



Environmental Management System

Plan | Do | Check | Act



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<u>Acknowledgements</u>

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Executive Summary





Chapter I: Executive Summary

The City of Palm Coast is a young community with incorporation 15 years ago. However, the testament of providing a "Hometown Feeling that Respects and Protects the Natural Environment" is a constant and the highest priority to the City of Palm Coast City Council. The Environmental Management System (EMS) concept will serve to foster an ongoing commitment and enhancement to the City of Palm Coast sustainability initiative which intertwines three core components: Economy, Environment and Equity. This document serves to consider the balance of these focuses while respecting parent plans to ensure the consideration of the environment for future generations.



Sustainability for the City of Palm Coast

Ensuring that economic health thrives over time in a vibrant and resilient community which values and respects natural resources

II

Overview





Chapter II: Overview

What are the basics?

In concept, the Environmental Management System (EMS) is a management tool uniquely tailored to the City of Palm Coast ("City") and based on the framework set forth in the <u>International Standard for Organization for Standardization (ISO) 14001</u>. The goal of this document is to comprehensively measure, monitor and correct activities serving the City "Green" or sustainable initiatives based on three primary components: environmental, economic, and social perspective (<u>United Nations General Assembly</u>, 2005).

How is this document organized?

This document serves as a reference but should be dually considered a living document that is expected to evolve pursuant to City Goals. It is intended to provide the user with guidance via a step-by-step method (Plan-Do-Check-Act) for projects and programs. The EMS focuses on five (5) fundamental categories to target unique disciplines of a City-wide approach.

- 1. Water Conservation: *Reduce Consumption*
- 2. Waste Reduction Increase Recycling: Natural Resource Conservation
- 3. Greenhouse Gas: Minimize Carbon Footprint
- 4. Energy Conservation and Alternative Sources: Embracing Innovation
- 5. Outreach and Incentives: Educate and Inspire



Of course, the boundaries are expected to become blurred since many projects and programs cross into some of all of the above-referenced categories. For instance, a project that targets Compressed Natural Gas (CNG) technologies to supply City Fleet vehicles with an alternative fuel supply would bridge a concept that dually serves as a "Greenhouse Gas" minimization strategy and an "Alternative Energy" resource.

Each category will be introduced with an initial overview to better facilitate a detailed description of the comprised elements. Projects will be inventoried based on three (3) primary sections.

- 1. Existing Programs: Serves to provide an inventory and update on existing programs and projects.
- 2. 2014 Accomplishments: Outlines new projects and initiatives introduced this year.
- 3. Potential Future Projects: Details potential future initiatives for City Council consideration and guidance.

It is not the intention of this document to be inundated with data and impractical project detail; however, the EMS is expected to serve the user with sufficient information for decision making purposes and appropriately track and monitor progress.



How was this document developed to be user-friendly?

In concert with the City's sustainability objective, this document has been integrated with user-friendly electronic applications to minimize the need for a printed desk-top document.

 One Click Away: Independent of the user's device, the document has been integrated with a "One Click Away" navigation approach. Features include bookmarks to internal document components and hyperlinks to outside data resources.



Navigates user to the EMS "Table of Contents"



Navigates user to the beginning of the respective "Chapter"



Provides links to media resources to enhance topic detail

<u>City of Palm Coast</u> Indicates a hyperlink to an external reference document or website

- Management Archive: To aid the document's flow, supporting management materials are housed
 in the Appendices section. Associated project materials are readily accessible through the "One
 Click Away" function.
- At a Glance: Projects that serve the City through other agendas are uniquely highlighted with iconic references throughout the document to alert the user to the significance.



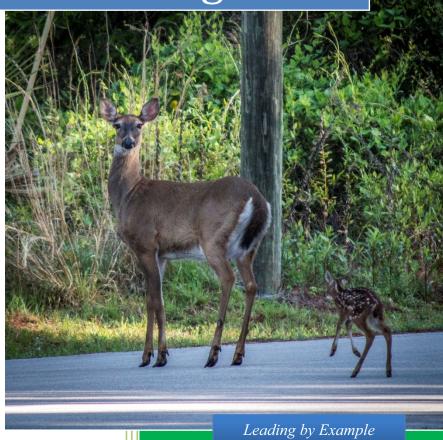
City of Palm Coast Strategic Action Plan



Project targets to enhance Green Local Government Certification

Ш

History and Background





Chapter III: Background and History Leading by Example

a. Leading by Example

Environmental resource stewardship consistently has been held to the highest priority from even the earliest beginnings of Palm Coast. In accordance with a master plan created by the International Telephone and Telegraph Corporation (ITT) / Levitt & Sons in the late 1960s, the community was created and marketed as "the perfect place to live" and was designed to "incorporate and merge the beautiful, balanced and diverse environment that already existed in the area with the recreational interests of its prospective residents". Protecting the environment, a commodity that cannot be replaced, is held as a mantra for City of Palm Coast City Council and resonates with the aggressive steps taken to not only protect but enhance the quality of life for future generations.

First you have to ask - How can one lead and teach without first experiencing it and practicing it? True leadership rests in a foundation of experience and understanding. Leading by example fosters inspiration without regulation.

"If your actions inspire others to dream more, learn more, do more and become more, you are a leader" ~ John Quincy Adams

In 2007, the Green City Committee (volunteering staff from a multitude of Departments) and the Green Team (City environmental professionals) were created through the leadership of City Manager, Jim Landon. Through these humble beginnings, City Departments inspired an entire community to dig, plant, nurture, conserve, teach and recognize the value of natural resources. Environmental programs began with city employees in their own workspace environment and rapidly expanded to inspire children and adults across the entire community.

b. Implementing a Vision

The City of Palm Coast formally embarked on sustainable initiatives with the adoption of the Green Resolution (2008-75) on May 6, 2008 which positioned the City with a "Leading by Example" posture. With this resolution, the City committed to three (3) aggressive actions that included the following.

- 1) All new facilities shall incorporate Green design principles, and existing facilities shall operate in a sustainable matter.
- 2) Evaluation of Green Development Incentives and mandatory land development regulations.
- 3) Pursuit of a Green Local Government designation.

As mandated by Resolution 2008-75, these actions have been the driving force for numerous enhancements that have promoted the City of Palm Coast City Council as Leaders of Sustainability. Ensuring long-term environmental stewardship was again reinforced with City Council's enhancement to the annual goal setting exercise.



Over the course of five (5) months, the City of Palm Coast City Council participated in an exhaustive planning exercise that consisted of interviews and workshop events to reaffirm a City-wide Mission, Values and Long-term Vision. During this process, City Council was provided a Leadership Guide tool that housed core planning elements to better assist with the Strategic Action Plan development process.

Through Palm Coast City Council's direction, the Vision is implemented through six (6) Long-term Goals and supporting Short-term Objectives and Strategies. In comparison to previous years, an additional tier of organization was established to bridge a closer relationship with implementing the Vision and Fiscal Year budgetary commitments. Through Approaches (Annual projects), City staff track activities, budget, performance and overall accountability of the pursuit of the City's Vision. The EMS is intended to dove tail into the annual reporting of our activities.

Goal 4 Environmental

To blend our residential and commercial properties with our "City of Parks and Trails" image to create a sustainable framework of visual appeal while caring for our land, water, air, and wildlife.

<u>Objective 4.1</u>: To develop programs to enhance our water conservation strategies

Strategy 4.1.1: Utilize nature's water supply resources effectively for water supply

Strategy 4.1.2: Target expansion opportunities to utilize reclaimed water through established City processes

<u>Objective 4.2:</u> To evaluate the evolution of City of Palm Coast Recreation and Parks Facilities Master Plan projects

Strategy 4.2.1: Develop a phased approach to financing and constructing the Long Creek Nature Preserve Concept

Strategy 4.2.2: Build future bicycle / pedestrian connections to unique destinations

Strategy 4.2.3: Identify unique user experiences through technological enhancements and innovative design principles



Goal 1 - Expansion

To anticipate the need for additional services and infrastructure to provide opportunities for mixed use development with goods, services, and employment

Goal 2 - Economic

To develop and maintain a strong economy by supporting the growth and development of new and existing businesses while creating an environment to attract new companies that align with our values

Goal 3 - Finance

To leverage our financial strengths while ensuring the City remains committed to fiscal responsibility in delivering value-added services to residents and businesses

Goal 4 - Environmental

To blend our residential and commercial properties with our "City of Parks and Trails" image to create a sustainable framework of visual appeal while caring for our land, water, air, and wildlife

Goal 5 - Quality of Life

To enhance the quality of life for our citizens by providing safe, affordable, and enjoyable options for cultural, educational, recreational, and leisure-time events

Goal 6 - Workforce Talent

To develop and implement a comprehensive plan to improve City employee skills and performance through education and training; performance management; and personal development opportunities

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TERM

Objective 4.3: Evaluate current "Green" initiatives and targeted projects that are sustainable

Strategy 4.3.1: Reduce waste through sustainable practices

Strategy 4.3.2: Staying in the forefront of sustainable communities in the State of Florida

Strategy 4.3.3: Develop Alternative Energy Strategy

Strategy 4.3.4: Implement City-wide energy savings program

<u>Objective 4.4</u>: Protect the environment through appropriate development strategies

Strategy 4.4.1: Protect natural green spaces to ensure a balance between the natural environment and development



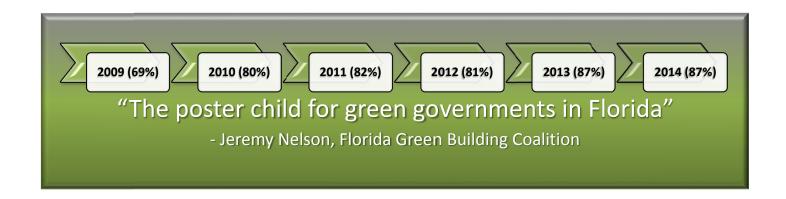
c. Strides to Sustainability

Through the framework of the Green Resolution and Strategic Action Plan, City leaders have pursued numerous initiatives consistent with the outlined commitments.

- ✓ Adopted Fire Station design prototype has been updated to include Leadership in Energy and Environmental Design (LEED) elements.
- ✓ On August 18, 2008, City of Palm Coast adopted the Unified Land Development Code (Ordinance 2008-16) which incorporated 57 green elements into land regulation.
- ✓ On February 20, 2009, City of Palm Coast was designated a Silver level Green Local Government by the Florida Green Building Coalition (FGBC). The certification graded an impressive inventory of City projects of which many have been highlighted in various media resources including the City of Palm Coast − Palm Coaster, April / May 2009 edition.



- ✓ On February 23, 2010, City of Palm Coast achieved a Gold level Green Local Government designation by FGBC. At certification, Palm Coast triumphed that it was one of only nine (9) local governments with this designation and led all municipalities in the State of Florida with the highest certification points achieved.
- ✓ Annual Citizen Survey: For the past 12 years, the Annual Citizen Survey has been conducted to evaluate Governance, Community Characteristics and Citizen Participation. In 2014, 87% of residents rated Overall Natural Environment as "excellent" or "good". Survey trends are provided below with remaining results provided in the Appendix.





d. Driving Change

On October 20, 2009, City of Palm Coast City Council adopted a Green Development Incentive Program Ordinance (2009-22). With the adoption of these instruments, the City further committed to additional internal actions to enhance sustainability within City operations and to promote Green practices within the development industry. The Program remains in effect through an amended ordinance (2013-13).



- a. City Commitments Creation and maintenance of an Environmental Management System plan that evaluates internal processes and operations to effectively enhance environmental performance with a multi-department systematic approach.
- b. Voluntary Green Development Incentive Program The Ordinance facilitates a voluntary program that promotes established Green certification programs through an incentive-based approach. All disciplines of development are embraced and identified by target project cost reductions. With the adoption of 2011-22, the Florida Water Star (FWS) program administered through St. Johns River Water Management District was added to the list of recognized standards. In conjunction with supporting FWS, participants can also receive incentives through Capital Facility Fee reimbursements through Resolution 2013-10. The first participant of the incentive program was Trivett Homes and reaped the benefits of a \$710.00 fee reimbursement for choosing FWS enhancements.

IV

Environmental Management System





Chapter IV: Environmental Management System Measuring Success

The City of Palm Coast is extremely critical of all operations and consistently grades its performance by applicable standards. Expectations of excellence are clearly depicted through the extensive inventory of environmentally based awards, certifications and recognitions achieved through so many aspects of City operations. Measuring City endeavors is of the highest priority to ensure that the citizens of Palm Coast are provided optimal service(s) and the highest quality of life.

Northeast Florida Regional Council 2010 Regional Award for Excellence in Environmental Stewardship – Gold Local Government

American Water Works Association Utility TOP-OPS 2011 State Champions – 7 Years

PCMA TV199
Silver Communicator Award of Distinction
GreenWays Partnership

Florida Green Building Coalition Gold Green Local Government February 23, 2010

Surfcoast Chapter - FPZA
2010 Outstanding Sustainability Initiative
Green Development Incentive Program

Northeast Florida Regional Council 2012 Regional Award for Excellence in Environmental Stewardship – Solid Waste & Recycling Program

Surfcoast Chapter - FPZA
2011 Outstanding Development
Florida Water Star Demonstration Exhibit

PCMA TV199

Gold Communicator Award of Excellence
2010 Intracoastal Cleanup

National Arbor Day Foundation Tree City USA – 9 Years Growth Award – 8 Years

Florida Water Environment Association Palm Coast Water 2011 Best Tasting Water in N.E. Florida

Friends of Our Urban Forest
2010 Outstanding Public Educational Program Award
Educational Tree Nursery

American Water Works Association Utility TOP-OPS 2011 National Champions – 4 Years

Northeast Florida Regional Council 2014 Regional Award for Excellence in Environmental Stewardship – Zero Liquid Discharge WTP #2

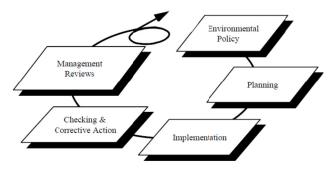
To date, numerous different mechanisms have been utilized to track and target green initiatives. From 2007 to 2008, a Master Project spreadsheet was maintained that inventoried each project with its respective goal, progress and completion date. This method was effective for summary purposes but did not truly grade City efforts according to a recognized standard. With this in mind and the passing of the City's Green Resolution (2008-75), City staff applied the Florida Green Building Coalition (FGBC) Green Local Government standard to the Master Project spreadsheet and found that a large percentage of the projects met the Standard's intent. It should be noted that the FGBC is the sole certifying entity in the State of Florida for local governments. In 2009, Palm Coast achieved the Silver level Green Local Government certification and embraced the standard as the governing method of managing City initiatives. Over the course of the next year, Palm Coast rapidly achieved the next level of certification, securing a "Gold" level designation on February 23, 2010. At time of "Gold" certification, the City led all municipal governments in Florida with the highest points achieved.



With this achievement, the City of Palm Coast quickly eclipsed eminent goals and found itself looking beyond. With the concepts and initiatives set forward by FGBC, the City envisioned an opportunity to expand, track and monitor sustainable efforts in a tailored structure. Concurrently with the certification upgrade, the City adopted Ordinance 2009-22 that brought forth a mandate of an all-encompassing concept, an Environmental Management System ("EMS"). Further, the City of Palm Coast echoed this requirement and other sustainable initiatives within the July 2010 adoption of the 2035 Comprehensive Plan update.

a. Purpose \sim Why is an EMS a good fit?

In 2005, the U.S. Environmental Protection Agency (EPA) made a formal statement which mimics the City's position stating that "EPA will lead by example, by developing, implementing, and maintaining EMS at appropriate EPA facilities." With technology innovation and ongoing diversification of grading standards in mind, a unique standard that yields itself to adaptation would serve the City with its ever-changing conditions.



b. Definition \sim What is it?

In concept, an Environmental Management System (EMS) serves as a sustainability cookbook providing a list of ingredients in balanced proportions with instructions to guide the preparer to a successful dish. As any master chef will declare, some recipes fall short but opportunities arise to enhance the product with alternative approaches. Through the experiences of numerous businesses and industry, an EMS brings perspective to managing environmental programs.

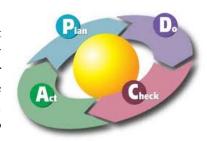
According to the <u>International Standard for Organization for Standardization (ISO) 14001</u>, an EMS is a management tool enabling an organization of any size or type to:

- Identify and control the environmental impact of its activities, products or services, and to
- Improve its environmental performance continually, and to
- Implement a systematic approach to setting environmental objectives and targets, to achieving these and to demonstrating that they have been achieved.



c. Plan - Do - Check - Act

This concept may appear to be a common sense approach to management when dealing with many different disciplines, but the origins rest in quality assurance which is commonly referred to as the "Shemhart Cycle" and later as the "Deming Wheel". With an emphasis of perpetual improvement, the Plan — Do — Check — Act (PDCA) concept embraces careful planning, systematic action, quantifying results and making possible changes to maintain or enhance program objectives.



With respect to the overall objective of the City of Palm Coast Environmental Management System (EMS), PDCA maintains a consistent approach to an extensive range and inventory of projects. For each project, a suite of tools and factors are expected to be unique especially when considering the discipline of sustainability as outlined in this document (i.e. Water Conservation, Waste Reduction, Greenhouse Gas, etc.). With the consolidation of the City's sustainable projects, the EMS offers the user a comprehensive snapshot of the overall endeavor through annual reporting. This approach yields numerous objectives, including but not limited to the following.

- Report card to the City of Palm Coast City Council
- Accountability to the Citizens of Palm Coast
- Setting measurable objectives and targets
- Annual evaluation to foster continuous improvements
- Maintaining compliance with certifications and mandates
- Keeping pace with innovation through dynamic reporting

Create the future instead of predicting it...

d. Keeping Pace



The EMS provides a conduit to report and recruit feedback from employees and the Citizens of Palm Coast through a survey-based approach. As part of the annual update process, staff evaluates the annual citizen survey results that track trends in awareness, involvement and opinions about environmental issues in City services. A copy of the trend analysis is located in the Appendix. With providing stakeholders opportunities to provide confidential input, the survey provides invaluable insight to the effectiveness and needs of the affected bodies. It is critical to better understand the effectiveness and perceived values of the City's sustainable initiatives to feel the pulse of the City.

In addition, the EMS will keep pace with any changes in laws and regulations associated with the provided projects. It is not the intent of this document to assemble all applicable regulations but provide assurances that projects are maintaining compliance while seeking environmental excellence. Concurrently, it is the goal of the EMS to consider grant and alternative funding opportunities through state, federal and non-profit organizations. As a comprehensive planning document, the EMS serves as a house for "on-call" projects and background information to effectively pursue supplemental funding resources.

V

Water Conservation





Chapter V: Water Conservation Reduce Consumption

The State of Florida is encompassed by 2,276 miles of tidal shoreline not to mention the interior lakes and Intracoastal Waterway. With water encompassing and scattered across the State of Florida, it seems surreal

that water is a commodity that cannot be taken for granted. The primary source of potable water across Florida is through the Floridian aquifer system, and is a limited resource. The water stored in aquifers is replenished, or recharged, by rainfall; however, only a small portion eventually meets the aquifer. St. Johns River Water Management District (SJRWMD), one of five State

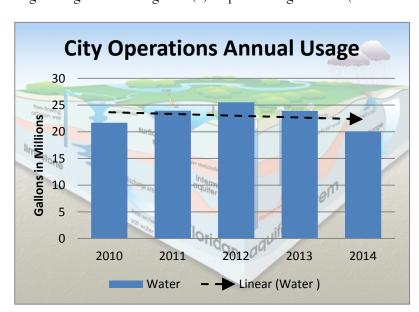
<u>Objective 4.1</u>: To develop programs to enhance our water conservation strategies

Strategy 4.1.1: Utilize nature's water supply resources effectively for water supply

Strategy 4.1.2: Target expansion opportunities to utilize reclaimed water through established City processes

overseeing agencies, estimates that of the 50 inches of annual rainfall only 13 inches makes it back to the aquifer in limited areas (<u>SJRWMD 2011</u>).

The City of Palm Coast prides itself on the quality of water and service provided to our residents. As echoed in the City of Palm Coast Comprehensive Plan, potable water and water conservation strategies are long-term goals. Through six (6) implementing Policies (5.1.4.1 - 5.1.4.6), numerous aggressive actions

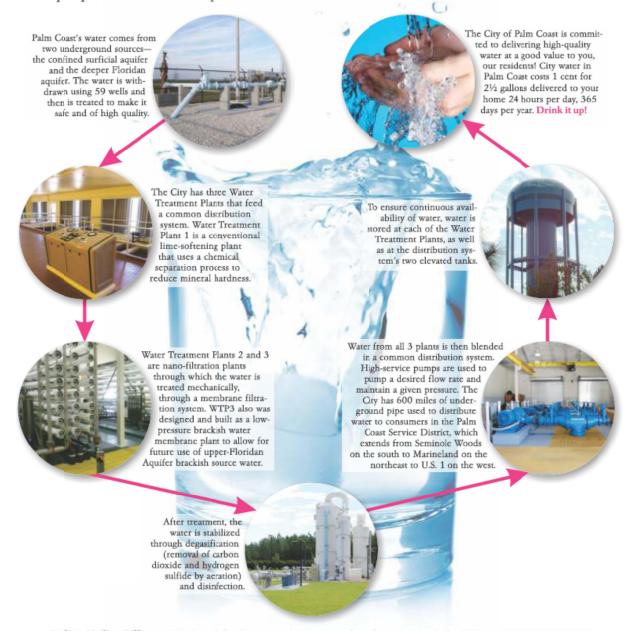


are mandated to achieve positive results. From partnering with State agencies on conservation strategies developing an aggressive educational outreach program, the City has a commitment to reducing consumption while improving efficiency within operations and beyond as depicted in the graph to the right. Through the Florida Green Building Coalition (FGBC) Green Local Government Standard and City Council Goals, the City has accomplished so much following guiding principles continues to look forward to future enhancements.



FROM THE GROUND TO YOUR TAP. YOUR CITY DELIVERS GREAT-TASTING, SAFE DRINKING WATER

Palm Coast enjoys some of the best water around – thanks to an excellent groundwater source, state-of-the-art facilities, and a Public Works Department/Utility Division committed to delivering healthy, delicious drinking water. Treating our water to meet all requirements of the federal Safe Drinking Water Act is a high-tech, complex process. Here's a brief explanation of how it's done.



Online Utility Billing – Help keep Palm Coast green by signing up for online, paperless billing! You can manage your account, view present and past bills, make payments each month, or sign up for automatic payments. For water conservation tips and to learn more about your water quality, go to www.palmcoastgov.com/utility.

To learn more about the 2013 City of Palm Coast Water Quality Report, please visit http://docs.palmcoastgov.com/departments/utility/water-quality/water-quality-report-2013.pdf



a. Existing Programs ~

| Project | Year Implemented | Status |
|--|---------------------|-----------------------|
| Monitor and track water use in City facilities | 2000 | Ongoing |
| Tiered Conservation Rate | 2001 | Ongoing |
| Create reclaimed water infrastructure | 2003 | Continue to expand |
| Irrigation efficiency and conservation measures within City maintained areas | 2008 | Ongoing |
| Certification of City facilities for Florida Yards and Neighborhoods Standard | 2009 | 104.5 acres certified |
| Customer service audits | 2009 | Ongoing |

9

1. Fire Department Water Conservation Strategy (2010)

During everyday operations, the City of Palm Coast Fire Department employs a range of water conservation practices that includes, but is not limited to discharging hose testing water onto pervious surfaces, and minimizing water usage for truck washing while identifying and applying alternative methods for station / additional vehicle maintenance. These procedures are established by a Standard Operating Procedure (SOP) policy which details the responsibilities of Department officers.

ACTION: No Action.



2. Enable customers to track and analyze usage via the internet (2010)

City of Palm Coast Utility customers can review their water usage history for a period of one year, via the City's website.

ACTION: No Action.



3. Florida Water Star Demonstration Center and Utility Office retrofit (2011)

In late July 2010, the St. John's River Water Management District (SJRWMD) contacted the City of Palm Coast ("City") staff about partnering on a water conservation project to study water consumption while educating the public regarding environmental stewardship of water resources. Initially, City Utility Department worked with SJRWMD to propose replacement of the aging plumbing fixtures to assess and promote water conservation through Florida Water Star (FWS) program criteria. During early project discussions, City staff recognized an opportunity to incorporate a Waterwise landscaping concept plan completed in past years by a college intern, under the supervision of the City Landscape Architect.

The goal of the overall project was to expose and educate the public to low impact alternatives to conventional landscape techniques that reduces water consumption through sustainable principles. Recognizing that project objectives rest with water conservation, City and SJRWMD staff agreed that City Utility Office at 2 Utility Drive would have the greatest public exposure knowing that customers visit the facility for water service billing matters. While at the offices, customers are



encouraged to visit the exhibit for a relaxing stroll and learn about Florida Water Star and other low impact development concepts.

Florida Water Star Demonstration Exhibit and Utility Office retrofit elements are listed below.

- Waterwise landscape concepts, drought tolerant plants, sod and a low volume irrigation system with a "smart" controller.
- Three types of sod plots (St. Augustine, zoysia and Bahia-irrigated and non-irrigated) to show what is available for ground cover.
- Rain barrel example connected to roof downspout.
- Pervious brick pavers to replace a portion of the existing parking spaces (and to pave a walkway) demonstrating a low impact development concept.
- Rain garden example adjacent to the parking area to catch and treat storm water run-off before it goes off site.
- Labels on all shrubs, trees and ground covers as examples of plants for drought tolerance as well as rain gardens.
- One recycled plastic informational kiosk explaining the Florida Water Star concept and other water conservation information.
- A second recycled plastic informational kiosk with a sample irrigation controller showing how to operate and program.
- Brochure boxes in both kiosks for pamphlets on related water conservation ideas and products.
- Conversion of existing potable, non-operational irrigation system to reuse.

Since completion in early 2011, the City has promoted this concept and exhibit to other organizations with tours, workshop presentations and even through new hire orientation for City staff. Staff envisions other opportunities to promote the exhibit by hosting educational tours that provide the public a more enhanced experience.

On December 9, 2011, the project achieved the Outstanding Development Planning Award from the Florida Planning and Zoning Association Surf Coast Chapter recognizing the commitment and innovative measures promoting water conservation.



ACTION: In 2015, provide a minimum of two (2) educational tours each quarter to educate citizens and professionals regarding low impact development including, but not limited to the Florida Water Star standard. Providing tours each quarter will expose visitors to seasonal influences and plant. Highlight project in other outreach endeavors including publications, speaking engagements, school programs, etc.



b. 2014 Accomplishments ~



1. <u>Investigate additional water conservation incentives</u>

On December 20, 2011, the City of Palm Coast City Council adopted an amendment to the Green Development Incentive Ordinance Program (2011-22) that incorporated the Florida Water Star (FWS) program as an acceptable standard to qualify for the associated incentives. As a result of Council guidance, staff was directed to evaluate the use of Impact fees to incentivize projects to utilize FWS which has demonstrated a reduction in water consumption.

In February 2013, City Council adopted Resolution 2013-10 that revised the rates of the City's utility systems. Through the evaluation of the 2013 Water and Wastewater Study", it was determined that the benefits of the Florida Water Star program provided equitable reduction of 20%. The adopted resolution affirmed that utility customers that achieved FWS certification are eligible for rate reductions. At this time, this incentive can be combined with the Green Development Incentive Program and yield \$720.00 of savings for a residential account. As is today, the final incentive amount will continue to be based on adopted utility rates.

In 2014, three City of Palm Coast employees became FWS Certifiers for the program. With the training, certified staff have the knowledge of the relevant criteria to better assist program applicants.



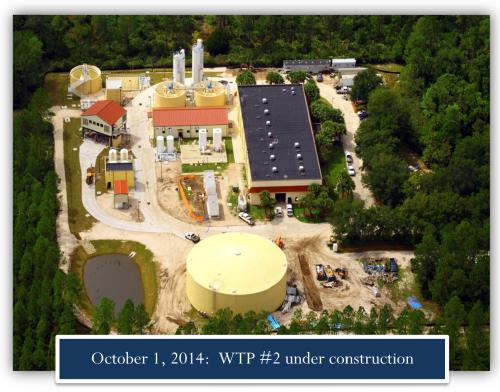
Action: Staff continues to evaluate other elements that would prove beneficial to a comprehensive program including, but not limited to rebates, retrofits, education, training, program management and budgetary commitments.





2. Zero Liquid Discharge Project

Palm Coast embarked on a unique venture to reclaim a resource that was previously wasted. Implementing a Zero Liquid Discharge (ZLD) process at Water Treatment Plant (WTP) #2 on Citation Boulevard will treat and recover up to 1.6 million gallons of water per day at full capacity — which will be blended with the plant's finished water to increase distribution capacity and add to the City's water supply in an economically feasible, environmentally responsible way. Currently, about 8 of every 10 gallons pumped from wells reach the City's drinking water supply. Under the new system, 9.8 of every 10 gallons will be used for drinking water. The new ZLD operations began in late 2014.



The concentrate ZLD process offers significant benefits:

- Increases the WTP production capacity without increasing the source water required.
- Eliminates the concentrate discharge permit and associated sampling costs.
- Meets the St Johns River Water Management District's Consumptive Use Permit requirement for alternative water supply.
- Maximizes the use of a finite water resource and provides a sustainable solution for the future.
- The design incorporates the city's green initiatives of water conservation and waste recovery.
- Dewatering the sludge reduces the impact on the environment as well as the volume of solids removed from the treatment process.
- The dewatered lime solids can be beneficially reused.
- Delays costs associated with future expansion.

Action: No action.



c. Potential Future Projects ~



1. Enact fountain / water feature standards

For City-maintained fountains, devices might include features such as anemometers' that will automatically shut off the fountains to eliminate excessive water loss in high wind conditions. Currently, the City's Land Development Code does not regulate open water features to this degree.

2. Water audit for all City facilities according to Florida Water Star

As noted in Section VIII. Energy Conservation, an audit has been conducted of all facilities which also included water conservation. These findings can be utilized to further evaluate improvements according to the Florida Water Star standard as noted previously. After completion, the results of the activity will be combined with the Monitoring and Tracking Water Use Project already underway. Additional projects are likely to arise from additional audit results.

VI

Waste Reduction Increase Recycling





Chapter VI: Waste Reduction – Increase Recycling Natural Resource Conservation

Our commitment to environmental sustainability is a keystone to the balance of the natural environment and the growth of our beautiful City. City staff continues to look for more opportunities to conserve our precious resources while being fiscally responsible and sensitive to the uniqueness of our community.

Beginning in June 2012, the City of Palm Coast waste hauling-recycling services were significantly enhanced through a renewed contract with Waste Pro. A suite of new services, at no additional cost to our citizens, were added to an already impressive program. When comparing June 2011 to June 2012

Objective 4.3: Evaluate current "Green" initiatives and targeted projects that are sustainable

Strategy 4.3.1: Reduce waste through sustainable practices

Strategy 4.3.2: Staying in the forefront of sustainable communities in the State of Florida

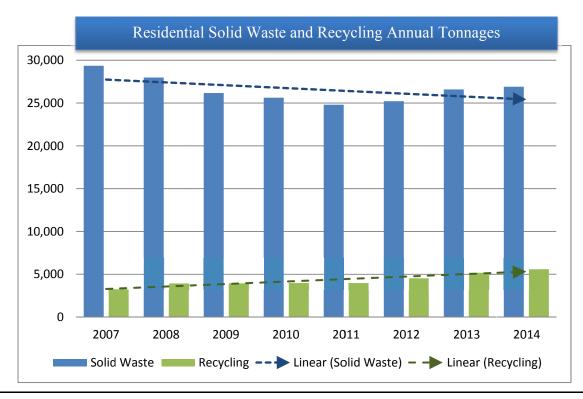
Strategy 4.3.3: Develop Alternative Energy Strategy

Strategy 4.3.4: Implement City-wide energy savings program

<u>Objective 4.4</u>: Protect the environment through appropriate development strategies

Strategy 4.4.1: Protect natural green spaces to ensure a balance between the natural environment and development

(Program start), amount of recycling has significantly increased based on amount collected. In fact, June 2012 was the first month in the history of City residential recycling when the tonnage hit **400**! The program's most significant month yet was October 2013 at **537.54 tons!** In addition, the recycling tonnage has not dipped below 400 in all of 2014. When considering Palm Coast's population has grown by over 10,000 since 2007, the trends tell a greater story of solid waste decreasing and recycling increasing. Please see the following sections to learn more about this unique and award-winning program.





a. Existing Programs

| Project | Year Implemented | Status |
|---|---------------------|-----------------------------------|
| Monitor and track local government solid waste generation / recycling rates | 2000 | Ongoing |
| Ensure that waste haulers operating in Palm Coast all provide recycling services | 2006 | Ongoing |
| Electronic job application submittal | 2007 | Ongoing |
| Electronic salary statements | 2007 | Ongoing |
| Direct deposit for staff salaries and expenses | 2007 | Ongoing |
| Printer toner recycling | 2007 | Ended |
| City printers with the capability, default to duplex | 2007 | Primary printers upgraded |
| Utilize pine bark instead of cypress mulch in City medians | 2007 | Ongoing |
| Recycling at City Parks | 2007 | Ongoing |
| Reduce paper in Planning and Land Development Regulation Board (PLDRB) packet | 2007 | Ongoing |
| Distribute recycled notepads | 2007 | Ongoing |
| Reduce number of Code of Ordinances books | 2007 | Ended – moved to online resources |
| Customer utility bill merger and transition to electronic billing | 2008 | Ongoing |
| Switch all City facilities to eco-friendly paper products (bathroom tissue, etc.) | 2008 | Ongoing |
| Determine use for 30,000 "unusable" Utility bulk mail envelopes | 2008 | Completed |
| Equip City facilities with paperless fax technology | 2008 | Completed |
| Purchase recycled copy paper | 2008 | Ongoing |
| Computer Lottery for City staff | 2009 | Ongoing |
| Junk mail reduced | 2009 | Ongoing |
| Purchase recycled ID badge lanyards | 2009 | Ongoing |
| Battery Recycling Program | 2009 | Ongoing |
| Special event recycling | 2009 | Ongoing |
| Provide incentives to encourage builders to build "Green" | 2009 | Ongoing |
| Recycling opportunities and guidelines provided to staff | 2009 | Ongoing |





1. Employ Florida Department of Environmental green cleaning and maintenance (2010)

For City Offices, the contracted firm is required to utilize green cleaning supplies to maintain facilities.

ACTION: No Action.

2. Transition to mobile tablets (2010)

Tablet distribution began in 2010. Currently, there are approximately 50 tablets in use. Staff is evaluating the impact of all efforts to reduce paper use. The biggest challenge is obtaining historic data on paper use city wide. The plans for the future are to convert other agendas to electronic format for remaining appointed Boards.

The "Cloud" program began in 2011. Currently, there are approximately 100 Wyse thin clients. The Wyse units have a number of advantages. First, the device uses less energy than a regular PC. Secondly, it is easier to manage and support from a staff perspective. Lastly, the units are expected to have a longer life cycle than a standard PC. Each workstation is evaluated individually, but the goal is to replace every desktop and laptop PC with a Wyse unit where feasible.

ACTION: Track conversion and technological advancements.



3. Microbe application for stormwater and landscape maintenance (2011)

Through pilot studies, microbe applications have been utilized for sports fields, golf course greens, and freshwater drainage canals. Based on the findings, the microbe alternative to traditional fertilizer application has been determined a sound practice that yields many benefits including, but not limited to the following.

- Nematode suppression and control
- PH maintenance
- Fungus control
- Fertilizer reduction
- Water requirement reduction
- Root mass growth
- Cost effectiveness

ACTION: In 2015, the following activities will be conducted.

- i. Coordinate with Public Works to identify other City facilities to conduct microbe treatment applications
- ii. Inventory City facilities with implementation dates for the application of microbe treatment
- iii. Identify locations and procedures for the application of microbe treatment in City-maintained areas
- iv. Implement microbe treatment at Palm Harbor Golf Course within its entirety





4. Provide reusable items to staff (2011)

This initiative originally took form as reusable water bottles issued to every existing and new employee of the City of Palm Coast. Beyond the reduction of waste, the initiative yielded an additional benefit of motivation and appreciation by staff. The Boost All Morale (BAM) Team has also distributed reusable mugs and lunch boxes as part of employee appreciation week on an annual basis. Most recently, the Safety Team provided an option to all existing staff of a reusable travel mug or a phone accessory. Beyond internal promotion, reusable water bottles are also distributed as part of the annual Intracoastal Waterway Cleanup to keep volunteers hydrated without wasting plastic.



ACTION: No Action.



5. Waste and Recycling Contract Renewed (2012)

On June 1, 2012, an innovative contract with Waste Pro was implemented with the launch of a Solid Waste & Recycling Program. Prior to the contracting process, City leaders performed a year-long evaluation of basic waste hauling needs and potential enhancements to recycling and collection services based on the needs of our residents. After an intensive selection and contracting process, the City of Palm Coast secured Waste Pro for an innovative program new to the region and relatively to the State of Florida at no additional cost to citizens.

The following section(s) itemize and summarize the background information, highlights of the Program and results accumulated to date.

- a. "Doorstep Household Hazardous Waste Removal: Based on the overwhelming response to the 2011 Town Center drop events, the Program incorporated "Doorstep Household Hazardous Waste Removal" to provide convenient and safe disposal of these items. The City of Palm Coast is the <u>first city</u> in the State of Florida to offer all of its citizens a doorstep service. Pick-up is by reservation only and includes, but is not limited to, the following list of eligible materials:
 - * Fluorescent light bulbs
 - * Used Motor Oil
 - * Batteries of all types
 - * Household paints and supplies
 - * Pool chemicals
 - * Pesticides and Fertilizers

b. Single Stream Recycling:

All residents may take advantage of single stream recycling instead of the traditional sorting paper from all other recyclables, which was the previous practice. It is the City's belief that providing more convenience to our residents is essential to increasing recycling. For those residents that do not recycle, the City pursued an aggressive incentive program to stimulate additional interest.



c. Recycle Rewards:

All residents are eligible to participate in this new aspect of the Program. Each residential household received a curb-side recycle bin in which a Radio Frequency Identification (RFID) chip was attached. This chip is encoded with each resident's name and household. The chip measures the frequency in which the household recycles and is recorded by a scanner utilized during pick-up. Each resident then registers with the Waste Pro Recycle Rewards Program and is rewarded with national, regional and local discounts and coupons for retail and commercial establishments. The more the household recycles, the more the rewards. Each quarter, there is a random drawing for

> eligible residents to receive larger prices such as \$100 gift cards.



IPad Winner – December 2012

An added bonus to this program is that local restaurants, retailers and commercial establishments of all kinds can be included in the program, free of charge. Participants upload their discounts to the rewards program thus allowing for local dollars to be spent in local businesses. In addition, these organizations can also participate in waste audits provided by Waste Pro to enhance their own internal operations. A win-win for everyone!

When comparing June 2011 to June 2012 (Program start), amount of recycling has significantly increased based on amount collected. In fact, June 2012 was the first month in the history of City residential recycling when the tonnage hit 400! The program's most significant month was October 2013 at **537.54 tons!**

The successful increase is attributed to many different factors but foremost, the partnership with Waste Pro is paramount to ensure top-notch services including single stream recycling, educational outreach, diversity of promotion, and award incentives.

The City prides itself on this unique contracting partnership with Waste Pro to provide the residents of Palm Coast the most diverse waste handling program in the region and possibly the State. The referenced contract was also the springboard for another commitment on behalf of Waste Pro to convert all collection vehicles to Compressed Natural Gas (CNG) which was implemented on June 1, 2013. The conversion will result in a more environmentally friendly and cleaner alternative to conventional fuels and allow for an additional \$.15 reduction in monthly solid waste billing to all residents.

ACTION: No Action.

6. Printer upgrades (2013)

The printer replacements are being done for a number of reasons. First, the newer printers are more efficient from an energy standpoint. The equipment also allows staff to track usage to a greater degree down to the staff member level. Having this capability assists with identifying areas



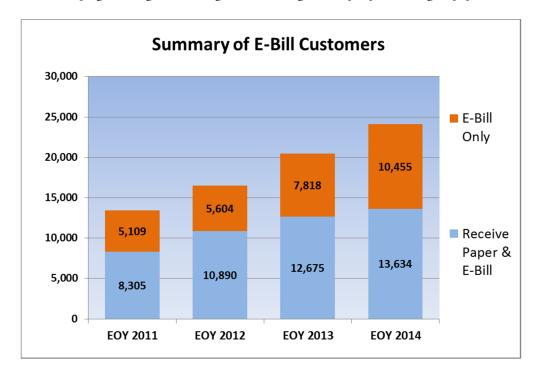
to save paper through other means such as electronic forms. The printer replacement program also consolidates printing so that there are less physical printers being used. This results in a decrease in power consumption and maintenance costs.

ACTION: No Action.



7. Encourage Utility Customers to transition to electronic bill pay (2013)

In 2014, mailing inserts were utilized to promote the paperless option during 6 occurrences. Facebook posts promoted paperless billing monthly. In Customer Service, representatives conducted a campaign through answering calls resulting in 200 people moving to paperless billing.



ACTION: Continue to promote paperless options to customers. Staff shall further evaluate methods of discouraging customers of receiving both paper and e-bill products.

b. 2014 Accomplishments ~



1. Develop an Environmentally Preferable Purchasing Program (EPP) for local government

Since 1993, the U.S. Environmental Protection Agency's has developed and managed an Environmentally Preferable Purchasing Program (EPP) through five (5) guiding principles.

- Include environmental considerations as part of the normal purchasing process.
- Emphasize pollution prevention as part of the purchasing process.
- Examine multiple environmental attributes throughout the product or service's life cycle.



- Compare environmental impacts when selecting products and services.
- Collect accurate and meaningful information about the environmental performance of products and services.

In 2000, President Clinton mandated that all Federal facilities implement an Environmental Management System (EMS) by December 31, 2005. Through subsequent Executive Orders (EO) including the most recent, EO 13514, signed by President Obama in October 2009, EPP has become a keystone measure for EMS management.

The City of Palm Coast currently utilizes Staples for all office supplies. To contract with Staples, a "piggyback" contract was executed that defines a request for proposal (RFP) process that Staples supplied to National Joint Powers Alliance. As part of the RFP, Staples achieved "bonus points" for "green initiatives" / "Environmentally Preferred Purchasing Opportunities" toward the company's evaluation. Maximum points available were 50 with Staples awarded 43.75. The competing bid company only secured 23 points. This measure was also a consideration during staff evaluation of the "piggyback" contract.

ACTION: No Action.

c. Potential Future Projects ~



1. Minimize paper use for City forms – LITE Team to be formed

In 2015, four new LITE teams are anticipated to be formed. One of the teams will focus on improving process efficiency in many different capacities including the reduction of paper usage.



2. Evaluate green landscaping requirements for local government buildings

On the merits of the existing Land Development Code, the City's landscaping regulations meet elements of Florida Yards & Neighborhoods and Florida Water Star programs. The LDC landscaping requirements are currently being revisited. After this evaluation, staff may revisit unique requirements for local government buildings.

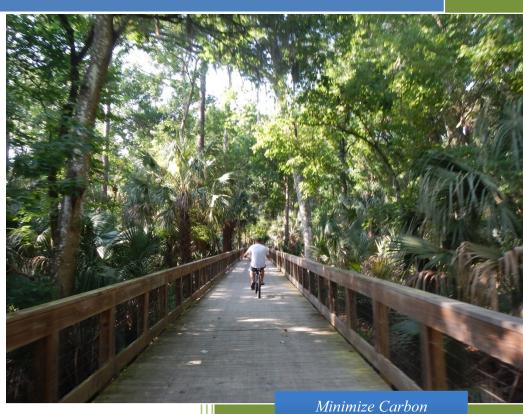


3. Evaluate Disaster Management Plan for waste reduction strategies

The County Comprehensive Emergency Management Plan (CEMP) is overseen by Flagler County Emergency Management Staff. City of Palm Coast has an active presence with the CEMP and the Local Mitigation Strategy (LMS) Working Group. As part of these roles, staff will target opportunities to evaluate waste reduction.

VII

Greenhouse Gas Reduction



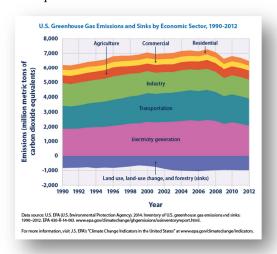
Minimize Carboi Footprint



Chapter VII: Greenhouse Gas Reduction Minimize Carbon Footprint

The City tracks activities that are intimately related to the production of greenhouse gases (GHG) which include carbon dioxide, methane, nitrous oxide, and fluorinated gases. Knowing the complexity of the contributing factors, staff has taken a rudimentary but effective approach to identifying projects that are known to mitigate the influence of human activities. According to the U.S. Environmental Protection Agency website, "emissions per person have decreased slightly in the last few years".

"Since 2005, total U.S. greenhouse gas emissions have decreased by 10 percent. Electricity generation is the largest sources of greenhouse gas emissions in the United States, followed by transportation."



Transportation and alternative fuel resources are a focal point to the City's tracking of this element of the Environmental Management System. In addition, tree protection and retention of green spaces through land use regulation and public recreation facilities is another valuable approach to target reduction of carbon dioxide. Noting that these are the targeted factors does not eliminate the relationship with energy conservation strategies and GHG emissions. Within the authority of operational management, the following projects reflect the strategies of this section.

a. Existing Programs ~

| Project | Year Implemented | Status |
|---|---------------------|------------------------------|
| Purchase of Alternative Fuel Vehicle (AFV) | 2008 | 1 Prius |
| City vehicle idling policy | 2008 | Utilize GPS tracking (below) |
| City carpooling program | 2008 | Ongoing |
| All new government buildings will be built to green standard | 2008 | Ongoing |
| Bicycle rack installation at all public amenities | 2008 | Ongoing |
| Recreation and Parks Facilities Master Plan & Pedestrian/Bicycle Master Plan | 2009 | Last update in 2013 |





1. Enhancements to "Conservation" element of 2035 Comprehensive Plan (2010)

As adopted on July 6, 2010, Objective 6.1.16 Sustainability through government operations was incorporated into the Comprehensive Plan. The following policies have been implemented as a result of the adoption.

- Policy 6.1.16.1: Environmental Management System (EMS) requirement
- Policy 6.1.16.2: Green building standards for City facilities
- Policy 6.1.16.3: Energy efficiency for City facilities
- Policy 6.1.16.4: Continue the utilization of environmentally beneficial landscape principles for City properties
- Policy 6.1.16.5: Recognition program for the public projects that utilize sustainable initiatives

ACTION: Revisit policies as part of the Evaluation and Appraisal Report (EAR) process.



2. Partnership with the Florida Department of Transportation (FDOT) to promote ReThink program (2011)

Since 2008, City staff have been working with FDOT representatives to promote carpooling and other alternatives to traditional transportation. Efforts have included, but have not been limited to the following.

- Educational outreach at Arbor Day Celebration Event and annual wellness fair for employees
- Promoting the ReThink program on the City website
 - Quick Response (QR) codes installed along City multi-use pathways. In July 2013, a unique QR code was installed at Waterfront Park promoting biking to work which is shown below. Visitors utilize their mobile device to scan the code which brings up a video, trivia, map guides, and other fun interactive information. The codes are also used to promote environmental, historical and fun facts at Waterfront Park and Graham Swamp Trail.





ACTION: No action.



3. "Trek It Out" brochure (2011)



The City of Palm Coast has worked tirelessly at connecting and expanding the trail system to encourage alternative transportation and a high quality of life for our citizens and visitors. The "Trek It Out" brochure depicts the 125-mile plus pathway system, public facilities and regional attractions. The trails charted on this map lead visitors through the splendid elegance of the native Florida landscape. Miles of pathways are lined with historic oaks, towering



pines and indigenous vegetation, taking hikers and bicycle riders on a delightful exploration with family or friends. Trails traverse Palm Coast's most delicate scenery, promising an exhilarating experience that will forever build cherished memories. http://www.palmcoastgov.com/trek-it-out

ACTION: Staff is working with the Chamber of Commerce to consolidate other guides with Trek It Out guide to ensure consistent guidance. In addition, staff is working on a water-based recreation guide as well.

4. Tracking City fleet efficiency with Global Positioning Systems (GPS) (2011)

Through the installation of GPS devices, fuel and staff efficiency has increased. Currently, the tracking system is primarily for monitoring. Managing staff can evaluate a vehicle's usage when inefficient routes are suspected. In addition, the system is set up with automatic alerts to prevent excessive idling.

ACTION: Continue to monitor users and expand GPS within the fleet.

5. Evaluate opportunities to incorporate Compressed Natural Gas (CNG) technologies into fleet operations (2011)

Staff continually evaluates this option for the City fleet. Unfortunately, most of the vehicles utilized are not available in CNG off the assembly line which leaves only the option of very expensive conversions. To date, decision makers have determined conversions to be cost prohibitive with no return on the investment. As noted in the following section, Waste Pro has converted due in part to the City contract requirement. Manufacturers of garbage trucks and city busses do have production vehicles with CNG options.

ACTION: Continue evaluation of CNG and electric vehicle purchasing.

6. Waste Pro transition to Compressed Natural Gas (CNG) pursuant to contract commitments (2012)

As part of Waste Pro's commitment to the more readily available and cost effective CNG fueling alternative, the

Palm Coast station is one of three fueling stations Waste Pro has constructed in Florida since 2012, but is the only one open to the public. The CNG Fueling Station is open for self-service and accepts all major credit cards. It is located at 400 South Bay Street in Bunnell.

ACTION: No action.





7. Palm Coast Parkway Tree Relocation Project (2013)

The widening of Palm Coast Parkway from Florida Park Drive to Cypress Point Parkway/Boulder Rock Drive is currently underway which will bring some much needed relief along City roadways. The widening has been achieved with minimal encroachment into natural areas.

Through an innovative and extraordinary effort, 110 sabal palms were relocated through in-house resources to Waterfront park (30 trees), Indian Trails Sports Complex (72 trees), and Palm Coast Parkway west (8 trees).



Waterfront Park (30 trees)



Indian Trails Sports Complex (72 trees)

ACTION: No action.

b. 2014 Accomplishments \sim



1. Plan for alternative fueling stations for Town Center and other high-use public areas

Staff conducted an extensive analysis of existing and future City facilities and determined a priority ranking for the installation of electric vehicle charging stations. With the assistance of FP&L and FDOT, staff established an evaluation methodology based on the following factors.

- Range of existing electric vehicle models
- Current inventory of electric vehicles owned by Flagler County residents and surrounding counties
- Frequency of existing charging stations
- Vicinity of facility to Interstate 95 and regional attractants
- Estimate length of time that a visitor would stay at the facility and cross-reference with optimal charging duration
- Determine facility improvements and associated costs for station installation
- Determine the feasibility of providing usage for free and/or at a cost to user



Based on this methodology, the following facilities will be part of the pilot implementation of the electric vehicle charging stations. The locations are listed in order of priority.

- 1. City Hall
- 2. Palm Coast Community Center
- 3. Holland Park
- 4. Long Creek Nature Preserve

ACTION: In 2015, conduct a pilot program that includes the installation of one charging station at City Hall. Dually, seek sponsorships for future charging stations.

c. Potential Future Projects ~



1. Evaluate fleet maintenance procedures

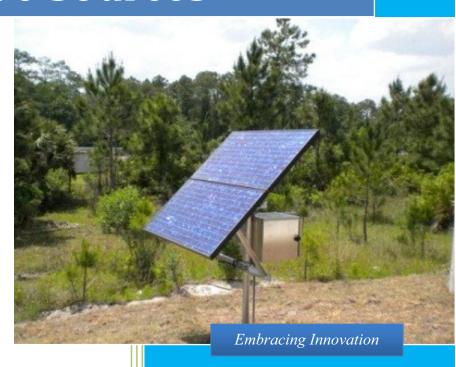
The focus of this evaluation would be to minimize waste to increase environmental performance and practices.

2. <u>City tree inventory</u>

Within City Right-of-Way (ROW), facilities, trails and walkways, a beautiful canopy of trees exist and are enjoyed by the public on a daily basis. The inventory would serve as the basis for a long-term management plan to optimize the trees' health and minimize hazards to the public.

VIII

Energy Conservation and Alternative Sources





Chapter VIII: Energy Conservation and Alternative Sources Embracing Innovation

The City evaluates and tracks energy consumption for City resources through the analysis of Florida Power & Light (FP&L) billing as an indicator for current and future performance as detailed throughout this Chapter. It shouldn't have to be said, but City Administration has always critically evaluated billing and monitored for inconsistencies. In

<u>Objective 4.3</u>: Evaluate current "Green" initiatives and targeted projects that are sustainable

Strategy 4.3.1: Reduce waste through sustainable practices

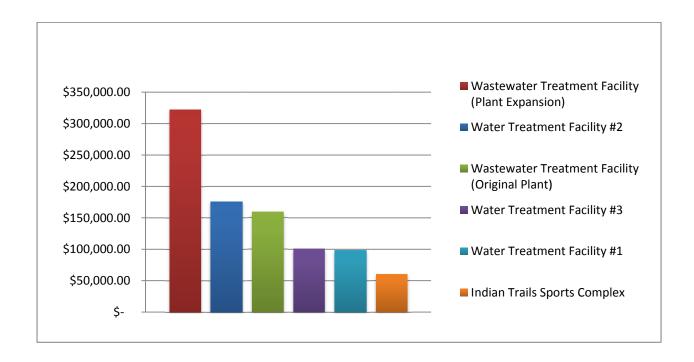
Strategy 4.3.2: Staying in the forefront of sustainable communities in the State of Florida

Strategy 4.3.3: Develop Alternative Energy Strategy

Strategy 4.3.4: Implement City-wide energy savings program

2009, billing data was embraced as a tool to track energy efficiency and set the groundwork to pursue innovative projects based on facility type and usage. Monitoring and tracking usage is a keystone action to the success of any of the projects contained herein.

In January 2014, the Alternative Energy Sub Team and Green Team presented a general overview of the top facility consumers within City operations. The information was provided to City Council during the consideration of an "Energy Savings Performance Contracting" (ESPC) through an approved State listing of qualified contractors. The main concept of ESPC is to provide energy savings in an amount of funding that pays for the cost of all improvements plus potential for additional operational savings for City departmental budgets.





a. Existing Programs ∼

| Project | Year Implemented | Status |
|--|---------------------|---------|
| Monitor and track local government energy use | 2000 | Ongoing |
| Light Emitting Diode (LED) transition for traffic control devices | 2008 | Ongoing |
| Evaluate computer and accessorial equipment for energy conservation strategies | 2009 | Ongoing |

1. Solar power for irrigation (2010)

During the 2010 expansion of Old Kings Road South (S.R. 100 and Royal Palms), improved medians were installed and planted with drought tolerant native species. For stabilization and long-term maintenance purposes, a solar powered unit was installed to mitigate for energy consumption from pump operation.





ACTION: Continue to implement solar technology where feasible.

2. Implement energy efficient lighting and controls at Indian Trails Sports Complex and other applicable parks (2010)

Sporting facilities including, but not limited to Indian Trails Sports Complex are managed with lighting controls to ensure optimal efficiency.

In addition, facilities planned for renovation or new construction target energy efficient upgrades as part of design specifications.





Light Emitting Diode (LED) technology has been incorporated into the latest construction upgrade at Central Park. The park is supported by a peripheral pathway around the existing pond. All new pathway bollard lighting around the pond is LED. The lighting is controlled by time clocks for further energy savings.

ACTION: As detailed in the 2014 Accomplishments Section, lighting improvements have been evaluated in all City facilities. The assessment results will be utilized to identify enhancements that will be done by outside vendors and those projects that can be conducted by City staff.

9

3. Creation of Alternative Energy Sub Team (2011)

To focus on energy consumption and conservation, the City of Palm Coast City Manager expanded the Green Team to include the Alternative Energy Sub Team (AES) component. Since 2011, the AES has tackled numerous projects including, but not limited to those provided in this section. The AES is primarily comprised of professional staff that manages operation and construction of City facilities. In addition, financial expertise is also critical to the successes of this specialized team.

ACTION: No action.

4. Evaluate existing FP&L accounts for accuracy and rate designation (2011)

Within applicable departments, existing FP&L accounts are reviewed and managed to ensure accuracy of billing. In 2011, the AES was tasked with conducting a comprehensive evaluation of all accounts.

ACTION: Conduct a comprehensive review annually.



5. <u>Light-emitting Diode (LED) incorporation into traffic control devices and street lighting (2011)</u>

Through attrition, the City has transitioned to LED technology for traffic signalization devices. Concurrently, the AES investigates other opportunities to test other opportunities for LED. The AES located and inventoried attributes associated with all street lights.









The inventory serves as an important tool to identify accounting inconsistencies, street light redundancy and other frequency The inventory findings justified the removal of 30 redundant lights and 8 poles. Additional benefits also included laying the groundwork for a unique pilot program for a City of Palm Coast – FP&L partnership project. With respect to the operational authority, the majority of streetlights (less than 3,000) are owned by Florida Power & Light (FP&L) of which the City pays for services through a tariff agreement. In 2012, 26 traditional high pressure sodium vapor lights were replaced with LED technology at no cost to the City. The City was one of three communities chosen State-wide, and the first to implement LED street lighting with FP&L. The pilot recently came to an end and has provided results that LED technology is a feasible service to provide FP&L customers. FP&L representatives provided a presentation to City staff to highlight study results and proposed LED program.

ACTION: The pilot phase of the LED project on Palm Coast Parkway ended. For 2015, staff will determine the feasibility of implementing LED in other reaches of the City.

b. 2014 Accomplishments \sim

1. Locate all FP&L meters and determine activity

This project was initiated in 2012 as a result of a Green Team initiative and at City Manager request. The project goal was to locate, GPS and identify all City electric meters verifying that they are still active. This data would be cross-referenced with accounts to verify status. In addition, the City Manager desired all of the information for each meter to be mapped out on an interactive map similar to the street light inventory. There are currently 300 electric meters assigned to the City. Initially, a list was compiled of active meters from three different sources/lists including Utility, Finance and FP&L. At this time, all meters have been located, GPS coordinates identified, verified and mapped. All current meter information has been built into an interactive map that can be found on the City Intranet at GIS Maps/Infrastructure Mapping/Meter Locations. One of the project challenges has been that within the last year FP&L elected to replace more than 40% of the meters throughout the City. This activity has required staff to return to the field to re-verify the new meter number(s) associated with the address of the affected accounts. Within the last 90 days, staff has verified all of these numbers. During this process, staff identified one meter that did not belong to the City. This meter has been turned over to the owner. In addition, nine electric meters with active accounts were identified that no longer served any functional purpose. These nine meters have since been removed or de-activated.

ACTION: Provide final data to managing Department. Determine the responsibility and process of updating map data or a routine basis.





2. Conduct comprehensive energy audit at all facilities

As noted previously, the AES was tasked with looking into various potential ways that the City could operate more efficiently in terms of energy consumption. As this team began to get into the core function, it came to light that a Florida Statute provided for the possibility to accomplish various energy-saving items under one umbrella project. This statute provides for "Energy Savings Performance Contracting" (ESPC) through an approved State listing of qualified contractors. The main concept of ESPC is to provide energy savings in an amount of funding that pays for the cost of all improvements plus potential for additional operational savings for the City departmental budgets.

In January 2014, City Council approved by Resolution an Energy Savings Project Development Agreement with Siemens Industry, Inc. The contractor audited all City facilities while identifying projects that could be implemented and determining the payback period for the recommended improvements. The project audit has been completed and currently being further evaluated by City staff and Siemens representatives.

ACTION: In 2015, staff will evaluate results and determine targeted projects and budget objectives for presentation to City Council.

c. Potential Future Projects ~

1. Curtail energy loads within Water Treatment Plants

Continue to evaluate opportunities to reduce energy consumption within City Utility Facilities in conjunction with energy audit findings.

IX

Outreach & Incentives





Chapter IX: Outreach and Incentives Educate and Inspire

As noted in previous sections, the City of Palm Coast has taken the position of inspiring instead of requiring. Through these merits, numerous activities are conducted to expand awareness and encourage the public's participation in sustainable practices.

a. Existing Programs ∼

| Project | Year Implemented | Status |
|---|---------------------|---------|
| Green Team established | 2007 | Ongoing |
| Green tip of the week posted on City Intranet | 2007 | Ongoing |
| Recycling fund utilized for outreach activities | 2008 | Ongoing |
| Low Impact Development Workshop for Flagler County (January 25, 2008) | 2008 | N/A |
| Flagler Home Show | 2008 | N/A |
| Flagler Palm Coast High School Career Day | 2008 | N/A |
| Growing Greener Workshop | 2008 | N/A |
| Tree City USA Award | 2008 | Ongoing |
| Growth Award | 2008 | Ongoing |
| Arbor Day Celebration | 2008 | Ongoing |
| Christmas Tree Recycling event | 2008 | Ongoing |
| Green Assessment for City facilities and operations | 2008 | Ended |
| Waterway clean-up Grant and Coordination | 2008 | Ongoing |
| School Job Shadowing Program | 2008 | Ended |
| Launched C.H.I.R.P (Children Helping In Resource Protection) | 2009 | Ongoing |
| Green Local Government Certification | 2009 | Ongoing |
| FPZA Green Luncheon at Hilton Garden Inn | 2009 | Ended |
| Ensure that one staff member retains green certification for City incentive program | 2009 | Ongoing |



1. Retain certifications and memberships to stay abreast of new developments in sustainable initiatives (2010)

- a. Florida Green Building Coalition (FGBC)
- b. U.S. Green Building Council (USGBC)

ACTION: No Action.



2. Green Orientation for City new-hires (2010)

A member of the Green Team provides an overview of the City's sustainability initiatives as part of City employees' new-hire orientation. The "Green" session is approximately 30 minutes long and is the first item on an all-day agenda of information.

8:30: Green Team

9:00: Information & Technology

9:30: City Clerk

10:00: Safety Team

10:30: Aflac Insurance

11:00: Great West

LUNCH

1:00: Policy & Procedures2:00: Employee Benefits

ACTION: No Action.



3. "Go Green" award for single-family and commercial developments (2010)

The Beautification Environmental Advisory Committee (BEAC) administers a program that identifies projects that have gone above and beyond on sustainability initiatives. The program also includes a Beautification Award (for landscaping), We Noticed Your Beautification Efforts (for smaller scale improvements), and Structural Beautification Award (for architectural improvements to building façade and structures.

The Hilton Garden Inn in Palm Coast Town Center achieved the "Go Green" Award. The Hilton Garden Inn is a "Green Lodging" designation by the Florida Department of Environmental Protection. General Manager, Tom Grimes, is pictured to the right receiving the award at a City Council business meeting. The team at the Hilton Garden Inn has also supported the City's green initiatives by hosting various green workshops and events at the beautiful facility.



ACTION: No Action.





4. Partner in the Environmental Protection Agency (EPA) Waste Wise Program (2010)

The City joined this program to seek tools to assist with sustainability management practices to reduce municipal waste.

ACTION: Continue to monitor the program website for helpful tools and information.

5. <u>Greenways video production series (2010)</u>

As noted within this chapter's summary table, the City has a program tailored to students from Flagler Schools termed CHIRP (Children Helping In Resource Protection). The program supports a diverse curriculum for all ages and engages students in many different experiences. CHIRP is truly a showcase program that is especially attractive to teachers since the City transports students from schools to City parks. Since implementation, the program has hosted 3,400 students. essence of the program was captured in a video production series named "Greenways" which is utilized to promote CHIRP.



ACTION: Continue to monitor the program website for helpful tools and information.

6. Social media launch (2010)



Through the X-Gen Team, social media is utilized to promote water conservation, natural resource protection and awareness, recycling outreach, and other topics applicable to "Green" initiatives.

ACTION: Continue to utilize social media to promote conservation strategies.



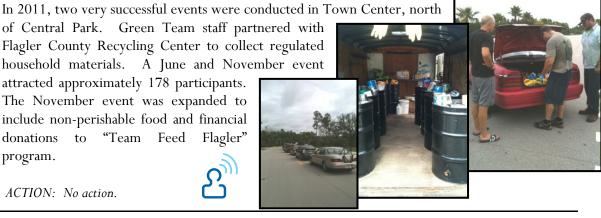
7. Household Hazardous Waste Drop-off Event (2011)

In 2011, two very successful events were conducted in Town Center, north of Central Park. Green Team staff partnered with

attracted approximately 178 participants. The November event was expanded to include non-perishable food and financial to "Team Feed donations

program.

ACTION: No action.





8. Quick Response (QR) enhancements to City parks and trails

a. Graham Swamp Trail (2012)

To further enhance a trail-user's experience, eight QR Code stations were installed along Graham Swamp Trail between Old Kings Road and Colbert Lane connections. With the use of a mobile smart phone or other mobile smart device, users scan bar codes at strategic locations. The scan links to a website which prompts video experiences and fun trivia about various topics. Users learn about the history, natural resources, and overall function and importance of Graham Swamp.



b. Waterfront Park and Intracoastal Waterway Trail (2013)





Similar to Graham Swamp Trail, the QR Code project was expanded to these park facilities. Topics included the ReThink program, history of the Intracoastal Waterway, manatee facts, recycling fishing line, birding along the see trail, and other natural resources in the area. Please section VII.a.2 for details.

ACTION: Evaluate the program and potential expansion.

b. 2014 Accomplishments \sim



. "Saving Green by Going Green in Palm Coast" workshop and brochure

On March 21, 2014, the City of Palm Coast hosted an all day workshop at Water Treatment Plant #3. Topics included Palm Coast green incentives, impact fee reduction, Florida Water Star, green building standards and greening the MLS. Sponsors include the City of Palm Coast, the St. Johns River Water Management District, the U.S. Green Building Council, and the Florida Green Building Coalition. The target audience was the professional building community.

ACTION: Target landscape and irrigation professionals for next workshop event.





2. Green Roof Webinar Conducted for all Engineering & Stormwater Staff

Applicable staff continues to identify educational opportunities to diversify their professional knowledge specific to low impact development principles. This activity was noted in quarterly reporting associated with the Strategic Action Plan and department Performance Measures.

ACTION: Continue to track training activity.



1 Adopt-A-Street, Median, Park and Trail/Shoreline programs evaluated

Originally, only "Adopt-A-Street" and "Adopt-A-Median" programs were utilized to recruit volunteer participation that dually offset City maintenance costs. The remaining programs associated with public recreational facilities were implemented in 2012. To ensure effective programs, staff evaluated all programs and developed a program pamphlet to further enhance participation.



Volunteer Appreciation Proclamation April 1, 2014

ACTION: Monitor participation and recruit feedback from participants.



Green Local Government Recertification

In 2008 and 2010, the City submitted application to the Florida Green Building Coalition (FGBC) to evaluate activities associated with being a green local government. To maintain or surpass the current "Gold" designation and reaffirm the City as being a green local government, an additional application was submitted to FGBC.

ACTION: Continue to track training activity through the EMS and Performance Measures.



5. <u>City website enhanced for "Green City" information</u>

During the redesigning of the City website, <u>www.palmcoastgov.com</u>, a Green City page was added that provides focus information about green programs, recycling, and incentives/award programs.

ACTION: Continue to update web content as needed.



Support and promote Flagler County Property Assessed Clean Energy (PACE) program opportunities

In Spring 2014, the PACE program secured financial resources to formally commence activities. Since this time, staff has provided educational materials in the front lobby of City Offices. This area is routinely visited by citizens, builders and contractors.

ACTION: Continue to provide educational materials in public areas.



c. Potential Future Projects ~



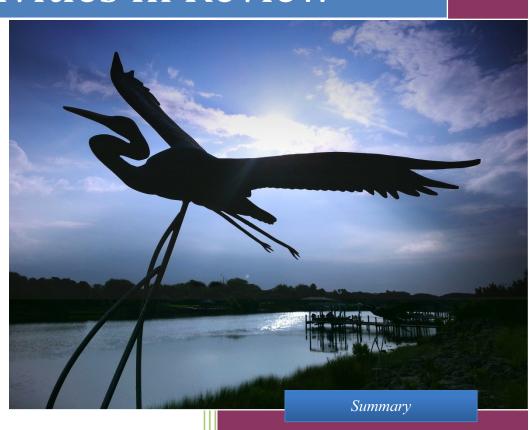
1. Seek certifications to attract visitors to natural amenities

The City prides itself as being a leader of environmental stewardship which reflects the high quality of life for our citizens. In addition to the following standards, staff should continue the evaluation of programs that may bring recognition to the City of Palm Coast.

- a. Become an Audubon Sustainable Community
- b. Certify community under National Wildlife Federation Habitat Program
- c. Bicycle Friendly America Community of League of American Bicyclists
- d. <u>Nominating Long Creek Nature Preserve as a Great Florida Birding and Wildlife Trail</u>

X

EMS Activities In Review

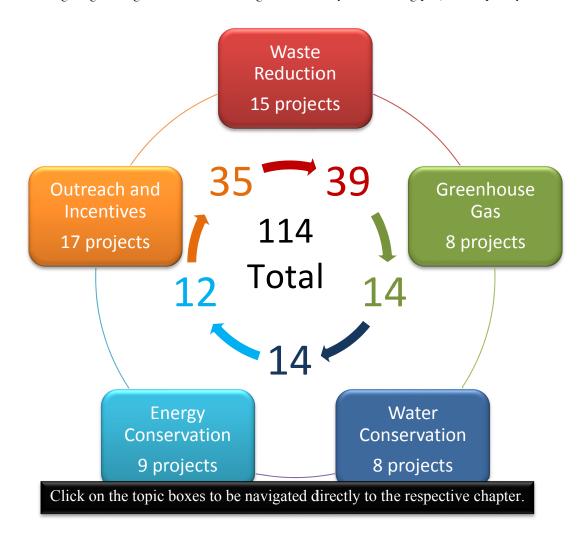




Chapter X: Summary

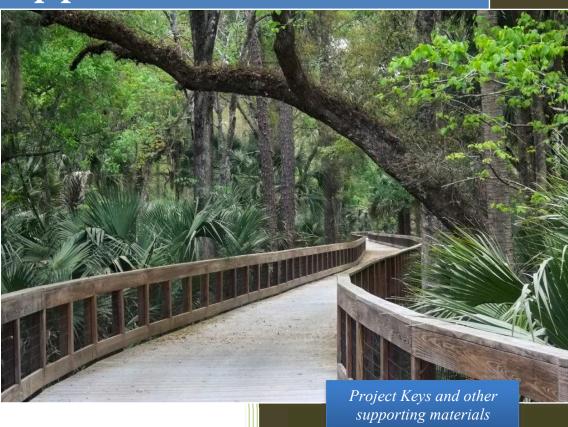
The City of Palm Coast is extremely critical of all operations and consistently grades its performance by applicable standards. This report serves to Plan – Do – Check – Act the activities associated with the City's Green Government Certification and beyond. Since February 2010, the date of achieving Gold level designation from the Florida Green Building Coalition, the City has completed **57** projects of greater complexity than in previous years, and **114** overall since 2007. Please see the following graphic that captures the activities conducted in the previous five fiscal years (outside loop) compared to total activities tracked through the Environmental Management System (inside loop).

While this document provides a sound foundation to the City Council's Objective 4.3: Evaluate current "Green" initiatives and targeted projects that are sustainable with the intent of continually improving the report utility — the act of continually improving the report utility should evolve over time. In years to come, attention should be given to tracking efforts on a numerical scale to enhance the communication of City's progress. Focal points should include measurement methods and benchmarks, and City objectives should include establishing long-term goals for the following five areas beyond tracking project frequency.



XI

Appendices



V. Project Key: Click on page number to navigate directly to project

| EMS Reference | Project Name | Year Reference | Performance Measure | Certification Maintenance V4-1 | Managing Department | Page Reference |
|------------------|--|-------------------|------------------------|--------------------------------------|---------------------|-------------------|
| | V. Water Conservation: | Reduce | Consum | ption | | |
| | Monitor and track water use in City facilities | 2000 | | A2c | Finance | |
| | Tiered Conservation Rate | 2001 | | S4a | Public Works | |
| V.a | Create reclaimed water infrastructure | 2003 | | S4e | Public Works | 13 |
| v.a | Irrigation efficiency and conservation measures within City maintained areas | 2008 | | B1a | Public Works | 13 |
| | Certification of City facilities for Florida Yards and Neighborhoods Standard | 2009 | | Bla | Community | |
| | Customer service audits | 2009 | | S5f | Public Works | |
| | 2010 - Future | Projects | | | | |
| V.a.1 | Fire Department Water Conservation Strategy | 2010 | | E3a | Fire | 13 |
| V.a.2 | Enable customers to track and analyze usage via the internet | 2010 | | S5g | Public Works | 13 |
| V.a.3 | Florida Water Star Demonstration Center and Utility Office retrofit | 2011 | | J6d, K3a | Public Works | 13 |
| | Target non-City seminars/workshops to distribute City regulations and Water | | | | | |
| V.a.3 | Wise educational materials | 2013 | 4.3.1.6 | S5c | Community | 13 |
| V.a.3 | Utilize Florida Water Star exhibit for educational outreach events | 2013 | 4.3.1.12 | J6d, S4e | Public Works | 13 |
| | Utility Rate Schedule Resolution adopted which included incentives for Florida | a | | | | |
| V.b.1 | Water Star | 2013 | | S4a, S4b | Public Works | 15 |
| V.b.2 | Zero Liquid Discharge for Water Treatment Plant #2 | 2014 | 4.1.1.5 | IV3 | Public Works | 16 |
| V | Develop a local government water reduction plan (EMS published) | 2014 | 4.3.1.9 | A2d | Administration | 13 |
| V.c.1 | Enact fountain / water feature standards | Future | | J5b | Community | 17 |
| V.c.2 | Water audit for all City facilities according to Florida Water Star | Future | | | Public Works | 17 |

VI. Project Key: Click on page number to navigate directly to project

| EMS Reference | Project Name | Year Reference | Performance Measure | Certification Maintenance V4-1 | Managing Department | Page Reference |
|------------------|---|-------------------|------------------------|--------------------------------------|---------------------|-------------------|
| | VI. Waste Reduction - Increase Recycling | g: Nat | ural Res | source C | onservation | |
| | Monitor and track local government solid waste generation / recycling rates | 2000 | | A2e | Finance | |
| | Ensure that waste haulers operating in Palm Coast all provide recycling services | 2006 | | | Finance | |
| | Electronic job application submittal | 2007 | | | Human Resources | |
| | Electronic salary statements | 2007 | | | Finance | |
| | Direct deposit for staff salaries and expenses | 2007 | | | Finance | |
| | Printer toner recycling | 2007 | | | IT&C | |
| | City printers with the capability, default to duplex | 2007 | | I2a, I2b | IT&C | |
| | Utilize pine bark instead of cypress mulch in City medians | 2007 | | | Finance | |
| | Recycling at City Parks | 2007 | | K1h | Park & Rec | |
| | Reduce paper in Planning and Land Development Regulation Board (PLDRB) | | | | | |
| | packet | 2007 | | | Community | |
| | Distribute recycled notepads | 2007 | | | Community | |
| VI.a | Reduce number of Code of Ordinances books | 2007 | | | Community | 19 |
| | Customer utility bill merger and transition to electronic billing | 2008 | | S5g | Public Works | |
| | Switch all City facilities to eco-friendly paper products (bathroom tissue, etc.) | 2008 | | | Finance | |
| | Determine use for 30,000 "unusable" Utility bulk mail envelopes | 2008 | | | Public Works | |
| | Equip City facilities with paperless fax technology | 2008 | | | IT&C | |
| | Purchase recycled copy paper | 2008 | | | Finance | |
| | Computer Lottery for City staff | 2009 | | I1a, I1b | IT&C | |
| | Junk mail reduced | 2009 | | | Administration | |
| | Purchase recycled ID badge lanyards | 2009 | | | Human Resources | |
| | Battery Recycling Program | 2009 | | R1b | Community | |
| | Special event recycling | 2009 | | | Community | |
| | Provide incentives to encourage builders to build "Green" | 2009 | | C2a,b,c,d | Community | |
| | Recycling opportunities and guidelines provided to staff | 2009 | | | Community | |

VI. Project Key: Click on page number to navigate directly to project

| EMS Reference | Project Name | Year Reference | Performance Measure | Certification Maintenance V4-1 | Managing Department | Page Reference |
|------------------|---|-------------------|------------------------|--------------------------------------|---------------------|-------------------|
| | VI. Waste Reduction - Increase Recyclin | | tural Res | source C | onservation | |
| | 2010 - Future 3 | Projects | | | | |
| VI.b.1 | Employ Florida Department of Environmental Protection green cleaning and maintainence | 2010 | | A4d, A6b | Administration | 20 |
| VI.b.3 | Microbe fertilizer for Indian Trails Sports Complex lacrosse fields project project | 2011 | 4.3.1.13 | K1e, P1e | Stormwater | 20 |
| VI.b.3 | Microbe release into freshwater canal for pilot project | 2011 | | K1e, P1e | Stormwater | 20 |
| VI.b.2 | City Council transition to iPads | 2011 | | | IT&C | 20 |
| VI.b.4 | Plastic reduction program - reusable water bottles | 2011 | | H2a | Community | 21 |
| VI.b.5 | Evaluation of residential developments to encourage recycling | 2011 | | R2c | Community | 21 |
| VI.b.5 | Waste and Recycling Contract renewed | 2012 | | R1b | Administration | 21 |
| VI.b.5 | Waste assessments for businesses provided by Waste Pro | 2012 | 4.3.1.8 | R4d | Community | 21 |
| VI.b.4 | Provide every employee a mug (BAM Team) | 2013 | | H2a | Administration | 21 |
| VI.b.6 | Printer upgrade to track usage and improve effeciency | 2013 | | | IT&C | 22 |
| VI.b.7 | Encourage the public to utilize paperless options (6 promotions conducted) | 2013 | 4.3.1.4 | | Public Works | 23 |
| VI.b.3 | Microbe treatment at Palm Harbor Golf Course | 2013 | 4.3.1.13 | K1e, P1e | Community | 20 |
| VI.b.4 | Provide every employee a reusable lunch box (BAM Team) | 2014 | | H2a | Administration | 21 |
| VI | Develop a local government solid/hazardous waste reduction plan (EMS Published) | 2014 | | A2f, A5b | Community | 19 |
| VI.b.1 | Develop and encourage an Environmentally Preferable Program (EPP) | 2014 | | A2g, A2h | Finance | 23 |
| VI.c.1 | Minimize paper use for City forms - LITE Team to be formed | Future | 4.3.1.1 | | IT&C | 24 |
| VI.c.2 | Evaluate green landscaping requirements for local government buildings | Future | | A6c | Community | 24 |
| VI.c.3 | Evaluate Disaster Management Plan for waste reduction strategies | Future | | R1g | Fire | 24 |

VII. Project Key: Click on page number to navigate directly to project

| EMS Reference | Project Name | Year Reference | Performance Measure | Certification Maintenance V4-1 | Managing Department | Page Reference |
|------------------|---|-------------------|------------------------|--------------------------------------|---------------------|-------------------|
| | VII. Greenhouse Gas: Minii | mize C | arbon F | ootprint | | |
| | Purchase of Alternative Fuel Vehicle (AFV) | 2008 | | A3b | Public Works | |
| | City vehicle idling policy | 2008 | | | Administration | |
| VII.a | City carpooling program | 2008 | | H1a | Community | 25 |
| V 11.a | All new government buildings will be built to green standard | 2008 | | A4c | Community | 23 |
| | Bicycle rack installation at all public amenities | 2008 | | K1c | Park & Rec | |
| | Recreation and Parks Facilities Master Plan & Pedestrian/Bicycle Master Plan | 2009 | | O2a | Community | |
| | 2010 - Future F | Projects | | | | |
| VII.a.1 | Enhancements to "Conservation" element of 2035 Comprehensive Plan | 2010 | | L1a | Community | 26 |
| | Partnership with the Florida Department of Transportation (FDOT) to promote | | | | | |
| VII.a.2 | ReThink Program | 2011 | | H1a, O4b | Community | 26 |
| VII.a.3 | "Trek It Out" brochure | 2011 | | K3a | Community | 26 |
| VII.a.4 | Tracking City fleet efficiency with Global Positioning Systems (GPS) | 2011 | | | Public Works | 27 |
| | Evaluate opportunities to incorporate Compressed Natural Gas (CNG) into fleet | | | | | |
| VII.a.5 | operation | 2011 | | P2a | Public Works | 27 |
| VII.a.6 | Waste Pro transition to CNG pursuant to contract commitments | 2012 | | P2a | Administration | 27 |
| VII.a.7 | Palm Coast Parkway tree relocation project | 2013 | | | Community | 28 |
| | Plan for alternative fueling stations for Town Center and other high-use public | | | | | |
| VII.b.1 | areas | 2014 | 4.3.3.3 | | Community | 28 |
| | | | | P1d, P7a, | | |
| VII.c.1 | Evaluate fleet maintenance procedures | Future | | E2a | Public Works | 29 |
| VII.c.2 | City tree inventory | Future | | | Community | 29 |

VIII. Project Key: Click on page number to navigate directly to project

| EMS Reference | Project Name | Year Reference | Performance Measure | Certification Maintenance V4-1 | Managing Department | Page Reference |
|------------------|---|-------------------|------------------------|--------------------------------------|---------------------|-------------------|
| | VIII. Energy Conservation and Alternativ | ve Sou | rces: Er | nbracing | g Innovation | |
| | Monitor and track local government energy use | 2000 | | A2a | Finance | |
| VIII.a | Light Emitting Diode (LED) transition for traffic control devices | 2008 | | P3b | Community | 30 |
| | Evaluate computer and accessorial equipment for energy conservation strategies | 2009 | | I1a, I1b | IT&C | |
| | 2010 - Future P | rojects | | | | |
| VIII.a.1 | Solar power for irrigation | 2010 | | | Community | 31 |
| VIII.a.2 | Implement energy efficient lighting and controls at Indian Trails Sports Complex and other applicable parks | 2010 | | | Park & Rec | 31 |
| VIII.a.3 | Creation of Alternative Energy Sub Team | 2011 | | A5a | Administration | 32 |
| VIII.a.4 | Evaluate existing FP&L accounts for accuracy and rate designation | 2011 | | | Finance | 32 |
| VIII.a.5 | Inventory and locate all street lights within the City | 2011 | | P3b | Stormwater | 32 |
| VIII.a.5 | LED Palm Coast Parkway Streetlight Pilot Project (FP&L/City Partnership) | 2012 | 4.3.3.1 | P3b | Administration | 32 |
| VIII.b.1 | Locate all FP&L meters and determine activity | 2014 | | | Community | 33 |
| VIII.b.2 | Conduct comprehensive energy audit at all facilities | 2014 | 4.3.2.2 | A2b | Public Works | 34 |
| VIII | Develop a local government energy reduction plan (EMS Published) | 2014 | | A2b | Administration | 30 |
| VIII.c.1 | Curtail energy loads within Water Treatment Plants | Future | | | Public Works | 34 |

IX. Project Key: Click on page number to navigate directly to project

| EMS Reference | Project Name | Year Reference | Performance Measure | Certification Maintenance V4-1 | Managing Department | Page Reference |
|------------------|---|-------------------|------------------------|--------------------------------------|---------------------|-------------------|
| | IX. Outreach and Incentives | s: Edu | cate and | Inspire | | |
| | Green Team established | 2007 | | A5a | Administration | |
| | Green tip of the week posted on City Intranet | 2007 | | | Community | |
| | Recycling fund utilized for outreach activities | 2008 | | A7a | Administration | |
| | Low Impact Development Workshop for Flagler County (January 25, 2008) | 2008 | | | Community | |
| | Flagler Home Show | 2008 | | | Community | |
| | Flagler Palm Coast High School Career Day | 2008 | | | Administration | |
| | Growing Greener Workshop | 2008 | | | Community | |
| | Tree City USA Award | 2008 | | | Community | |
| | Growth Award | 2008 | | | Community | |
| IX.a | Arbor Day Celebration | 2008 | | | Community | 35 |
| | Christmas Tree Recycling event | 2008 | 4.3.1.10 | | Community | |
| | Green Assessment for City facilities and operations | 2008 | | | Community | |
| | Waterway clean-up Grant and Coordination | 2008 | 5.1.2.4 | M3a | Community | |
| | School Job Shadowing Program | 2008 | | | Administration | |
| | Launched C.H.I.R.P (Children Helping In Resource Protection) | 2009 | | Q6b | Community | |
| | Green Local Government Certification | 2009 | | | Community | |
| | FPZA Green Luncheon at Hilton Garden Inn | 2009 | | | Community | |
| | Ensure that one staff member retains green certification for City incentive program | 2009 | | G5a | Community | |

IX. Project Key: Click on page number to navigate directly to project

| EMS Reference | Project Name | Year Reference | Performance Measure | Certification Maintenance V4-1 | Managing Department | Page Reference |
|------------------|--|-------------------|------------------------|--------------------------------------|---------------------|-------------------|
| | IX. Outreach and Incentives | : Edu | cate and | Inspire | | |
| | 2010 - Future P | rojects | | | | |
| IX.a.1 | Retain certifications and membership to stay abreast of new developments in sustainable initiatives - track certifications | 2010 | | A 90 1120 | Community | 36 |
| IX.a.2 | Green Orientation for City new-hires | 2010 | | A8a, H3a, I4a | Administration | 36 |
| IX.a.3 | "Go Green" award for single-family and commercial developments | 2010 | | C6c, D3c | Community | 36 |
| IX.a.4 | Partner in the Environmental Protection Agency (EPA) Waste Wise Program | 2010 | | R1a | Community | 37 |
| IX.a.5 | Greenways video production | 2010 | | | IT&C | 37 |
| IX.a.6 | Social media launch | 2010 | | | IT&C | 37 |
| IX.a.7 | Household Hazardous Waste Drop-off Event | 2011 | | R1b | Community | 37 |
| III.b | Strategic Action Plan updated with enhanced commitments to the environment | 2011 | | A1a | Administration | 5 |
| IX.a.8.a | QR Project (Graham Swamp Trail) | 2012 | | | Community | 38 |
| IX.a.8.b | QR Project (Waterfront Park & ICWW Trail) | 2013 | | | Community | 38 |
| IX.b.1 | Publicity and case studies for green building | 2013 | | C7a | Community | 38 |
| IX.b.1 | "Saving Green by Going Green in Palm Coast" workshop and brochure | 2014 | 4.3.1.6 | A7a, C6a, F4b | Public Works | 38 |
| IX.b.2 | Green Roof Webinar Conducted for all Engineering & Stormwater Staff | 2014 | 4.3.2.1 | A8a | Stormwater | 38 |
| IX.b.3 | Adopt-A-Street, Median, Park and Trail/Shoreline Evaluated | 2014 | 3.2.3.4 | | Community | 39 |
| IX.b.4 | Green Local Government Recertification | 2014 | 4.3.2.3 | | Community | 39 |
| IX.b.5 | Green Development Incentive Program webpage enhanced | 2014 | | C7a | Community | 39 |
| IX.b.6 | Support and Promote Flagler County Property Assessed Clean Energy (PACE) program opportunities | 2014 | | E4a | Community | 39 |
| IX.c.1 | Seek certifications to attract visitors to natural amenities | Future | | K3a, J1b, J1d | Community | 40 |



Palm Coast, FL

Trends over Time

2014



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Summary

The National Citizen Survey™ (The NCS™) is a collaborative effort between National Research Center, Inc. (NRC) and the International City/County Management Association (ICMA). The survey and its administration are standardized to assure high quality research methods and directly comparable results across The NCS communities. The NCS captures residents' opinions within the three pillars of a community (Community Characteristics, Governance and Participation) across eight central facets of community (Safety, Mobility, Natural Environment, Built Environment, Economy, Recreation and Wellness, Education and Enrichment and Community Engagement). This report discusses trends over time, comparing the 2014 ratings for the City of Palm Coast to its previous yearly survey results from 2002 to 2013. Additional reports and technical appendices are available under separate cover.

Trend data for Palm Coast represent important comparison data and should be examined for improvements or declines. Deviations from stable trends over time, especially, represent opportunities for understanding how local policies, programs or public information may have affected residents' opinions.

Meaningful differences between survey years have been noted within the following tables as being "higher" (\uparrow) or "lower" (\downarrow) if the differences are greater than seven percentage points between the 2013 and 2014 surveys, otherwise the comparison between 2013 and 2014 are noted as being "similar" (\leftrightarrow). Additionally, benchmark comparisons for all survey years are presented for reference. Changes in the benchmark comparison over time can be impacted by various trends, including varying survey cycles for the individual communities that comprise the benchmarks, regional and national economic or other events, as well as emerging survey methodologies. If a survey question was not asked it is noted with an asterisk (*).

Overall, ratings in Palm Coast for 2014 generally remained stable. Of the 128 items for which comparisons were available, 104 items were rated similarly in 2013 and 2014, 18 items showed a decrease in ratings and 6 showed an increase in ratings. Notable trends over time included the following:

- In the facet of Economy several features ratings decreased compared to 2013; these features included employment opportunities, cost of living, vibrant downtown/commercial area and businesses and services in Palm Coast. Participants are more positive about their economic outlook however; compared to 2013 more participants believed the economy would have a positive impact on their income.
- While most Education and Enrichment ratings remained stable, several ratings varied compared to 2013. Ratings decreased for cultural/arts/music activities, the availability of affordable quality child care/preschool and adult education opportunities. Ratings increased for City-sponsored special events.
- Several Built Environment ratings increased, including sewer services, storm drainage and land use, planning and zoning. More participants in 2014 than in 2013 did NOT observe a code violation.
- Within Recreation and Wellness, ratings decreased for the availability of affordable quality food and mental healthcare. Also, fewer participants used recreation centers compared to the previous survey.
- Fewer participants reported watching a local public meeting and ratings also decreased for the Community Engagement features of the value of services for taxes paid and Palm Coast welcoming citizen involvement.

Table 1: Community Characteristics General

| | Percent rating positively (e.g., excellent/good) | | | | | | | | | | | 2014 rating compared to | ed to Comparison to benchmark 02 03 04 05 06 07 08 09 10 11 12 13 1 | | | | | | | | | | | | | | |
|-------------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------------------|--|-------------------|-------------------|-------------------|-------------------|---------------------|---------------------|-------------------|---------------------|---------------------|---------------------|-------------------|------------------------|-------------------|-------------------|
| | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 2013 | | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 |
| Overall quality of life | 82% | 80% | 82% | 75% | 73% | 71% | 73% | 74% | 75% | 67% | 70% | 75% | 73% | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | T | J. | \leftrightarrow | \leftrightarrow | 11 | J.J. | \leftrightarrow | → |
| Overall image | * | * | * | * | * | * | 70% | * | | | 69% | | | | * | * | * | * | * | * | \leftrightarrow | * | 1 | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| Place to live | 86% | 84% | 86% | 83% | 80% | 77% | 80% | 79% | 85% | 78% | 80% | 84% | 80% | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \ | \leftrightarrow | \leftrightarrow | \leftrightarrow | 1 | \downarrow | \leftrightarrow | \leftrightarrow |
| Neighborhood | 86% | 88% | 88% | 86% | 86% | 80% | 81% | 78% | 82% | 78% | 82% | 83% | 85% | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| Place to raise children | 69% | 75% | 72% | 70% | 66% | 60% | 61% | 60% | 73% | 63% | 71% | 73% | 68% | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | ↓ ↓ | ↓ ↓ | ↓ ↓ | 1 | 11 | $\downarrow\downarrow$ | \leftrightarrow | ↓ |
| Place to retire | 84% | 83% | 81% | 78% | 71% | 76% | 78% | 73% | 78% | 75% | 78% | 80% | 79% | \leftrightarrow | ↑ ↑ | 11 | ↑ ↑ | $\uparrow \uparrow$ | 1 | 11 | ↑ ↑ | ↑ ↑ | ↑ ↑ | ↑ ↑ | ↑ ↑ | ↑ | 1 |
| Overall appearance | 75% | 76% | 83% | 85% | 80% | 83% | 82% | 86% | 83% | 83% | 85% | 85% | 84% | \leftrightarrow | \leftrightarrow | \leftrightarrow | 1 | $\uparrow \uparrow$ | $\uparrow \uparrow$ | 11 | $\uparrow \uparrow$ | $\uparrow \uparrow$ | $\uparrow \uparrow$ | ↑ ↑ | $\uparrow \uparrow$ | ↑ | 1 |

Table 2: Community Characteristics by Facet

| | <u> </u> | | Per | | 2014 | | | | C | omp | ariso | n to | bend | hma | rk | | | | | | | | | | | | | |
|----------------------|-------------------------------------|-----|-----|-----|------|-----|-----|-----|-----|-----|-------|------|------|-----|-------------------------------|------------------------|-------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------|---------------------|-------------------|-------------------|
| | | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | rating compared to 2013 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 |
| | Overall feeling of safety | * | * | * | * | * | * | * | * | * | * | * | 70% | 76% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow |
| | Safe in neighborhood | 96% | 93% | 94% | 94% | 92% | 93% | 92% | 90% | 93% | 91% | 93% | 88% | 92% | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| Safety | Safe downtown/commercial area | 93% | 92% | 91% | 91% | 88% | 90% | 88% | 90% | 89% | 88% | 88% | 82% | 89% | \leftrightarrow | ↑ ↑ | 1 | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| | Overall ease of travel | * | * | * | * | * | * | * | * | * | * | * | 72% | 67% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow |
| | Paths and walking trails | * | * | * | * | * | * | 49% | 53% | 61% | 70% | 73% | 78% | 81% | \leftrightarrow | * | * | * | * | * | * | 11 | \leftrightarrow | 1 | 11 | ↑ ↑ | 1 | 1 |
| | Ease of walking | * | * | * | 36% | 42% | 45% | 46% | 49% | 52% | 58% | 65% | 68% | 66% | \leftrightarrow | * | * | * | $\downarrow\downarrow$ | $\downarrow\downarrow$ | $\downarrow\downarrow$ | $\downarrow\downarrow$ | $\downarrow\downarrow$ | $\downarrow\downarrow$ | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow |
| | Travel by bicycle | 43% | 41% | 46% | 33% | 42% | 45% | 45% | 49% | 54% | 65% | 69% | 64% | 70% | \leftrightarrow | $\downarrow\downarrow$ | 1 | 1 | $\downarrow\downarrow$ | 1 | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | ↑ ↑ | $\uparrow \uparrow$ | \leftrightarrow | 1 |
| | Travel by car | 51% | 37% | 22% | 16% | 20% | 39% | 41% | 50% | 62% | 57% | 71% | 69% | 62% | \leftrightarrow | \leftrightarrow | 1 | $\downarrow\downarrow$ | $\downarrow\downarrow$ | $\downarrow\downarrow$ | $\downarrow\downarrow$ | $\downarrow\downarrow$ | 1 | \leftrightarrow | \leftrightarrow | $\uparrow \uparrow$ | \leftrightarrow | \leftrightarrow |
| | Public parking | * | * | * | * | * | * | * | * | * | * | * | 74% | 71% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow |
| Mobility | Traffic flow | 45% | 29% | 14% | 11% | 12% | 25% | 32% | 41% | 44% | 50% | 60% | 56% | 47% | 1 | * | * | * | * | * | * | $\downarrow\downarrow$ | \leftrightarrow | \leftrightarrow | 1 | $\uparrow \uparrow$ | \leftrightarrow | \leftrightarrow |
| | Overall natural environment | * | * | * | * | * | * | 71% | 69% | 80% | 82% | 81% | 87% | 87% | \leftrightarrow | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow | 1 | 1 | ↑ ↑ | \leftrightarrow | \leftrightarrow |
| Natural | Cleanliness | * | * | * | * | * | * | * | 85% | 83% | 83% | 87% | 85% | 85% | \leftrightarrow | * | * | * | * | * | * | * | ↑ ↑ | $\uparrow \uparrow$ | 11 | $\uparrow \uparrow$ | 1 | 1 |
| Environment | Air quality | * | * | * | * | * | * | 79% | * | 83% | 79% | 83% | 83% | 85% | \leftrightarrow | * | * | * | * | * | * | 11 | * | $\uparrow \uparrow$ | 11 | $\uparrow \uparrow$ | \leftrightarrow | \leftrightarrow |
| | Overall built environment | * | * | * | * | * | * | * | * | * | * | * | 62% | 64% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow |
| Built Environment | New development in Palm Coast | * | * | * | 48% | 47% | 53% | 63% | 61% | 63% | 56% | 53% | 42% | 41% | \leftrightarrow | * | * | * | * | | ↓ | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow | 1 | | 1 |

| | | | Per | cent ra | ting po | sitively | (e.g., | excelle | nt/god | d, very | //some | what s | afe) | | 2014 | | | | С | omp | ariso | n to | benc | hma | rk | | | |
|-------------------------|--|-----|-----|---------|---------|----------|--------|---------|--------|---------|--------|--------|------|-----|-------------------------------|------------------------|------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|------------------------|------------------------|
| | | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | rating compared to 2013 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 |
| | Affordable quality housing | * | * | 54% | 39% | 33% | 41% | 53% | 58% | 61% | 58% | 67% | 64% | 59% | \leftrightarrow | * | * | \leftrightarrow | \leftrightarrow | 1 | \leftrightarrow | 11 | ↑ ↑ | ↑ ↑ | ↑ ↑ | ↑ ↑ | 1 | \leftrightarrow |
| | Housing options | * | * | * | * | * | * | 64% | 67% | 64% | 59% | 59% | 63% | 70% | \leftrightarrow | * | * | * | * | * | * | 11 | ↑ ↑ | 1 | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| | Public places | * | * | * | * | * | * | * | * | * | * | * | 60% | 65% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow |
| | Overall economic health | * | * | * | * | * | * | * | * | * | * | * | 36% | 37% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | 1 | ↓ |
| | Vibrant downtown/commercial area | * | * | * | * | * | * | * | * | * | * | * | 32% | 25% | ↓ | * | * | * | * | * | * | * | * | * | * | * | ļ | ↓ |
| | Business and services | * | * | * | * | * | * | 45% | 52% | 52% | 48% | 49% | 56% | 44% | \ | * | * | * | * | * | * | * | 1 | $\downarrow\downarrow$ | $\downarrow\downarrow$ | $\downarrow \downarrow$ | \leftrightarrow | 1 |
| | Cost of living | * | * | * | * | * | * | * | * | * | * | * | 45% | 37% | ↓ | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow |
| | Shopping opportunities | 23% | 20% | 27% | 22% | 22% | 25% | 30% | 49% | 47% | 43% | 43% | 43% | 36% | \leftrightarrow | $\downarrow\downarrow$ | ↓ ↓ | ↓ ↓ | ↓ ↓ | ↓↓ | ↓ ↓ | 1 | \leftrightarrow | ↓ | $\downarrow\downarrow$ | $\downarrow\downarrow$ | \leftrightarrow | ↓ |
| | Employment opportunities | 8% | 7% | 9% | 7% | 7% | 6% | 9% | 6% | 9% | 5% | 11% | 13% | 6% | \ | ↓↓ | 1 | 1 1 | 1 1 | 11 | ↓↓ | 11 | ↓ ↓ | 1 1 | 1 1 | $\downarrow\downarrow$ | ↓↓ | 11 |
| | Place to visit | * | * | * | * | * | * | * | * | * | * | * | 63% | 60% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow |
| Economy | Place to work | * | * | * | 24% | 20% | 16% | 16% | 20% | 21% | 15% | 16% | 18% | 18% | \leftrightarrow | * | * | * | $\downarrow\downarrow$ | $\downarrow\downarrow$ | $\downarrow\downarrow$ |
| | Health and wellness | * | * | * | * | * | * | * | * | * | * | * | 67% | 64% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow |
| | Mental health care | * | * | * | * | * | * | * | * | * | * | * | 44% | 31% | 1 | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | 1 |
| | Preventive health services | * | * | * | * | * | * | 43% | 47% | 56% | 53% | 60% | 58% | 56% | \leftrightarrow | * | * | * | * | * | * | \leftrightarrow | 1 | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| | Health care | * | * | 44% | 41% | 42% | 42% | 37% | 46% | 49% | 45% | 56% | 60% | 55% | \leftrightarrow | * | * | 1 | \leftrightarrow | 1 | 1 | $\downarrow\downarrow$ | \leftrightarrow | \leftrightarrow | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow |
| | Food | * | * | * | * | * | 56% | 56% | * | 60% | 55% | 58% | 64% | 51% | 1 | * | * | * | * | * | 1 | 1 | * | \downarrow | 1 | 1 | \leftrightarrow | \leftrightarrow |
| Recreation and | Recreational opportunities | 38% | 37% | 35% | 35% | 29% | 37% | 41% | 51% | 53% | 52% | 58% | 69% | 67% | \leftrightarrow | ↓↓ | ↓↓ | ↓↓ | 11 | 11 | ↓↓ | ↓↓ | ↓↓ | ↓↓ | $\downarrow\downarrow$ | ↓ | \leftrightarrow | \leftrightarrow |
| Wellness | Fitness opportunities | * | * | * | * | * | * | * | * | * | * | * | 82% | 79% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow |
| | Religious or spiritual events and activities | * | * | * | * | * | * | * | 81% | 77% | 74% | 79% | 77% | 70% | \leftrightarrow | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| | Cultural/arts/music activities | 40% | 46% | * | * | * | * | * | * | 44% | 40% | 43% | 49% | 41% | \ | ↓↓ | 1 | * | * | * | * | * | * | ↓ | ↓ ↓ | $\downarrow\downarrow$ | \leftrightarrow | \leftrightarrow |
| Education | Adult education | * | * | * | * | * | * | * | * | * | * | * | 58% | 48% | Į. | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow |
| and | K-12 education | * | * | * | * | * | * | * | * | * | 65% | 73% | 64% | 60% | \leftrightarrow | * | * | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| Enrichment | Child care/preschool | * | * | 32% | 24% | 30% | 27% | 27% | 32% | 44% | 30% | 45% | 63% | 44% | 1 | * | * | $\downarrow\downarrow$ | $\downarrow\downarrow$ | $\downarrow\downarrow$ | $\downarrow\downarrow$ | $\downarrow\downarrow$ | 1 | \leftrightarrow | 1 | \leftrightarrow | 1 | \leftrightarrow |
| | Social events and activities | * | * | * | * | * | * | * | 56% | 55% | 53% | 54% | 48% | 46% | \leftrightarrow | * | * | * | * | * | * | * | ↓ | ↓ | 11 | $\downarrow\downarrow$ | \leftrightarrow | \leftrightarrow |
| | Neighborliness | * | * | * | * | * | * | * | * | * | * | * | 52% | 53% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow |
| Community Engagement | Openness and acceptance | * | * | * | * | * | * | * | * | 75% | 65% | 68% | 62% | 65% | \leftrightarrow | * | * | * | * | * | * | * | * | ↑ ↑ | \leftrightarrow | ↑ | \leftrightarrow | \leftrightarrow |

| | | | | | | | | | | | | | | | | | | С | ompa | ariso | n to | benc | hma | rk | | | |
|---|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-------------------------------|----|----|----|----|------|-------|------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | rating compared to 2013 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 |
| Opportunities to participate in community matters | * | * | * | * | * | * | 52% | 61% | 60% | 51% | 61% | 55% | 52% | \leftrightarrow | * | * | * | * | * | * | ↓↓ | \leftrightarrow | ↓ | 1 | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| Opportunities to volunteer | * | * | * | * | * | * | * | 76% | 74% | 71% | 73% | 66% | 67% | \leftrightarrow | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow |

Table 3: Governance General

| | | | | Percei | nt ratin | g posit | ively (e | e.g., ex | cellent | /good) | | | | 2014 rating | | | | - | Comp | oarisc | n to | bench | nmarl | < | | | |
|---|-----|-----|-----|--------|----------|---------|----------|----------|---------|--------|-----|-----|-----|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------------|-------------------|-------------------|-------------------|------------------------|-------------------|-------------------|
| | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | compared to 2013 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 |
| Services provided by Palm Coast | 55% | 58% | 67% | 59% | 55% | 59% | 66% | 74% | 69% | 71% | 67% | 66% | 71% | \leftrightarrow | ↓↓ | ↓↓ | ↓ | 1 | 1 | ↓↓ | 1 | 1 | \leftrightarrow | \leftrightarrow | ↓ | \leftrightarrow | \leftrightarrow |
| Customer service | 65% | 66% | 71% | 65% | 68% | 66% | 70% | 74% | 79% | 77% | 68% | 66% | 67% | \leftrightarrow | 1 | 1 | 1 | \leftrightarrow | \leftrightarrow | 1 | 1 | \leftrightarrow | 1 | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow |
| Value of services for taxes paid | * | * | * | 59% | 52% | 48% | 49% | 56% | 53% | 54% | 50% | 54% | 46% | ↓ | * | * | * | \leftrightarrow | \leftrightarrow | ļ | ↓↓ | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| Overall direction | 44% | 50% | 54% | 47% | 44% | 50% | 53% | 55% | 58% | 50% | 48% | 46% | 47% | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow | 1 | 1 | 1 | $\downarrow\downarrow$ | \leftrightarrow | \leftrightarrow | 1 | $\downarrow\downarrow$ | \leftrightarrow | \leftrightarrow |
| Welcoming citizen involvement | 56% | 56% | 61% | 49% | 46% | 50% | 42% | 47% | 48% | 45% | 39% | 48% | 38% | ↓ | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | ↓ ↓ | ļ | ↓↓ | ↓↓ | \leftrightarrow | ļ | $\downarrow\downarrow$ | \leftrightarrow | \leftrightarrow |
| Confidence in City government | * | * | * | * | * | * | * | * | * | * | * | 39% | 35% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | 1 |
| Acting in the best interest of Palm Coast | * | * | * | * | * | * | * | * | * | * | * | 45% | 40% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow |
| Being honest | * | * | * | * | * | * | * | * | * | * | * | 43% | 39% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | 1 |
| Treating all residents fairly | * | * | * | * | * | * | * | * | * | * | * | 47% | 42% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow |
| Services provided by the Federal | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Government | 44% | 41% | 43% | 43% | 38% | 38% | 34% | 42% | 37% | 35% | 41% | 30% | 36% | \leftrightarrow | ↓ | \leftrightarrow | \leftrightarrow | ↓ | \leftrightarrow | ↓ | \leftrightarrow |

Table 4: Governance by Facet

| | | | | | Percer | nt ratin | g posit | ively (e | e.g., ex | cellent | /good) | | | | 2014 rating | | | | С | ompa | ariso | n to | benc | hmaı | rk | | | |
|--------|------------------|-----|-----|-----|--------|----------|---------|----------|----------|---------|--------|-----|-----|-----|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | | | | | | | | | | | | | | compared | | | | | | | | | | | | | |
| | | 02 | 03 | 04 | 05 | 06 | 07 | 80 | 09 | 10 | 11 | 12 | 13 | 14 | to 2013 | 02 | 03 | 04 | 05 | 06 | 07 | 80 | 09 | 10 | 11 | 12 | 13 | 14 |
| | Police | 81% | 82% | 79% | 81% | 77% | 70% | 69% | 78% | 79% | 80% | 80% | 77% | 80% | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | 1 | 1 | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| | Fire | 91% | 92% | 94% | 95% | 90% | 90% | 90% | 94% | 95% | 92% | 96% | 94% | 93% | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | 1 | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow |
| | Ambulance/EMS | 90% | 89% | 92% | 94% | 87% | 86% | 88% | 92% | 92% | 88% | 96% | 91% | 91% | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow | \leftrightarrow | 1 | 1 | \leftrightarrow | ↑ ↑ | \leftrightarrow | \leftrightarrow |
| | Crime prevention | 70% | 69% | * | * | * | * | * | * | 69% | 62% | 65% | 60% | 55% | \leftrightarrow | \leftrightarrow | \leftrightarrow | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| | Fire prevention | 76% | 77% | * | 73% | 71% | 76% | 75% | 78% | 79% | 75% | 82% | 79% | 70% | 1 | 1 | \leftrightarrow | * | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| Safety | Animal control | * | * | * | * | * | * | 55% | 61% | 64% | 57% | 65% | 67% | 57% | | * | * | * | * | * | * | \downarrow | \leftrightarrow | \leftrightarrow | 1 | 1 | \leftrightarrow | \leftrightarrow |

| | | | | | Percer | nt ratin | g posit | ively (e | e.g., ex | cellent | /good) | | | | 2014 rating | | | | С | omp | ariso | n to | benc | hma | rk | | | |
|-------------------|-------------------------------------|------|------|------|--------|----------|---------|----------|----------|---------|--------|------|-----|------|---------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------|-------------------|-------------------|-------------------|
| | | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | compared to 2013 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 |
| | Emergency preparedness | * | * | * | * | * | * | 61% | 71% | 73% | 69% | 73% | 68% | 68% | \leftrightarrow | * | * | * | * | * | * | 1 | ↑ ↑ | ↑ ↑ | 1 | ↑ ↑ | \leftrightarrow | \leftrightarrow |
| | Traffic enforcement | 56% | 48% | 55% | 50% | 50% | 57% | 57% | 61% | 65% | 63% | 65% | 57% | 55% | \leftrightarrow | | 11 | 1 | | | | | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | _ |
| | Street repair | 16% | 18% | | 31% | | 43% | | 62% | | 68% | 70% | 64% | 63% | ↔ | 11 | 11 | 11 | 1 | \leftrightarrow | \leftrightarrow | † | ↑ ↑ | ↑ ↑ | 11 | 11 | 1 | \leftrightarrow |
| | Street cleaning | 27% | | | 40% | 45% | 48% | | | 62% | | | 67% | 69% | ↔ | 11 | 11 | 11 | 11 | 1 | 11 | \leftrightarrow | ↑ ↑ | ↔ | 1 | 11 | \leftrightarrow | \leftrightarrow |
| | Street lighting | * | 18% | | 20% | | | | 38% | 36% | | | 41% | 45% | \leftrightarrow | * | 11 | 11 | 11 | ↓↓ | | $\downarrow\downarrow$ | $\downarrow\downarrow$ | $\downarrow\downarrow$ | 1 | 11 | Ţ | L |
| | Sidewalk maintenance | 35% | 35% | 43% | | | | | | 57% | | | | | \leftrightarrow | 11 | | 1 | ↔ | | | ↔ | \leftrightarrow | ↑ | | ↑ ↑ | | ↔ |
| | Traffic signal | 0070 | 0070 | 1070 | 1070 | 1070 | .,,, | 0.70 | 02.0 | 0.70 | 0070 | 00.0 | | 0070 | | ** | ** | * | | | | | | | - 11 | | <u> </u> | |
| Mobility | timing | 46% | 38% | 35% | 28% | 33% | 39% | 45% | 46% | 46% | 43% | 52% | 39% | 35% | \leftrightarrow | 1 | 1 | $\downarrow\downarrow$ | $\downarrow\downarrow$ | $\downarrow\downarrow$ | 1 | \leftrightarrow | \leftrightarrow | \leftrightarrow | 1 | \leftrightarrow | 1 | 1 |
| | Garbage | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | collection | 83% | - | | | 82% | 85% | 86% | 86% | | | | | 87% | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | 1 | 1 | 1 | 1 | | | 1 | 11 | \leftrightarrow | \leftrightarrow |
| | Recycling | 83% | 81% | 79% | 84% | 80% | 81% | 84% | 87% | 86% | 83% | 90% | 89% | 87% | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | 1 | 1 | 1 | 11 | 1 | ↑ ↑ | ↑ ↑ | 11 | \leftrightarrow | \leftrightarrow |
| | Yard waste pick- up | * | * | * | * | * | * | * | * | 84% | 87% | 90% | 86% | 86% | \leftrightarrow | * | * | * | * | * | * | * | * | ↑ ↑ | ↑ ↑ | ↑ ↑ | \leftrightarrow | 1 |
| | Drinking water | 55% | 54% | 55% | 52% | 55% | 53% | 56% | 58% | 66% | 65% | 65% | 56% | 60% | \leftrightarrow | $\downarrow\downarrow$ | $\downarrow\downarrow$ | 1 | 1 | ↓ | ↓ | 1 | \downarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \downarrow | \leftrightarrow |
| Natural | Natural areas preservation | * | * | * | * | * | * | 56% | 66% | 70% | 66% | 75% | 70% | 65% | \leftrightarrow | * | * | * | * | * | * | \leftrightarrow | ↑ ↑ | ↑ ↑ | 1 | ↑ ↑ | \leftrightarrow | \leftrightarrow |
| Environment | Open space | * | * | * | * | * | * | * | * | * | * | * | 72% | 61% | 1 | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow |
| | Storm drainage | 40% | 21% | 35% | 29% | 32% | 40% | 46% | 49% | 43% | 57% | 56% | 43% | 51% | 1 | $\downarrow\downarrow$ | 1 | $\downarrow\downarrow$ | \leftrightarrow | \leftrightarrow | 1 | \leftrightarrow |
| | Sewer services | 68% | 64% | 88% | 64% | 63% | 64% | 69% | 72% | 73% | 76% | 81% | 65% | 73% | 1 | \leftrightarrow | 1 | 11 | \leftrightarrow | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow |
| | Utility billing | * | * | * | * | * | * | * | * | * | * | * | 62% | 57% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow |
| | Land use, planning and zoning | 27% | 28% | 33% | 30% | 27% | 32% | 41% | 42% | 46% | 42% | 39% | 41% | 50% | 1 | 1 1 | 1 | 1 | 1 | 1 | \ | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow |
| Built | Code enforcement | 37% | 31% | 44% | 45% | 42% | 44% | 43% | 50% | 50% | 47% | 55% | 43% | 49% | \leftrightarrow | 11 | ↓↓ | Ţ | \leftrightarrow | \leftrightarrow | \leftrightarrow | Ţ | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| Environment | Cable television | 27% | * | 40% | 52% | 46% | * | * | * | 62% | 57% | 58% | 53% | 55% | \leftrightarrow | 11 | * | 11 | \leftrightarrow | \leftrightarrow | * | * | * | 1 | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow |
| Economy | Economic development | * | 22% | 29% | 35% | 32% | 29% | 32% | 33% | 34% | 31% | 30% | 34% | 30% | \leftrightarrow | * | 11 | 11 | 1 | 1 | 11 | ↓↓ | $\downarrow\downarrow$ | | ↓↓ | 11 | 1 | 1 |
| , | City parks | 69% | 71% | 73% | 70% | | 72% | | 78% | 80% | | 85% | 77% | 83% | \leftrightarrow | J | J | \leftrightarrow | \leftrightarrow | Į. | Ţ | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| | Recreation programs | * | 67% | 70% | 62% | 58% | | | | 70% | | | | 63% | \leftrightarrow | * | ļ | \leftrightarrow | \leftrightarrow | 1 | 1 | \leftrightarrow | \leftrightarrow | \leftrightarrow | Ţ | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| Recreation | Recreation centers | 52% | 51% | 59% | 51% | 50% | 56% | 62% | 66% | 65% | 65% | 68% | 63% | 61% | \leftrightarrow | 11 | . | ↓ | ļ | , | , | 1 | \leftrightarrow | ↓ | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| and Wellness | Health services | 56% | * | 57% | 52% | 48% | 47% | 51% | 57% | 62% | 55% | 66% | 57% | 53% | \leftrightarrow | \downarrow | * | 1 | \leftrightarrow | 1 | 1 | $\downarrow\downarrow$ | \leftrightarrow | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| Education | Special events | * | * | * | * | * | * | * | * | * | * | * | 58% | 66% | 1 | * | * | * | * | * | * | * | * | * | * | * | \downarrow | \leftrightarrow |
| and Enrichment | Public libraries | * | * | * | 44% | * | * | * | * | * | 80% | 80% | 80% | 84% | \leftrightarrow | * | * | * | $\downarrow\downarrow$ | * | * | * | * | * | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow |

| | | | | | Percer | nt rating | g positi | vely (e | e.g., ex | cellent | /good) | | | | 2014 rating | | | | С | ompa | arisor | n to l | bencl | nmai | rk | | | |
|------------|-------------|-----|----|----|--------|-----------|----------|---------|----------|----------|--------|-----|-----|-----|-------------------|------------------------|----|----|----|------------------------|------------------------|------------------------|------------------------|-------------------------|-------------------|-------------------|-------------------|-------------------|
| | | | | | | | | | | compared | | | | | | | | | | | | | | | | | | |
| | | 02 | 03 | 04 | 05 | 06 | 07 | 80 | 09 | 10 | 11 | 12 | 13 | 14 | to 2013 | 02 | 03 | 04 | 05 | 06 | 07 | 80 | 09 | 10 | 11 | 12 | 13 | 14 |
| Community | Public | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Engagement | information | 36% | * | * | * | 39% | 47% | 46% | 53% | 55% | 64% | 68% | 59% | 62% | \leftrightarrow | $\downarrow\downarrow$ | * | * | * | $\downarrow\downarrow$ | $\downarrow\downarrow$ | $\downarrow\downarrow$ | $\downarrow\downarrow$ | $\downarrow \downarrow$ | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow |

Table 5: Participation General

| | Per | cent ra | iting po | sitively | / (e.g., | always | s/some | times, | more t | han on | ice a m | onth, y | es) | 2014 rating | | | | Co | ompa | ariso | n to | benc | hma | rk | | | |
|----------------------|-----|---------|----------|----------|----------|--------|--------|--------|--------|--------|---------|---------|-----|-------------------|-------------------|-------------------|----|----|------|-------|------------------------|-------------------|-------------------|------------------------|-------------------|-------------------|-------------------|
| | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | compared to 2013 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 |
| Sense of community | 59% | 63% | * | * | * | * | 58% | * | 62% | 56% | 64% | 46% | 47% | \leftrightarrow | \leftrightarrow | \leftrightarrow | * | * | * | * | \leftrightarrow | * | \leftrightarrow | $\downarrow\downarrow$ | \leftrightarrow | \downarrow | \downarrow |
| Recommend Palm Coast | * | * | * | * | * | * | 80% | 82% | 85% | 78% | 80% | 82% | 80% | \leftrightarrow | * | * | * | * | * | * | $\downarrow\downarrow$ | \leftrightarrow | \leftrightarrow | $\downarrow\downarrow$ | ↓ | \leftrightarrow | \leftrightarrow |
| Remain in Palm Coast | * | * | * | * | * | * | 83% | 84% | 85% | 83% | 82% | 83% | 85% | \leftrightarrow | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| Contacted Palm Coast | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| employees | 55% | 59% | 58% | 65% | 59% | 63% | * | 59% | 60% | 52% | 57% | 49% | 53% | \leftrightarrow | * | * | * | * | * | * | * | \leftrightarrow | 1 | ↓ ↓ | 1 | \leftrightarrow | \leftrightarrow |

Table 6: Participation by Facet

| | , , | Perc | ent rat | ing pos | itively | (e.g., a | always | /som | netimes | , more | than c | nce a | month, | yes) | 2014 rating | | | | С | omp | ariso | n to | benc | hmaı | rk | | | |
|----------------------|---|------|---------|---------|---------|----------|--------|------|---------|--------|--------|-------|--------|------|-------------------|----|----|----|----|-----|-------|------|-------------------|-------------------|---------------------|-------------------|------------------------|-------------------|
| | | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | to 2013 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 |
| | Stocked supplies for an emergency | * | * | * | * | * | * | * | * | * | * | * | 54% | 47% | | * | * | * | * | * | * | * | * | * | * | * | ↑ ↑ | 1 |
| | Did NOT report a crime | * | * | * | * | * | * | * | * | * | * | * | 78% | 78% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | | \leftrightarrow |
| Safety | Was NOT the victim of a crime | 91% | 93% | 92% | 92% | 89% | 89% | * | 88% | 90% | 88% | 87% | 87% | 87% | \leftrightarrow | * | * | * | * | * | * | * | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow |
| | Used public transportation instead of driving | * | * | * | * | * | * | * | * | * | * | * | 4% | 3% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | 1 1 | ↓↓ |
| | Carpooled instead of driving alone | * | * | * | * | * | * | * | * | * | * | * | 30% | 34% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | ↓ | 1 |
| Mobility | Walked or biked instead of driving | * | * | * | * | * | * | * | * | * | * | * | 42% | 46% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | ↓ ↓ | 1 |
| | Conserved water | * | * | * | * | * | * | * | * | * | * | * | 93% | 91% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | | \leftrightarrow |
| Natural | Made home more energy efficient | * | * | * | * | * | * | * | * | * | * | * | 79% | 76% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow |
| Environment | Recycled at home | 86% | 87% | 82% | 82% | 77% | 85% | * | 88% | 83% | 87% | 92% | 90% | 96% | \leftrightarrow | * | * | * | * | * | * | * | ↑ ↑ | \leftrightarrow | $\uparrow \uparrow$ | ↑ ↑ | \leftrightarrow | 1 |
| | Did NOT observe a code violation | * | * | * | * | * | * | * | * | * | * | * | 31% | 41% | ↑ | * | * | * | * | * | * | * | * | * | * | * | $\downarrow\downarrow$ | 1 |
| Built Environment | NOT under housing cost stress | * | * | * | * | * | * | * | 55% | 58% | 64% | 62% | 62% | 62% | ↔ | * | * | * | * | * | * | * | ↓↓ | \ | \leftrightarrow | \leftrightarrow | \leftrightarrow | |

| | | Perc | ent rat | ing pos | sitively | (e.g., | always/ | /som | etimes | , more | than c | nce a i | month, | yes) | 2014 rating compared | | | | С | Cor | npa | risor | n to | benc | hmai | rk | | | |
|--------------------------|---|------|---------|---------|----------|--------|---------|------|--------|--------|--------|---------|--------|------|----------------------|----|----|----|----|-----|-----|-------|------|------------------------|-------------------|-------------------|-------------------|-------------------|------------|
| | | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | to 2013 | 02 | 03 | 04 | 05 | 5 0 |)6 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 1. |
| | Purchased goods or services in Palm Coast | * | * | * | * | * | * | * | * | * | * | * | 98% | 99% | \leftrightarrow | * | * | * | * | | * | * | * | * | * | * | * | \leftrightarrow | + |
| | Economy will have positive impact on income | 19% | 15% | 31% | 25% | 20% | 18% | * | 12% | 16% | 13% | 18% | 15% | 23% | ↑ | * | * | * | * | | * | * | * | $\downarrow\downarrow$ | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow | + |
| Economy | Work in Palm Coast | * | * | * | * | * | * | * | * | * | * | * | 33% | 37% | \leftrightarrow | * | * | * | * | | * | * | * | * | * | * | * | 1 | ~ |
| | Used Palm Coast recreation centers | 73% | 72% | 59% | 49% | 50% | 52% | * | 55% | 58% | 54% | 57% | 60% | 50% | 1 | * | * | * | * | | * | * | * | \leftrightarrow | \leftrightarrow | ļ | \leftrightarrow | \leftrightarrow | ← |
| | Visited a City park | 78% | 80% | 78% | 75% | 76% | 81% | * | 83% | 83% | 83% | 84% | 79% | 74% | \leftrightarrow | * | * | * | * | | * | * | * | \leftrightarrow | \leftrightarrow | 1 | \leftrightarrow | \leftrightarrow | ← |
| | Ate 5 portions of fruits and vegetables | * | * | * | * | * | * | * | * | * | * | * | 83% | 79% | \leftrightarrow | * | * | * | * | | * | * | * | * | * | * | * | \leftrightarrow | ← : |
| | Participated in moderate or vigorous physical activity | * | * | * | * | * | * | * | * | * | * | * | 83% | 81% | ↔ | * | * | * | * | | * | * | * | * | * | * | * | \leftrightarrow | ← : |
| Recreation and Wellness | In very good to excellent health | * | * | * | * | * | * | * | * | * | * | * | 59% | 58% | \leftrightarrow | * | * | * | * | | * | * | * | * | * | * | * | \leftrightarrow | ← |
| | Used Palm Coast public libraries | 84% | 84% | * | * | * | * | * | * | 82% | 76% | 70% | 61% | 64% | \leftrightarrow | * | * | * | * | | * | * | * | * | ↑ ↑ | 1 | \leftrightarrow | \leftrightarrow | ← : |
| | Participated in religious or spiritual activities | * | * | * | * | * | * | * | 65% | 64% | 60% | 55% | 52% | 53% | \leftrightarrow | * | * | * | * | | * | * | * | ↑ ↑ | ↑ ↑ | 1 1 | 1 | \leftrightarrow | ← |
| Education and Enrichment | Attended a City- sponsored event | * | * | * | * | * | * | * | * | * | * | * | 50% | 51% | \leftrightarrow | * | * | * | * | | * | * | * | * | * | * | * | \leftrightarrow | ← |
| | Campaigned for an issue, cause or candidate | * | * | * | * | * | * | * | * | * | * | * | 22% | 20% | \leftrightarrow | * | * | * | * | | * | * | * | * | * | * | * | \leftrightarrow | ← : |
| | Contacted Palm Coast elected officials | * | * | * | * | * | * | * | * | * | * | * | 18% | 16% | \leftrightarrow | * | * | * | * | | * | * | * | * | * | * | * | \leftrightarrow | + |
| | Volunteered | 51% | 48% | * | * | * | * | * | * | 55% | 46% | 45% | 37% | 38% | \leftrightarrow | * | * | * | * | T | * | * | * | * | ↑ ↑ | \leftrightarrow | \leftrightarrow | \leftrightarrow | ← |
| | Participated in a club | * | * | * | * | * | * | * | 45% | 49% | 41% | 40% | | | \leftrightarrow | * | * | * | * | | * | * | * | ↑ ↑ | ↑ ↑ | ↑ ↑ | ↑ ↑ | \leftrightarrow | ← |
| | Talked to or visited with neighbors | * | * | * | * | * | * | * | * | * | * | * | * | 94% | * | * | * | * | * | | * | * | * | * | * | * | * | * | ← |
| Community Engagement | Done a favor for a neighbor | * | * | * | * | * | * | * | * | * | * | * | * | 82% | * | * | * | * | * | | * | * | * | * | * | * | * | * | ← |

| | | Perc | ent rat | ing pos | sitively | (e.g., a | always | /som | etimes | , more | than o | nce a r | month, | yes) | 2014 rating | | | | С | ompa | ariso | n to | benc | hmar | k | | | |
|---|---------------------------------|------|---------|---------|----------|----------|--------|------|--------|--------|--------|---------|--------|------|---------------------|----|----|----|----|------|-------|------|-------------------|------|-------------------|-------------------|-------------------|-------------------|
| | | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | compared to 2013 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 |
| | Attended a local public meeting | 41% | 37% | 33% | 39% | 34% | 32% | * | 32% | * | 31% | 37% | 17% | 22% | \leftrightarrow | * | * | * | * | * | * | * | 1 | * | \leftrightarrow | ↑ ↑ | \leftrightarrow | \leftrightarrow |
| | Watched a local public meeting | 50% | 44% | 44% | 44% | 44% | 51% | * | 47% | * | 40% | 38% | 28% | 18% | ↓ | * | * | * | * | * | * | * | \leftrightarrow | * | \leftrightarrow | \leftrightarrow | \leftrightarrow | 1 |
| R | Read or watched local news | * | * | * | * | * | * | * | * | * | * | * | 95% | 89% | \leftrightarrow | * | * | * | * | * | * | * | * | * | * | * | \leftrightarrow | \leftrightarrow |
| | Voted in local elections | 79% | 78% | 70% | 84% | 76% | 76% | * | 89% | 81% | 78% | 82% | 81% | 87% | \leftrightarrow | * | * | * | * | * | * | * | 11 | 1 | 1 | ↑ ↑ | \leftrightarrow | \leftrightarrow |



Palm Coast, FL

Community Livability Report

2014



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About

The National Citizen $Survey^{TM}$ (The NCS) report is about the "livability" of Palm Coast. The phrase "livable community" is used here to evoke a place that is not simply habitable, but that is desirable. It is not only where people do live, but where they want to live.

Great communities are partnerships of the government, private sector, community-based organizations and residents, all geographically connected. The NCS captures residents' opinions within the three pillars of a community (Community Characteristics, Governance and Participation) across eight central facets of community (Safety, Mobility, Natural Environment, Built Environment, Economy, Recreation and Wellness, Education and Enrichment and Community Engagement).

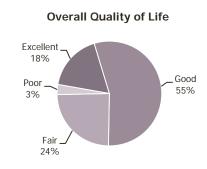
The Community Livability Report provides the opinions of a representative sample of 361 residents of the City of Palm Coast. The margin of error around any reported percentage is 5% for the entire sample. The full description of methods used to garner these opinions can be found in the *Technical Appendices* provided under separate cover.



Quality of Life in Palm Coast

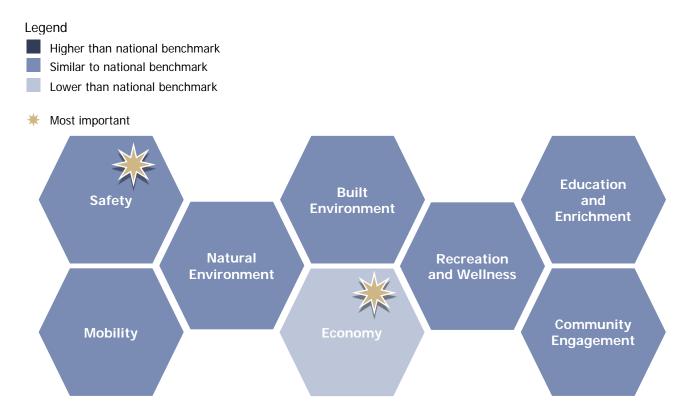
Most residents rated the quality of life in Palm Coast as excellent or good. This rating was similar to what's reported in other communities across the nation (see Appendix B of the *Technical Appendices* provided under separate cover).

Shown below are the eight facets of community. The color of each community facet summarizes how residents rated it across the three sections of the survey that represent the pillars of a community — Community Characteristics, Governance and Participation. When most ratings across the three pillars were higher than the benchmark, the color for that facet is the darkest shade; when most ratings were lower than the benchmark, the color is the lightest shade. A mix of ratings (higher and lower than the benchmark) results in a color between the extremes.



In addition to a summary of ratings, the image below includes one or more stars to indicate which community facets were the most important focus areas for the community. Residents identified Safety and Economy as priorities for the Palm Coast community in the coming two years. It is noteworthy that Palm Coast residents gave favorable ratings to Safety whereas ratings for Economy were not as strong. Ratings for Mobility, Natural Environment, Built Environment, Recreation and Wellness, Education and Enrichment and Community Engagement were positive and similar to other communities. This overview of the key aspects of community quality provides a quick summary of where residents see exceptionally strong performance and where performance offers the greatest opportunity for improvement. Linking quality to importance offers community members and leaders a view into the characteristics of the community that matter most and that seem to be working best.

Details that support these findings are contained in the remainder of this Livability Report, starting with the ratings for Community Characteristics, Governance and Participation and ending with results for Palm Coast's unique questions.



Community Characteristics

What makes a community livable, attractive and a place where people want to be?

Overall quality of community life represents the natural ambience, services and amenities that make for an attractive community. How residents rate their overall quality of life is an indicator of the overall health of a community. In the case of Palm Coast, 80% rated the City as an excellent or good place to live. Respondents' ratings of Palm Coast as a place to live were similar to ratings in other communities across the nation.

In addition to rating the City as a place to live, respondents rated several aspects of community quality including Palm Coast as a place to raise children and to retire, their neighborhood as a place to live, the overall image or reputation of Palm Coast and its overall appearance. Over 8 in 10 respondents gave positive ratings for their neighborhoods as well as for the overall appearance of Palm Coast. Most participants (79%) also gave high ratings for Palm Coast as a place to retire and this rating was higher than the benchmark. About two-thirds of participants rated Palm Coast's overall image and Palm Coast as a place to raise children positively. Palm Coast as a place to raise children received lower ratings when compared to other communities.

Delving deeper into Community Characteristics, survey respondents rated over 40 features of the community within the eight facets of Community Livability. At least three-quarters of respondents gave positive ratings for Safety features and all ratings for Safety were similar to the national benchmark. Almost all features of Mobility received positive ratings from a majority of respondents; most Mobility ratings were similar to the benchmark, however, ratings for paths and walking trails and travel by bicycle were higher than the benchmark. Almost all participants gave positive ratings for the Natural Environment and ratings for cleanliness in Palm Coast were



higher than what's reported in other communities. Ratings within Built Environment and Recreation and Wellness varied, but most features in these facets were rated positive by a majority of participants and were rated similar to the benchmark. Most Economy features were rated lower than the benchmark and less than half of participants gave positive ratings for most features. Several Economy ratings (including cost of living, employment opportunities, vibrant downtown/commercial area and businesses and services) decreased compared to the 2013 survey (see *The NCS Trends over Time* report provided under separate cover). The highest rated features in Education and Enrichment were religious or spiritual events or activities and K-12 education: the lowest rated features were

cultural/arts/music activities and the availability of affordable quality childcare/preschool. Most features of Community Engagement were rated positively by a majority of participants and all ratings of Community Engagement were similar to the benchmark.

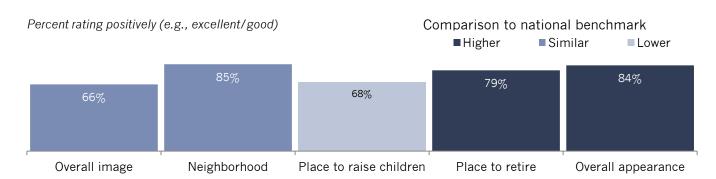
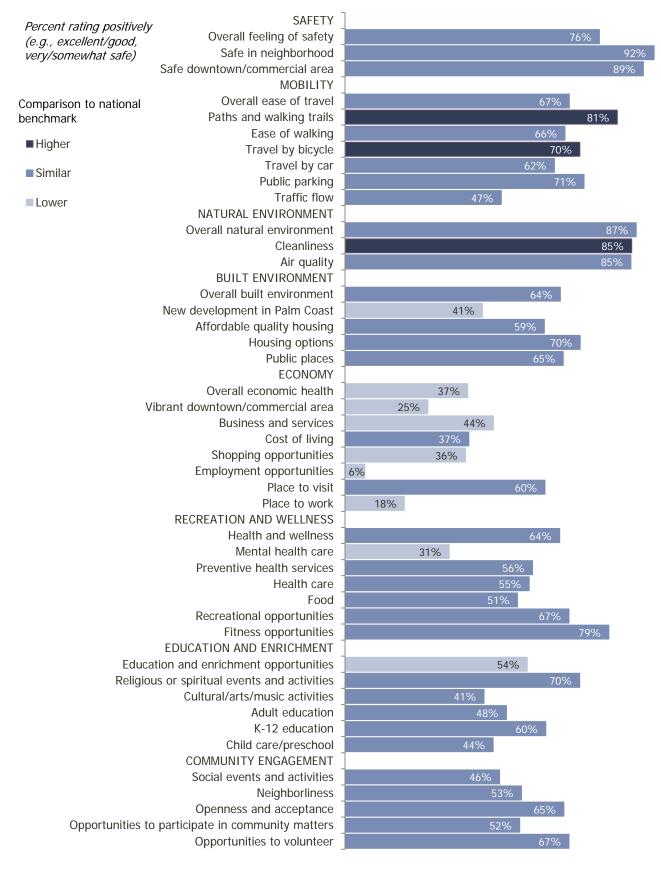


Figure 1: Aspects of Community Characteristics



Governance

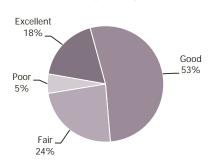
How well does the government of Palm Coast meet the needs and expectations of its residents?

The overall quality of the services provided by Palm Coast as well as the manner in which these services are provided are a key component of how residents rate their quality of life. About 7 in 10 respondents gave positive ratings for the overall quality of Palm Coast's services, while only 3 in 10 respondents gave positive ratings for the Federal Government.

Survey respondents also rated various aspects of Palm Coast's leadership and governance. Most aspects of leadership and governance were similar to other communities, with the exception of confidence in City government and being honest—which were rated lower than other communities. The highest rated aspect of leadership and governance was customer service (67% rated positively) while the lowest rated aspect was confidence in City government (35%).

Respondents evaluated over 30 individual services and amenities available in Palm Coast. Within the facet of Safety, police, fire and ambulance/EMS received the highest ratings; the remaining features of Safety were also rated positively by a majority of respondents and all features of Safety were similar to the national benchmark. Ratings within Mobility displayed the greatest variation; less than half of respondents rated street lighting and traffic signal timing positively and both of these aspects were rated lower than the benchmark. The remaining aspects of Mobility (traffic enforcement, street repair, street cleaning, and sidewalk maintenance) received

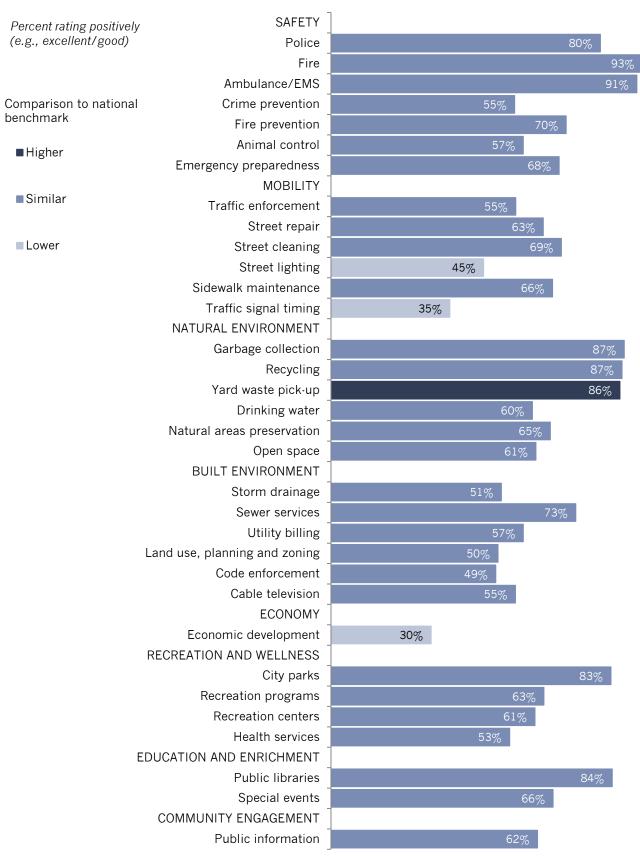
Overall Quality of City Services



positive ratings from a majority of participants and were similar to the benchmark. Within Natural Environment, almost all participants rated garbage collection, recycling and yard waste pick-up positively and about 3 in 5 participants rated drinking water, natural areas preservation and open space positively. About one-third of participants rated economic development positively, which was a lower rating than what's seen in other communities. All Built Environment ratings were similar to the benchmark and most aspects of Built Environment were rated positively by a majority of participants. Ratings for the Built Environment features of sewer services, storm drainage and land use, planning and zoning increased when compared to the 2013 ratings. All ratings for Education and Enrichment, Recreation and Wellness and Community Engagement were similar to the benchmark and were rated positively by a majority of participants.

Percent rating positively (e.g., excellent/good) Comparison to national benchmark ■ Higher Similar Lower 67% 46% 42% 40% 39% 36% 35% Overall Confidence Acting in the Being honest Treating all Services Value of Welcoming Customer services for direction best interest residents service provided by citizen in City of Palm taxes paid involvement government fairly the Federal Coast Government

Figure 2: Aspects of Governance



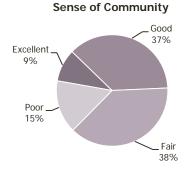
Participation

Are the residents of Palm Coast connected to the community and each other?

An engaged community harnesses its most valuable resource, its residents. The connections and trust among residents, government, businesses and other organizations help to create a sense of community; a shared sense of membership, belonging and history. About 46% of respondents rated sense of community positively, which is a lower rating when compared to other communities across the nation. However, most respondents (80%) would recommend Palm Coast to others and a similar number were also planning on remaining in Palm Coast.

The survey included over 30 activities and behaviors for which respondents indicated how often they participated in or performed each, if at all. When compared to other communities, more participants in Palm Coast stocked supplies for an emergency and more participants in Palm Coast recycle. Most participants were not the victim of a crime and did not report a crime. A high number of participants reported conserving water and about three-quarters of respondents made efforts to make their home more energy efficient. Very few participants (3%) reported using public transportation and less than half of participants had carpooled or biked or walked instead of driving; all of these aspects of Mobility were rated lower than the benchmark. Built Environment ratings varied, with many participants (62%) reporting not being under housing cost stress, but less than half (41%) of participants reporting that they did NOT observe a code violation. Economy, Recreation and Wellness and Education and Enrichment ratings were all similar to the benchmark. A majority of respondents participated in all aspects of Recreation and Wellness and Education and Enrichment. Within Community Engagement, almost all participants had talked to or visited with their neighbors as well as read or watched local news. Fewer participants (less than 20%) had contacted local elected officials or watched a local public

meeting.



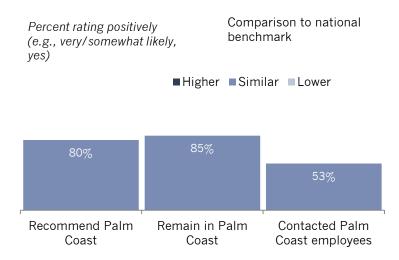
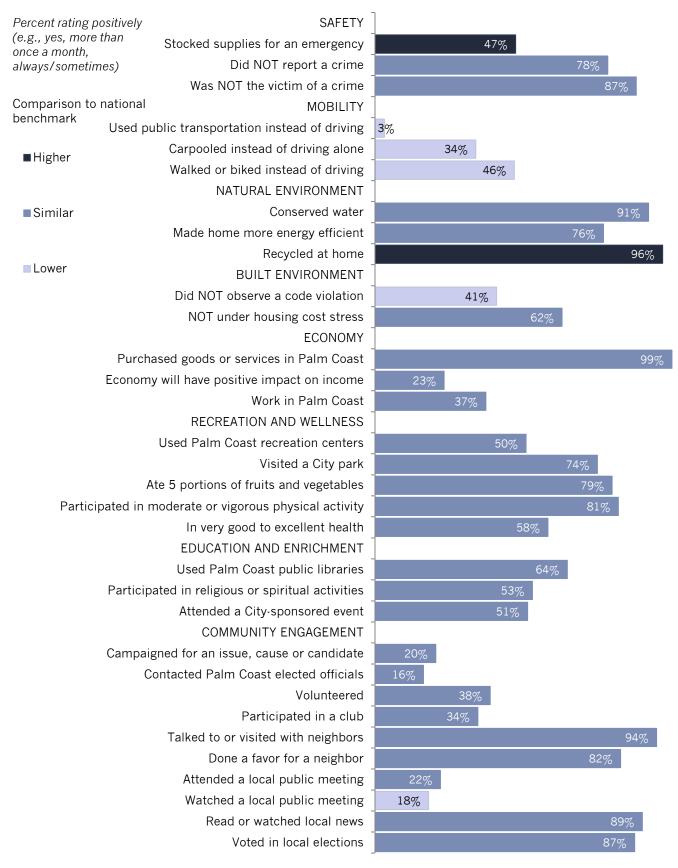


Figure 3: Aspects of Participation



Special Topics

The City of Palm Coast included three questions of special interest on The NCS. The first question asked participant whether they had contacted a City employee within the last 12 months. A majority of participants (64%) responded yes to this question. Of those who responded yes, they rated several aspects of customer service; courtesy, promptness, overall impression and knowledge all received positive ratings from at least three-quarters of respondents. A little over half of respondents thought employees did an excellent or good job of making them feel valued.

Figure 4: Question 14

Have you had any contact with any City employee(s) by phone, in person, via email or online within the last 12 months?

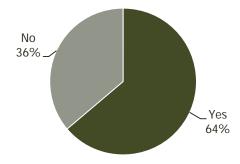
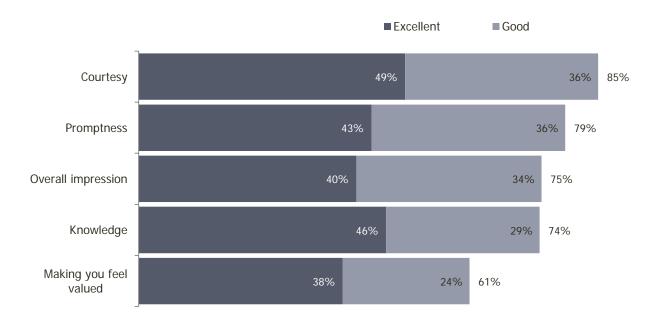


Figure 5: Question 15

Thinking about your most recent contact, please rate City employee(s) on each of the items below.

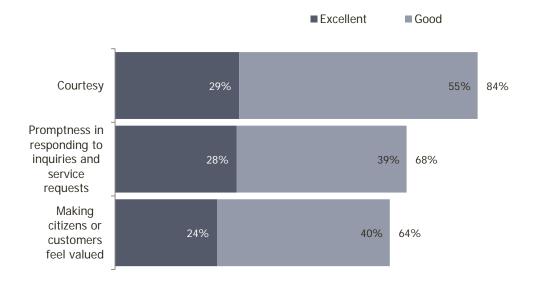


The National Citizen Survey™

Those who reported not having contacted a City employee in the last 12 months (36% of respondents), were asked to rate several features of City employee service. These ratings were to be based on their impression of employees, despite having not contacted City employees recently. Most participants rated City employee courtesy positively. About 3 in 5 respondents also gave positive ratings for promptness and making citizens or customers feel valued.

Figure 6: Question 16

Although you may not have had any recent personal contact with City employees, we would like to know your impression of how City employees treat Palm Coast residents. Please rate City employees on each of the items below.



Conclusions

Residents have a high quality of life in Palm Coast.

Most residents gave positive ratings for their overall quality of life and for Palm Coast as a place to live. Compared to other communities across the nation, more residents in Palm Coast than elsewhere give positive ratings for the overall image of Palm Coast and for Palm Coast as a place to retire. However, compared to other communities, fewer participants thought Palm Coast was an excellent or good place to raise a family. About 8 in 10 participants would recommend Palm Coast to others and plan on remaining in Palm Coast over the next five years. Many participants (about three-quarters) think City services are excellent or good and many aspects of customer service, such as courtesy, promptness and knowledge received positive ratings from most respondents.

The Economy is important to residents.

Participants indicated that the Economy would be an important focus area over the next two years and this facet tended to get lower ratings when compared to other communities. A majority of respondents thought Palm Coast was an excellent or good place to visit, but only a little more than one-third of participants gave positive ratings for the overall economic health of Palm Coast, shopping opportunities, cost of living and businesses and services. Very few participants (6%) gave positive ratings for employment opportunities, a rating that decreased compared to 2013. About one-quarter of respondents thought the economy would have a positive impact on their income, which is higher than what was reported in 2013.

The Natural Environment continues to be a strong feature in Palm Coast.

As was also cited in 2013, the Natural Environment is a key feature and asset of Palm Coast that residents appreciate. More participants in Palm Coast than in other communities think that Palm Coast's cleanliness is excellent or good. A high number of participants (at least 85%) gave positive ratings for air quality and overall natural environment. City services related to the Natural Environment continue to receive positive ratings, with garbage collection, recycling and yard waste pick-up receiving the highest ratings. Compared to other communities, a higher number of participants in Palm Coast recycle. Almost all participants conserved water and most participants (76%) made efforts to make their homes more energy efficient.

Mobility assets may not be utilized.

Participants gave high ratings (higher than the benchmark) for paths and walking trails and ease of travel via bicycle. But, when asked how often they biked or walked instead of driving, fewer participants in Palm Coast compared to other communities indicated that they used these alternative modes of transportation. Additionally, while a majority of participants gave positive ratings for automobile related travel (such as ease of travel, travel by car and public parking), few participants (about one-third) carpooled with other adults or children. Very few participants (3%) used public transportation.