In communities designed to promote health behaviors, it is easier for residents to stay physically active and age in place, avoid injuries and breathe better quality air. An attractive, mixed land-use community design promotes walking and biking by decreasing distances between homes, promotes walking and biking by decreasing distances between homes, businesses, schools and places used for recreational activity. It also increases positive community interaction, street safety, and overall quality of life. Measures for health infrastructure include bike and pedestrian infrastructure, access to public park facilities, access to health food such and fresh fruits and vegetables, and air quality.

Public green space has a significant impact on a community’s health and how much people exercise. Although the usual measure of park access is through acres of park and recreation space, it does not provide clarity into their proximity to the population or their distribution without further analysis. As part of the Pasco County master planning efforts, existing acreage level of service analysis was completed. According to the Pasco County Master Plan\(^1\) there are 84,892 acres of public park and greenway lands in Pasco, however 80% of those are within the J.B. Starkey Wilderness Park. In this analysis they have excluded the park from the calculation to better reflect the developed park acreage. Analysis indicates that after excluding the park Pasco is experiencing a deficit in park acreage with a level of service county-wide of 5.12 acres per 1,000 residents.

Health infrastructure, or the built environment also include access to park facilities. In 2013 Pasco County 8.82% (Figure 1) of residents experience access to off-street trail system compared to the state at 10.64%. In 2010 only 14.89% (Figure 2) of Pasco residents live within 10 min of a park compared to the state at 44.83%.

Many studies indicate that fast food consumption is associated with weight gain and low micronutrient intake.\(^3\) Having an availability of convenience foods combined with a decreased accessibility to healthy food sources
may have a negative effect on a population’s food intake and overall health.\textsuperscript{4} By utilizing the environmental indicators: \% of population within 1/2 mile of a fast food restaurant, 1/2 mile from a healthy food source, and a 1/2 mile from an off-street trail, we can further analyze environmental factors effecting certain population’s overall health.

Figure 3: Percentage of population living with \(\frac{1}{2}\) mile of a healthy food source; Pasco vs. State

![Bar chart showing percentage of population living within \(\frac{1}{2}\) mile of a healthy food source in Pasco County and State of Florida, with data points for 2010 and 2013.]

Source: Floridatracking.com

According to Floridatracking.com in 2013 the percent of Pasco residents that live within 1/2 mile of a healthy food source was 15.4\%, compared to that of the state of Florida at 31.8\%. The population of Pasco County that lives within 1/2 mile of a fast food restaurant is 20.4\%, compared to the states 33.5\%. Pasco county strays most from the state of Florida average under the “population that lives within a 1/2 mile of a healthy food source” indicator indicating that Pasco county residents could have less access to healthy food choices.

There are many factors that contribute to an individual’s overall health. Looking at built environment indicators within certain populations can be a useful tactic in analyzing trends that may be contributing to a population’s overall health. Data from the 2013 Florida Behavioral Risk Factor Surveillance System (BRFSS)\textsuperscript{4} indicates that 66.4\% of adults in Pasco County are overweight or obese compared to the state of Florida average, 62.8\%. The CDC states in its “strategies to prevent obesity and other chronic diseases” that “neighborhood residents with better access to supermarkets and other retail stores that provide healthful foods tend to have healthier diets.”\textsuperscript{5} The CDC also suggests that policy and infrastructure supports that help stores sell more healthy foods provide an opportunity to increase access to and availability of fruits and vegetables. Evidence from multiple studies has shown an association among access and proximity to food outlets and diet. “A separate study found that an increased availability of fresh vegetables within 100 meters of residence was associated with higher vegetable intake.”\textsuperscript{4} In conclusion, there is evidence to suggest an association between environmental indicators such as availability of healthy food sources and a populations overall health.
Notes:

1. Pasco County Parks and Recreation Master Plan  
2. www.floridatracking.com, Pasco County  
5. www.cdc.gov/obesity, strategies to prevent obesity and other chronic diseases.