



Healthy Communities

Being green is healthy, and this plan includes a focus on our daily quality of life. We focus on personal health through being more active and eating in such a way that is better for us, better for our local environment, and better for our local economy. We also focus on neighborhood health through an abundance of trees and gardens. Community design that incorporates parks and open spaces, paths for biking and walking, and access to healthy foods contributes to overall community health. The growing cost of health care, especially preventable conditions associated with obesity and lifestyle disease, is an expensive national problem. Diet and exercise have a clear link to reducing greenhouse gas emissions, as well, by promoting walking and biking over driving and increasing consumption of locally grown food that requires little transportation.

Goals

• Raise awareness that sustainable living is healthy

Decrease our community's lifestyle disease rates, such as diabetes and heart disease through healthy eating and exercise. Provide access to fresh, local and/or organic food in all neighborhoods through grocery stores, farmers markets and community gardens supported by local agriculture. Increase the number of short walking and biking trips through safety and other programs. Reduce barriers for disabled and elderly residents

• Plant more Florida-friendly and native trees and landscapes

Plant half a million trees by 2015 to achieve a 30 percent tree canopy by 2020 and encourage native, drought tolerant landscaping to cool our communities, capture greenhouse gas emissions, beautify our neighborhoods, and provide wildlife habitat



"Healthy people depend on a healthy environment. At Baptist Health, it is our mission to improve the health and well-being of the individuals and communities we serve. Therefore, we strive to promote environmental sustainability practices and reduce our ecological footprint, in order to ensure optimal health both within our community today and for future generations."

- Brian E. Keeley, President and CEO of Baptist Health South Florida

Strengths & Accomplishments...Opportunities & Actions

The connection between Responsible Land Use and Smart Transportation to Healthy Communities

We are a unique community made up of many geographically distributed smaller communities. In a sustainable future each of these distinct areas will be connected by smart transportation options, and each individual area will have features that allow residents to live, work and play nearby. Ultimately, this provides the framework for healthier living within our own neighborhoods and across Miami-Dade County.

The benefits of healthy, sustainable lifestyles

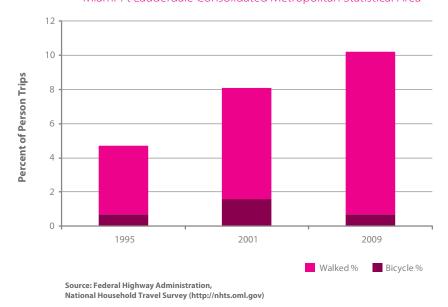
The impacts of physical activity and nutrition on our health are massive. Data indicates that many Miami-Dade County residents face health risks from inactivity, obesity, being overweight, and low consumption of healthy foods such as vegetables. More than a third of adults reported no leisure time physical activity, and nearly two thirds were overweight or obese, according to a 2007 study (Florida Department of Health). The consequences on our health are disturbing: our *GreenPrint* Assessment Report details that diabetes and hypertension have been increasing.

We can help reverse these trends and improve our overall health by making it easier for individuals to make healthy, sustainable lifestyle decisions. This includes encouraging walking and biking by improving safety and through promotional efforts, in addition to the infrastructure improvements discussed in the Land Use and Transportation area. These efforts can have a big payoff: every hour of walking may increase life expectancy by two hours (American Heart Association). Of course, when residents get out of their cars and choose to walk and bike, carbon emissions are avoided as well.

Another strategy to promote outdoor activity is to increase the tree canopy. While we have the advantage of year-round warm weather, we also have periods of extreme heat. Shadier bike paths and sidewalks will cool our communities and get residents moving outside.

It should also be noted that a community's green infrastructure provides many environmental, social and economic benefits. The shade from a healthy urban forest, in particular, reduces the need for indoor air conditioning, slows stormwater runoff, improves air and water quality, protects soil from erosion, and stores atmospheric carbon. Urban forests are important because a lush tree canopy offsets the negative effects of carbon in the atmosphere.

Biking and Walking as a Percentage of All Trips Miami-Ft Lauderdale Consolidated Metropolitan Statistical Area



South Floridians walked more frequently in 2009 than in 1995. However, the portion of trips taken by bike fluctuated over the same time period. All trips include biking, walking, transit, and vehicles.

The Value of Trees

- Suburban areas with mature trees are four to six degrees cooler than new suburbs without trees.
- One modeling study estimated that the direct energy savings from shading alone by trees and vegetation could reduce carbon emissions in various U.S. metropolitan areas by roughly one point five to five percent.
- One five-city study found that, on a per tree basis, cities accrued benefits ranging from roughly \$1.50 to \$3 for every dollar invested. These cities spent about \$15 to \$65 annually per tree, with net benefits ranging from approximately \$30 to \$90 per tree (U.S. Environmental Protection Agency).

A healthy tree canopy increases real-estate values, protects property from hurricanes by serving as a wind break, increases and improves wildlife habitat, reduces noise levels, contributes to economic sustainability and enhances community aesthetics and appeal. Research also shows that consumers are willing to shop longer and spend more in retail areas that have trees because trees provide a human habitat (Wolf, n. pag.). Simply stated, healthy communities are green and shady.

Additionally, we can encourage residents to make healthy nutritional choices by improving access to locally produced and/or organic fresh foods. In fact, there is a growing demand among our community for these products through farmer's markets, merchants and gardens; strategies in the Healthy Communities area focus on supporting this burgeoning local food movement.

A diet rich in fresh, unprocessed foods such as fruits and vegetables lowers the risk of obesity and potentially devastating diseases such as heart disease, diabetes, cancer and depression. Adults and children who eat organic foods reduce their exposure to toxins, hormones and antibiotics used in conventional agriculture; additionally, studies have shown that some organically grown produce contains higher levels of nutrients. Studies have shown that community gardeners and their children eat healthier, more nutrient rich diets than do non-gardening families. Importantly, community gardens provide

access to nutritionally rich foods that may otherwise be unavailable to low-income families and individuals. Additionally, there is evidence that eating locally produced food reduces asthma rates, because children consume local pollen and develop immunities (Gardening Matters).

Healthy food is also sustainable food. Miami-Dade is the second largest agricultural producer in the state, but 90 to 95 percent of our produce is sold outside of Miami-Dade County. We may be able to reduce the carbon footprint of our food system by purchasing more from local producers. Organic agriculture has additional sustainability benefits by reducing emissions associated with the production and distribution of chemical fertilizers and pesticides and by improving the ability of farmland to sequester carbon from the atmosphere (Fernandez Rysavy 14-16).

Community gardens can serve as an outdoor classroom where youth can learn valuable skills, including practical math, communication, responsibility and cooperation. They also provide the opportunity to learn about the importance of community stewardship and environmental responsibility (Gardening Matters).

Local agricultural production benefits the local economy, and commercial community gardens may contribute to economic development as well. Local food production helps preserve green space. Other benefits of community gardens may include increased property values, reduced crime, neighborhood beautification, and increased community engagement (Gardening Matters).

Healthy Communities Initiatives:

1. Facilitate active and safe lifestyles for residents through the Open Space Master Plan and other community initiatives

- Implement the Open Space Master Plan
- Promote and develop biking activities such as the City of Miami Bike Days
- Explore tax incentives for bicycle commuting
- Improve safety for pedestrians and bicyclists through legislation and enforcement of traffic laws (i.e. antidistracted driving laws, red light cameras, etc.)
- Increase safe walking, bicycling and driving behaviors through educational, public awareness and social marketing programs (for example, 'Share the Road,' WalkSafe, BikeSafe programs, Walk to School Day, Bicycle month)

Strategies

Plant more trees

Facilitate active and safe lifestyles for

residents through the Open Space Master

· Promote fresh, local, organic food in all

neighborhoods through grocers, farmer

Plan and other community initiatives

markets, and community gardens

- Increase participation in the "Safe Routes to School" program and provide school crossing guards at elementary schools
- · Identify barriers to mobility for disabled and elderly residents and create an action plan

2. Plant more trees

- Promote community partnerships such as Million Trees Miami
- Promote proper tree maintenance (for example use the Community Image Advisory Board's Tree Care Guide in development)
- Promote landscaping and gardening suitable for the South Florida environment

3. Promote fresh, local, organic food in all neighborhoods through grocers, farmers' markets, and community gardens

- Create a working group to coordinate sustainable food initiatives
- Continue Redland Raised to promote local/organic agriculture and economy by connecting farmers with local users such as restaurants, grocers, and farmers markets
- Develop an analysis of potential sites and develop approach for turning 'un-buildable lots' close to schools and churches into community gardens
- Amend the Comprehensive Development Master Plan and County Code to provide for sustainable, urban agricultural practices inside the Urban Development Boundary

Physical Activity & Nutrition (2007)	County	State
Adults who are inactive at work	67.3 percent	34.5 percent
Adults who are sedentary	35.4 percent	25.4 percent
Adults who consume at least five servings of fruit and vegetables a day	23.1 percent	26.2 percent
Adults who consume three or more servings of vegetables per day	24.3 percent	29.1 percent
Adults who consume two or more servings of fruit per day	37.9 percent	36.2 percent
Adults who meet moderate physical activity recommendations	29.2 percent	34.6 percent
Adults who meet vigorous physical activity recommendations	23.7 percent	26.0 percent

Source: http://www.floridacharts.com/charts/mapp_report.aspx http://www.cdc.gov/obesity/causes/index.html

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We must continue to build upon our success. Miami-Dade County has adopted a progressive Open Space Master Plan; *GreenPrint* is in line with this plan, and the actions and initiatives in both support each other. We must continue to promote community exercise in parks and community centers and continue to make facilities better, more available and more accessible.

Through the University of Florida and the Miami-Dade County Consumer Services Department Cooperative Extension, we have a strong and popular Florida Friendly Yards Program with a wide range of programs covering commercial crop agriculture education, commercial landscape maintenance, pesticide applicator training, home lawn and gardens and master gardener training. Cooperative Extension should continue such efforts to plant the right tree in the right place and should further encourage and work with big-box retail stores to stock and sell Florida-friendly plants. These are the foundation of a healthy Miami-Dade.

Benefits of Trees

- Contribute to the processes of air purification, oxygen regeneration and ground water recharge.
- Aid in the abatement of noise, glare, heat, air pollution and dust generated by major roadways and intense use areas.
- Act as a wind break to protect and buffer the effects of high winds on structures.
- Reduce local air temperatures and the urban heat island effect, where temperatures in cities are higher than surrounding suburban and rural areas due to paved and dark surfaces that absorb and store energy.
- Improve the aesthetic appearance of commercial, industrial and residential development, and complement urban redevelopment by protecting and increasing property values within the community.
- Promote public health and well-being and improve the pedestrian environment by providing shade and creating a setting conducive to walking and non-motorized transportation.
- Establish community identity, character and linkages.
- Trees save money on our electric bills by shading homes, offices, and streets, resulting in a reduced need for air conditioning.
- Trees reduce storm water runoff by intercepting rainfall through their leaves and branches, slowing the flow of rainwater and actively removing water from the soil.
- National studies indicate that trees increase property values by five to 15 percent and make communities more visually and environmentally appealing (Anderson and Cordell 153-164).
- Trees improve air quality by absorbing pollutants and particulate matter from the air. Trees shade pavement and reduce air temperatures.
- Recent studies have shown a positive correlation between trees and social benefits and quality of life indicators, including the reduction of reports of physical violence in public housing that had trees outside the buildings and significantly better relations and stronger ties between neighbors (Sullivan and Kuo, n. pag.).
- Research also shows that consumers are willing to shop longer and spend more in retail areas that have trees because trees provide a "human habitat" (Wolf n. pag.).













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