

Town of Hilton Head Green Blueprint



Adopted by Town Council Resolution

April 21, 2015



Category 1: Transportation

Action 1 Reduce the percentage of vehicular trips on roadways within the Town by 2030.

Purpose: Reducing the percentage of vehicle trips on Island roads reaps major benefits, including less greenhouse gas emissions for better air quality, less formation of ground-level ozone and other health-damaging air pollutants and less stress for drivers. One of the ways to reduce the percentage of vehicle trips is to continue to promote walkable developments and building and interconnecting multi-use pathways that allow bicyclists and pedestrians to access all parts of the Island. Using these pathways also promotes a healthier population.

Measurable Indicators: Annual traffic counts and bicycle counts, other annual non-vehicular counts, total number of miles of pathway connections

Status: As of 2013, the Town has built 60 miles of pathways and greatly increased connectivity between pathway segments. Some of Town Council's goals are to provide a bike path on both sides of US 278, provide pathways on all secondary roads and provide pathways on all new Town road projects. The Town has received recognition as a Bicycle Friendly Community at the Silver Level from the League of American Bicyclists.

The Town will continue to buy high-density properties, using the Real Estate Transfer fee and other resources, to decrease the number of peak hour trips on our roads.

Lead and Partners: Grants Administrator, Bicycle Advisory Committee

Action 2 Prepare a Public Transportation Plan by 2020.

Purpose: Although the Town supports a permanent population of about 40,000 and visitors that number around 2.5 million per year, there is currently no consolidated public transportation system. Having an efficient public transport system could greatly reduce Island traffic and yield human health and environmental benefits mentioned in Action 1.

Measurable Indicators: Number of public transit vehicles entering/exiting the Island per month, frequency of trips of public transit per week, and ridership numbers

Status: This action is a recommendation of the 2010 Comprehensive Plan.

Lead and Partners: Town Traffic and Transportation Engineer, Palmetto Breeze, MPO, LCOG

Action 3 Make non-automobile transit more convenient for users.

Purpose: In order to encourage residents and visitors to ride bicycles and walk more often, non-automobile activities should be made as convenient as possible.

Measurable Indicators: Number and availability of bicycle parking spaces, number of hotels offering bike rentals for guests, number of pathway connectors to parks and businesses, number of bicycle spaces at Town facilities

Status: Encouraging an increase in the number of bicycle parking spaces and pathway connectors to businesses are both recommendations of the 2010 Comprehensive Plan. As a Town practice funds are budgeted annually for replacement and installation of new bicycle racks at Town parks. Interconnections between discrete pathway sections are currently planned or being constructed, with the goal being to have non-motorized access to all areas of the Island. The Town has also installed 30 information kiosks along 62 miles of multi-use pathways to assist users in wayfinding. The Town Urban Designer assists with Town pathway and other Town amenities designs; Chaplin Linear Park, which will connect Shelter Cove Community Park with Chaplin Park, is currently being designed. Town maintains

all Town facilities once construction is completed; examples are mulching of nature trails annually, trimming vegetation along pathways as needed, mowing of park turf grass weekly.

Lead and Partners: Grants Administrator, Facilities Manager, Town Urban Designer, Island businesses

Category 2: Education

Action 1 Raise awareness of sustainable practices in the community by 2019.

Purpose: Showing residents and visitors what steps are being taken by members of the community to lead greener lives encourages the spread of these practices (“lead by example”).

Measurable Indicators: Number of people served by education efforts per year, numbers and types of programs offered, number of hits on the Town website sustainability page, number of published articles on sustainability written by Town staff

Status: The Town has incorporated interpretive signs into green infrastructure projects, such as Jarvis Creek Park and Fish Haul Creek Park, to educate the public on the social, economic and environmental benefits of using green infrastructure. Interpretive signs incorporating technology that illustrate the importance of Broad Creek and how to keep the creek clean and healthy have been recommended along Chaplin Linear Park, which is currently being designed. Town staff plans to work with the Chamber of Commerce to highlight green businesses on the Chamber’s website, and to gauge the interest of the Chamber in an awards program to recognize local green businesses.

Lead and Partners: Sustainable Practices Coordinator, Town Urban Designer, Storm Water Manager, Chamber of Commerce

Action 2 Work with local schools to incorporate material on sustainability into their lesson plans by 2019.

Purpose: Teaching school-age children about the benefits of leading greener lives helps them to start these habits at an earlier age and follow them throughout their lives. Children also often help educate their family and peers.

Measurable Indicators: Number of schools, classes and students served, number and types of programs produced for schools

Status: Staff has contacted two local schools with proposed lesson plans for different age groups.

Lead and Partners: Sustainable Practices Coordinator, area schools

Action 3 Increase use of multiple platforms to reach all audiences with educational information on sustainability by 2019.

Purpose: In order to educate all segments of the resident and visitor population, education must be tailored for each audience and presented via media that they use.

Measurable Indicators: Number and types of educational platforms used and number of people served

Status: The Town has produced a Sustainability web page on its website that educates on topics such as how to live greener lives, the importance of green living, how to recycle on Hilton Head Island and the natural history of some of our native species. This web page is intended to be a “living document” with frequent updates.

In cooperation with municipal, county and non-profit partners, the Town has produced a touch screen kiosk that educates about the importance of our watersheds, the environmental, social and economic problems of storm water generation and pollution, and steps that citizens can take to help solve these problems. This kiosk will be circulated through the Property Owner Association offices on the Island in order to reach the maximum number of residents.

The Town continues to present sustainability-themed presentations to both internal (staff) and external (general public, special interest groups, businesses, and visitors) customers. Water utilities have info on websites to educate and encourage their customers to conserve water. Palmetto Electric also educates their customers on energy saving

measures via their website. The RBC Heritage of Golf Tournament presented by Boeing is partially powered by green energy supplied by Palmetto Electric.

Lead and Partners: Sustainable Practices Coordinator, POAs, Utility Providers

Category 3: Agriculture

Action 1 Encourage the growth of community gardens on the Island.

Purpose: Encouraging community gardens and traditional home gardening on Hilton Head Island would encourage residents to eat healthier, fresher foods and to be more active, both of which would have positive effects on health. Community gardens usually raise enough produce to donate some to charitable organizations on the Island for distribution to in-need sectors of the population. It may also be an opportunity for Island restaurants to purchase locally grown vegetables, which would save fossil fuels used in shipping those foods.

Measurable Indicators: Number of community gardens, pounds of food donated to charity, number of acres used for agriculture

Status: There are currently three community gardens in gated communities on the Island.

Lead and Partners: Sustainable Practices Coordinator, Island Garden Clubs, Master Gardeners, Clemson Extension Cooperative

Action 2 Encourage the use of local foods on the Island.

Purpose: Eating local foods contributes to the good health of our visitors and residents, grows the local economy and saves on the environmental cost of shipping foods long distances.

Measurable Indicators: Attendance at Island Farmers' Markets, Annual Community Oyster Roast and other local food venues

Status: In the coming year, Town staff will be working with the organizers of the Annual Community Oyster Roast to incorporate sustainable food topics into this established festival that celebrates our local oysters.

Lead and Partners: Sustainable Practices Coordinator, Grants Administrator, Island Recreation Association

Category 4: Economic Development and Tourism

Action 1 Provide information on sustainable economies to the Economic Development Corporation.

Purpose: Develop a more diverse, resilient and sustainable Island economy.

Measurable Indicators: Track diversity of businesses on the Island, track number of green businesses

Status: The Hilton Head Island Economic Development Corporation formed in 2013 and is currently developing its strategic goals

Lead and Partners: Deputy Director of Community Development, Sustainable Practices Coordinator

Action 2 Assist Island visitors to reduce their Island carbon footprint by producing and distributing a Green Visitors' Guide.

Purpose: Tourists visit Hilton Head Island from all over the United States and the world; Hilton Head Island receives approximately 2.5 million visitors a year and has a permanent population of 37,099. Providing green guidance to them for their visit will help reduce the overall carbon footprint of the island.

Measurable Indicators: Number of visits to the webpage after the guide has been posted.

Status: No Green Visitors' Guide currently exists for Hilton Head Island therefore no visits to that webpage have been recorded.

Lead and Partners: Sustainable Practices Coordinator

Category 5: Environmental Issues

Subcategory 5.1: Water Quality

Action 1 Organize and analyze water quality monitoring data.

Purpose: One of Town Council's highest priorities is to maintain and improve water quality. Analyzing monitoring data will allow for determination of impairments to Island water bodies, and show where long-term problems exist to target corrective strategies.

Measurable Indicators: Water parameters such as dissolved oxygen, fecal coliform counts, ammonia, pH, salinity, total Kjeldahl nitrogen, total nitrogen, total phosphorus, turbidity, total suspended solids, water temperature, nitrates

Status: Water quality monitoring is ongoing and data is being organized and analyzed. The goal is to produce an annual water quality report.

Lead and Partners: Storm Water Data and Compliance Administrator, Sustainable Practices Coordinator

Action 2 Evaluate water pollution prevention methods used by Town.

Purpose: Several storm water treatment methods have been in place for decades but have never been formally analyzed. Doing this analysis will enable the Town to improve its efforts.

Measurable Indicators: Storm water monitoring data parameters such as dissolved oxygen, bacteria counts, phosphate and nitrate levels

Status: Analysis of the storm water green infrastructure at Jarvis Creek Park is currently underway.

Lead and Partners: Storm Water Manager, Sustainable Practices Coordinator

Subcategory 5.2: Air Quality

Action 1 Estimate the percent shading of impervious surfaces on the Island.

Purpose: Impervious surfaces such as dark-colored roofs and asphalt absorb heat during the day and release it slowly at night. This leads to the urban “heat island” effect, making it more likely that ground-level ozone will form. This chemical is damaging to all organisms, and is especially harmful to lung tissue. Shading these impervious surfaces by planting or retaining existing trees will reduce the urban heat island effect, making it less likely that ground-level ozone will form. This action will allow the Town to address areas of the Island where tree cover provides inadequate shading.

Measurable Indicators: Track the size of the urban forest canopy as compared to the acreage of impervious surfaces; compare traffic counts to tree cover

Status: A comprehensive tree ordinance in place since 1986 provides a robust urban forest that helps improve air quality by shading the built environment, cooling air temperature, and absorbing and breaking down air pollutants. Due to this ordinance, tree canopy on the island is greater than other communities in this area. Staff has produced an impervious surfaces map for the Island which will help to measure the percentage of shading on built surfaces. Report results of urban forest canopy studies to Town Council on a periodic basis.

Lead and Partners: Sustainable Practices Coordinator, GIS staff

Action 2 Perform an urban forest canopy analysis.

Purpose: The size and health of the urban forest directly relates to air quality. Trees and other plants can clean the air by absorbing air pollutants and prevent the formation of ground-level ozone by cooling the built environment. These are natural services that trees provide free of charge. There is a significant economic benefit to these services, as well as human health and environmental benefits. The American Lung Association states that there is no safe level of ground-level ozone for humans to breathe.

Measurable Indicators: Characterization of ground cover via analysis of random points on aerial photography of the Island

Status: This analysis recommended in the 2010 Comprehensive Plan will begin in 2014. Report results of urban forest canopy studies to Town Council on a periodic basis.

Lead and Partners: Sustainable Practices Coordinator, GIS staff

Subcategory 5.3: Biodiversity Conservation

Action 1 Monitor habitat types on the Island using aerial photography and GIS and correlate with the number of vertebrate species present.

Purpose: Biodiversity contributes critical natural services to humans and our environment, such as storm water filtration, pest control, environmental sanitation and economic and social benefits.

Measurable Indicators: Track the number of vertebrate species on the Island, track acres and types of habitat available

Status: The Hilton Head Island Audubon Christmas bird count has been ongoing on the Island since the 1970s, as has regular aerial photography. Island beach profiles are also monitored on a continuing basis. Habitat monitoring will be used to educate the public on biodiversity issues and will be reported to Town Council on an as needed basis.

Lead and Partners: Sustainable Practices Coordinator, GIS Staff, HHI Audubon Society, beach renourishment consultant

Action 2 Monitor the number of rare/threatened/endangered species on the Island and document efforts to preserve them.

Purpose: The biodiversity on Hilton Head Island is a critical part of the local economy and quality of life.

Measurable Indicators: Number of nesting loggerheads per year, nesting success, number of hatchlings produced; number of wintering piping plovers

Status: The Town has been a partner of the Sea Turtle Protection Project since 1995. Data collected by this project is used to produce a map showing the density of nesting turtles along the oceanfront, which plays a part in permitting beach renourishment and other projects. The Town also partners with Federal and State Agencies in the stranding networks for sea turtles and marine mammals and also monitors the endangered piping plover, which winters on Hilton Head Island. Data from these projects help the Town protect these species and aid the State and Federal Governments with their recovery plans. The results of these monitoring efforts will be used to educate the public and enlist their assistance in efforts at protection and recovery efforts.

Lead and Partners: Sustainable Practices Coordinator, GIS Staff, HHI Audubon Society, US Fish and Wildlife Service, South Carolina Department of Natural Resources, NOAA

Category 6: Population

Action 1 Compile Census data showing age groups/ethnicity/gender/income statistics for each 10 year Census.

Purpose: Analyzing Census data will allow the Town to determine if services provided are adequate for the Island's population. It also provides an opportunity to determine if additional services for under-served portions of the population, such as the elderly or disabled, are needed.

Measurable Indicators: Monitor the 3-5 year American Community Survey data for unforeseen or unanticipated population or demographic changes; identify levels of service based upon population; monitor monthly visitor statistics provided to the Town by the Hilton Head Island-Bluffton Chamber of Commerce

Status: The Town participates in the U.S. Census Bureau Decennial Census. The last Census was administered in 2010.

Lead and Partners: Grants Administrator, U.S. Census Bureau

Category 7: Housing

Action 1 Identify methods to support construction of new moderate income housing by 2024.

Purpose: The majority of people that work on Hilton Head Island live off-Island and must commute daily. Availability of moderate income housing on the Island would alleviate traffic on roads and reduce carbon emissions.

Measurable Indicators: Number of acres used for moderate income housing, number of moderate income units on the Island

Status: The 2010 Comprehensive Plan encourages residential developers to construct moderate-income housing options. Town Council approves the annual fair housing resolution proclaiming April Fair Housing Month in the Town.

Lead and Partners: Grants Administrator, Town LMO Official, local developers

Category 8: Volunteerism and Civic Engagement

Action 1 Encourage the tourism industry on the Island to offer visitors a chance to mitigate their travel carbon footprint.

Purpose: Offering visitors a chance to mitigate their travel carbon footprint advances the sustainability goals of the Town and many accommodations businesses, as well as attracting a group of visitors that otherwise might not visit the Island. It also allows for the accomplishment of many projects (such as beach plantings, sand fencing, marsh clean ups, etc.) that benefit residents, visitors and the environment that might otherwise go undone. It fosters a sense of ownership in visitors that will keep them returning as good stewards of the Island.

Measurable Indicators: Number of businesses offering carbon mitigation, number of visitors participating, number of hours donated, number and types of projects accomplished

Status: Staff has worked with several businesses on the Island, one of which now coordinates a twice a year cleanup of Broad Creek, using visitor and resident volunteers.

Lead and Partners: Various visitor-based businesses, Sustainable Practices Coordinator

Action 2 Work with various groups to encourage volunteerism and foster a greater sense of community.

Purpose: Resident groups that volunteer get to know their neighbors and share ownership of the community. Volunteer groups become good stewards whose efforts benefit everyone in the community.

Measurable Indicators: Counts of number and type of selected volunteer groups and number of individual volunteers, number of hours donated, number and types of projects accomplished.

Status: Hilton Head Island is home to numerous volunteer organizations which dedicate many hours to community services, such as Volunteers in Medicine, Deep Well and Hilton Head Humane Association. For example the Town currently works with the Hilton Head Island Council of Garden Clubs and the Master Gardeners group to maintain and improve the Town's Xeriscape Garden, which is open to the public and encourages the use of native plants and the grouping of like-demand plants for water conservation. These groups have also installed name plates for the plants in the garden, so that visitors can become familiar with native plants.

Lead and Partners: Volunteer groups, Sustainable Practices Coordinator

Action 3 Make official Town Proclamation for Earth Day.

Purpose: To create greater local awareness of sustainable activities/initiatives conducted by the Town and encourage residents and visitors to live greener lives.

Measurable Indicators: Number of Earth Day events offered on the Island, number of people attending these events

Status: This Proclamation does not yet exist.

Lead and Partners: Sustainable Practices Coordinator, Grants Administrator

Category 9: Recreation

Action 1 Promote outdoor recreational activities which contribute to healthy lifestyle habits of good nutrition, good physical health and good mental health.

Purpose: Creating outdoor activity venues and encouraging use leads to better overall quality of life for residents, which in turn reduces medical care costs.

Measurable Indicators: Number of active parks, number of activities available at all parks, usage of active fields (baseball and soccer fields, tennis courts), number of miles of pathways Status: The Town owns approximately 1,300 acres of land, and has built numerous active and passive parks with facilities such as playgrounds, multi-use pathways, baseball diamonds, soccer fields, tennis courts and beach parks. A rowing and sailing center is scheduled for construction in 2014. In addition to Town owned and maintained recreational facilities, there are 21 golf courses and numerous tennis courts, and beach and water access points as well as water-oriented recreational activities that are privately owned. Town staff will continue to collaborate with the Island Recreation Association to communicate recreational opportunities to residents and visitors via the Town and Island Recreation Center websites.

Lead and Partners: Grants Administrator, Island Recreation Association, Facilities Division

Action 2 Provide walkable access to Parks and Beaches.

Purpose: The option of being able to walk to parks and beaches increases healthy lifestyle habits and decreases automobile trips. On average a walkable distance can be defined as a quarter mile walked within ten minutes.

Measurable Indicators: Number of walkable beach access points and parks, average distance from nearest residences

Status: The Town currently has eight public beach access points, many of which serve adjacent neighborhoods. The majority of Town parks can be reached by walking from nearby residences or by using existing pathways. Chaplin Linear Park, which will connect Shelter Cove Community Park with Chaplin Park, is currently under design. The Town also has neighborhood beach access points (107) and private beach access points (59) as defined by the Beach Management Plan.

Lead and Partners: Urban Designer

Category 10: Governance

Action 1 Increase energy efficiency in all Town buildings by 10% by 2019.

Purpose: In order for the Town to continue to improve its efforts to conserve resources and save funds, opportunities should be identified to make improvements in operations. The Town should also advertise successes in these endeavors in order to “lead by example”.

Measurable Indicators: Track water, electricity and alternate energy use at Town Hall and other Town buildings

Status: Palmetto Electric did an energy audit of Town Hall in 2013 and offered useful suggestions on improving energy conservation. In the recent Town Hall conference room renovations, energy efficient ballast/lighting was used and installation of motion sensor lighting in two Town Hall departments and at several Town fire stations was completed. Fire Station 6 is scheduled to have a solar panel installed to assist with heating water supplies and installation of a dual gas/electric HVAC system will improve efforts to conserve resources and save funds. Town Hall has been insulated with spray foam and is scheduled for HVAC duct sweeping in the fiscal year 2015 Town Hall remodel capital improvement project. If approved in the fiscal year 2015 budget, installation of an HVAC thermostat lock-out system at Town Hall will begin.

Lead and Partners: Sustainable Practices Coordinator, Facilities Manager

Action 2 Improve indoor air quality in all Town buildings by 2019.

Purpose: As a species, humans are spending more and more time indoors, creating exposure to chemicals used in paint, carpets, upholstery and cleaning products for longer periods of time, which may result in adverse health effects. Reducing chemicals used in Town offices will result in a healthier environment for Town employees and visitors.

Measurable Indicators: Track efforts to buy greener cleaning products, furniture, carpets, vehicles, etc.; develop recommendation(s) for procurement process to purchase greener products

Status: The Town's Facilities Department has made strides in using greener cleaning materials, low VOC paints and carpet adhesives and less pesticides.

Lead and Partners: Facilities Manager, Director of Administrative Services, Sustainable Practices Coordinator

Category 11: Open Space and Land Use

Action 1 Perform annual land use map update.

Purpose: The Town's Land Use Map shows how land use changes over time. Monitoring these changes help to determine if any proposed uses are incompatible with natural features such as tidal creeks.

Measurable Indicators: Change in acreage of open space, change in percent vacant land

Status: This update is performed annually in mid-January.

Lead and Partners: Grants Administrator, GIS staff

Category 12: Planning, Zoning, Building and Development

Action 1 Work sustainable initiatives into new ordinances by 2019.

Purpose: The Town has long been known for its environmental stewardship; the next step in the Town's evolution is to maintain and enhance this stewardship from social, economic and environmental perspectives.

Measurable Indicators: Number of new or amended Ordinances that contain sustainable goals

Status: The current Comprehensive Plan includes information on why sustainability is important and recommendations on changes to Town Ordinances to become more sustainable. The Land Management Ordinance, which carries out the recommendations of the Comprehensive Plan, is currently being rewritten.

Lead and Partners: LMO Official, Sustainable Practices Coordinator, Planning staff, Building Codes, Stormwater Division

Category 13: Public Safety and Emergency Management

Action 1 Provide the highest level of Fire and Rescue and Emergency Management services to Island residents and visitors.

Purpose: Hilton Head Island is a top destination for visitors. Because of this, during peak season, Island population swells to many times its off-season size. The Town's fire and rescue and emergency management departments must be prepared to handle this increase, and do it in a manner that satisfies residents and keeps visitors interested in returning to visit or live.

Measurable Indicators: Number of emergency calls, number of certifications held by Fire and Rescue and Emergency Management staff, average response time

Status: Call records and department data are maintained by the Fire & Rescue division.

Lead and Partners: Deputy Fire Chief, Battalion Chief of Planning

Category 14: Resource Use/Conservation

Action 1 Reduce the Town's environmental impact by using sustainable design, construction, operation and maintenance of Town facilities and assets.

Purpose: The Town should serve in a leadership role to set an example for businesses and residents in these areas as a method of education and leadership.

Measurable Indicators: Number of reams of copy paper used by Town Departments, number of tons of recycled electronics and household hazardous waste collected, number of Christmas trees recycled

Status: In the last three years, the Town has begun accepting electronic submissions for permit applications, which has greatly reduced the amount of paper generated and used. All plan documents, as well as Ordinances, are now available electronically and are no longer sent out in hard copy except under special circumstances. This has decreased use of paper for copying and printing. The Town provides receptacles for recycling along the 12 miles of beach and at all Town owned parks and Town Hall. When the full life-cycle of toilets and hand dryers at Town owned buildings have reached their maximum level, they are replaced with energy efficient models. When appropriate during building and/or rehabilitation projects, old construction materials are recycled. The current construction of Fire Station 6 will result in the building being LEED compliant at the silver level. An energy audit of Town Hall by Palmetto Electric offered additional suggestions, several of which had already been done, as mentioned above. As a matter of practice Town staff intends to examine a future purchasing policy to further encourage use of green products, including recycled and/or reusable items.

Lead and Partners: Facilities Manager, various businesses, Sustainable Practices Coordinator