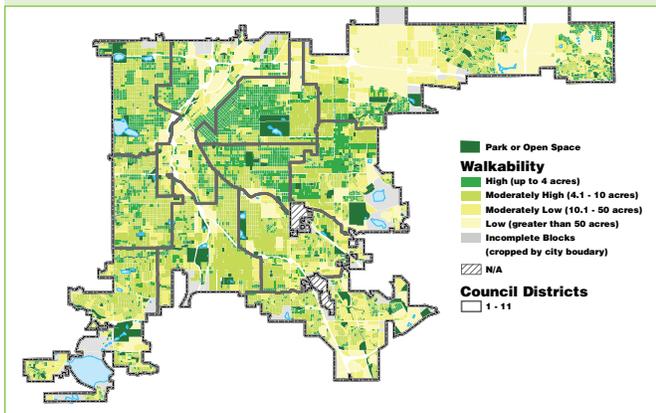
BUILT ENVIRONMENT

This section describes these concepts and shows differences among Denver communities. Local planning directly affects infrastructure, recreation opportunities, and business development. New policies focused on improving the built environment can greatly improve the health of a community.

In Denver, there are many positive characteristics related to the built environment. About 79% of residents in Denver live within half a mile walking distance of a park (FIGURE 6).⁷¹ Nearly 75% of children live within half a mile of a city-owned playground.⁷² The quality of a park is important, too (FIGURE 7). In 2006, Axum Park in northeast Park Hill was an underutilized park and the community pushed for renovations. A bond project allowed for more lighting, landscape changes, and paths that have created a vibrant community area that deters illicit activities. Due to the renovation, use of Axum Park by residents increased by a factor of five times.⁷³ With more recreation options, Denver residents can live healthier lives.

NOTE: For specific information regarding access to healthy foods and exercise habits, please see the Weight section.

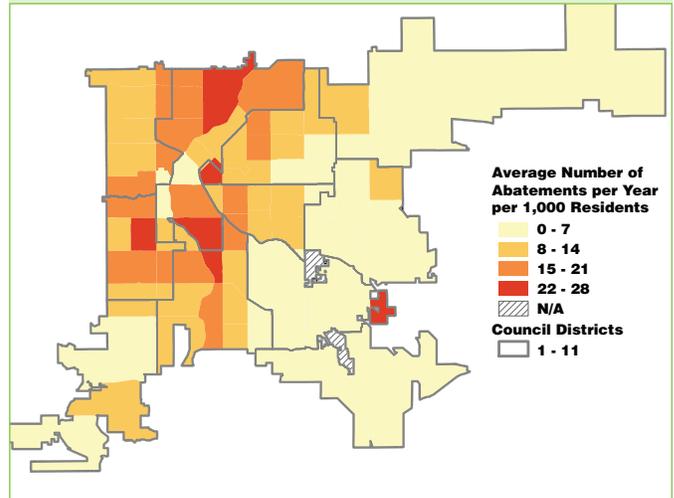
FIGURE 3
Walkability Measure Using City Block Size DENVER, 2009



Walking from your home to the neighborhood store or park promotes active living and reduces vehicle dependence. People living in poverty as well as younger and older people often do not drive a car. Walkability depends on several factors including safety, living near retail destinations, adequate sidewalks, and ambiance. Small block sizes are often associated with pedestrian-friendly areas. On the map above, areas in green are more walkable.

SOURCE: City and County of Denver's Community Planning and Development

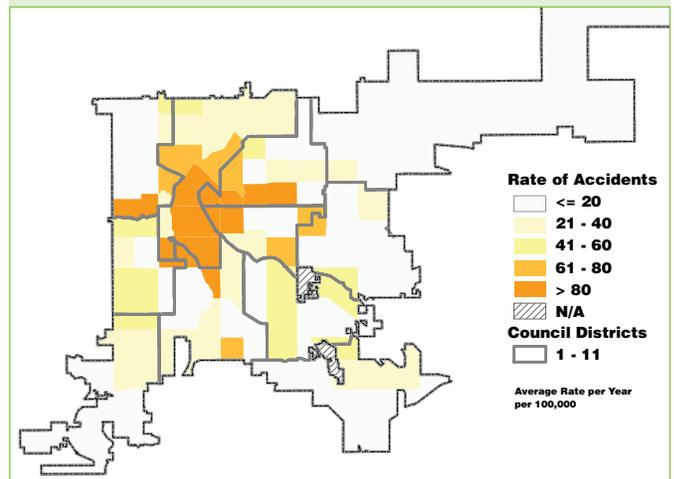
FIGURE 4
Graffiti Abatements DENVER, 2006 - 2010



Areas of high graffiti may have higher rates of criminal activity, or just be perceived to have higher crime rates. Graffiti can decrease the beauty of the neighborhood. Policies supporting local art and mural projects are a way to deter graffiti, improve social cohesion, and increase the beauty of an area.

SOURCE: City and County of Denver's Public Works Department, 2010 U.S. Census

FIGURE 5
Non-Fatal Pedestrian Accidents with Injuries DENVER, 2005 - 2010



The Healthy People 2020 target for pedestrian injuries on public roadways is no more than 20.3 per 100,000 people. Denver as a whole, and most council districts within Denver, are above that level. Some districts may have higher rates because there is a large daytime population in a business area. The yellow areas on the map are all above the Healthy People 2020 target.

SOURCE: City and County of Denver Public Works Department

BUILT ENVIRONMENT

Local Story

The Bike Depot in Park Hill

Established in 2008 through LiveWell Colorado's Park Hill Thriving Communities Program, the Bike Depot is a non-profit community bike shop located in Denver's Park Hill neighborhood. This organization allows any individual to earn a bike by taking bicycle safety and bike maintenance classes from volunteer mechanics.⁷⁵



The Bike Depot is an outstanding example of how community-based organizations work with residents in a fun environment that promotes active living. This non-profit increases access to bicycles, promotes safe, bike-friendly environments, and advocates for policies that promote bicycle access and use.

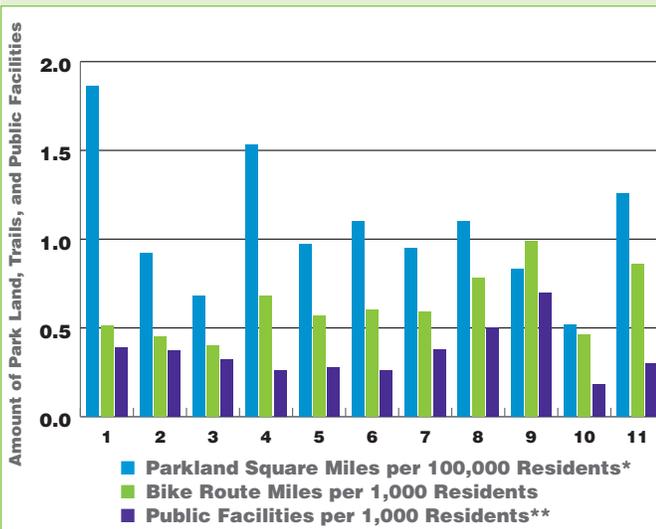
Not only does the Bike Depot envision a place where everyone has a bicycle, they envision a place where the built environment allows for safe bicycle riding and encourages better health for Denver residents. Their hard work has paid off. In 2011, between January and November:

- 496 people earned a bike
- 2,127 people participated in the Fix Your Bike program
- 313 people participated in various classes offered by the Bike Depot⁷⁵

These numbers have exceeded the Bike Depot's original goals for 2011!

FIGURE 6

Parkland, Trails, and Public Facilities by Council District
DENVER, 2011



The amount of parkland, bike trails, and public facilities varies by council district.

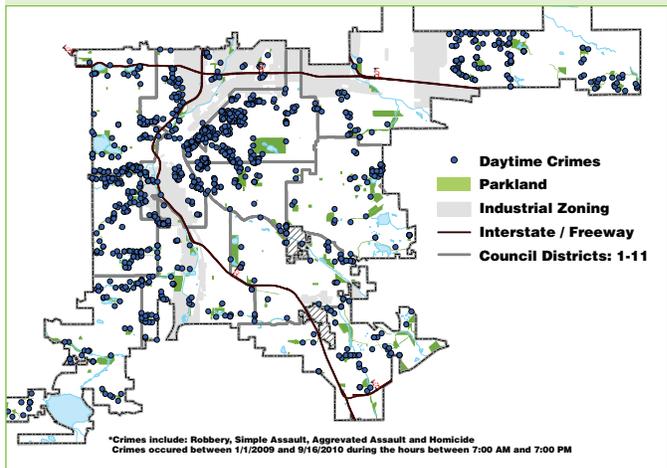
* Parklands represented in this analysis excludes fee-based facilities such as golf courses and the Botanic Gardens. In addition, ornamental and conservation lands managed by Denver Parks and Recreation such as parkways, medians, and river corridors were also excluded from this analysis.

** Public Facilities include Recreation Centers, Libraries, Play Grounds, and Skate Parks

SOURCE: City and County of Denver Parks and Recreation Department and Public Works

FIGURE 7

Daytime Crimes Against People within one-tenth of a Mile of Parkland Areas



Crime or the perception of crime, may deter people from engaging in outdoor activity. It is important to note that some areas may be more likely to report crimes than others. There is no simple solution to this issue. Encouraging more people to use an area may allow individuals to feel safer in numbers. Potential built environment solutions such as improved lighting or park amenities may encourage use.

SOURCE: Denver Police Department

BUILT ENVIRONMENT

Comparison Story

Using Streets to Improve Health

Multiple use streets allow for more physical activity and increased social connectedness. In urban environments, streets are a major part of the built environment. Streets designed for motor vehicle traffic can convert into other uses to build new active living spaces. In New York, one neighborhood temporarily converted a street to a Play Street during the summer months. The Play Street was closed to cars and provided children with a fun, safe place to play.⁷⁶

Closer to home, Colorado Springs officials put many of their city's roads on a "diet." On streets where there is excess capacity, the city uses the annual street resurfacing program to re-stripe existing roadways. Roads that were once four lanes were reduced to three to help create more pedestrian and bicycle-friendly streets.⁷⁴

Both of these examples show that multiple use streets allow for more physical activity and increase social interactions.



Did You Know



- Denver's bicycle commuting increased from 1.8% in 2009 to 2.2% in 2010. This is four times the national average and places Denver 6th out of 43 cities with populations above 400,000.⁷⁷
- Walking, using mass transit, or biking makes financial sense. In 2010, it cost on average \$8,588 to own and operate a new passenger car driven 15,000 miles per year.⁷⁸
- Out of the top 100 most populated cities, Denver ranks 34th in the number of city-owned parks per resident with 2.4 parks per 10,000 residents.⁷⁹
- Denver Moves is a plan for developing and improving the city's bike and pedestrian paths and infrastructure. The plan is to create safe, comfortable corridors that link neighborhoods, parks, employment centers, business districts, transit hubs, and other destinations in all parts of Denver.⁸⁰