



# **AGENDA**

## **SUSTAINABILITY BOARD**

### **Meeting 2020-07**

Monday, September 14, 2020 – 7:30 P.M.  
City Hall Council Chambers  
120 Malabar Road SE, Palm Bay, FL 32907

#### **CALL TO ORDER:**

#### **ROLL CALL:**

#### **ADOPTION OF MINUTES:**

1. Meeting 2020-05; August 10, 2020.

#### **PUBLIC COMMENTS:**

Public Comments on Agenda Items – Individuals wishing to speak on specific agenda items can do so at the time the item is being considered by the Board. The Chairperson will ask if there are any public comments prior to the Board taking action on the item. All speakers will be limited to three (3) minutes each.

#### **NEW BUSINESS:**

1. Discussion of proposed Sustainability Action Plan.

#### **OTHER BUSINESS:**

#### **ADJOURNMENT:**

Pursuant to Section 286.011, Florida Statutes, Executive Order 20-69, and Palm Bay Resolution 2020-30, notice is hereby given that the Sustainability Board shall hold the above public meeting on September 14, 2020, beginning at 7:30 P.M. and lasting until the meeting is complete. The meeting will be conducted via communications media technology (teleconference/video conference).

**THIS MEETING IS BROADCAST LIVE ON THE CITY'S WEBSITE**

**Public comments may be submitted via email at [sbcomments@palmbayflorida.org](mailto:sbcomments@palmbayflorida.org). All comments submitted will be included as part of the public record for this virtual meeting and will be considered by the Sustainability Board prior to any action taken. Comments must be received at least twenty-four (24) hours prior to the meeting and shall have a time limit of three (3) minutes.**

**Pursuant to Resolution 2020-30, members of the public wishing to use electronic media when addressing the Sustainability Board must provide the electronic file to staff for screening no later than 2:00 P.M. on the day of the meeting.**

**If an individual decides to appeal any decision made by the Sustainability Board with respect to any matter considered at this meeting, a record of the proceedings will be required, and the individual will need to ensure that a verbatim transcript of the proceedings is made, which record includes the testimony and evidence upon which the appeal is based (Section 286.0105, Florida Statutes). Such person must provide a method for recording the proceedings verbatim.**

**In accordance with the Americans with Disabilities Act, persons needing special accommodations for this meeting shall, at least 48 hours prior to the meeting, contact the Office of the City Clerk at (321) 952-3414 or Florida Relay System at 711.**

# **CITY OF PALM BAY, FLORIDA**

## **SUSTAINABILITY BOARD**

### **MEETING 2020-05**

Held on Monday, the 10<sup>th</sup> day of August 2020, at the City Hall Council Chambers, 120 Malabar Road, SE, Palm Bay, Florida.

This meeting was properly noticed pursuant to law; the minutes are on file in the Office of the City Clerk, City Hall, Palm Bay, Florida. The minutes are not a verbatim transcript but a brief summary of the discussions and actions taken at the meeting.

Pursuant to Section 286.011, Florida Statutes, and Executive Order 20-69, this public meeting was conducted via communications media technology (teleconference/video conference).

The meeting was called to order at the hour of 7:35 P.M.

#### **ROLL CALL:**

<b>CHAIRPERSON:</b>	Lesley Byrd	Present
<b>VICE CHAIRPERSON:</b>	Rebecca Ziegler	Present
<b>MEMBER:</b>	Janice Crisp	Absent
<b>MEMBER:</b>	Donielle Rouse	Present
<b>MEMBER:</b>	Joe Laughlin	Present (Late)
<b>MEMBER:</b>	Shaun McFadden	Present
<b>MEMBER:</b>	Amy Ford	Present

**CITY STAFF:** Present was Suzanne Sherman, Acting City Manager; Terese Jones, City Clerk; Richard Murlin, Intern.

#### **ADOPTION OF MINUTES:**

##### **1. Regular Meeting 2020-02; February 18, 2020.**

Motion by Mr. McFadden, seconded by Ms. Rouse, to adopt the minutes as presented. Motion carried unanimously.

#### **PUBLIC COMMENTS:**

There were no public comments.

Mr. Laughlin joined the meeting at this time.

## **NEW BUSINESS:**

### **1. Discussion of proposed Sustainability Action Plan.**

The Board concurred with the following revisions to the plan under the category of Natural Environment (Land and Water Systems):

- Objectives; Goal 1 to read as follows: “To protect natural resources by increasing the use of reclaimed water in city and residential properties, ~~create wildlife corridors~~ and reduce water consumption.” It was suggested that the deleted language be placed under Energy and Buildings (Built Environment).
- Objectives; Goal 1; City Government objectives - include >>(E) Promote the use of reusable water bottles by installing hydration stations.<<
- Objectives; Goal 2; City Government objectives – (A) – to read as “Replace >>maintenance heavy<< turf grass with native plants on median strips, by canals, and around public facilities.”
- Objectives; Goal 2; City Government objectives – (C) – would be moved under the category of Education and Public Engagement.
- Objectives; Goal 2; Local Business objectives – (B) – it was suggested to make this more specific to the community; address how tree canopies could reduce bills; educate on how to trim trees before hurricanes.
- Additional objectives to be added under this category – gross potable water increase by a certain percentage; consumption of water compared to neighbors; switching from septic to sewer; rainwater to non-potable use; vending machines with reusable water bottles.
- Objectives; Goal 3; City Government objectives – (A)(a) – to read as “Partner with local nonprofits to create a rain garden on suitable public land (low lying or near downspout) including signage. Consider reduction of sewer >>stormwater<< bill if homeowners or HOA community meet city established criteria in capturing stormwater in rain gardens. >>Encourage rain catching systems.”<<

- Objectives; Goal 3; City Government objectives – (B) – add second sentence to read as “Use organic sources, i.e. fish or animal waste.”
- Objectives; Goal 3; Community objectives – (A) – second sentence to read as “Consider requiring >>encouraging or providing incentives for<< conversion prior to sale of property where sewer is available.”
- Objectives; Goal 3; Community objectives – (B) – include language addressing leaks in general, either through the water system or septic system.
- Objectives; Goal 3; Community objectives – (C) – include language regarding testing water quality and installing some type of apparatus to improve the quality.

The topic for the next meeting would be Energy and Buildings (Built Environment).

#### **OTHER BUSINESS:**

The Board concurred to schedule the next meeting for Wednesday, August 26, 2020, at 7:30 P.M.

#### **ADJOURNMENT:**

There being no further business, the meeting adjourned at the hour of 8:47 P.M.

---

Lesley Byrd, Chairperson

ATTEST:

---

Terese M. Jones, City Clerk

~~Strikethrough~~ words shall be deleted; highlighted words that will be included will be placed in between two arrow symbols (>> <<). Deletions and additions constitute the proposed amendment. Words remaining are now in effect and remain unchanged.

City of Palm Bay, Florida  
Sustainability Action Plan  
2020

# **Table of Contents**

Introduction

Goals for the Action Plan

Message from the Mayor

Sustainability Master Plan

Elements....

Natural Environment (Land and Water Systems)

Energy and Buildings (Built Environment)

Transportation and Mobility

Innovative Waste Management

Education and Public Engagement

Appendix

## **Introduction**

### **About the City**

The City of Palm Bay was incorporated in 1960 and is celebrating its 60<sup>th</sup> anniversary in 2020. The City is a Council-City Manager form of government, with a Mayor, Deputy Mayor, and three Council members elected at large on a non-partisan basis. The City Manager serves as the chief administrative officer for all activities related to the operations of the City. Palm Bay is the largest municipality in Brevard County and the second largest in central Florida behind Orlando, covering 88 square miles and including a population of 118,268 as of March 2020. The City is approximately 37 percent developed with 2,563 business establishments and an estimated 44,087 households. The City continues to experience positive economic growth with a surge of development interest in multi-family and commercial mixed-use development. The City is surrounded by natural beauty and abundant opportunities for outdoor recreation. We are fortunate to have both the Indian River Lagoon and Turkey Creek and Sanctuary to the east, the St. Johns River and Three Forks Marsh Conservation Area to the west, and many acres of natural land preserved in the southern part of the City through the Environmentally Endangered Lands program.

In recent years, the City has taken a variety of initiatives with a focus on sustainability. In 2009, the City was certified as a “Green Local Government” by the Florida Green Building Coalition. In 2010 the City’s first Community Gardening program at the Nemo Community Garden was established. Also in 2010, the Palm Bay Utilities Department (PBUD) took the lead in working with other City departments to develop the first Sustainability Master Plan. PBUD had established itself as a leader in sustainability when in 2008 it became the first public or private utility in Florida to achieve ISO 14001 Environmental Management System certification for both water and wastewater treatment facilities. The focus in the 2010 Sustainability Master Plan was primarily an inward look at municipal operations and infrastructure, specifically the categories of Environment, Buildings and Facilities, Utilities, Transportation, Waste Management, and Procurement. The City also completed its first Greenhouse Gas Inventory survey. The three-story City Hall Annex building completed in 2011 was LEED-certified.

In 2018 the City entered into an energy performance contracting agreement with Honeywell. The upgrades and retrofits were completed in mid-2019 and included lighting upgrades, water conservation and building envelope improvements, cool roof retrofit, optimizations/replacements of chilled water systems and air handling units, and building automation systems and programmable thermostats. Also in 2019, the City joined FPL’s Solar Together program to promote large-scale solar use, and also approved the conversion of FPL street lights to LED.

### **About the Board**

The City of Palm Bay created its first Sustainability Board in 2018. The purpose and intent of the Board is to advise and assist the City Council, City Manager, and City staff in matters relating to pollution reduction, water quality initiatives, community education and involvement, and assessing local climate risk. The duties and responsibilities of the Board as approved by City Council include but are not limited to:

The Board shall identify and make recommendations to the City Council concerning affordable strategies associated with conservation, renewable energy, and energy efficiency.

- Develop an environmental sustainability plan for city operations with a goal of achieving one hundred percent (100%) clean energy by 2035 in city operations.
- Develop an assessment plan to track activities and implementation of the city's environmental sustainability plan. Provide an annual report to the City Council on activities and implementation of the plan.
- Review ordinances and policies that have an environmental impact on the city and make recommendations to City Council. Such topics may include standards for recycling, environmental standards, preservation and landscape design, and floodplain management.

Initiatives of the Board may include:

- Research, identify, and recommend to the public affordable strategies associated with conservation, renewable energy, and energy efficiency.
- Research and recommend to the public financial initiatives and resources that are available to offset costs associated with renewable energy initiatives.
- Recognize the efforts of others who contribute to the beautification, environmental protection, and enhancement of the city.

After the 7-member Board was created in 2018, the City experienced some difficulty reaching quorum. In September 2019, the Board had enough members to achieve quorum again so work began anew. City staff, along with a Sustainability Intern from Florida Tech, have been working with the Board to develop the City's first Sustainability Action Plan, and the five Elements found in this document were a result of the Board's discussion and include:

- Land and Water Systems (Natural Environment)
- Built Environment (Energy and Buildings)
- Transportation and Mobility
- Waste Management
- Education and Public Engagement

Unlike the 2010 Sustainability Master Plan, this new Sustainability Action Plan presents a broad focus on the City and incorporates elements of focus on what we can do as individual residents, as a community, and as a municipal operation.

## **Goals of Action Plan**

Within each of the five Elements established in this plan, we are defining what each Element means to our City and establishing goals and objectives that will help us establish improvements in each area. These may be specific to municipal or business operations, individual citizen or community-wide actions, or all of the above.

It is our intention to establish a plan that will establish short- and long-term goals that are both meaningful and actionable. It is the intention of both City staff and the Sustainability Board that this plan, once adopted, will be reviewed at least annually, and that each year, consideration will be given to moving forward with an agreed up on set of action items.

## **Primary Goals of Plan**

- Provide a foundation for and guidance regarding the sustainability and resiliency efforts of the City of Palm Bay operations.
- Establish goals and measure progress in each of the five Elements of the Sustainability Action Plan.
- Update the City's Greenhouse Gas (GHG) Emissions Inventory and establish a recurring schedule for keeping the inventory up-to-date. A GHG Inventory provides will enable the City to identify and measure where our emissions come from, and then develop effective reduction strategies and goals. Many of the goals included in this document have the potential to positively impact our emissions levels.
- Educate and promote awareness and action of City employees, those in the business community, individual residents, and the community as a whole.
- As the Plan is developed and updated, include measurable indicators to be used to evaluate and quantify our success and impact.

## **Community goals**

Goal 1: Raise the sustainability awareness of Palm Bay residents

Goal 2: Increase percentage of residents that have implemented sustainable practices, such as those listed in other sections in this plan

Goal 3: Raise the sustainability awareness of Palm Bay businesses

Goal 4: Increase number of businesses that have implemented sustainable practices, such as those listed in other sections in this plan

## **Municipality goals**

Goal 1: Ensure sustainability is considered in the decision process, including the city budget process

Goal 2: Raise the sustainability awareness of citizen representatives to city committees

Goal 3: Raise the sustainability awareness of city employees

## **Natural Environment (Land and Water Systems)**

Environmental sustainability is defined as responsible interaction with the environment to avoid depletion or degradation of natural resources and allow for long-term environmental quality.

Land and water systems encompass all terrestrial and aquatic environments around and within a city that must interact and deal with human intervention and stressors. These systems are highly interconnected, with a change in one having the potential to greatly affect the others.

### Goals:

1. To protect natural resources by increasing the use of reclaimed water in city and residential properties and reduce water consumption.
2. To expand, protect, and restore publicly owned natural land, to lead by example, and to incentivize the protection of natural areas on private lands.
3. To manage and protect ground water and surface water bodies

### Objectives:

Goal 1. To protect natural resources by increasing the use of reclaimed water in city and residential properties, create wildlife corridors and reduce water consumption.

#### City Government objectives:

- A. Install waterless composting toilets on remote natural landscapes as approved and used by the National Park Service.
- B. Retrofit existing retention/detention ponds with 10-15 ft native plants border to filter pollutants
- C. Reimagine canals to be wildlife corridors.
- D. Expand capture of storm water through use of rain barrels by partnering with the Marine Resources Council (MRC) and Indian River Lagoon (IRL) organizations. Hold educational events to provide low cost materials and free workshops for citizens to do the same.
- E. Promote the use of reusable water bottles by installing hydration stations

#### Local Business objectives:

- A. Promote the use of reusable water bottles by installing hydration stations
- B. Identify opportunities based on cost and benefit in improving water quality, habitat and hydrology to convert retention ponds to wetlands or marshes.
- C. Vending machines with reusable water bottles

#### Community objectives:

- A. Encourage the use of low flow showerheads and automated sinks and toilets.
- B. Increase the percentage of gross potable water
- C. Consumption of water compared to neighbors
- D. Switching from septic to sewer

Goal 2. To expand, protect, and restore publicly owned natural land, to lead by example, and to incentivize the protection of natural areas on private lands.

City Government objectives:

- A. Replace maintenance heavy turf grass with native plants on median strips, by canals, and around public facilities. Identify Florida Friendly landscaping through signage. Invite private sponsorship of median strip plantings through adoption programs.
- B. Expand natural areas in public parks by replacing turf grass and replanting with trees, understory shrubs and groundcovers to create habitat. Include pathways for recreational opportunities. Prioritize parks near schools to partner with and educate students on benefits of natural environment.
- C. Look for land that could qualify for protection under the Florida Forever program. Seek to partner with The Nature Conservancy and the Audubon Society to expand the size of protected tracts of land by purchasing adjacent parcels.
- D. Educate city employees on the care of native plants. For example, when pruning palms on public lands, the Sabal or Cabbage Palm is not to be pruned, though dead fronds may be removed.

Local Business objectives:

- A. Explore potential areas for ecotourism. Identify locations that could generate revenue if restored and promoted.
- B. Landscape restoration. “Restoration economy”  
<https://www.wri.org/blog/2017/06/growing-trees-and-growing-profit-are-you-restoration-enterprise> Make more specific to business. Through 3<sup>rd</sup> party preservation credits

Community objectives:

- A. Improve awareness of invasive species through public events and campaigns. For example, partner with KBB to remove invasive plants on public lands with recognition awards for success in greatest number of participants and in largest area cleared.
- B. Encourage and acknowledge Florida Friendly landscaping in HOA communities through awards for biggest percent native plant areas, the greatest number of trees per dwelling, and capture of storm water.
- C. Increase tree planting on private land by educational (to be created) “Small yard? Small tree!” and “the understory story” campaigns, with Audubon or Arbor Foundation (or other non-profit) partnerships to give away trees at public event. An increase in tree canopy coverage would reduce electric bills, however, with the extra canopy coverage it is important to know how to trim trees before a hurricane.

Goal 3. To manage and protect ground water and surface water bodies.

City Government objectives:

- A. Educate and incentivize homeowners to capture storm water in native plant rain gardens.
  - a. Partner with local nonprofits to create a rain garden on suitable public land (low lying or near downspout) including signage. Consider reduction of storm water bill if homeowners or HOA community meet city established criteria in capturing storm water in rain gardens. Encourage rain catching systems.
- B. Eliminate use of fertilizer on public lands by using organic sources like fish or animal waste. Discourage use of fertilizers on private lands through continuing educational efforts. Identify and convert a public park suitable for xeriscaping. Install signage for public education and awareness.

Local Business objectives:

- A. Set new standards for construction and development to manage storm water on site using planned wetlands and marshes rather than retention ponds.

Community objectives:

- A. Expand conversion from septic tank to sewer. Consider encouraging or providing incentives for conversion prior to sale of property where sewer is available from encouragement or through possible incentives. To make this work economically, the city will have to work with homeowners to help manage cost and the ability to link the sewers in the area.
- B. Educate homeowners with septic tanks or city water on how to detect and repair leaks in their home water system of choice.
- C. Promote awareness of hazardous chemicals that should not be flushed or released in septic, sewer or storm drains by testing the water quality and installing a stormwater treatment infrastructure to improve the water quality. Post a list of such products and safe disposal methods on the city website.

## **Energy and Buildings (Built Environment)**

A sustainable building, or green building is an outcome of a design philosophy which focuses on increasing the efficiency of resource use — energy, water, and materials — while reducing building impacts on human health and the environment during the building's lifecycle, through better siting, design, construction, operation, maintenance, and removal.[1] Though green building is interpreted in many different ways, a common view is that they should be designed and operated to reduce the overall impact of the built environment on human health and the natural environment by (a) Efficiently using energy, water, and other resources, (b) Protecting occupant health and improving employee productivity, and (c) Reducing waste, pollution and environmental degradation.

### Goals:

1. Open space/ Walkability and Connectivity
2. Support sustainable infrastructure and buildings
3. Systematically upgrade existing buildings, equipment and infrastructure

### Objectives

#### Goal 1. Open space/ Walkability and Connectivity

##### City Government objectives:

- A. Integrating green building standards into both public and private developments
- B. Land use practices, and promotion of sustainable development for infill of local goods and services to create a stable and long-term economy and walkable community
- C. Re-use and redevelopment of both public and private lands and buildings
- D. Government decisions for repurpose, operation, and retirement of municipal structures

- E. Creation and maintenance of public spaces
- F. Creating walkable, bikeable, and alternative vehicle use opportunities and safe spaces
- G. Evaluating density increases for residential development to support commercial ventures
- H. Long term tax bases with equal land use support (i.e. residential and commercial, as opposed to predominantly residential)

#### Local Business objectives:

- A. Develop guidelines for developers and committees to follow when creating and reviewing plans to re-invent old big box, strip malls and other commercial developments with similar low density uses to better use the land and surrounding parking lots.
- B. Change requirements for all surface parking, where appropriate, to increase storm water infiltration, reduce heat island effects and other strategies to reduce environmental impacts (e.g., install parking lot islands that allow rain gardens, solar canopies, create incentives for structured parking).

#### Community objectives:

- A. Providing incentives for better natural resource management for new construction and redevelopment, thereby reducing wasted spaces, vacancies, and derelict buildings or spaces

### Goal 2. Support Sustainable Infrastructure and Buildings

#### City Government objectives:

- A. Demonstrate sustainability on all public projects to motivate the community to follow in the cities footsteps.
- B. Create project management teams within City agencies to support and encourage developers and builders to work toward environmentally friendly outcomes. Project Management Teams should be very knowledgeable about City regulations and approval processes, plus know about sustainable design, building and development practices
- C. Create incentive programs to encourage rehabilitation of existing buildings and new infill development.
- D. Promote ‘pocket parks’ within a development that are within easy walking distance. Design the parks to provide rain catchment and provide solar spacing between buildings. Pocket parks with adjacent row houses can provide increased density that is also family-friendly.
- E. Create LEED (the globally recognized standard for the design, construction and operation of high-performance green buildings and neighborhoods) or equivalent third-party certified construction with tiered incentives based on level of certification

Local Business objectives:

- A. Encourage sustainable private development. This would be implemented through higher prices or incentives for using LEED certifications or other options available to the business.
- B. Provide financing for energy efficiency upgrades to private buildings.

Community objectives:

- A. Improve opportunities for physical activities through sidewalk, signage, safe routes, lighting and bike paths.

Goal 3. Systematically upgrade existing buildings, Equipment and Infrastructure

City Government objectives:

- A. City government prioritizes and accelerates government buildings and equipment upgrades in a structured schedule.
- B. Reallocate a portion of all City agencies' operating budgets to the annual replacement of capital assets to improve energy efficiency and reduce carbon emissions.
- C. Develop a green building (energy efficiency, water conservation, construction materials, landscaping, etc.) program that help City staff guide new commercial and public construction.
- D. Establish audit program through Facilities and Sustainability Office and Finance Department to ensure that budgeted upgrades are spent on the approved items.

Local Business objectives:

- A. Implement low cost behavior-based operational programs that minimize energy use in operations. (<https://www.peoplepowerplanet.com>)
- B. Create and adopt strategies and requirements to minimize urban heat islands, optimize carbon sequestration and promote water retention (e.g., green roof, bio swales, urban tree canopy, vegetative parking).
- C. Allow on-site energy generation (e.g., ground source heat pumps or other district clean energy source, or on-site solar generation).

Community objectives:

- A. Survey how many residences use solar panels and water conservation techniques such as low flow faucets. This will give the City a baseline from which to grow green-building techniques post sustainability plan.
- B. Reduce light pollution in municipal buildings through low-level shielded light fixtures that produce long wavelength LED lighting.

## **Transportation and Mobility**

Sustainable transportation is the capacity to support the mobility needs of a society in a manner that is the least damaging to the environment and does not impair the mobility needs of future generations.

\*Alternative transportation is considered, but not limited to: walking, biking, busing, carpooling

### Goals:

1. Create a culture of planning and designing our communities and transportation systems to encourage alternative forms of transportation.
2. Facilitate a reduction in automobile dependency in favor of affordable alternative, sustainable modes of travel.
3. Maximize the use of alternative transportation infrastructure by implementing and/or improving marketing strategies

### Objectives

Goal 1. Create a culture of planning and designing our communities and transportation systems to encourage alternative forms of transportation.

#### City Government objectives

- A. Promote diverse transportation modes, including walking, biking, and public transit, that are safe, low-cost, and reduce vehicle miles traveled
- B. Create transportation improvement plans (TIPs): or action plans identify specific projects and programs to be implemented within a few years.
- C. Create corridor transportation plans: identify projects and programs to be implemented on a specific corridor, such as along a particular highway, bridge or route.
- D. Create mode-or area-specific transport plans identify: ways to improve a particular mode (walking, cycling, public transit, etc.) or area (a campus, downtown, industrial park, etc.)
- E. Foster corridor planning, transit-oriented development and high density, mixed use development along corridors.

- F. Enhance traffic design practices and standards to ensure livability and safety of all residential streets.

Local Business objectives

- A. Support multi-modal transportation (electric scooters and bikes)

Community objectives

- A. Reduce vehicle miles travelled (VMT) by land use patterns that enable a reduction in the need for automobile travel for all trip purposes, and through increased travel by bus, fixed-rail systems, and walking and bicycling in existing settlements and new urban-growth areas

Goal 2. Facilitate a reduction in automobile dependency in favor of affordable alternative, sustainable modes of travel.

City Government objectives:

- A. Concentrate development in compact, human-scaled, walkable centers and neighborhoods that connect to public transit, offer diverse uses and services
- B. Pedestrian Facilities refer to complete sidewalks, Public/ Private pathways, crosswalk enhancements, and signal timing enhancements within the city.
- C. Create a realistic timeline, overall funding strategy, needs assessment, and process for implementation of each transportation plan.
- D. Measure and report transportation mode share objectively through exploring technology options and other innovative measuring techniques.
- E. Electric vehicle charging stations to be installed at the City Hall and various locations throughout the city to promote the use/ conversion of/ to electric vehicles.

Local Business objectives:

- A. Reduction of miles traveled per vehicle by 20% by 2030
- B. Provide employees with different transportation options in the area to reduce the amount of cars on the road
- C. Collaborate with other agencies regarding bike plans and implementation.

Community objectives:

- A. Upward trend of multi-modal use
- B. Residential use of sustainable transportation
- C. Sufficient use of sustainable transportation within X miles

Goal 3. Maximize the use of alternative transportation infrastructure by implementing and/or improving marketing strategies

City Government objectives:

- A. Investigate hiring an outside consultant experienced in marketing transportation to create the City program and offer guidance on the staffing needs.
- B. Expand website services(Create a website or use existing) —add one-time ride module and survey module and customize webpages to create a quicker read for prospective users.
- C. Consider strategies that place a greater portion of road costs on users and properties that generate trips (i.e., Transportation Utility). Tentative upon board approval

Local Business objectives:

- A. Coordinate employer workshops/seminars and hold employee transportation meetings to provide supporting materials which would include distribution of resources for specific area
- B. Create incentive programs for businesses and City agencies that encourage employee parking use reduction.
- C. Develop a plan to provide bus pass and commuter card programs to large employers.

Community objectives:

- A. Identify and develop evaluation improvements for local transit for measuring user placement rates (High traffic transit locations) and marketing programs to encourage the use of multi modal transportation
- B. Continue to encourage phone/hand-held device applications and other technologies to make transit easier for customers.

## **Innovative Waste Management**

Waste management refers to the practice of collecting, transporting, processing or disposing of, managing and monitoring various waste materials. It is important to observe sustainability in this aspect so that every bit of waste can be managed in an efficient manner, reducing the use of landfills.

### Goals:

1. Decrease amount of waste generated by increasing use of reusable, compostable and electronic resources.
2. Increase recycling rates among city government, individuals and businesses.
3. Implement a city-wide composting campaign to divert organics from landfills.
4. Explore waste to energy options.

### Objectives:

#### Goal 1. Decrease waste generation.

##### City government objectives:

- A. Eliminate single use plastics in city facilities and city sponsored events.
  - a. Break rooms to use only reusable materials.
  - b. City events to use only compostable materials for packaging, utensils and straws.
- B. Utilize e-resources in city government including non-print minutes for our board, electronic signups for parks and recreation, utilities, etc.
- C. All city properties should have water bottle refilling stations to reduce the use of plastic water bottles. For example, an innovative method to reduce plastic bottle use is through incentivized reverse vending (IRV). It's a convenient way to deposit bottles and claim deposit refunds. This allows all plastic bottles at a site to be properly recycled to prevent bottle from going straight to landfills.
- D. Create city composting programs in designated areas for residential use and educational purposes. For example, identify public schools with space for onsite composting of site- produced organic matter.

##### Local business objectives:

- A. Implement city ordinances regarding single use plastics, including packaging materials. (I'm unsure what kind of ordinances the city is allowed to make in

this regard, especially regarding plastic packaging in grocery stores.) This may include plastic bags, plastic utensils, Styrofoam cups and packages, napkins, and plastic films.

Community objectives:

- A. Implement a pay per use program for waste that financially incentivizes individuals to produce less trash.

Goal 2. Increase recycling rates (targets should be set based on current data of rates)

City government objectives:

- A. Increase recycling containers at all city facilities including offices and at all parks and recreation facilities.
- B. Include recycling containers at all city sponsored events. (I'm not sure if this is already happening)
- C. Review current recycling in city government to see if improvements can be made in recycling specific materials that cannot be put into the single stream system, including batteries, electronics, lightbulbs, tires, engine oil, ink, aluminum, etc.

Local Business Objectives:

- A. Review current recycling trends in local businesses to see if city can encourage a higher recycling rate. (Do local businesses have the same options for single stream recycling as individuals?)

Community Objectives:

- A. Pay as you throw rates should increase recycling. This could be implemented in a number of ways including pay per bag or by paying for the size of container used with smaller containers costing significantly less than larger containers. With this policy the city will need to review its anti-dumping measures to make sure dumping fees are high and are enforced. Residents could receive free bags when they participate in city clean up days and lower rates could be given to lower income families.
- B. Establish a Recycling One Stop. With the goal of eventually having a permanent center, the city can begin with quarterly or monthly recycling events where residents can bring recyclables that are not appropriate for the single stream. This would seek to coordinate the efforts of businesses and groups already doing this work while making it more accessible to residents. This effort can begin with at least a "Where to Recycle" list showing where residents can take things like batteries, light bulbs, tires, oil, paint, electronics, pharmaceuticals, Styrofoam, clothing, gardening pots, and more. Residents who utilize this recycling center or event could be incentivized by receiving free pay as you throw bags when they recycle.
- C. Educate on contamination rates and what is recyclable in the single stream. Specific programs can be implemented to provide education in schools.

Goal 3. Composting

City Government Goals:

- A. Create city composting sites to create compost fertilizer for city properties using yard waste and food waste.

Local Business Goals:

- A. Explore ways to incentivize or ordinances to require composting of food waste in schools, businesses, restaurants and grocery stores.

Community Objectives:

- A. Educate residents on how to compost at their own homes. Pay as you throw rates should encourage people to compost their organics to avoid putting them in the trash.

Goal 4. Waste to Energy

City Objectives:

- A. Explore Waste to Energy facilities that could be built in our community.

## **Education and Community Involvement**

Successful implementation of this Plan depends on much more than just municipal government support. This Plan can have the greatest impact when the entire community is supportive. The residents and business entities within the City of Palm Bay will have a significant impact on the capacity for innovative sustainability actions in our City. Beyond residents and businesses, there are also a wide range of educational institutions (for example, Eastern State Florida College, public and private schools), churches, and civic-minded organizations that can also play a role in moving the Plan forward.

One of the biggest barriers to action is a lack of understanding on how our choices today affect the Plan Elements of Natural Environment, Built Environment, Transportation and Mobility, and Innovative Waste Management, both now and in the future. By focusing efforts on educational awareness, the City can provide community members of all ages the information they need to support change. The following objectives create opportunities to educate the community, encourage smart practices, and foster participation to promote more sustainable municipal, residential, and business practices.

### Goals:

1. Provide community amenities, such as recreational, entertainment, and cultural experiences, which enhance the quality of life in Palm Bay and attract and retain businesses.
2. Lead by example and promote sustainability efforts to the public.
3. Hold public events promoting sustainability in the community
4. Collaborate and partner with other organizations with similar missions

### Objectives:

Goal 1. Provide community amenities and educational materials to increase community knowledge and sharing of best practices in sustainability, which enhance the quality of life in Palm Bay and attract and retain businesses.

- A. Create a web page that identifies existing amenities and promote the web page to residents and businesses.
- B. Where needed, improve access to community amenities.
- C. Conduct a gap analysis, and survey residents and businesses to determine the need for new community amenities/ job creations.

- D. Create social rehabilitation programs for ex-convicts to rejoin the workforce
- E. Ensure that public safety and security needs are met for all citizens of Palm Bay

Goal 2. Lead by example and promote sustainability efforts to the public.

- A. Support mental health initiatives
- B. Increase awareness and stewardship of sustainable concepts through community outreach, educational outreach, involvement of schools and participation of city leadership (i.e. participation in civil affairs and improve access to community amenities and quality public education)
- C. Support and provide education to schools looking to create sustainable programs and classrooms (i.e. school gardens)
- D. Create a Climate Change Action plan
  - Create/Outline plan for vulnerable industries affected by climate change (i.e. agricultural workers, construction workers, emergency responders, commercial fishermen, paramedics and fire fighters, transportation workers, and other workers exposed to outdoor weather conditions, particularly those performing physically demanding work for extended periods of time)
- E. Maintain and/or improve our ozone air quality of Grade A given by American Under Association

Goal 3. Hold public events promoting sustainability in the community

- A. Take advantage of social media
- B. Provide educational materials to increase community knowledge and display best practices
  - Make it real for the citizens of Palm Bay. Display the benefits of living more sustainably and show them easy changes they can make to be live a more sustainable lifestyle
  - Use of advertisements in public spaces

Goal 4. Collaborate and partner with other organizations with similar missions

- A. Host a yearly sustainability fair
- B. Host monthly events (i.e. trash pickup, plant a tree)
- C. Involve local businesses and industries to increase awareness. Partner with companies that have sustainable initiatives

- Have links on city website—What we are doing and Why, what you can do. – [part of educational component](#)