CITY OF COCOA
Planning & Zoning Board /
Local Planning Agency
City Council Chambers

Cocoa City Hall
65 Stone Street
Cocoa, FL 32922

AGENDA
Special Meeting
September 24, 2019
6:00 p.m.

I. OPENING MATTERS:
1. CALL TO ORDER
2. ROLL CALL
3. PLEDGE OF ALLEGIANCE

II. APPROVAL OF AGENDA AND MINUTES:
1. AGENDA: Meeting of September 24, 2019
2. MINUTES: Meeting of August 6, 2019

III. OLD BUSINESS: (None)

IV. NEW BUSINESS:
A. PZ-19-028 – Comprehensive Plan EAR (Evaluation and Appraisal Report) Amendments

Ordinance No. 13-2019

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF COCOA, BREVARD COUNTY, FLORIDA; ADOPTING AMENDMENTS TO THE CITY OF COCOA COMPREHENSIVE PLAN BASED ON THE CITY'S EVALUATION AND APPRAISAL OF THE COMPREHENSIVE PLAN PURSUANT TO SECTION 163.3191, FLORIDA STATUTES; PROVIDING FOR THE REPEAL OF PRIOR INCONSISTENT ORDINANCES AND RESOLUTIONS, INCORPORATION INTO THE COMPREHENSIVE PLAN; LEGAL STATUS OF THE COMPREHENSIVE PLAN AMENDMENTS; SEVERABILITY, AND AN EFFECTIVE DATE.

V. OTHER BUSINESS:
A. Tree Board Update (None)
B. Recent Development Update (None)
C. Open Discussion by Board members

VI. NEXT MEETING DATE:
Wednesday, October 2, 2019

VII. ADJOURNMENT

(Over)

NOTICE TO PUBLIC:

This meeting may include the attendance of one (1) or more members of the Cocoa City Council who may or may not participate in the Board discussions held at this public hearing.

All persons and parties are hereby advised that if they should decide to appeal any decision made by this Board with respect to any matter considered at this hearing, they will need a record of the proceedings and that for such purpose, affected persons may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

The facility where this public hearing will be held is accessible to the physically handicapped. Interested parties are hereby advised that they may appear at said meeting and be heard with respect to the application. Written comment from the public with regard to the application will also be accepted.

Information pertaining to the above may be inspected at the Planning & Zoning Division at 65 Stone Street, Cocoa, Florida between 8:00 a.m. and 5:00 p.m., Monday through Friday, beginning the Friday before the Board Meeting date, or by phoning (321) 433-8535.

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Run Dates: 09/12/19

Text of Ad:

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CITY OF COCOA
NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN THAT THE PLANNING & ZONING BOARD/LOCAL PLANNING AGENCY AND THE COCOA CITY COUNCIL PROPOSE TO CONSIDER THE FOLLOWING:

A.Comprehensive Plan EAR (Evaluation and Appraisal Report) Amendment

Ordinance No. 13-2019
AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF COCOA, BREVARD COUNTY, FLORIDA; ADOPTING AMENDMENTS TO THE CITY OF COCOA COMPREHENSIVE PLAN BASED ON THE CITY'S EVALUATION AND APPRAISAL OF THE COMPREHENSIVE PLAN PURSUANT TO SECTION 163.3191, FLORIDA STATUTES; PROVIDING FOR THE REPEAL OF PRIOR INCONSISTENT ORDINANCES AND RESOLUTIONS, INCORPORATION INTO THE COMPREHENSIVE PLAN; LEGAL STATUS OF THE COMPREHENSIVE PLAN AMENDMENTS; SEVERABILITY, AND AN EFFECTIVE DATE.

PLANNING & ZONING BOARD/ LOCAL PLANNING AGENCY
PUBLIC HEARING WILL BE HELD ON
TUESDAY, SEPTEMBER 24, 2019
AT 6:00 P.M. OR SOON THEREAFTER IN THE
COCOA CITY HALL COUNCIL CHAMBERS LOCATED AT
65 STONE STREET, COCOA, FL

CITY COUNCIL WILL CONSIDER THIS ITEM ON
WEDNESDAY, SEPTEMBER 25, 2019
AT 6:00 P.M. OR SOON THEREAFTER IN THE
COCOA CITY HALL COUNCIL CHAMBERS LOCATED AT
65 STONE STREET, COCOA, FL

Interested parties are hereby advised that they may appear at said meeting and be heard with respect to the application. All persons and parties are hereby advised that if they should decide to appeal any decision made by the City Council with respect to any matter considered at this hearing, they will need a record of the proceedings and that for such purpose, affected persons may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. The Local Planning Agency and City Council reserve the right to continue or postpone hearings to a date certain without re-advertising.

Information pertaining to the above may be inspected at the Planning & Zoning Division beginning the Friday before the meeting, between 8:00 a.m. and 5:00 p.m., Monday through Friday, or by phoning (321) 433-8535.

The facility where this public hearing will be held is accessible to the physically handicapped. SPECIAL ACCOMMODATIONS: Persons with disabilities needing special accommodations to participate in this proceeding should contact the City Clerk's Office at (321) 433-8484 no later than 48 hours prior to the proceeding for assistance.

MINUTES
CITY OF COCOA
PLANNING & ZONING BOARD/ LOCAL PLANNING AGENCY
SPECIAL MEETING
AUGUST 6, 2019

The regular meeting of the Planning & Zoning Board/ Local Planning Agency was held on August 6, 2019 at City Hall, 65 Stone Street, Cocoa, FL, as publically noted.

I. CALL TO ORDER:

Chairperson Dobrin called the meeting to order at 6:01 PM

ROLL CALL:

Michael Dobrin	Chairperson
Al Washington	Vice Chairperson
Todd Anderson	Board Member
Jeri Blanco	Board Member
Sherry Ervin	Board Member
Trina Gilliam	Board Member
Marilyn Green	Board Member
Aleck Greenwood	Board Member
Lawrence Koss	Board Member
Russell Sengel	Board Member
Kristen Eick	Assistant City Attorney
Courtney Jackson	Recording Secretary

PRESENT:

Michael Dobrin	Chairperson
Al Washington	Vice Chairperson
Todd Anderson	Board Member
Jeri Blanco	Board Member
Sherry Ervin	Board Member
Trina Gilliam	Board Member
Marilyn Green	Board Member
Aleck Greenwood	Board Member
Lawrence Koss	Board Member
Russell Sengel	Board Member
Kristen Eick	Assistant City Attorney
Courtney Jackson	Recording Secretary

ABSENT:

NONE

STAFF PRESENT:
Jake Williams Jr., Mayor, **Angela Essing**, Senior Planner, **Dodie Selig**, Planning & Zoning Manager, **Matt Fuhrer**, Assistant City Manager (entered at 6:08pm), **Sandra Leone**, Planner.

Chairperson Dobrin led the assembly in the Pledge of Allegiance to the flag of the United States of America.

II. APPROVAL OF AGENDA AND MINUTES:

1. AGENDA: Meeting of August 6, 2019

* **MOTION BY BOARD MEMBER ERVIN; SECONDED BY BOARD MEMBER KOSS TO APPRIVE THE AGENDA AS WRITTEN.**

AYES: Dobrin, Washington, Anderson, Blanco, Ervin, Gilliam, Green, Greenwood, Koss, Sengel

* **MOTION PASSED UNANIMOUSLY. (10-0)**

2. MINUTES: Meeting of July 17, 2019

* **MOTION BY BOARD MEMBER BLANCO; SECONDED BY BOARD MEMBER GREEN TO APPROVE THE MINUTES FROM JULY 17, 2019 WITH AMENDMENTS.**

AYES: Dobrin, Washington, Anderson, Blanco, Ervin, Gilliam, Green, Greenwood, Koss, Sengel

* **MOTION PASSED UNANIMOUSLY. (10-0)**

III. OLD BUSINESS:

A. PZ-19-022- Development Agency Agreement (Integra Land Company) (Previously Tabled from July 17, 2019)

Consideration of a Binding Development Agreement between the City of Cocoa, Florida and Integra Land Company to allow the developer to construct up to 249 apartments in 5 apartment buildings with 5 parking garage buildings and a community clubhouse on 2 parcels of land. (Parcel ID: 34-5-13-00-750 and 24-35-24-00-1)

Ms. Selig presented a Power Point describing plans, staff recommendation and conditions for the Development Agency Agreement (Integra Land Company)[1].

[1] Exhibit 1: Integra Land Company Development Plan PowerPoint Presentation

Discussion between **Ms. Selig** and **Board Member Ervin** regarding possible access roads including one by Cox Road.

Discussion between **Board Member Blanco** and **Ms. Selig** regarding clarification on the length of the access trail by the conservation area and Cocoa Kay.

Board Member Green asked if City Council had to approve assigning this project to a different developer, if plans did not go through with the current developer.

Board Attorney Eick confirmed it would require City Council's approval to assign it to a different developer.

Board Member Gilliam inquired if traffic studies were required for this project.

Ms. Selig stated the developer has already done a FDOT traffic analysis and the findings will be part of the site plan.

Board Member Sengel asked if there will be pedestrian access and sidewalks from SR524 to the Publix Plaza.

Ms. Selig explained that it is in the developer's policy to incorporate pedestrian access.

David McDaniel (Integra Land Company, 1525 International Pkwy, Lake Mary, FL) briefly introduced himself and his company. He announced that the working name for the project is "Integra Preserve Trails".

Questions for David McDaniel:

Chairperson Dobrin asked when will his company begin building and have construction completed.

Mr. McDaniel stated that while the civil plans are finished and submitted, it is up to the City for the final date. He also added that the architectural plans will be completed and submitted to the City in 6 weeks and the plan is to have construction start December 2019 and finish in 18 months. He hopes to have occupancy by December 2020.

Vice Chairperson Washington and **Board Member Greenwood** both expressed their concerns over how small the one-bedroom apartments are.

Mr. McDaniel respectfully disagreed, as he did not feel their one-bedroom apartments were small. He explained that in order to come up with the square footage, his company researched around Central Florida, what the average size

dimensions were for one-bedroom apartments; which were typically under 700 sq. ft. He pointed out that they have some one-bedroom apartments measuring at 810 sq. ft., and further explained that the designs are very efficient, upscale, and most include an outside patio area.

Board Member Greenwood inquired about the cost of rent and construction material.

Mr. McDaniel explained what material the apartments will be made out of and that the rent for one-bedrooms will range from $1,200-$1,600 and the two-bedrooms from $1,450-$1,550.

Board Member Gilliam asked if they will be using solar to power the house lights.

Mr. McDaniel replied it is not currently in their plans, but they are looking at using solar for the clubhouse and garage lighting.

Board Member Gilliam asked how wide the sidewalk trails are.

Mr. McDaniel stated the trail head will be 4 ft. wide, but they will do the rest in accordance to the size that is required of them by city code.

Chairperson Dobrin asked how large the largest units are.

Mr. McDaniel shared that the three-bedrooms will be 1,300 sq. ft. and the two-bedrooms are 1,100 sq. ft.

Board Member Ervin inquired if the project can be eventually expandable by the Mud Lake area.

Ms. Selig explained it is undevelopable as it is mostly wetlands.

<u>Delegations Regarding Item A</u>

- **Rod McGowen (3815 Sentry Dr.)** began by expressing his frustration with the lack of communication between Staff and Cocoa citizens in terms of Staff not returning phone calls nor answering their phones. To give background to his concern- he shared with the Board how during the 2004-2005 hurricane season, the retention pond by his house became backed up and his street/property was flooded. He went into detail regarding how the storm drains work by his house. He explained how he has previously asked for the city to check the canals and to have a canal that drains into Mud Lake. He was told they could not build a canal there due to that area being considered “wetlands”. Now, because of this new project and where it is located, he fears the amount of water run-off from the

project, will negatively affect the retention pond and storm drains by his house, causing more water damage. He pleaded with the Board to reconsider the location/approval of the project, to save the wetlands and to consider the citizens of Cocoa.

Chairperson Dobrin noted the Board understands his situation and will have a City Engineer take a look at his concerns.

Discussion between **Vice Chair Washington**, **Board Member Ervin** and **Mr. McGowen** regarding the rising storm water throughout the years.

Mayor Williams noted that the City is aware more needs to be done regarding fixing Cocoa's retention ponds, but assured Mr. McGowen that the City is aware of the situation and is working on it.

Discussion between **Mayor Williams** and **Board Member Ervin** regarding the issues along SR 524.

Board Member Greenwood inquired if the canal could be dredged and if not, could the city trade land in order to enlarge the canal.

Ms. Selig explained that because it is wetlands, they cannot dredge it and as for trading in land, that would be a question she would have to ask Public Works and the City Engineers.

* **MOTION TO APPROVE STAFF RECOMMENDATION WITH CONDITIONS PRESENTED MADE BY BOARD MEMBER ANDERSON: SECONDED BY VICE CHAIR WASHINGTON**

AYES: Dobrin, Washington, Anderson, Blanco, Ervin, Gilliam, Green, Greenwood, Koss, Sengel

*** MOTION PASSES UNAMIOUSLY (10-0)**

IV. NEW BUSINESS:

NONE

V. OTHER BUSINESS:

A. Tree Board Update
- Tree-City USA designation follow-up

Ms. Selig[2] announced after looking into reinstating the Tree City USA designation, since the city has met all 4 requirements, all that is left to do is to wait and apply in September.

Board Member Ervin expressed that she felt that the Tree Board should be its own separate Board and not part of Planning and Zoning. She explained that it was important to separate the issues that were being discussed.

Board Member Green suggested a subcommittee of the Planning and Zoning Board geared towards individuals who are more versed in the subject.

Board Member Koss cautioned the Board not to overtax Staff by adding another meeting/board to their already busy calendar.

Board Member Greenwood explained that the Board should wait to finish the tree ordinance they are currently working on before deciding to make the Tree Board its own separate board.

Mayor Williams shared how Cocoa PD has taken pictures of some canopy trees that were visual obstructions to some of the street lights and signs. He noted they are mapping them right now and are actively working on how the City can better understand how to maintain the trees and how to move forward.

Board Member Blanco agreed and noted some citizens were concerned with the oak trees limbs being an obstruction. She urged that the City needs to maintain the trees better.

Discussion between **Board Member Greenwood** and **Mayor Williams** regarding the tree study, what it entails and if results will be shared with the Board.

Board Member Green asked if a few members from the Planning and Zoning Board, who were knowledgeable about trees, could educate the members who were not as well-versed and if the board could have a tree workshop.

Ms. Selig agreed and stated that a workshop could be added to a future meeting and taking **Board Member Koss**'s recommendation of having a certified arborist in attendance, she can reach out to someone from ISA to come in and speak.

Board Member Blanco suggested that after old business is finished, the tree board could be better served on the Sustainability Committee.

Chairperson Dobrin agreed that the Planning and Zoning Board is not a good fit for the Tree Board.

[2] Assistant City Manager Fuhrer left the room at 6:48pm

Board Member Koss discussed that while they are not on the same scale as Minneapolis and Tampa or another major hub such as those cities, there are still possibilities here in Cocoa, even on a smaller scale that could save the city money.

Discussion among the board members regarding whether P&Z or Sustainability would be a better fit for the Tree Board and it was agreed upon that regardless, it should be separate, but depends on Staff time.

Mayor Williams explained that in the 1990s the Tree Board used to be a part of Code Enforcement before it was then given to the Planning & Zoning Board.

Vice Chairperson Washington noted that the Tree Board discussion has never exceeded over 5 minutes and once the loose ends of the old business are tied up, he does not think that there is enough discussion to justify having a separate board.

Board Member Koss suggested they should continue the discussion of the possible separation of the Tree Board from Planning and Zoning Board at a future meeting.

* **MOTION TO AUTHORIZE STAFF TO MOVE FORWARD WITH APPLYING FOR THE TREE CITY USA DESIGNATION BY BOARD MEMBER KOSS; SECONDED BY BOARD MEMBER ERVIN**

AYES: Dobrin, Washington, Anderson, Blanco, Ervin, Gilliam, Green, Greenwood, Koss, Sengel

MOTION PASSES UNAMIOUSLY (10-0)

Ms. Selig announced that the City was allotted a few spots to attend a tree workshop in Tampa. She noted that Angela Essing, Mayor Williams, and the Assistant City Engineer will be attending and will bring back more information.

Board Member Koss shared with the board the questions that he had regarding the Landscape Ordinance. He also expressed his frustration about how private property owners can take down a seemingly healthy tree on an easement without city approval or any review.[3] He then asked Staff questions 1-4 from the presentation[4] to have the answer aired in a public setting:

[3] Assistant City Manager Fuhrer re-entered the room at 7:15pm

[4] Tree Ordinance Questions for Staff PDF

1) **Does the city require private property owners to get approval from the city before planting trees or bushes in the public easement property?**

   Ms. Selig yes, you would need approval from the city and you would need to go to Public Works' office to do so.

2) **If a private property owner plants a tree or bush without city approval, then does the tree or bush become city property?**

   Ms. Selig replied yes, because it is planted on city property.

   Assistant City Attorney Eick clarified it would depend on what interest the city has on the property. If it was just on an easement, it would not necessarily become city property. But, if the city owned that property outright and fee, it would then become city property.

   Discussion between **Board Member Koss** and **Assistant City Attorney Eick** regarding waterlines and the definition differences between right-of-way v. easement.

3) **If a previous private property owner planted a tree or bush in the public easement, then do the current private property owners have the right to remove the tree or bush?**

   Ms. Selig replied no, because it's the public-right-of-way.

4) **Does the city have the authority to remove any tree or bush in the public easement if a private property owner planted it and not the City?**

   Ms. Selig replied, yes because it is the City's tree.

   Board Member Koss shared that he was disheartened to see that there are no repercussions listed in the ordinance for someone who removes a public tree. He explained that it is it not that he wants the city to go after anyone in terms of repercussions, but he wants the public to be more informed. He also expressed that there should be some type of oversight review from the tree board prior to a public tree being cut down.

   Discussion between **Board Member Blanco** and **Board Member Greenwood** regarding the prior discussion of the heritage tree being cut down, if it was on private or public property, and the guidelines for removing it.

   Board Member Greenwood pointed out the upcoming tree workshop in Tampa and shared what Councilperson Koss experienced while attending the tree

workshop in Titusville. He further stated that he hopes to bring a similar workshop here in the City of Cocoa.

Board Member Green stated someone from the tree board should go to the upcoming Tampa tree workshop.

Board Member Koss explained what the Titusville workshop entailed and the citizens of Titusville expressed that there should be a middle ground where there can be growth within the city, but not at the expense of the mature trees. He explained the complication of the ideology of planting replacement trees for the ones that were removed.

Discussion among the Board and Staff regarding the clarification language of the landscape ordinance and minimum standard.

Board Member Koss redirected the conversation back to the Beverly Manor project and explained that after speaking with an arborist, the recommendation that was made, was to put in a sand live oak tree. He shared that this tree is a native tree, only grows to 35 feet and its branches would not be a nuisance.

Assistant City Manager Fuhrer provided additional information regarding the recent palm tree removal and why it was cut down. He explained that because the root ball was exposed, the ultimate concern was, with the expected strong storms and wind-driven rain and the direction it was facing, that the tree would eventually fall into the roadway. He apologized for the tree being removed, but due to the current language in the ordinance and the type of the tree that it was, it was not required to go before the Tree Board.

Board Member Koss suggested that the language should be broadened to include "native trees".

Assistant City Manager Fuhrer pointed out that if someone wishes to plant a tree or vegetation in a right-of-way, you would need to apply for a right-of-way use permit with Public Works.

Board Member Greenwood recalled the old permit process and explained that the permit process Assistant City Manager Fuhrer explained, is fairly new.

Walt Roslan (1628 Manor Dr.) shared he has been an arborist for over 40 years and pointed out that the cabbage palm has been implanted in other cities for mosquito mitigation to reduce the risk for mosquito-borne illnesses. Explained the palm tree that was removed, he has been looking at it for 15 years and stated the tree had survived 2 hurricanes. He also noted by looking at the trunk, it was completely healthy and just because the root ball was exposed did not mean it was unstable. He expressed that this is why you need someone with training to make

an assessment of the tree before removing it. He shared that would have been a lot cheaper to send an arborist to inspect the tree for $30-$40 rather than sending 2 trucks, a removal crew, and a tractor. He thought it was a waste of money and waste of a healthy tree. Explained his neighbors removing the trees in the neighborhood affects the ambiance of the neighborhood and his property value.

Chairperson Dobrin asked for clarification regarding if the 3 trees in Beverly Manor, were on public property and a private property owner had them removed.

Mr. Roslan explained the situation to the board.

Board Member Greenwood iterated that cases like this are the reason the Tree Board needs to be reactivated.

Mr. Roslan discussed other cities having policies for removing the trees. He also shared how a city that he recently visited has a $1,000 grant to have citizens plant a rain garden on their property and how that could be something Cocoa could look into as an incentive for residents to plant more vegetation.

Discussion between **Chairperson Dobrin** and **Mayor Williams** regarding if private owners have ever been fined for illegally removing public trees.

Board Member Greenwood, following the discussion, expressed that once it is made public that Cocoa has a Tree City USA Designation, it might discourage citizens from removing trees.

* **BOARD UNANIOUSLY MOTIONED AND SECONDED TO TABLE BOARD MEMBER GILLIAM'S PRESENTATON UNTIL THE SEPETEMBER MEETING.**

AYES: Dobrin, Washington, Anderson, Blanco, Ervin, Gilliam, Green, Greenwood, Koss, Sengel

MOTION PASSED UNANIMOUSLY (10-0)

B. Recent Development Update

- None Discussed

C. Open Discussion by Board Members

Chairperson Dobrin asked **Ms. Selig** what happened to the work on Rosa Jones and why it appears to be stopped.

Ms. Selig she explained there is a discrepancy between the contractor, the engineer and the architect currently, but they are still moving forward.

Board Member Koss wanted to make sure that if they are going to plant the new sand live oak, there be room in the budget to have it maintained.

Board Member Greenwood asked on the status of the gravel code changes.

Ms. Selig explained due to time constraints from current projects, she is planning on starting research to look into the gravel code changes the following Monday.

Board Member Green asked if the presentation from the Tampa tree workshop could be shared with the board after staff returned and asked if there was any way for a member of the tree board to attend.

Ms. Selig stated that she will ask if Ms. Essing could share the presentation and that staff does not have the ability to add people and the city was only allotted so many seats.

Board Member Green reiterated that this is another reason why there should be a separate committee or subcommittee for the tree board. She explained that it would narrow down the scope and really emphasize what needs to be done with Cocoa and have that be decided by individuals who are more versed in the subject.

VI. NEXT MEETING DATE:

The next regularly scheduled meeting for the Planning and Zoning Board will be held on Wednesday, September 4, 2019 at 6pm in Cocoa City Hall, 65 Stone St, Cocoa, FL 32922.

VII. ADJOURNMENT:

*** BOARD UNAMIOUSLY MOTIONED AND SECONDED FOR THE ADJOURNMENT OF THE REGULAR MEETING ON AUGUST 6, 2019**

AYES: Dobrin, Washington, Anderson, Blanco, Ervin, Gilliam, Green, Greenwood, Koss, Sengel

MEETING WAS ADJOURNED AT 7:42 PM.

_____
Michael Dobrin, Chairperson

Respectfully Submitted By:

_____
Courtney Jackson, Recording Secretary

City of Cocoa
Planning & Zoning Board
STAFF REPORT

Date:	September 5, 2019
Project Name:	Comprehensive Plan EAR Amendment
Project No:	PZ-19-028
Meeting Date:	September 23, 2019
Planner:	Dodie Selig, AICP, Planning & Zoning Manager
Applicant:	City of Cocoa
Property Owner:	n/a
Project Location:	Citywide
Requested Action:	**Approval of the Evaluation and Appraisal Report (EAR) based Comprehensive Plan Amendments**.
Notice Provided:	September 12, 2019

I. Project Information

Pursuant to Section 163.3191, Florida Statutes, "*At least once every 7 years, each local government shall evaluate its comprehensive plan to determine if plan amendments are necessary to reflect changes in state requirements in this part since the last update of the comprehensive plan, and notify the state land planning agency as to its determination*."

The EAR provides a framework for analysis of the City's existing Comprehensive Plan and can be used to evaluate the success of the plan in addressing major community land use planning issues through its implementation. The EAR is also the process by which the City updates its comprehensive plan to reflect changes in local conditions and state policy on planning and growth management.

The City reviewed its Comprehensive Plan in 2017 and determined that there were general, administrative, map and text revisions necessary to reflect changes in state planning legislation.

An EAR Notification letter describing these changes was sent to the State Department of Economic Opportunity, Division of Community Planning and Development on September 28, 2017.

In 2018, the City applied for and was awarded several grants from the State of Florida. One was a grant from the Florida Department of Environmental Protection to conduct a vulnerability assessment related to sea level rise, flooding and storm surge. The other grant was a Community Planning Technical Assistance grant from the Florida Department of Economic Opportunity to address Peril of Flood requirements and a Resiliency Action Plan for the City. The East Central Florida Planning Council worked with City staff as well as the City of Cocoa Sustainability Committee to fulfill the grant requirements. Their work resulted in the Resilient Cocoa document (Exhibit A) which includes the City of Cocoa Resilience Action Plan 2019-2024 and which was used to provide the data and analysis for this Comprehensive Plan update.

II. Comprehensive Plan Amendment Analysis

The City has been working with its consultant, S&ME, Inc., to prepare updates to the goals, objectives and policies of the City's Comprehensive Plan which was last updated in 2010. Changes in State Statutes from 2011 to the present affecting the comprehensive plan were identified. This included those statutes identified in the City's EAR Notification Letter. Special attention was given to the "Peril of Flood" requirements resulting from Senate Bill 1094. Several maps were updated or created depicting floodplains and coastal areas subject to flood hazard. The Plan updates also include deleting or modifying existing goals, objectives and policies; formulating new goals, objectives and policies and updating the Map Series based on the above data and information.

Included as part of this staff report is a strike through and underline version of the Comprehensive Plan (Exhibit B) indicating all the changes made to the Plan, a series of new maps (Exhibit C) to be adopted as part of this amendment and the Resilient Cocoa document. Administrative changes common to all elements include removal of dates of completion, references to Florida Rule 9J-5 and 9J-11 which are no longer in effect, and replacement of all references to the Department of Community Affairs with the Department of Economic Opportunity. Following is a summary of the substantive changes made to each element of the Comprehensive Plan:

FUTURE LAND USE ELEMENT

- Added a policy that land development regulations must be made consistent with updates to the Comprehensive Plan within 1 year of plan amendment submittal as required by Florida Statute.

TRANSPORTATION ELEMENT

- The "Dense Urban Land Area (DULA)" designation is no longer effective therefore this reference has been removed. The City has been exempt from state-mandated transportation concurrency since 2009.

- Strengthened language referencing the Florida Scenic Highways and National Scenic Byways programs.

HOUSING ELEMENT

- Updated reference to Florida Statute number and median gross annual income.

- Added streamlined permitting process to the list of development incentives for affordable and workforce housing.

SANITARY SEWER ELEMENT

(No substantive changes)

SOLID WASTE ELEMENT

- Changed the Level of Service for residential collection from 2 times per week to 1-2 times per week as needed.

STORMWATER MANAGEMENT ELEMENT

- Added language to a sustainable stormwater management strategy related to creation of a site design to require design that "implements/retains pervious surfaces (areas maintained in their natural conditions or materials that permit the infiltration or percolation of water into the ground) where appropriate".

- Added a policy that the Stormwater Master Plan "shall incorporate an increase in green engineering/infrastructure solutions to reduce run off into the lagoon either directly or indirectly and provide additional opportunities for water capture and filtration. These solutions shall include but not be limited to bio-swales, water detention/retention ponds, seasonal stormwater parks, trees and other native vegetation, rain gardens and other water flow diversion and capture solutions".

- Added a policy that the City "shall consider the acquisition of properties in the 100-year flood plain that can be used for public open space and function as part of a hybrid stormwater master plan that utilizes green engineering techniques such as stormwater parks, bio-swales, rain gardens and others that will result the capture of water and provide natural filtration prior to entering the lagoon and will result in the removal of coastal real property from flood zone designations established by the Federal Emergency Management Agency (FEMA). These projects shall be designed in a manner that will allow for continued functionality when considering future effects from sea level rise".

- Added a policy that the City "shall administer land development regulations that promote a "natural runoff" or "net-zero discharge" for all site plans in the 100-year floodplain".

POTABLE WATER ELEMENT

- Removed reference to "cost feasible" from two policies related to the schedule of capital improvements and capital improvements plan.

NATURAL GROUNDWATER AQUIFER RECHARGE ELEMENT

(No substantive changes)

COASTAL MANAGEMENT ELEMENT

- A Coastal Planning Area (CPA) was established which includes the Coastal High Hazard Area (CHHA), areas of the City vulnerable to a Category 3 storm surge or to sea level rise by 2070, or other areas identified as being subject to coastal erosion, flooding or sea level rise, or in the immediate vicinity of such areas.

- The CPA will also serve as the Adaptation Action Area in accordance with Florida Statute with the purpose of increasing funding opportunities (such as grants) and identifying creative solutions for increasing the resiliency of the Adaption Action Area against natural hazards, flooding and sea level rise.

- Policies have been added in furtherance of the protection of marine resources. These include such things as coordination with other local governments and agencies such as the Marine Resources Council of East Florida and facilitating the installation of native shoreline vegetation and oyster mats.

- The Estuarine Environmental Quality objective was amended to include reference to the consideration of future impacts of sea level rise and flooding.

- Coordination with Brevard County was expanded to include projects connected to the Save Our Indian River Lagoon program.

- A policy was added to work with property owners to encourage and implement buffers of native vegetation between the shoreline and turf.

- Additional criteria were added to those applied to marinas and mooring fields such as the minimization of shoreline hardening structures, a designation by the Clean Marina Program and a plan for adaptation or mitigation strategies for sea level rise through 2070 and flood impacts to vulnerable infrastructure.

- Public expenditures in the CPA will prioritize projects which restore or enhance natural resources, are part of the City's Redevelopment Plan and/or serve to reduce risk of sea level rise, flooding and storm surge. Local funds used to subsidize new development through new or improved infrastructure will be limited and such

infrastructure shall not be used to justify new development in the CPA where the infrastructure removes previous capacity/safety impediments to additional development.

- Public access to the Lagoon will take into account mitigation of risk from natural hazards. The purchase of frontage properties along the shoreline will also be considered in light of their functionality to serve as areas to mitigate impacts from storm surge, seal level rise and flooding. Infrastructure in public access areas will be strictly limited to that necessary for safe public access.

- The Coastal High Hazard Area (CHHA) has been defined as the area below the elevation of a Category 1 storm surge line as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model.

- A new objective and related policies were created which require development to be planned and managed through strategies and design principles that are consistent with sound planning practices that protect life and property from the effects of flooding, storm surge and related impacts of sea level rise and that protect the long-term financial viability of the City.

- A new object and related policies were created which highlight planning and process consistency in the adaptation and mitigation of the built environment addressing natural hazards, flooding, and impacts from seal level rise, as well as related coordination with partner agencies.

- New policies were added to the Post-Disaster Redevelopment Plan objective. Guidelines for post-disaster redevelopment and hazard mitigation will continue to be developed and included in the City's land development regulations. Procedures for post-disaster action shall include a system for distinguishing between immediate repair and clean-up actions needed to protect the public health and safety, versus long-term repair and redevelopment activities. A temporary-building moratorium may be declared in the Coastal Planning Area when 50% or more of the structures have been damaged by 50% or greater to assess the impacts and feasibility of redevelopment.

- A new object and policies were created to address disaster preparedness for entities critical to redevelopment.

- The objective related to infrastructure in the CPA was amended to require that level of service standards for facilities within the CPA consider the long-term implications of increased hazards due to sea level rise and flooding. A cost-benefit analysis may include considerations such as the number of times infrastructure has been damaged, upgraded, or rebuilt; number of people served by the infrastructure; whether alternatives for the services provided by the infrastructure are present; criticality of the infrastructure for protection of safety; potential increased hazards to first

responders; etc.

- Additionally a policy was added related to construction or reconstructing of utilities or infrastructure, providing that the City assess vulnerabilities and resilience to sea level rise, flooding and storm surge, and identify cost-effective strategies to minimize exposure and reduce impacts.

- A policy was developed to prioritize the use of Green Street techniques (reference Policy 9.2.2.2 (1)) within the Stormwater Master Plan, on public rights-of-way, to the extent financially and physically possible, to alleviate flood impacts to streets and buildings and maintain its level of service standards.

RECREATION AND OPEN SPACE ELEMENT

- The City will consider developing and adopting its own Parks and Recreation Master Plan, as well as a Pedestrian Routes and Bike Trails Master Plan.

PUBLIC SCHOOLS FACILITIES ELEMENT

- The Level of Service (LOS) for the School District is now set at 100%. Therefore, the text and the table addressing the former phased LOS plan have been removed.

- A policy was added that would allow a landowner to proceed with development of a specific parcel of land notwithstanding a failure of the development to satisfy school concurrency, providing that certain factors are shown to exist.

CONSERVATION ELEMENT

- The definition for water dependent uses was amended to "an activity which can only be conducted on, in, over, or adjacent to water areas because the activity requires direct access to the water body or sovereign submerged lands for transportation, recreation, energy production or transmission, or source of water, and where the use of the water or sovereign submerged lands is an integral part of the activity".

INTERGOVERNMENTAL COORDINATION ELEMENT

(No substantive changes)

CAPITAL IMPROVEMENT ELEMENT

- A policy was amended to require requests for capital projects be evaluated on their impact to the City budget based on consistency with the City's Budget Prioritization list.

- The criteria for priority ranking of capital improvement projects was amended to match the City's Budget Prioritization list with four priority categories.

- A policy was added that public expenditures which fund infrastructure improvements within the Coastal Planning Area shall abide by the limitations expressed in the Coastal Management Element (Objective 9.1.5. and Policies 9.1.5.1-2).

- Additional City departments were added to those reviewing the Capital Improvements Element on an annual basis.

- An updated CIP for FY2018-2022 replaces the outdated version.

III. Recommendation

Staff recommends the Planning and Zoning Board recommends approval to City Council for the EAR-based Comprehensive Plan Amendments.

Resilient Cocoa



COCOA
FLORIDA

STORM SURGE | FLOODING | SEA LEVEL RISE | SEA LEVEL RISE + SURGE

2019

This report was prepared for the City of Cape Canaveral, the Florida Department of Environmental Protection and the National Oceanic and Atmospheric Administration by the East Central Florida Regional Planning Council.

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EXECUTIVE SUMMARY

The overarching goal of the Resilient Cocoa Project is to strengthen the City's capacity to withstand and recover quickly from natural hazard events such as flooding, sea level rise, storm surge, and nuisance flooding. From December 2018 through June 2019, the ECFRPC worked with City officials to complete the following milestones:

- **Vulnerability Analysis**: Identified the City's exposure to effects from storm surge, flooding, sea level rise and nuisance flooding.
- **Public Engagement:** Gathered input from Cocoa residents and business owners through workshops and surveys to identify their priorities to address resiliency.
- **Economic Impact Analysis:** Used the REMI PI+ model to estimate the economic costs of not addressing flooding versus mitigating this weakness through the adoption of green infrastructure program.
- **Strategy and Policy Development:** Developed an Action Plan based on the findings from the vulnerability analysis, public input, economic analysis and national best practices. This part also included the formulation of comprehensive plan policies for compliance with SB 1094 (Peril of Flood).

The Resilient Cocoa Project found that three parts of the City are the most vulnerable to natural hazards: High Point, Magnolia Point, and Cocoa Village. The report provides a detailed assessment of the impacts that these hazards will have on the City's transportation network, critical facilities, land development patterns, and tax revenues. All of these vary greatly depending on the type of vulnerability discussed.

The ECFRPC used various ways to gather input from the public for this project. In February, the City of Cocoa hosted a public workshop where citizens discussed some of the City's vulnerabilities, focus areas, and strategies to create a more resilient city. This information was used to develop an online survey which ran from March 20 to April 18. The objective of the survey was to gather public input about the areas that City officials need to prioritize to make Cocoa more resilient to natural disasters and sea level rise. A total of 152 participants completed the survey. The majority of respondents want government officials to focus their efforts on addressing inadequate infrastructure, hurricane and storm, and flooding issues within the City. Since Cocoa Village is one of the City's most vulnerable areas, the project team also worked on specific outreach efforts that targeted the local business community. This included hosting a business resiliency workshop on March 26. In addition to this event, the City's Economic Development Specialist met with individual businesses to help them fill out a business resiliency questionnaire.

Because flooding is one of Cocoa's major concerns, the ECFRPC used the REMI PI+ model to estimate the economic impact that strong precipitation events have on Cocoa Village businesses. This economic impact analysis is comprised of two scenarios. The "do nothing" simulation estimates the economic impact of not addressing the flooding events caused by intense precipitation. This scenario found that flooding events can have a deep impact on the local economy. The second scenario found that incorporating green infrastructure features within Cocoa Village could help ameliorate some of these negative impacts.

The ECFRPC used the information gathered from these previous tasks to develop a Resiliency Action Plan for the City of Cocoa. The plan includes a series of tasks focused around four main areas: Leadership and Strategy, Economic and Society, Infrastructure and Environment, and Health and Well Being. It also includes the appropriate City Department that will take on the task, its priority level, and recommended start year.

ABOUT THE ECFRPC

The ECFRPC was established in 1962 as an area-wide association of local governments. It is one of Florida's ten regional planning councils and serves governments and organizations located within Brevard, Lake, Orange, Osceola, Seminole, Sumter and Volusia counties. Council staff provides technical assistance in the areas of land use and environmental planning, emergency preparedness, geographic information systems (GIS), health, housing, urban design, transportation and economic and fiscal analysis among others. Because of the ECFRPC, member governments have received more than $10.6 million in federal grants since 2011. This represents a return on investment of $2.53 for every dollar paid in assessments

On September 19, 2018, the ECFRPC unanimously adopted a resolution to develop a process and framework for a regional resilience collaborative in east Central Florida. To date, two committees have been formed: a Council Sub-Committee and a Steering Committee. This regional collaborative will help build capacity and establish a shared mission and goals uniting knowledge, lessons learned, and future endeavors. The premise of the The City of Cocoa, along with the ECFRPC, Brevard County, and the Space Coast TPO have adopted the ECF RRAP. Others have the adoption resolution in the pipeline.

This report publication was funded in part, through a grant agreement from the Florida Department of Environmental Protection, Florida Coastal Management Program, by a grant provided by the Office of Ocean and Coastal Resource Management under the Coastal Zone Management Act of 1972, as amended, National Oceanic and Atmospheric Administration Award No. _____. The views, statements, findings, conclusions, and recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of the State of Florida, NOAA or any of their sub-agencies.

The Senate Bill 1094 (2015):
Requires coastal jurisdictions to add a '*Peril of Flood*' component within the Coastal Element of their Comprehensive Plans.

House Bill 7207 (2011):
Creates the "Adaptation Action Area" (AAA) optional designation for *"areas that experience coastal flooding and are vulnerable to the related impacts of rising sea levels for the purpose of prioritizing funding for infrastructure needs and adaptation planning for the purpose of prioritizing funding for infrastructure needs and adaptation planning*".



INTRODUCTION

Florida's coastal communities currently are experiencing more frequent flooding and storm surge events that are affecting their critical infrastructure, local economies, and the health and welfare of its residents. This has been recognized by the Florida Legislature, which recently passed *Peril of Flood* legislation to require the development of strategies that address sea level rise and flood hazards. Moreover, federal agencies such as the Federal Highway Administration, the U.S. Department of Housing and Urban Development, and the Federal Emergency Management Administration are now tying their funding programs to the long term environmental effects caused by sea level rise and flooding.

In order to address the effects of these naturally-occurring hazards, Florida's coastal communities must assess, plan and implement strategies to increase their resilience. To this effect, the ECFRPC collaborated with over 50 Brevard and Volusia County stakeholders to develop the East Central Florida Regional Resiliency Action Plan (RRAP). This RRAP identifies opportunities and gaps in planning for resilience and discusses local actions that could be implemented over a five-year timeframe to address climate-related vulnerabilities. Following the completion of the RRAP's process, the ECFRPC started working with local coastal governments to address resiliency issues. In 2018, the Florida Department of Environmental Protection's Florida Coastal Management Program (FCMP) and the National Oceanic and Atmospheric Administration (NOAA) awarded the City of Cocoa a grant to develop a community resilience plan. The Resilient Cocoa document contains several strategies to increase the City's resiliency to natural climate-related hazards based on the findings of a vulnerability analysis, several public engagement activities, and an economic impact analysis simulation,

Resilient Cocoa Project

Developed over a six-month period, the Resilient Cocoa project addresses resiliency issues in a holistic way by identifying the City's vulnerabilities using ArcGIS and NOAA data, receiving input from the public and business community, and performing an economic impact analysis. The projects main activities are described in more detail below.

Vulnerability Analysis:
The ECFRPC identified the social, economic, and functional vulnerabilities posed to the City from four natural hazards: storm surge, flooding, sea level rise, and coastal shallow flooding. This analysis was based on data from NOAA, the University of Florida's GEO Plan Center, and the Brevard County Property Appraiser, among others.

Public Engagement:
Cocoa citizens and business owners provided their input by participating at several public workshops and completing an online MetroQuest survey. In addition to these activities, the City's Economic Development Specialist met individually with several business owners to help them complete a business resiliency questionnaire.

Economic Impact Analysis:
The ECFRPC used the REMI model to estimated the economic impact of resiliency mitigation efforts. Staff developed two different simulations: a "do-nothing" scenario and another where the City implemented a "green infrastructure" resiliency program.

Strategy and Policy Development:
Based on the findings from the previous analyses and best practices, the ECFRPC developed an Action Plan that contains strategies to address resiliency issues within the City of Cocoa. This process included the formulation of comprehensive plan policies for compliance with SB 1094 (Peril of Flood) legislation. The Data and maps developed as part of this study will be incorporated into the City of Cocoa's Coastal Element in order to fulfill this state requirement.

About Cocoa

Located on Florida's east coast, the City of Cocoa is bounded by Cidco Road to the north, Rosa L. Jones Road to the south, the intersection of State Road 524 and State Road 520 to the west, and the Indian River Lagoon to the east. US-1 cuts vertically through the City and the Martin Andersen Beachline Expressway and Hubert Humphrey Bridge provide access to Merritt Island. Three miles west of City limits, Interstate 95 provides an important connection to north and south Florida. Cocoa is also located in close proximity to NASA, Patrick Air Force Base, and Cape the Canaveral Air Station.

The City's social and economic hub, Cocoa Village, is located on a small, southern peninsula that juts into the lagoon. First developed in the mid 1880s, this area remains a popular destination for events, shopping, and gourmet dining. Cocoa Village is home to several historical assets including the Playhouse Theater, the Porcher House, and the Florida Historical Society. The Playhouse is Cocoa's oldest theater. Opening it's doors to the public in 1924, the theater played silent movies but later showed Brevard's first "talkie" movie. Known as the "Broadway on Brevard", over 55,000 patrons view theater productions here each year. Additionally, The Porcher house is quintessential 20th century revival architecture. Sitting adjacent to the Cocoa Riverfront Park, the house was originally built in 1914 by Edward Porcher. The home was later purchased by the City to become City Hall and is now open to the public with rooms to rent for weddings and other special occasions. Also located in Cocoa Village, the Florida Historical Society is dedicated to preserving Florida's past through the collection and archival maintenance of historical documents and photographs, as well as publishing scholarly research on Florida history. It also educates the public about Florida history through a variety of history projects and programs.





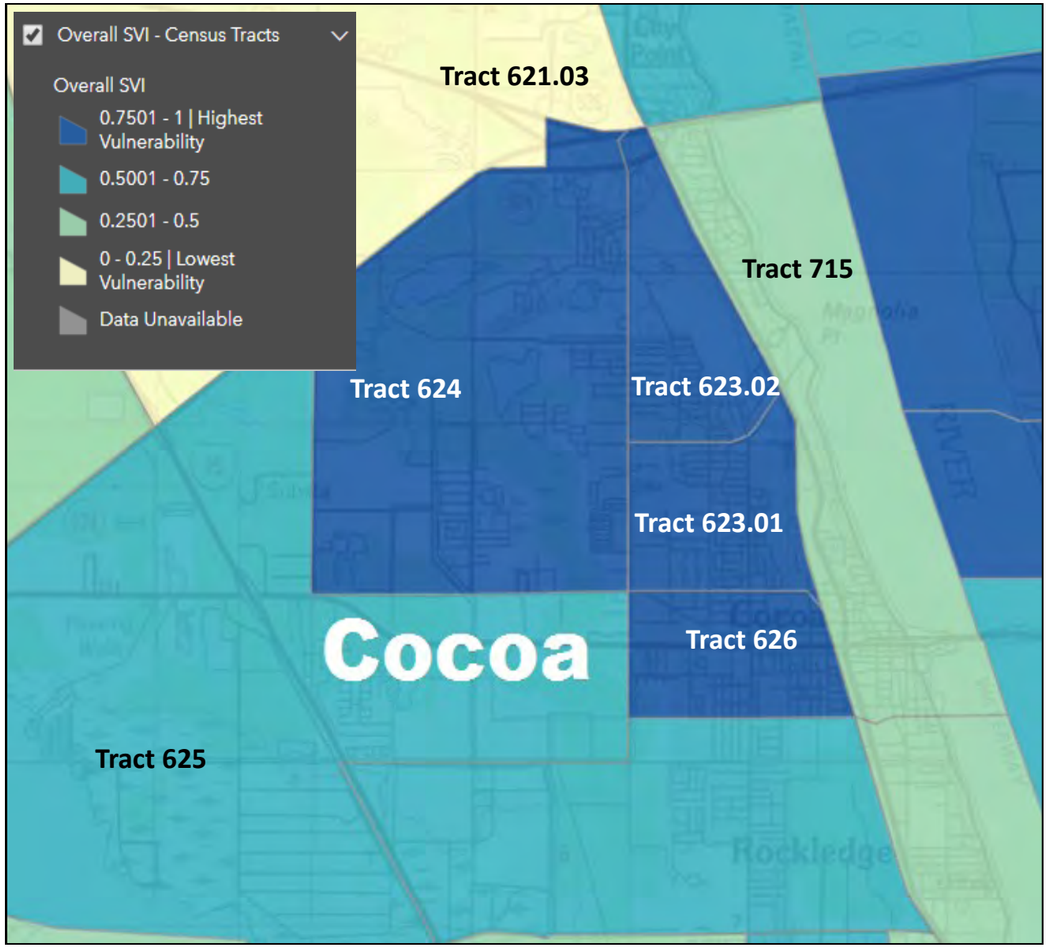


City Demographics and Vulnerable Populations

Understanding demographic and socioeconomic variables is important to help the City become more resilient to future natural hazards. Cocoa is currently home to 17,748 residents. The average age of City's residents is 38 years old, with about 30% of its population being 55 years and older (US Census Bureau). The average household income in Cocoa is $32,685 and 24% of residents considered to be living in poverty. These numbers contrast greatly with those of Brevard County, which has higher median incomes and lower poverty levels.

The Center for Disease Control developed the Social Vulnerability Index (SVI) to identify communities that may need support in preparing for hazards and recover from disaster. The SVI score groups 15 census-derived factors into four themes that summarize the extent in which an area is socially vulnerable to a disaster. These themes are *Socioeconomic Status*, *Household Composition/Disability*, *Race/Ethnicity/Language, and Housing/Transportation.* The SVI score scale goes from 0 (least vulnerable) to 1 (most vulnerable). According to the SVI, the approximate overall score for the City if Cocoa is .7077. Census Tract 621.03 is the City's less vulnerable area (SVI 0.16). The lower part of the City contains four highly vulnerable Census Tracts with scores ranging from .8718 (CT 624) to .9983 (CT 626).

According to the University of Florida's Shimberg Center, more than 31 percent the of the City's renter are severely cost burdened. This means that they spend 50 percent or more their salaries on housing. These households are more vulnerable to natural disasters and will need more assistance with emergency preparedness and recovery. Moreover, median income families living within the City spend about 53 percent of their incomes to cover both housing and transportation costs.



Data Set	Brevard	Brevard % Total	Cocoa	Cocoa % Total
Families Below Poverty Level	13,670	9.4	918	21.7
People Below Poverty Level	75,104	13.2	4,669	26.3
Population Age 65 and Over	129,240	22.7	2,949	16.6
Individuals who Speak English less than Very Well	18,527	3.3	973	5.5
Total Persons Unemployed	19,763	7.6	820	10.4
Occupied Household with No Vehicle	12,725	5.6	887	13.0

Source: ACS 2013-2017

VULNERABILITY ASSESSMENT

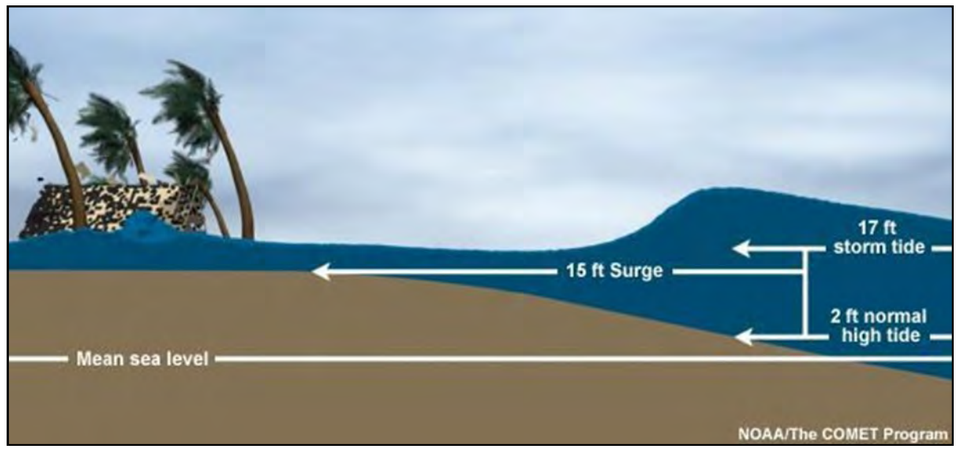
The vulnerabilities assessed in this analysis are: shallow coastal flooding, storm surge, sea level rise, the combination of storm surge and sea level rise, and FEMA flood areas. Modeling by the Tampa Bay Regional Planning Council also assessed storm surge combined with the effects of sea level rise.

Shallow Coastal Flooding

Shallow coastal flooding or nuisance flooding includes low-lying coastal areas susceptible to flooding during extreme high tides. According to NOAA, extreme high tides occur a few times per year because of the alignment of the sun, moon, and earth. Flood levels can increase due to rainfall or wind during storm events. Since the 1960's, high tide flooding occurrences have increased 5 - to 10-fold in several U.S. coastal cities.

Storm Surge

Storm surge is the rise of water past the normal tide level because of a storm. Storm winds push water farther up the shore. The destructive force of a storm surge can damage underground utilities and water mains, disable electrical equipment, erode seawalls and revetment systems, and destroy roadways, sidewalks, homes, and businesses.



Storm Surge

Shallow Coastal Flooding

Nuisance flooding areas are areas that flood frequently during higher than average tide events.



Storm Surge

Storm surge occurs when hurricanes and tropical storms raise water levels in coastal areas which is pushed on shore.



Sea Level Rise

Sea level rise is occurring at an alarming pace along Florida's east coast. This is a long-term hazard.



Surge + Sea Level Rise

Referred to as the "Combined Hazard Zone", this includes the long-term effects of surge plus sea level rise.



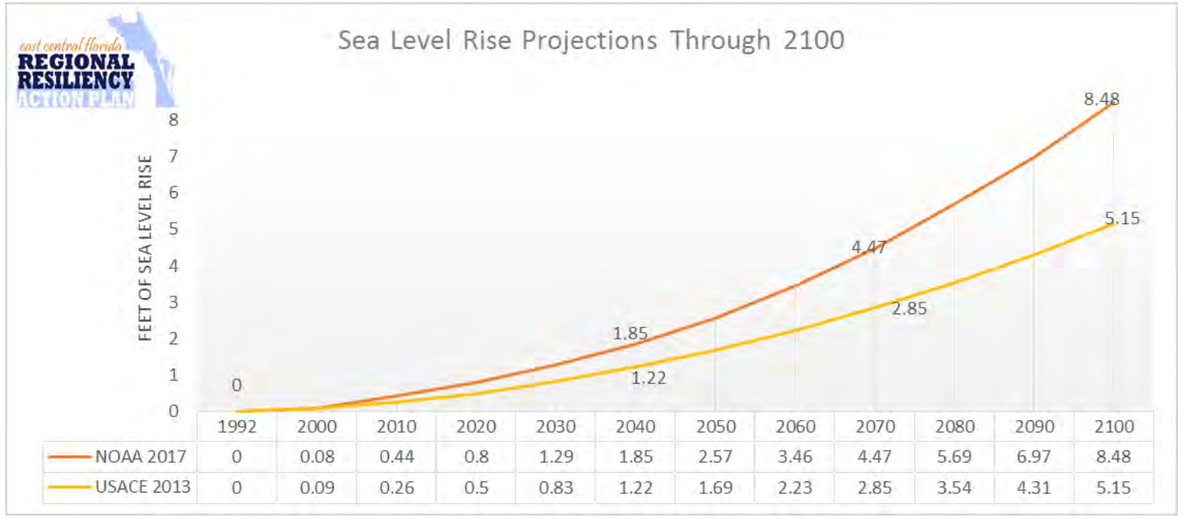
100-Year Flood

The 100-year flood zone depicts areas that have a 1% annual chance of flooding.



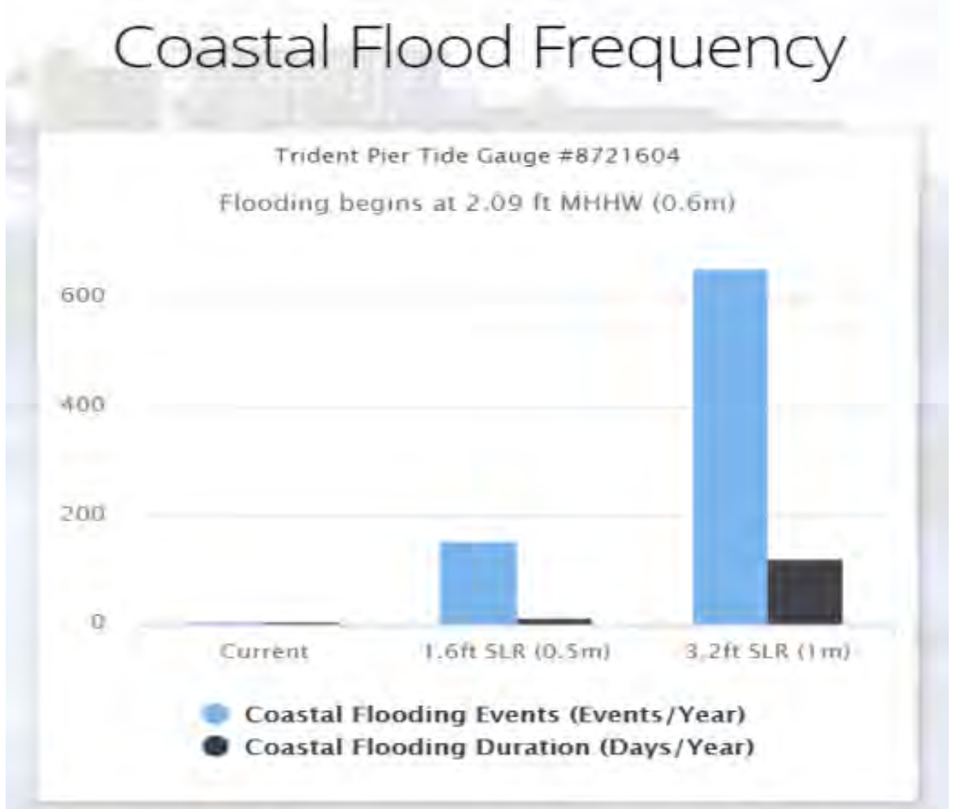
Sea Level Rise

Sea level rise is the steady and continuous increase of water elevation along the coast which will push the shoreline inland. This analysis used two sea level rise projection curves: NOAA 2017 and United States Army Corps of Engineers 2013. The maps depict the potential areas of impact based upon the NOAA projection rate curve for the 2040, 2070, and 2100 planning horizons. While the maps show areas that will be inundated during MHHW, sea level rise effects may be seen prior to inundation through increased erosion and wave action, as well as failure of the stormwater systems.



Storm Surge and Sea Level Rise

The combination of Category 3 storm surge and NOAA sea level rise projections are important in order to understand the effect that sea level rise has on coastal areas during tropical storms. Sea level rise in the near term is not dramatic when viewed on its own. However, coastal storm run-up and storm surge can be pushed past a tipping point when sea levels are higher than today.



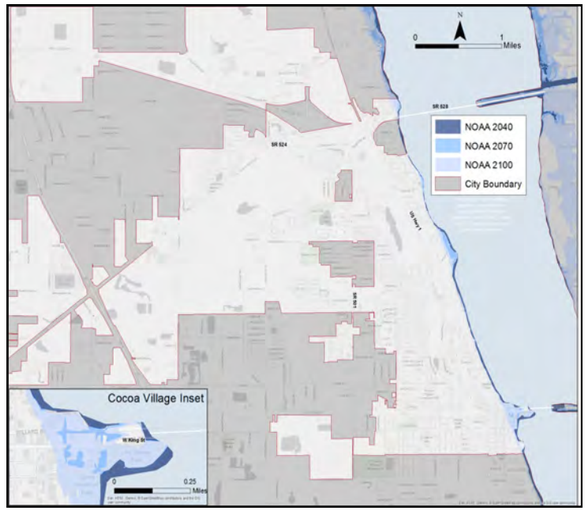
FEMA Designated Flood Areas

The FEMA Digital Flood Insurance Rate Maps (DFRIM) from 2014 were used to identify assets located in the 100- and 500-year flood zones. DFIRMS data indicates flood risk information derived from Flood Insurance Studies (FISs). According to FEMA, flood risk can change over time based on development patterns and environmental and watershed conditions. For this reason, FEMA has started to conduct a RiskMAP Coastal Restudy for Brevard County which includes revised DFRIMS. As of the time of this analysis, the study and revised DFIRMS have yet to be reviewed and adopted (December 2018). It is recommended that after the DFIRMS are adopted, the new analysis should include areas added to the flood zones.

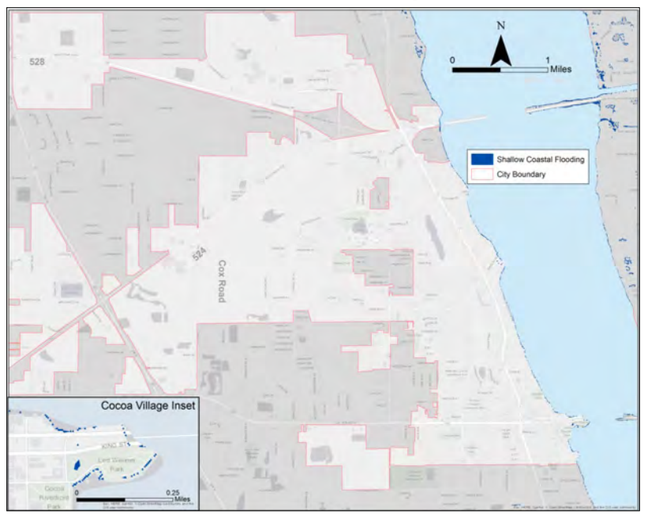
Major Findings

The findings section details the vulnerabilities of the City's transportation network, critical facilities, impacted land uses, and financial values for at-risk properties. Three areas within the City will be consistently impacted by all vulnerabilities. **High Point** is a residential area found in the north-east corner of the city. **Magnolia Point, a** mix of residential and vacant land, sits on the center of Cocoa's vertical coastline and extends into the lagoon. Finally, **Cocoa Village** is the economic and social hub of the city and the third focus area. Larger versions of all the maps can be found on the Map Appendix at the end of this document.

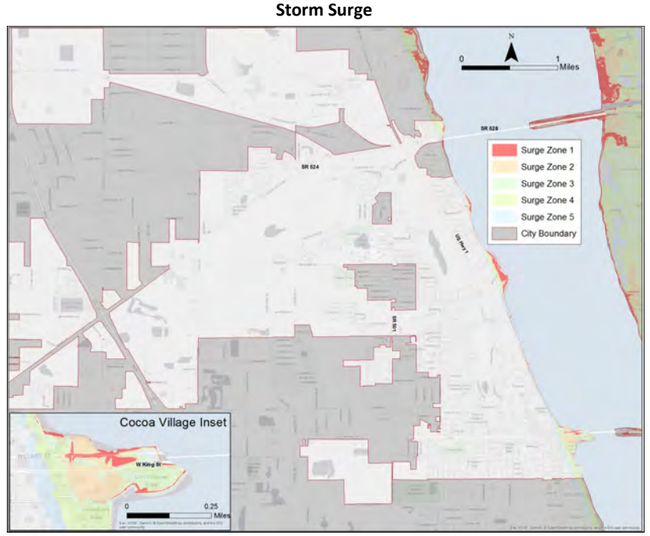
NOAA Sea Level Rise



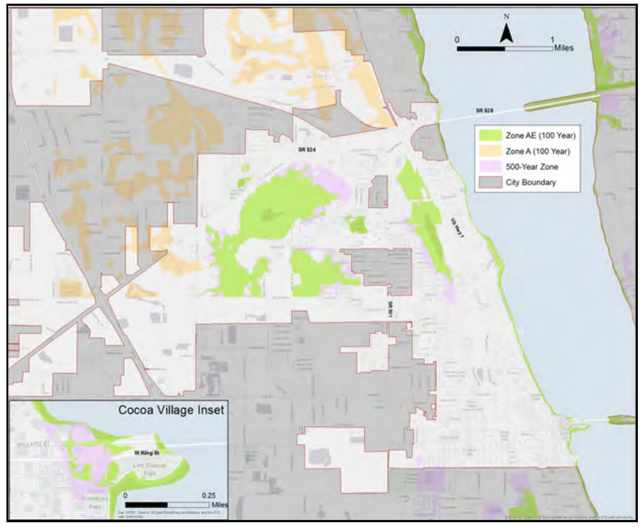
Shallow Coastal Flooding



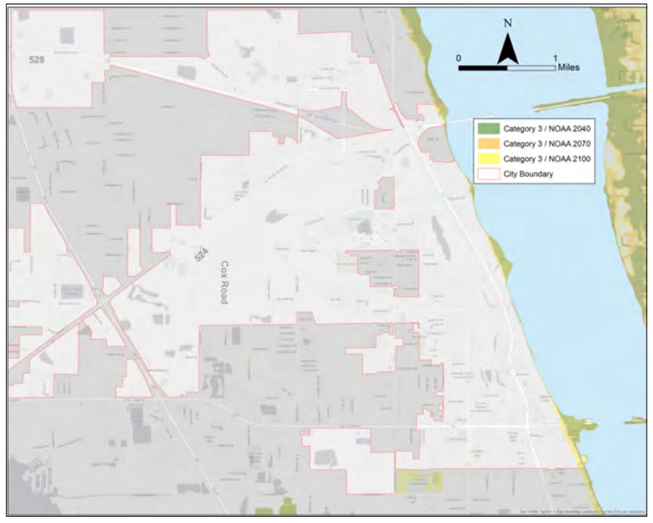
Storm Surge



FEMA Designated Flood Areas



Surge + Sea Level Rise Combo



Transportation

Roadways, especially those found along coastal waters, are constantly enduring hazards that degrade their integrity. Flooding, storm surge, and erosion can disable and destroy vital transportation infrastructure. Important facilities and evacuation routes can become inaccessible, choking economic vitality and bottlenecking the city's traffic flow. Impacts should not only just be considered to the roadway itself but also the utilities that are associated with the roadway in its right of way or underground.

The table summarizes the impacts to roadways within the City of Cocoa by hazard and subdivided by Florida Department of Transportation (FDOT) classification. Local roads, a responsibility of the City, will suffer the greatest amount of inundation from sea level rise at horizon years 2070 and 2100. They are also the most impacted type of roadway for FEMA 100 Year Flood Zone, shallow coastal flooding, and the combined zone. King Street, a principal arterial road that is an entryway onto Hubert Humphrey Causeway, sees more than 12,000 Average Annual Daily Traffic (AADT). Willard Street, also in Cocoa Village, has an AADT of 29,000. Emergency response times and evacuation efforts could be severely disrupted when these roads become inundated.





Indian River Drive & Sunset Terrace washed out by Hurricane Irma 2017 (Via Twitter)

Roadway Classification *(FDOT)*	Storm Surge CHHZ *(Miles)*	NOAA SLR Year 2040 *(Miles)*	NOAA SLR Year 2070 *(Miles)*	NOAA SLR Year 2100 *(Miles)*	ACOE SLR Year 2040 *(Miles)*	ACOE SLR Year 2070 *(Miles)*	ACOE SLR Year 2100 *(Miles)*	100 Year Flood Zone *(Miles)*	Nuisance Flood Area *(Miles)*	Combined CHHZ *(Miles)*
Principal Arterial Expressway - Rural & Urban	1.26	0.34	0	0.34	0	0	0	0.4	0.15	2.21
Principal Arterial Other - Rural & Urban	1.89	0.59	0.14	0.4	0	0	0.28	0.7	3.3	6.54
Minor Arterial Rural & Urban	0	0	0	0	0	0	0	0.6	0	0
Major Collector Rural & Urban	0	0	0	0	0	0	0	0.27	0	0
Local - Major Roads	0	0	0.07	1.8	0	0.03	1.04	1.1	1.35	6.59
Local - Minor Roads	0	0	0.06	0.89	0	0	0.45	2.55	0.6	4.3
All Evacuation Routes	13.8	0.93	0.15	0.75	0	0	0.28	1.76	0.5	8.6

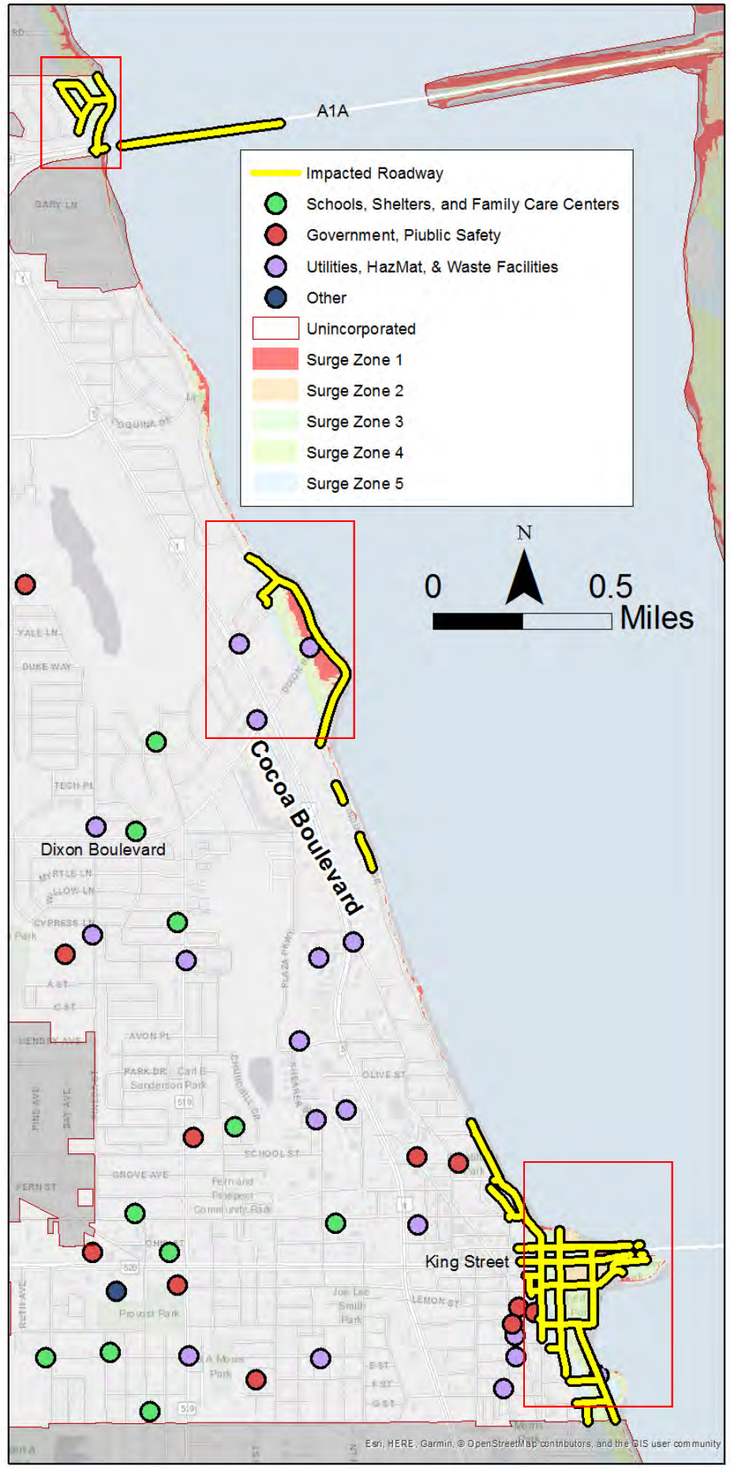
Storm Surge

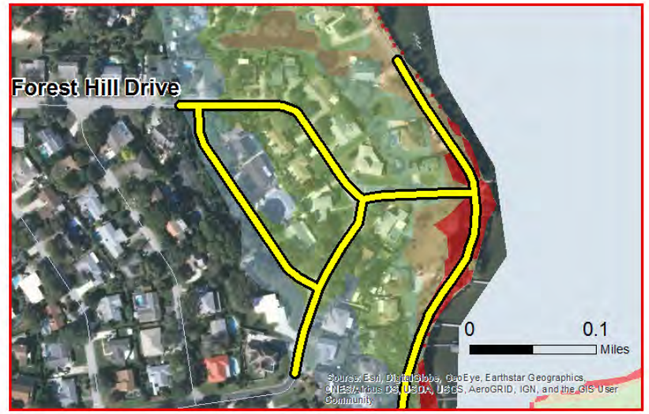
The total miles of vulnerable roadway to surge is as follows:

Road Name Classification	Storm Surge Categories				
	1	2	3	4	5
Willard Street* Principle Arterial - Other	0.12	0.3	0.49	0.75	1.07
State Road A1A* Principle Arterial - Freeway & Expressway	0.05	0.13	0.38	0.78	1.26
King Street* Principle Arterial - Other	0	0.11	0.27	0.51	0.83
State Highway 515 Local - Major Road	0.5	1.24	2.14	3.74	5
Brevard Local - Major Road	0	0	0.02	0.03	0.28
Riverside Local - Major Road	0	0	0.09	1.2	1.5
Church Local - Major Road	0	0	0	0.06	0.07
Total	0.67	1.78	3.39	7.07	10.01

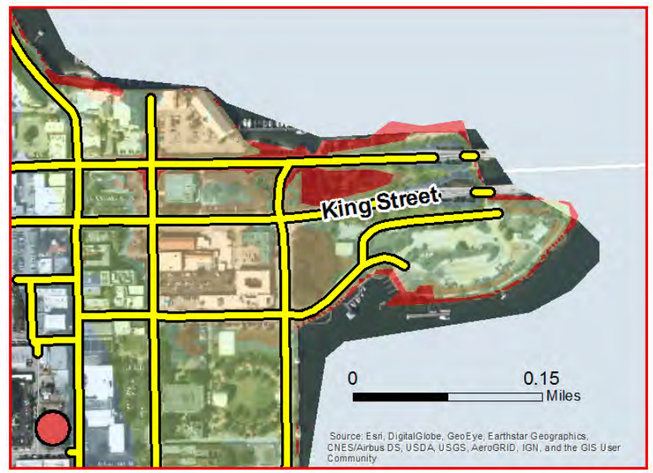
Measured in miles

Note that the total miles of roadway do not indicate a continuous stretch of impact but could represent smaller segments across the corridor.









Sea Level Rise

The following table shows major roadway impacts. Note that the total miles of roadway do not indicate a continuous stretch of impact but could represent smaller segments across the corridor.

Road Name	ACOE Projection			NOAA Projection		
	2040	2070	2100	2040	2070	2100
State Hwy 515	0	0.03	0.92	0	0.63	1.41
Brevard	0	0	0.01	0	0	0.05
Riverside	0	0	0.11	0	0	0.29
Willard Street	0	0	0.17	0.29	0.13	0.22
King Street	0	0	0.11	0.29	0.02	0.19
State Road A1A	0	1	2	0.35	0.008	0.34
Church	0	0	0	0	0	0.01

Measured in miles







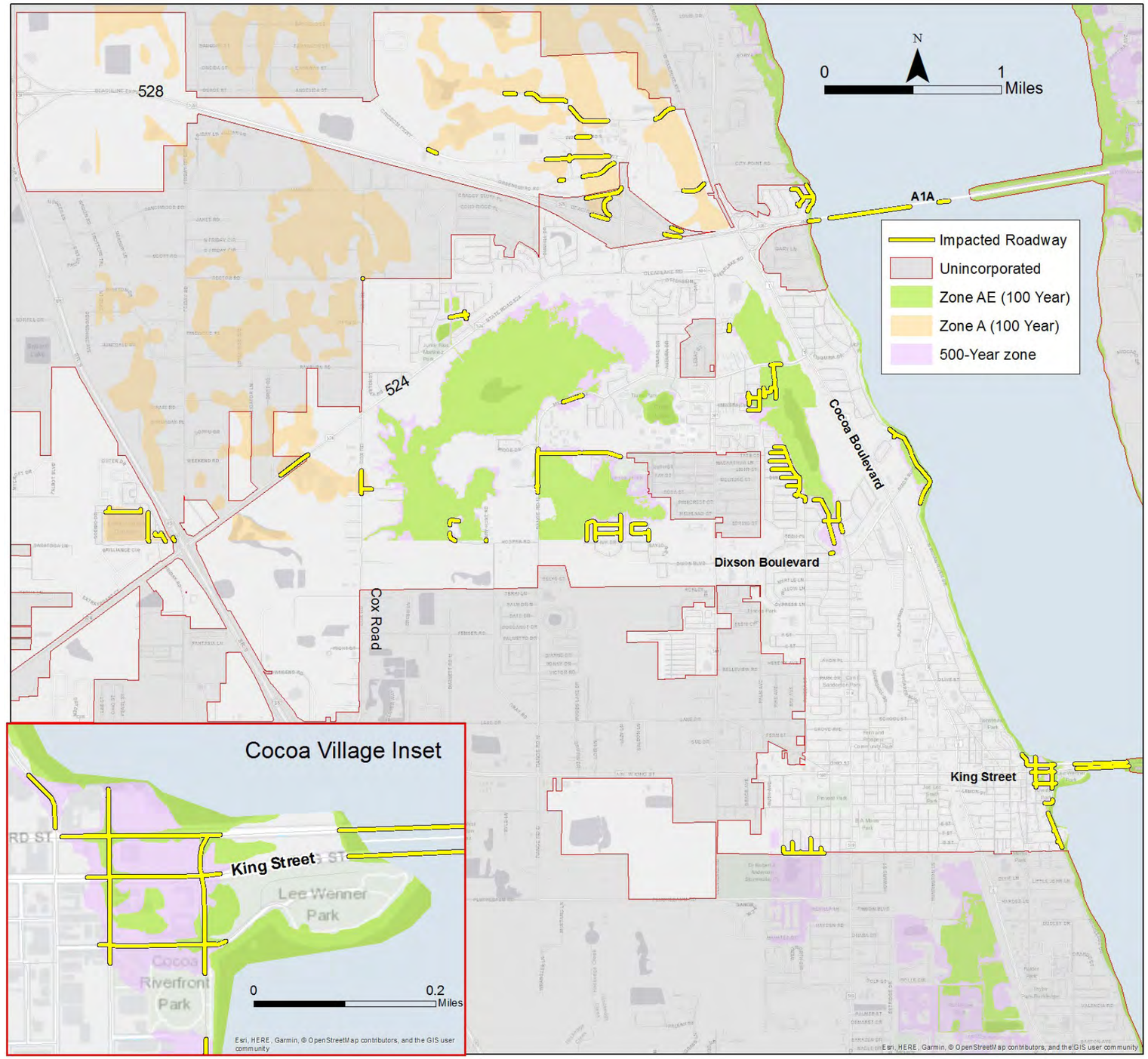


FEMA Designated Flood Areas

This map displays the impacted roadways along FEMA designated flood areas. Compared to the previous hazards, more roadways are affected by this flooding because of the widespread nature of the inundation.

The following table shows major roadway impacts. Note that the total miles of roadway do not indicate a continuous stretch of impact but could represent smaller segments across the corridor.

Road Name Classification	100-Year Flood Zones A, AE, AH, AO, VE --- Projected Inundation (miles)	500-Year Flood Projected Inundation (miles)
Range Road *Major Collector*	0.15	0.42
Cox Road *Major Collector*	0.12	0.13
Beeline Expressway *Principal Arterial*	0.18	0.18
State Road A1A *Principal Arterial*	0.22	0.57
King Street *Principal Arterial*	0.31	0.42
Willard Street *Principal Arterial*	0.42	0.45
Michigan Avenue Major Collector	0	0.12
State Highway 515 *Local - Major Road*	0.7	1.07



Land Use

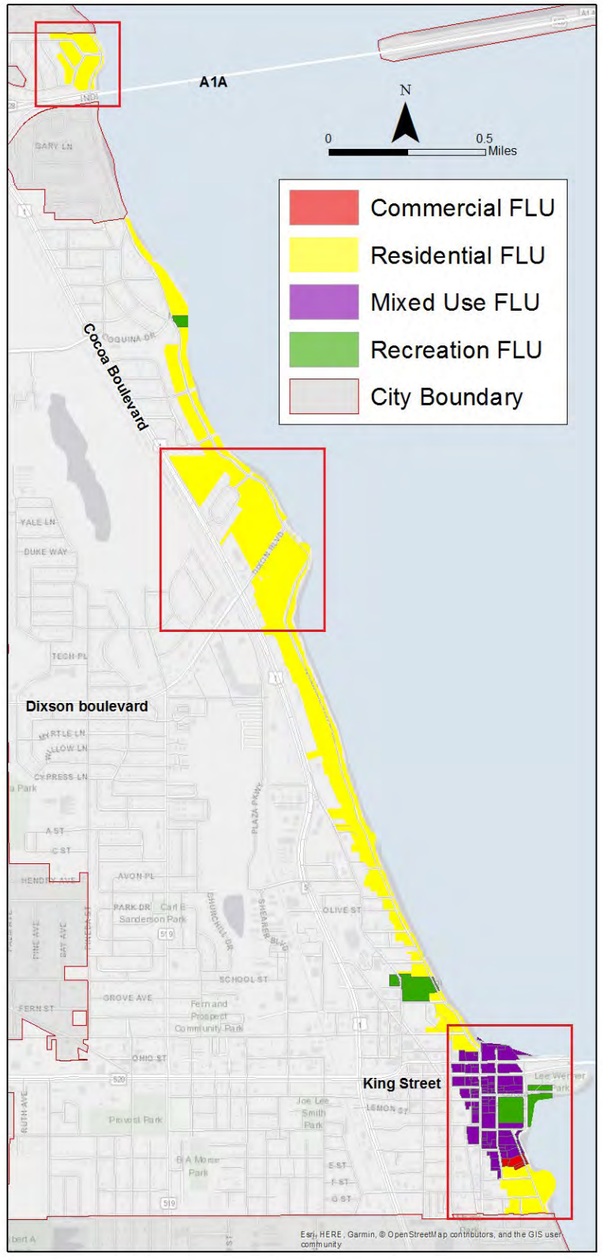
This analysis determines which types of parcels would be impacted. The FLU designations that were studied are as follows: Commercial, Low/ Medium/High Residential, Mixed Use, Industrial, Conservation and Public and Recreation.

Storm Surge

Storm surge can breach up to approximately 0.25 miles inland, depending on the category of storm. Upwards of 147 acres of residential property will be impacted by a category 5 storm surge. All 31.7 acres of exposed Mixed Use areas are located in Cocoa Village, as well as the surrounding Public & Recreation areas. High Point is currently developed and will see its residential parcels impacted. Magnolia Point is largely.

Storm Surge Zone	Commercial	Low Density Residential	Med. Density Residential	High Density Residential	Mixed Use	Public & Recreation
Category 1	1.0	92.8	1.5	14.9	11.2	11.3
Category 2	1.0	104.8	1.5	15.2	16.2	11.3
Category 3	1.0	107.2	3.3	15.6	17.8	11.3
Category 4	1.4	115.4	4.6	15.9	23.2	11.3
Category 5	1.4	119.7	8.5	19.1	31.7	15.9

Measured in acres









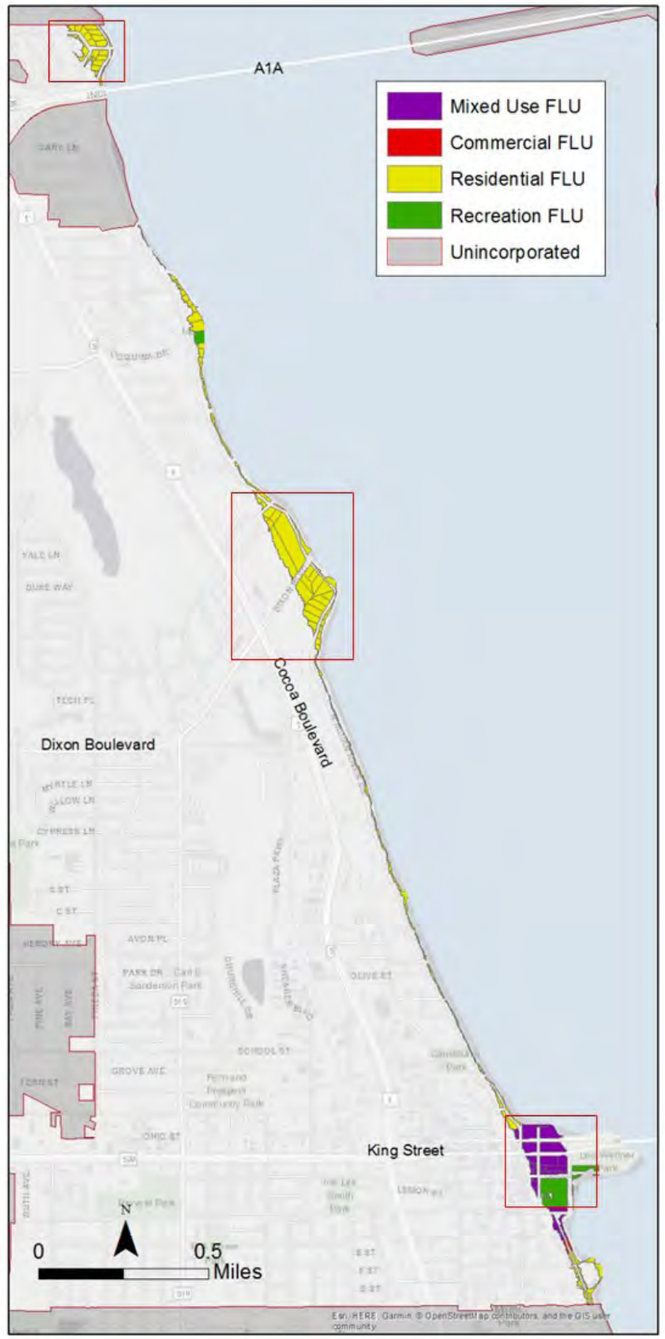
Sea Level Rise

The projected impacts of sea level rise vary depending on the curve, data source, and time horizon analyzed. For the purposes of this text analysis, the NOAA "High Curve" will be highlighted to show maximum modeled inundation.

The three focus areas, High Point, Magnolia Point, and Cocoa Village, will bare the largest burden of Cocoa's sea level rise vulnerabilities. Cocoa's shoreline is largely residential FLU and will see approximately 136 acres exposed to sea level rise inundation by 2100. In the downtown area, exposure is projected to infringe on properties with mixed-use FLU, as well as reaction areas. Single family houses that line the shore will be at risk of sea level rise inundation.

Flood Zone	Commercial	Low Density Residential	Medium Density Residential	High Density Residential	Mixed Use	Public & Recreation
2040 *ACOE Curve*	0	0	0	0	0	0
2070 *ACOE Curve*	0	3.6	0	0	0	2.0
2100 *ACOE Curve*	0.2	67.9	3.7	7.9	16.6	11.4
2040 *NOAA Curve*	1.2	83.6	1.5	17.7	10.7	17.1
2070 *NOAA Curve*	1.2	93.6	1.5	17.7	15.4	17.1
2100 *NOAA Curve*	1.2	114.8	3.7	17.7	20.8	17.1

Measured in acres







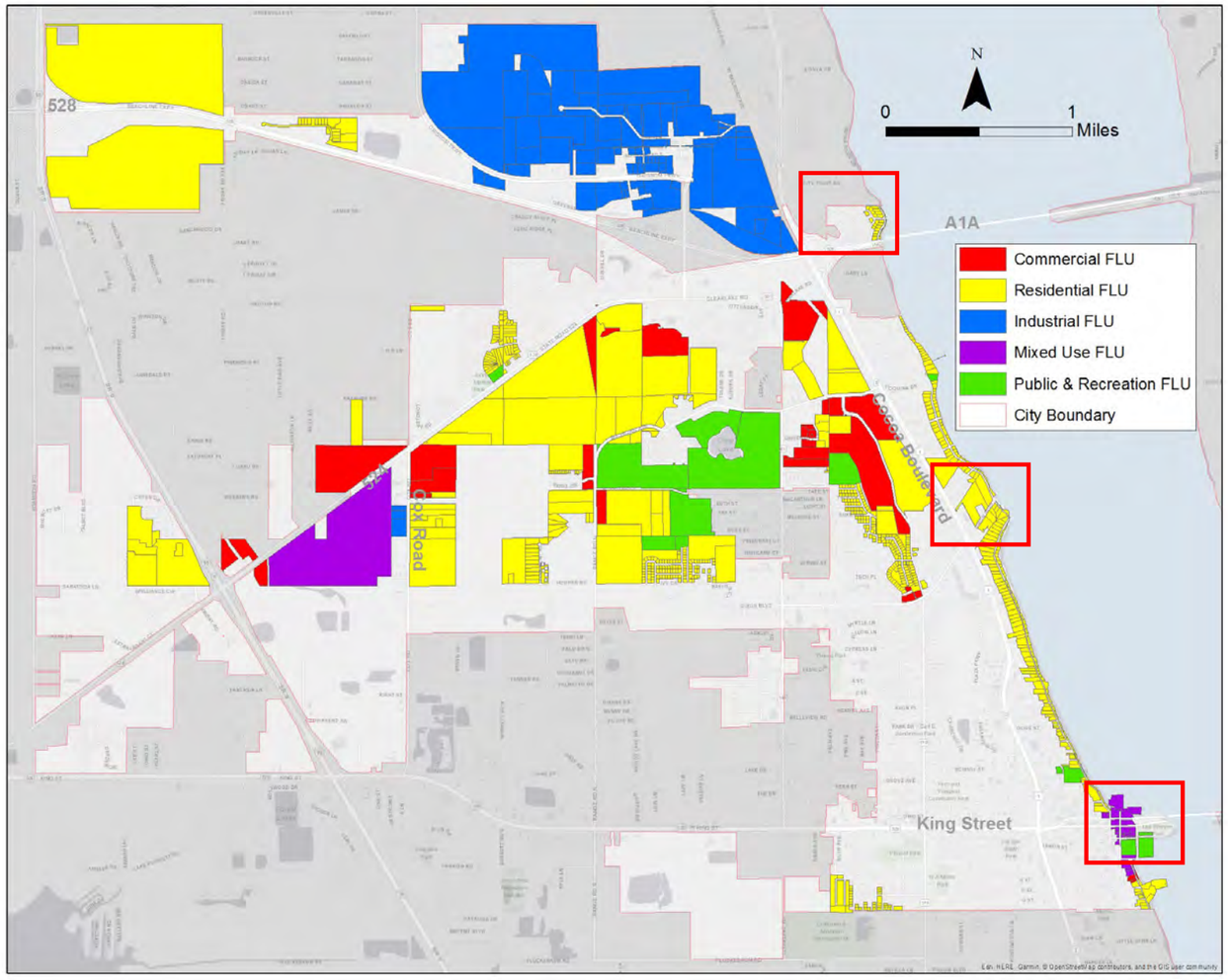


FEMA Designated Flood Areas

The City of Cocoa has large areas of land that are located in FEMA's 100 Year (Zone A, Zone AE) and 500 Year flood plain. This map displays the parcels that are projected to be impacted by FEMA designated flooding. Unlike the other hazards, industrial property is exposed to flooding. In total, approximately 3,311 acres of land are vulnerable to a 500-year flood event. Nearly 800 acres of industrial FLU are at risk, as well as over 1,500 acres of residential property. The following table shows the breakdown by FLU category.

Flood Zone	Commercial	Conservation	Low Density Residential	Medium Density Residential	High Density Residential	Industrial	Mixed Use	Public & Recreation
Zone A *(100 Year)*	69.3	0	494.4	76.3	0	783.1	158.7	0
Zone AE *(100 Year)*	181.9	226.8	626.1	256.2	17.7	0	15.3	245.3
500 Year *(Includes 100 Year)*	294	226.8	1227.7	340.3	17.7	783.1	176.9	245.3

Measured in acres



High Point



Magnolia Point



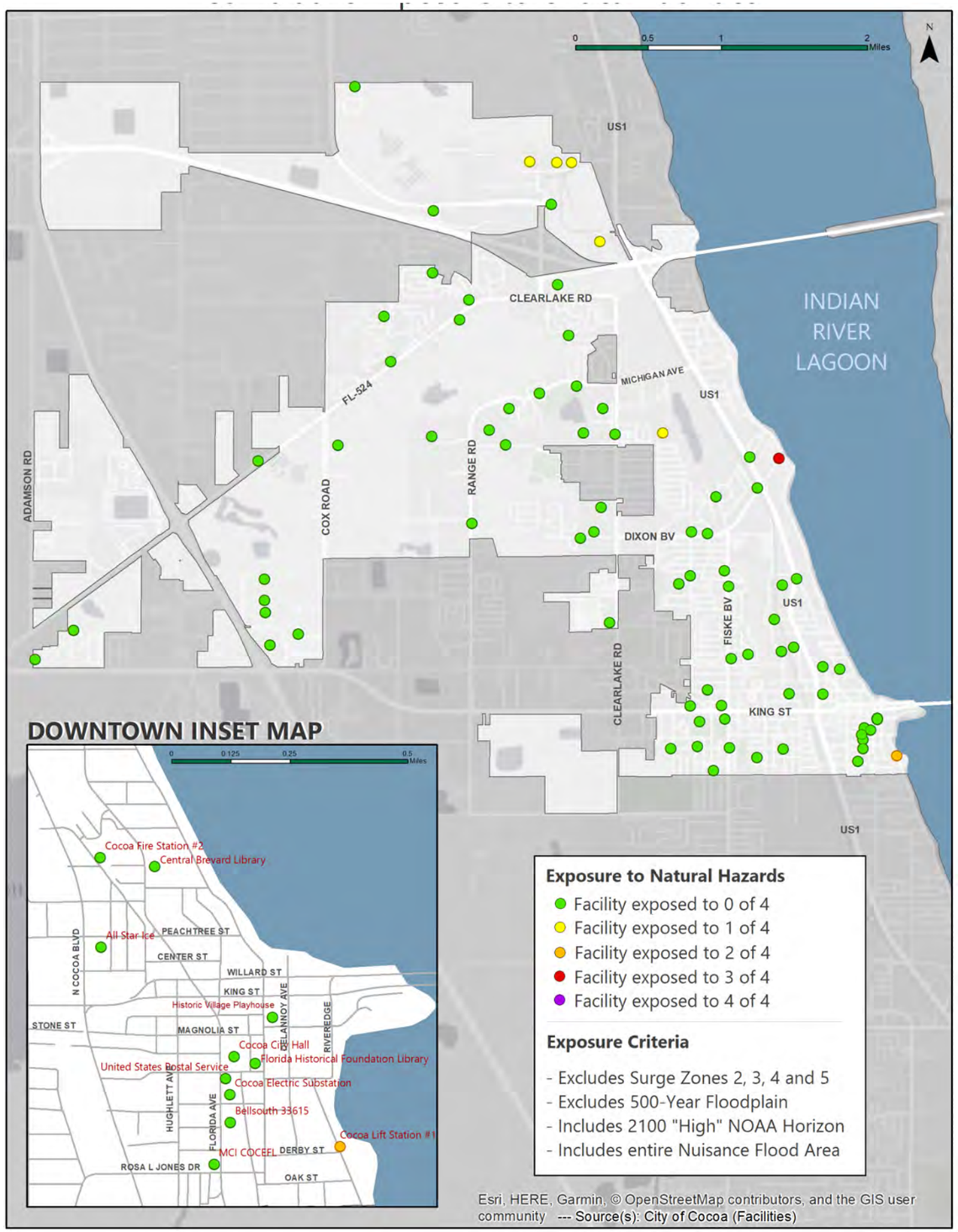
Cocoa Village



Critical Facilities

The critical facilities analysis in this report details the risk posed to infrastructure critical to the life, safety, health and continuity of city-wide operations following storm events. Eleven critical facilities are exposed to at least one hazard in Cocoa. All listed facilities are located in a flood zone. Three lift stations risk exposure to natural threats, with two stations impacted by storm surge, sea level rise, FEMA floods, and shallow coastal flooding. Facilities that are located in shallow coastal flooding areas should be assessed further by the City as they would potentially be the most vulnerable to flooding in the future. Cambridge Elementary School acts as a shelter in emergency situations and faces inundation threats by the Zone AE flooding. While this analysis was based on exposure of the building footprint to each vulnerability, as noted previously in the report, access to these facilities should also be considered.

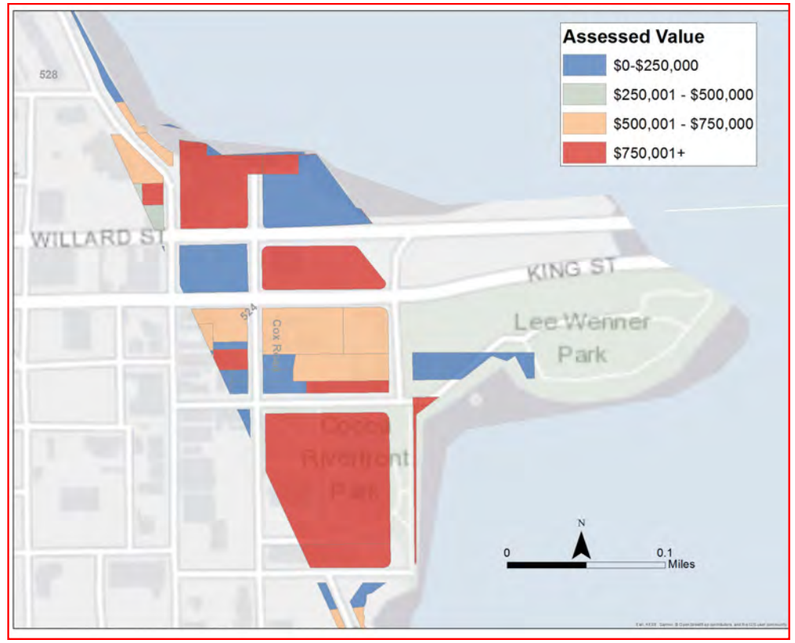
Facility	Facility Type	Storm Surge Zone	ACOE SLR Horizon	NOAA SLR Horizon	Flood Zone	Shallow Coastal Flood Area
ATM Recycling	Waste Facility	None	None	None	Zone A	No
Beyel Brothers Inc - Cocoa	Waste Facility	None	None	None	Zone A	No
Cambridge Elementary School	School (Shelter)	None	None	None	Zone AE	No
Central Brevard Library	Government	None	None	None	None	No
City Point Electric Substation	Utility	None	None	None	Zone A	No
Cocoa Lift Station #1	Utility	Category 4	2100	2100	500 Year	Yes
Cocoa Lift Station #24	Utility	None	None	None	500 Year	No
Cocoa Lift Station #45	Utility	Category 2	2100	2070	Zone AE	Yes
Eastern Florida State College	School	None	None	None	500 Year	No
Goodson Paving	HazMat Facility	None	None	None	Zone A	No
Vernita Jones Family Day Care	Day Care	None	None	None	500 Year	No



Adaption Action Area

An Adaptation Action Area (AAA) is a designation tool for prioritizing infrastructure development and policy implementation to areas impacted by both Category 3 Storm Surge and the Army Corps of Engineers' (ACOE) 2070 Sea Level Rise projection. The City of Cocoa is impacted by Storm Surge Category 3 and AOE 2070 Sea Level Rise along its coast. Cocoa's downtown area is completely vulnerable to these hazards and therefore should be within the Adaptation Action Area. Indian River Drive, which snakes along the coast, is the de facto boundary for the AAA. Gray and green infrastructure can be used to alleviate flooding urban areas. Implementing these strategies require an understanding of the existing and impending hazards, as well as the City's fiduciary responsibility. AAAs should incorporate synergetic and geographically focused elements to appropriate suite the environment.

Downtown Cocoa is home to some of the City's most expensive properties. These properties are exposed to nearly all hazards and pose a large financial liability for business and property owners.





Financial Impacts

Approximately 202 parcels in the City of Cocoa could be impacted by shallow coastal. The assessed value of these properties is $170.3 million. Almost 60% of buildings on these vulnerable properties were constructed before 1968 which was food insurance was first required for properties in flood-prone areas beginning in 1968. The highest-value-clusters of lagoon-adjacent properties exposed to this hazard are located in Cocoa Village.

Storm surge is expected to have a large financial impact on the City of Cocoa. In the event of a category 1 surge, vulnerable land is assessed at $167,000,000. For the most severe surge, a category 5, assessed land value balloons to over $222,000,000. Forty-six percent of vulnerable structures in storm surge areas, are immediately at risk in a category 1 coastal high hazard event. Property in the City of Cocoa is also at risk to sea level rise. According to NOAA time horizons, the city will see substantial impacts as early as 2040. Property value of over $170,000,000 is susceptible to inundation by this year. Nearly 60% of all structures on property impacted by NOAA's 2040 curve were built pre-1968, meaning their construction standards are much lower than the modern standards in place today. The 2070 NOAA curve will see impacted property values creep to $182,00,000 and will exceed $200,000,000 by the 2100 horizon year.

The Army Corps of Engineers projection curves have a starkly different outlook. According to this projection, the City of Cocoa wont see property damage until the 2070 horizon year, where 9 parcels will impacted. This number jumps to 118 parcels and $138,000,000 worth of damages by 2100.

Nuisance Flooding Area					Built Pre-1968	Built 1968-2001	Built 2002 - 2018
Parcels in Zone	Number of Buildings	Land Value	Assessed Value	Taxable Value	# Buildings Total Value	# Buildings Total Value	# Buildings Total Value
139	116	$36,220,800	$170,315,380	$117,073,071	63 $38,238,830	37 $64,727,740	16 $63,219,240

						Built Pre-1968	Built 1968-2001	Built 2002 - 2018
Storm Surge Zone	# Parcels in Zone	Number of Buildings	Land Value	Assessed Value	Taxable Value	# Buildings Total Value	# Buildings Total Value	# Buildings Total Value
Category 1	147	122	$38,567,030	$167,898,010	$121,344,197	66 $33,822,220	40 $65,957,240	16 $63,657,980
Category 2	166	136	$39,819,710	$175,722,620	$127,616,687	75 $38,182,150	43 $67,621,240	18 $65,165,580
Category 3	184	154	$41,045,970	$181,746,490	$131,793,427	88 $41,908,540	46 $68,147,950	20 $66,936,350
Category 4	238	199	$43,072,530	$198,929,200	$145,845,217	117 $50,163,740	61 $76,620,500	21 $67,172,190
Category 5	309	262	$46,605,680	$222,136,100	$158,197,081	168 $67,201,480	71 $81,779,220	23 $67,838,720

				Built Pre-1968	Built 1968-2001	Built 2002 - 2018
Horizon Year	# Parcels in Zone	Total Number of Buildings	Value of Parcels in Zone	Buildings Total Value	Buildings Total Value	Buildings Total Value
2040 *ACOE Curve*	0	0	$0	0 $0	0 $0	0 $0
2070 *ACOE Curve*	9	5	$2,866,420	1 $381,930	4 $1,967,460	0 $0
2100 *ACOE Curve*	117	93	$138,096,960	45 $22,184,470	37 $63,097,470	11 $48,754,290
2040 *NOAA Curve*	139	118	$170,051,950	69 $40,726,030	34 $62,611,440	15 $62,788,110
2070 *NOAA Curve*	167	137	$182,276,330	79 $46,026,520	43 $67,583,770	16 $64,057,990
2100 *NOAA Curve*	220	186	$203,760,390	105 $54,672,340	61 $77,054,700	21 $67,172,190

PUBLIC ENGAGEMENT

This section of the report discusses the Resilient Cocoa project's public engagement process, which included several outreach activities targeting residents and business owners.

Public Workshop

The City hosted a public workshop on February 12, 2019 at the City of Cocoa Chambers, which was facilitated by ECFRPC. The first part of the meeting included a presentation that illustrated how Cocoa might be affected by nuisance flooding, storm surge, and sea level rise. This was followed by a series of community engagement activities where the meeting's participants identified vulnerabilities, focus areas, and strategies to create a more resilient city. The ECFRPC used this information to develop a public survey for the City's residents.

Open House

The City hosted an open house on May 21 that included presentations from the ECFRPC, Brevard County Emergency Management, and the County Environmental Services Office.

Public Survey

As part of the community outreach process, the ECFRPC prepared an online survey using the MetroQuest public engagement software. The objective of the survey was to gather public input about the areas that City officials need to prioritize to make Cocoa more resilient to natural disasters and sea level rise. This survey was launched on March 20, 2019 and ended on April 18, 2019. City of Cocoa officials used a variety of methods to advertise the survey including the City's Facebook page. Moreover, Spectrum News 13 ran a story about the project on March 25, which included a link to the survey. Because of these efforts, a total of 152 participants completed the survey. Close to 70% of the respondents where either full-time or seasonal Cocoa residents. The majority of the participants were either newcomers to the City (less than five years) or long- time residents (21+years). Finally, most of the respondents were over 40 years old, which follows the City's demographics very closely.



The city of Cocoa is working with residents to best prevent catastrophic flooding. (Spectrum News image)

Experts: Cocoa Could Face More Flooding Due to Sea Level Rising

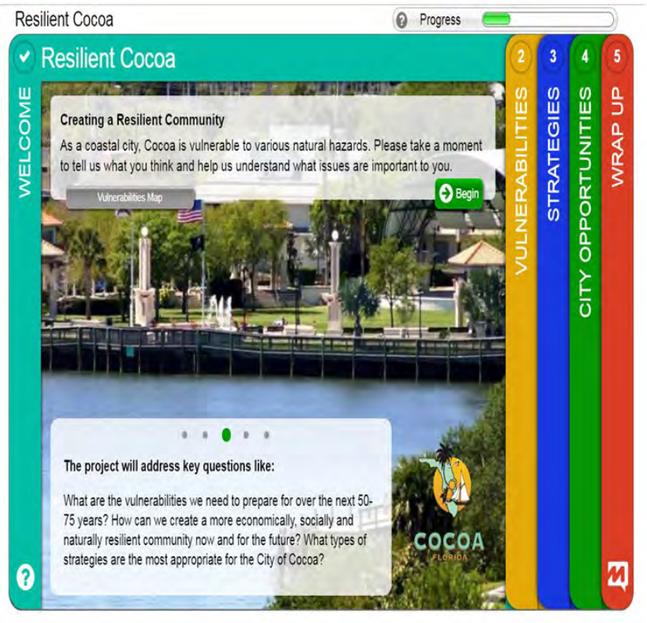
By Krystel Knowles

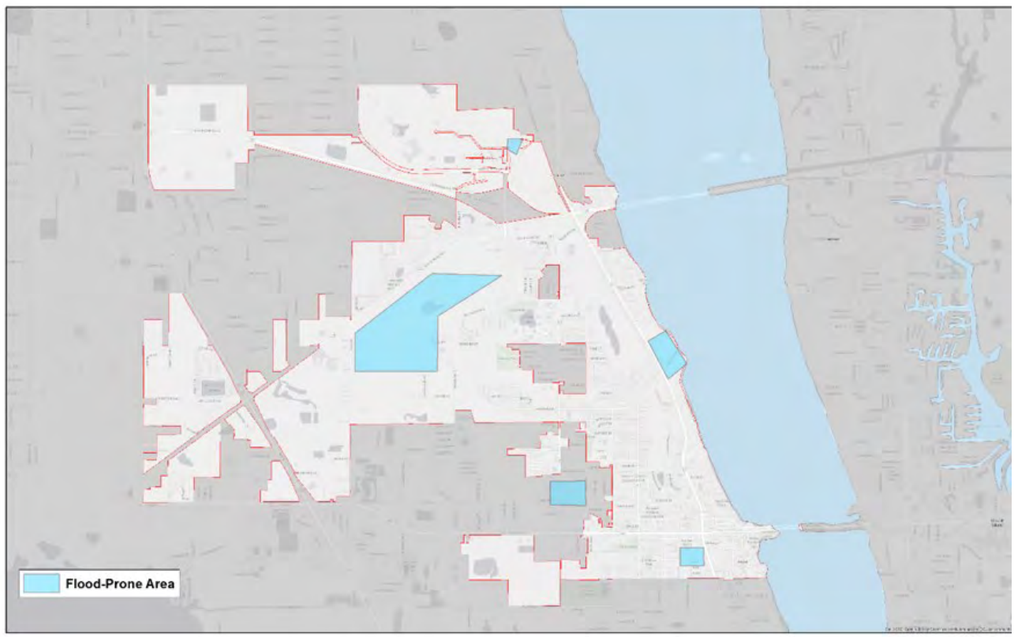
PUBLISHED 5:46 PM EDT Mar. 25, 2019 | UPDATED 6:09 PM ET Mar. 25, 2019

SHARE

COCOA, Fla. — The city of Cocoa is working to prevent potentially serious flooding. According to new data, the coastal city might be even more prone to flooding. Now, officials are looking for some help from residents.

- Sea level rising could make Cocoa more prone to flooding
- City asking residents to take survey to help with curbing damage
- LINK: Take the Cocoa survey here

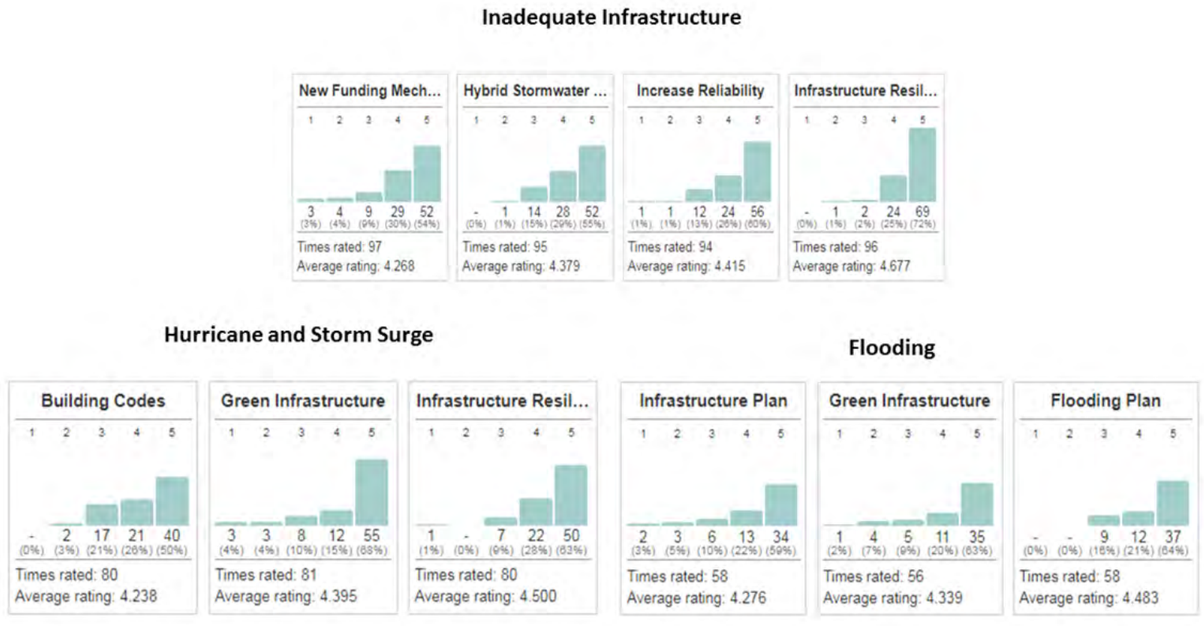




The first question of the survey asked participants to rank five vulnerabilities, which were based on input from the public workshop and the Brevard County Local Mitigation Study. Based on the combined survey results, the top three vulnerabilities were Inadequate Infrastructure, Hurricane and Storm Surge, and Flooding. After choosing their top three vulnerabilities, participants were then asked to show their support for several defined strategies by rating them on a one to five scale.

The highest rated strategies under the Inadequate Infrastructure vulnerability were identifying aging storm water/drainage infrastructure, requiring all infrastructure to incorporate new loads and meet current demand, and incorporating engineering and natural features to manage surface runoff. Under the Hurricane and Storm Surge vulnerability, survey participants want the City of Cocoa to focus on identifying critical infrastructure needs for storm preparedness recovery, using vegetative solutions along the Indian Rive Lagoon to reduce storm surge impact, and adapting the City's building and land development codes for greater resiliency standards. To address flooding, respondents also want the City to identify areas and corridors to prone to recurrent inundation, increase the number of green spaces that could be used for storm water retention, and develop a plan that incorporates best practices for grey and green infrastructure.

Finally, the survey asked respondents to prioritize areas that City officials should emphasize to create a more resilient Cocoa. The selected priorities include determining appropriate measures to mitigate, adapt or relocate critical infrastructure and assets vulnerable to extensive flooding and storm surge, updating codes & policies to promote the use of conservation lands and on-site natural features to protect water quality and manage storm water runoff, and promoting redevelopment in the least vulnerable areas.



Vulnerability	Vulnerability Description	Survey Rank
Economic Resiliency	Natural disasters can disrupt business operations and in the worst case scenario lead to closures and jobs losses in the community	4
Flooding	Standing water due to rainfall, tropical events, and high tides	3
Inadequate Infrastructure	Storm water infrastructure (retention ponds, ditches, curbs, sewer pipes) helps to manage water from rain events and prevent flooding. Failing septic tanks can pollute nearby water bodies such as the Indian River Lagoon	1
Hurricane and Storm Surge	Elements associated with hurricanes including wind, rain, utility failure, and surge from ocean and lagoon waters	2
Vulnerable Populations	Certain groups such as the elderly and the poor are particularly vulnerable when a disaster strikes	5

Business Outreach

Different from other concurrent studies, the Resilient Cocoa project included a business resiliency component. The ECFRPC and City reached out to Cocoa businesses in two ways. First, the ECFRPC hosted a business workshop on March 26, 2019. This event introduced attendees to the concept of resilience, explained the goals of the project, and finished with an interactive public engagement exercise using the Mentimeter polling software. The objective here was to identify the main challenges faced by businesses after a major storm event, and determine the most critical City services before and after a natural disaster. According to the meeting attendees, the most useful services before the storm were sand bags, tree trimming, and debris removal. After the storm, businesses benefited the most from water restoration, law enforcement, and debris clean up. Most of these businesses reported that they closed for at least a week after Hurricane Irma.

In addition to holding this event, the ECFRPC also prepared a survey for businesses. This questionnaire was shared by the City of Cocoa's Economic Development Specialist during her site visits with the area businesses. The survey questions were very similar to the ones asked at the business workshop. However, it also inquired businesses if they would be interested in developing a business continuity plan. City staff and the ECFRPC will be following up with those establishments that requested learning more about this process.

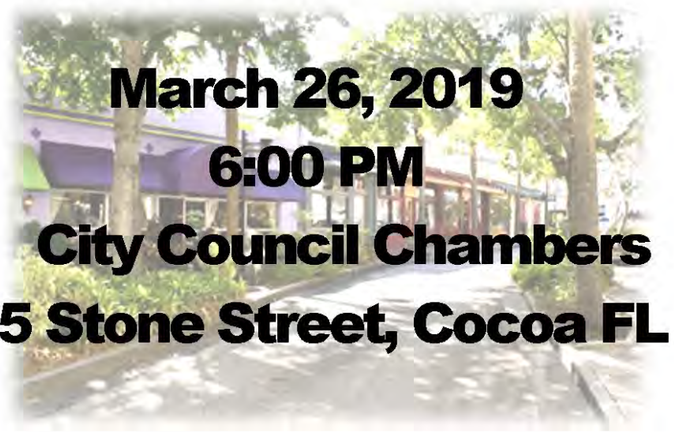




COCOA FLORIDA

Is Your Business Prepared for an Emergency?

The City of Cocoa and the East Central Florida Regional Planning Council are developing a plan to create a more resilient Cocoa. Resiliency is the capacity of communities and businesses within a city to bounce back after a natural disaster.



As part of this process, the City will be hosting a business workshop to learn how Cocoa businesses are preparing for natural disasters. For more information about this meeting, please contact Samia Singleton at (321) 433-8577 or via-mail at ssingleton@cocoafl.org.

ECONOMIC IMPACT ANALYSIS

According to most scientists, changes in the climate over the next decades will lead to an increase in the number and intensity of heavy rainfall events. From 1900 to 2015, the United States experienced a four percent increase in annual average precipitation nationwide. The frequency of these intense rain events could increase between two and five times if emissions are not curtailed (Center for Climate and Energy Solutions, 2017). In Brevard County, Tropical Storm Fay (2008) and Hurricane Irma (2017) brought relentless precipitation that overwhelmed storm water infrastructure and caused inundation throughout the area.

Urban areas are especially susceptible to flooding because of the abundance of impervious surfaces (parking lots, rooftops) and lack of vegetation and soil that could slow and filter the water. These flash flooding events are not merely an inconvenience for both urban dwellers and workers, but can also have devastating events for small firms. Based on the preliminary results from the Cocoa Business Resiliency surveys, most local businesses were closed between two and five days after hurricane Irma. Several of them listed flooding as one of the causes for their involuntary closing. Therefore, preparing our commercial corridors for these intense precipitation events is of utmost importance for improving economic resiliency.

As part of the Resilient Cocoa project, the ECFRPC used the REMI PI+ model to explore how small businesses can be affected by strong precipitation events. This economic impact analysis is comprised of two scenarios. The "do nothing" simulation estimates the economic impact of not addressing the flooding events. The second scenario assumes that the City of Cocoa will use green infrastructure features to alleviate this situation.



Flooding along Delannoy Avenue in Cocoa Village (FloridaToday.com)

About the REMI PI+ model

Since 2005, The ECFRPC has been using the Regional Economic Models, Inc. (REMI) Policy Insight economic model to calculate the economic effects of a variety of policies and investments. The REMI model builds on the strengths of four major modeling approaches: Input-Output, General Equilibrium, Econometric, and Economic Geography. More detailed information about the model can be found at www.remi.com.

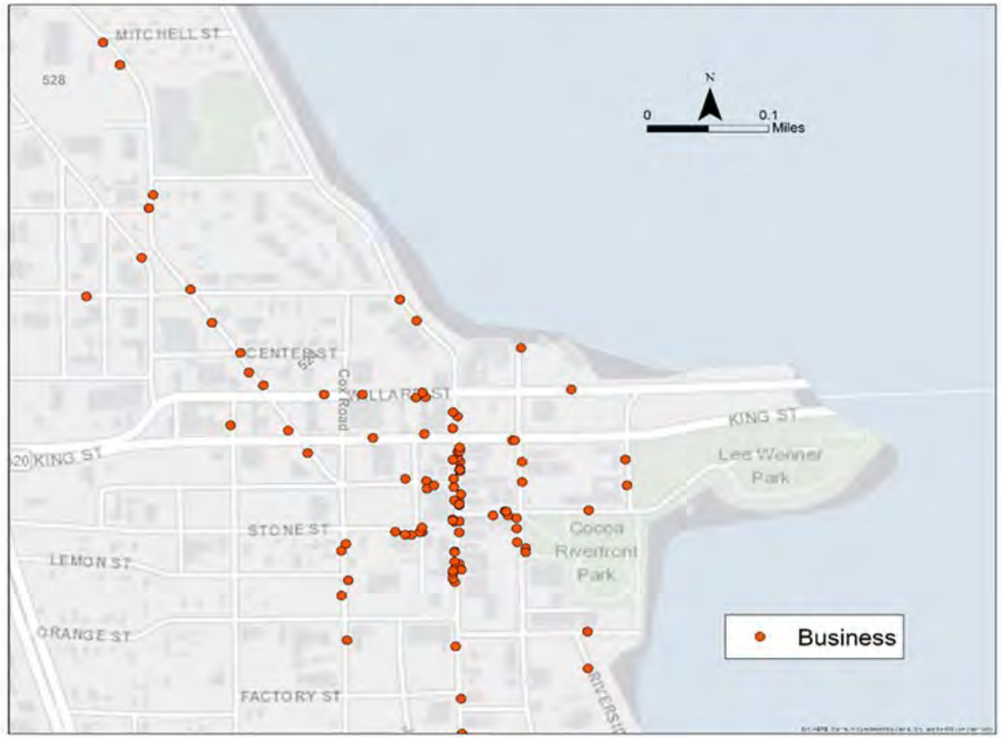
Methodology, Inputs and Assumptions

One of the areas affected by urban flooding events is Cocoa Village, which is the social and business hub. To develop the actual simulation, the ECFRPC identified all establishments located within Cocoa Village using Infogroup's Reference USA database and City Business Tax Receipt data. Home businesses, government offices, and those firms without a website or other form of verification were eliminated. This left a total of 181 business that employ close to 1,000 people. Most of Cocoa Village's businesses are within the Professional, Scientific and Technical Services category, which includes accounting, engineering, and law firms. This followed by Retail Trade establishments and Restaurants.

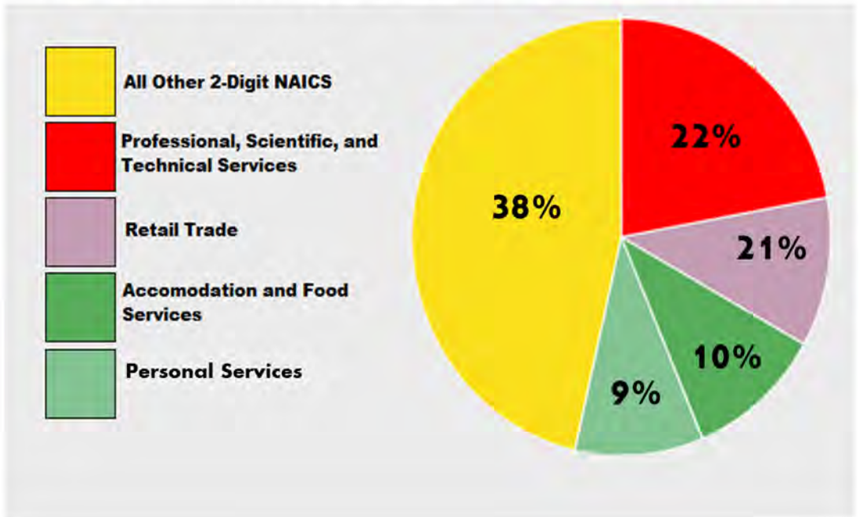
To calculate the economic impact of these business losses, the ECFRPC used total annual business sales (output) as provided by Infogroup. In the case where the business record did not have that information, the ECFRPC multiplied the total number of employees by REMI's labor productivity industry numbers for Brevard County to calculate the total output. In addition to this, staff also modified some of the NAICS codes for businesses that were obviously misclassified and recalculated the output using the labor productivity rates. A few of the establishments did not have any employment data. Here, the ECFRPC relied on the company webpages to estimate the number of employees. Based on Infogroup data and ECFRPC estimates, Cocoa Village businesses have a total of $139.5 million in annual sales.

More often than not, it is very difficult for businesses to recoup the amount of sales lost because of a weather event. Because of this, the ECFRPC decided to estimate the effect that these momentary business closures could have in Brevard County's economy over a long term period using Cocoa Village as a case study. The economic impact was measured based on changes to the total output/sales of Cocoa Village businesses.

Cocoa Village Business District



Cocoa Village Business Structure



Scenario 1: Do Nothing Scenario

The ECFRPC developed the first scenario of increasing business closing days based on changes to the weather patterns over a 31-year period. Staff aggregated annual business sales by industry and then divided this number by 365 to get the total daily output. This number was then multiplied by the total number of days that the businesses will be closed because of a flooding event. Based on the literature examined for this project and the results of the business surveys, the ECFRPC assumed that the total number of days would be increasing gradually over the next three decades. All numbers were entered as negative.

According to REMI, on average, the reduction of Cocoa Village's business sales results in the loss of 1,370 jobs when compared to the regular forecast. This employment estimate includes full-time, part-time, and temporary positions, which the model gives equal weight. Often referred to as total sales volume, output measures the gross level of business revenue which includes both the costs of labor and materials (intermediate inputs) and value added activities (compensation and profits). Since business output is the broadest measure of economic activity, it tends to generate the largest numbers. This new scenario shows that on average there will be a decrease of $111 million in sales during the study period. Personal income refers to total earnings from employee compensation, wage supplements, rents, transfer payments, and other business ventures. There will be a loss of $128 million. Finally, gross regional product (GRP) represents the market value of all goods and services produced by labor and property, regardless of nationality. Based on the results of this simulation, these flooding events will reduce facility will Brevard County's GRP by $56 million.

Total Sales/Output by Industry in Cocoa Village

Industry	Annual Sales	Daily Sales
Retail Trade	$22,445,185	$61,494
Wholesale Trade	$18,012,974	$49,351
Full Service Restaurants	$15,208,075	$41,666
Legal Services	$11,708,000	$32,077
Real Estate	$11,698,868	$32,052
All Other Industries	$60,429,933	$165,561
Total	$139,503,035	$382,200

Sources: Infogroup, ECFRPC Calculations

Annual Output Losses by Number of Flooding Days

Forecast Period	Number of Flooding Days	Annual Output Loss
2020-2030	3	-$1,146,600
2031-2040	5	-$1,911,000
2041-2050	7	-$2,675,401

Sources: Infogroup, ECFRPC Calculations

Scenario 2: Adoption of Green Infrastructure Scenario

The second scenario estimates the economic impact of adopting a green infrastructure program to alleviate flooding within the Cocoa Village district. Smart Growth America and the Center for Climate and Energy Solutions (C2ES) promote the use of green features such as rain gardens and green roofs to help manage storm water in urban areas. One problem encountered when constructing this model is that none of the literature studied for this report stated the degree to which green infrastructure can help alleviate flooding. Therefore, the ECFRPC assumed that there will be one less flooding day because of the incorporation of green infrastructure elements. This would in turn reduce the amount of business output lost during the study period.

Incorporating this new infrastructure would certainly have its costs. According to C2ES, the price for installing green features ranges from $7 per square foot for permeable concrete pavement to $10 for rain gardens and green roofs. A rain barrel can sell for about $50. To estimate the total costs for installing these features, the ECFRPC identified several parking lots and large commercial buildings with flat roofs within the Cocoa Village district. Staff used ArcGIS software to estimate the total square footage of these areas and then multiplied this amount by the unit/cost. The ECFRPC also estimated annual maintenance costs based on numbers provided by C2ES and the U.S. Environmental Protection Agency. Green infrastructure costs were entered into the model as a positive for Construction Industry Sales and as negative for the Local Government Spending. This means that while the construction industry will benefit from the new investment, the local government will have less money to pay for other goods and services. Maintenance costs were also calculated based on square footage, and were added annually as Construction-Building Repair and Maintenance.

Annual Output Losses by Number of Flooding Days with Green Infrastructure Intervention

Forecast Period	Number of Flooding Days	Annual Output Loss
2020-2030	2	-$764,400
2031-2040	4	-$1,528,800
2041-2050	6	-$2,293,201

Sources: Infogroup, ECFRPC Calculations

Largest Impervious Areas and Flat Roofs



Total Installation Costs

Green Infrastructure	Unit Cost	Total Square Footage	Installation Costs
Permeable Concrete Pavement	$7.00	390,130	$2,730,910
Rain Garden	$10.00	300,000	$3,000,000
Green Roofs	$10.00	105,760	$1,057,600

Sources: Brevard County Property Appraiser, ECFRPC Calculations

As explained on Scenario 1, failure to address flooding within the Cocoa Village District could cost 1,370 jobs, $111 million in sales, $128 million in personal income over a 31-year period. It would also reduce Brevard County's GRP $56 million. While these are countywide numbers, it can be assumed that the City of Cocoa would bear the brunt of these losses. On the other hand, Scenario 2 shows that introducing green infrastructure features in Cocoa Village would help to ameliorate the negative impacts that urban flooding can have on the economy. The economic indicators show the loss of 23 jobs, $2.8 million in sales, $3.8 million in personal income, and a reduction of $1.6 million to Brevard's GRP.

These results are based on the inputs and assumptions used to develop this scenario. Because of the dearth of quantitative data explaining the cost/ benefit ratio of incorporating green infrastructure projects into urban areas, the ECFRPC assumed that these improvements would only slightly reduce the number of flooding days experienced by Cocoa Village. The effectiveness of this approach to combat urban flooding could in reality be much greater than was presented in this simulation. However, using conservative assumptions is the best practice when developing economic impact scenarios.



Total Installation Costs

Green Infrastructure	Unit Cost	Total Square Footage	Installation Costs
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Sources: Brevard County Property Appraiser, ECFRPC Calculations

Comparison of Do Nothing and Mitigation Scenarios

Economic Indicator	Do Nothing Scenario	Mitigation Scenario
Total Employment	-1,370	-23
Output	-111,294,143	-2,870,968
Personal Income	-128,250,113	-3,806,452
Gross Regional Product	-56,004,711	-1,645,161

Sources: REMI PI+ East Central Florida Region v 2.2

RESILIENCE ACTION PLAN 2019- 2024

The City of Cocoa Resilience Action Plan is a culmination of the information collected as part of the vulnerability assessment and threat and hazard identification and reduction analysis (THIRA) , citizen input, and the East Central Florida Regional Resilience Action Plan (ECF RRAP), adopted by the City. The action plan is formatted and structured in a way to provide consistency between the City's action plan the ECF RRAP.

The East Central Florida Regional Resiliency Action Plan, completed in 2018 by the East Central Florida Regional Planning Council, was used as a model for some of the actions developed in this section of the report including the plan's goals and objectives. The ECFRPC also included strategies to address the findings of the vulnerability analysis, the public engagement process, and the economic impact analysis report.

The plan is organized by each goal and objective, includes the appropriate City department for ownership of each task, a level of priority and recommended year for which each task should be completed. Some tasks are labeled as "on-going" which signifies this task is recommended to be completed every year or continuously.

"Coming together is a beginning; keeping together is progress; working together is success."

– Henry Ford

Goals and Objectives

Goal #1: Leadership & Strategy | Promote leadership, education, and empowerment to foster resiliency

- Incorporate resiliency into local plans, policies and objectives.
- Plan fiscally to implement resilient and sustainable solutions to long term impacts.
- Implement strategies to promote adaptive measures that keep people and property safe.
- Engage and educate private sector stakeholders, elected officials, and others about ways to increase community resiliency.

Goal #2: Economic & Society | Provide opportunities to foster economic prosperity and social equity

- Protect high value assets from natural hazards.
- Educate businesses about access to funding and financial services related to resiliency.
- Facilitate and support the efficient recovery of business operations after an event.
- Improve social inclusion in decision making processes.

Goal #3: Infrastructure & Environment | Encourage responsible development and infrastructure solutions

- Prioritize the use of green infrastructure as a first line of defense.
- Promote interconnectivity of natural lands for habitat migration.
- Enhance stormwater systems to be more resilient.
- Improve water quality in surface water bodies.
- Incorporate resiliency into local plans, policies and objectives.
- Preserve and adapt the built environment to keep people and property safe.
- Improve community mobility while improving vulnerable transportation infrastructure.

Goal #4: Health & Well Being |Facilitate opportunities to improve community and environmental health

- Improve the capacity of the City to better respond to hazard events.
- Improve capacity of medical facility operations to prepare for and recover from hazards.
- Promote sustainable practices in government-owned facilities.
- Engage residents and business owners with locally relevant information.
- Improve access to resources for the homeless, special needs, elderly and poor.

Leadership and Strategy

Objective	Task / Recommendation	Department	Priority	Year
LS-3 Promote Adaptive Measures to Protect People and Property from Natural Hazards	Update Land Development Code to allow onsite-storm water management infrastructure such as rain gardens, native vegetation, living shorelines on private property.	Community Services SJRWMD UF IFAS Extension	High	1
	Partner with Brevard County Natural Resources to determine where living shorelines are appropriate. Prioritize areas for implementation.	Public Works Brevard Natural Resources	High	2
	Plan and conduct a workshop with residents and businesses to determine obstacles that they face in improving their property to be more resilient to natural hazards and how the City can help.	Community Services Public Works	Low	2
	Research best practices for community parking standards and strategies to address the heat island effect.	Community Services	Medium	2
	Identify publicly-owned parking lots that could be retrofitted using green infrastructure and permeable surfaces.	Community Services	Medium	2
	Update City's Land Development Code to adopt best practices to mitigate the heat island effect.	Community Services	Medium	3
LS-4 Educate local stakeholders about ways to increase community resiliency	Identify elected and non-elected resiliency advocates to participate in regional initiatives such as the East Central Florida Regional Resilience Collaborative.	All Departments	High	1
	Educate newly-elected officials about the City's primary vulnerabilities and hazard mitigation strategies.	City Administration ECFRPC Florida Sea Grant	Medium	2
	Develop or partner to conduct at least one workshop a year or various one-on-one meetings with private sector stakeholders to educate and train them on sustainable practices, such as continuity of operations plans, the importance of emergency generators, and other topics.	Emergency Management	Low	2
	Create a social media account for the Cocoa Sustainability Advisory Committee.	City Administration	Low	2
	Encourage hands-on community education and volunteer activities to educate residents about resiliency.	Community Services UF IFAS Extension Brevard Public Schools Surf rider Foundation	Low	3
	Create and mail infographics to educate the public about the economic and environmental benefits associated with the property improvement strategies covered in the City's Sustainability Plan.	City Administration	Medium	4
	Re-evaluate workshops and educational materials to determine gaps and lessons learned.	Community Services	Low	5+

Health and Wellbeing

Objective	Task / Recommendation	Department	Priority	Year
HW-3 Promote sustainable practices in government-owned facilities.	Assess the feasibility of creating an incentive program to promote sustainability within the City of Cocoa.	Community Services	High	1
	Assess and update future land use and zoning codes to limit or mitigate the placement of government buildings in vulnerable areas.	Community Services	High	1
	Identify locations for electric charging stations, especially near/at publicly-owned properties and high employment areas.	Community Services Public Works	Low	2
	Update local codes and policies to promote sustainable and Low Impact Development practices for government owned facilities.	Community Services	Medium	2
	Conduct an energy audit within the City and develop strategies to mitigate the effects of the greenhouse gas effect.	Public Works	Medium	3
	Partner or develop programs/incentives to install community gardens and green roofs on public buildings.	Community Services Public Works	Medium	4
	Work with the Brevard Public Schools (BPS) to promote the use of green building techniques and sustainable practices.	Brevard Public Schools Community Services	Low	4
	Reassess sustainability plan and metrics associated with the implementation of sustainable building practices in government facilities.	Community Services Public Works	Medium	5+
HW-4 Engage residents and business owners with locally relevant information about expected future changes in natural hazards and sustainable practices.	Evaluate existing programs in other jurisdictions and agencies aimed at educating residents and business owners about imminent natural hazards and sustainable practices.	Community Services Emergency Management	Medium	2
	Develop an in-depth community outreach program, outside of the storm season and following an event, to identify needs and barriers associated with resource accessibility and disaster response.	FEMA Emergency Management	Medium	2
	Develop an incentive program to increase the energy efficiency and resilience of homes and businesses.	Community Services	Medium	3
	Evaluate the creation of a tree canopy program to educate community about best landscaping practices, appropriate tree maintenance protocols, and yard debris removal.	Community Services	Medium	3
	Host a minimum of four events annually to educate the community about best sustainability and resiliency practices.	Community Services Emergency Management	Medium	3
	Develop a Return on Investment Infographic to be shared with homeowners and businesses that details the benefits of adopting a variety of resilient and sustainable practices.	Community Services	Low	4

Health and Wellbeing				
Objective	Task / Recommendation	Department	Priority	Year
HW-5 Improve access to resources for the homeless, special needs, elderly, low income, and English-limited residents.	Create/Continue “primary” social media account to relay all disaster-related information.	City Administration Emergency Management	High	1
	Develop and implement strategies to encourage greater pre-registration for special needs and seniors within the community.	City Administration Emergency Management	High	1
	Partner with the IDignity Program to ensure residents have essential documents before disasters.	City Administration Emergency Management	Medium	1
	Assess plans and policies to require development of future affordable housing choices outside of vulnerable areas and with access to transit, jobs, and resources.	Community Services	Medium	2

Economy and Society				
Objective	Task / Recommendation	Department	Priority	Year
ES-1 Protect high-value assets from natural hazards.	Develop and adopt policy language that prohibits the development of high value assets in vulnerable areas or if necessary, are mitigated to the greatest extent possible.	Community Services Public Works Emergency Management	Medium	1
	Work with the community to identify local businesses such as gas stations, food suppliers or others that provide specific services or resources vital for recovery.	Emergency Management Community Services	High	2
	Identify resilience strategies and policies related to resilient rebuilding, relocation, fortification, mitigation or adaptation for critical facilities in identified vulnerable areas.	Public Works Utilities Emergency Management Community Services	Medium	2
	Develop a long-term financial plan for loss of or restructure of tax base in highly vulnerable areas.	City Administration	Low	5
ES-2 Educate business about access to funding and financing services related to resiliency and sustainability	Create, update and disseminate an educational infographic for businesses with funding and financing services for pre/post- disaster needs and sustainable practices.	Emergency Management Economic Development Chamber of Commerce Community Services	Medium	1
	Conduct a follow up workshop with business owners to determine status, needs, wants and constraints as related to implementing resilient and sustainable practices.	Economic Development Community Services ECFRPC	Medium	2

Economy and Society				
Objective	Task / Recommendation	Department	Priority	Year
ES-3 Facilitate and support the efficient recovery of business operations after an event	Designate government official to serve as a liaison between the business community and the local government for resiliency efforts.	City Administration	High	1
	Develop a section on the City's website focused on disaster preparedness and include links to business continuity plan and employee disaster plan templates.	City Administration	Medium	2
	Research available templates for business and employee preparedness plans and create an outreach proposal for businesses to update these templates.	Community Services ECFRPC	High	2
	Develop a "one-pager" with best practices and links for responding to and preparing for hazard events. Create/update and disseminate an educational infographic for businesses with emergency information to access for post disaster needs.	Emergency Management Community Services Chamber of Commerce Career Source Brevard	Medium	2
	Develop a media package/press kit to implement after a disaster event to bring tourists back by showcasing that the area is open for business.	City Administration Economic Development Tourism Development Council	High	3
	Work with the identified local critical facility businesses to determine resources needed to aid in timely recovery efforts such as generators, mitigation projects, etc.	Emergency Management Community Services	Medium	3
	Consider implementing a long-term recovery plan for businesses to retain employees as soon as possible following a storm event.	Emergency Management Community Services	Low	4

Economy and Society				
Objective	Task / Recommendation	Department	Priority	Year
ES-4 Improve social inclusion in decision making process	Apply for funding opportunities that could help finance resiliency projects such as onsite stormwater management, living shorelines, etc…	Public Works Community Services	Medium	Ongoing
	Host community meetings in underserved, low income communities to discuss projects within and just outside the community.	All Departments	High	1
	Engage with communities to identify gaps and priorities in the decision making process to improve social inclusion.	Community Services	High	1
	Train Community Services staff on Health Impact Assessments	ECFRPC	Medium	2
	Partner with local organizations and faith-based organizations to provide feedback concerning needs and opportunities specific to a project or program.	All Departments	High	2
	Create an outreach plan to involve all communities in the City to engage in local decisions.	Community Services	Low	2
	Create a timeline to develop and implement strategies identified in the City's Sustainability Plan as they relate to Civic Engagement.	Ciity Administration	Medium	3
	Implement the directive to conduct health impact assessments when considering projects that may affect underserved, low income communities, and determine benchmark health outcomes.	Community Services	Medium	3
	Implement the outreach plan.	City Administration	Low	3
	Reassess the gaps that remain in community involvement outcomes.	City Administration	Low	5+

Infrastructure and Environment

Objective	Task / Recommendation	Department	Priority	Year
IE-4 **Improve water quality in surface water bodies.**	Coordinate with other agencies/organizations to educate property owners about best management practices (BMP's) for reducing nutrient loads flowing into surface waters via residential, commercial, industrial and agricultural lands.	Community Services Indian River Lagoon Council SJRWMD	Medium	Ongoing
	Determine whether currently property buffers along the Indian River Lagoon are sufficient or could be enhanced to allow for the introduction of native vegetation that could help capture and filter storm water.	Water Resources	High	1
	Assess City's fertilizer ordinance to determine appropriateness of mirroring the County's ordinance.	Community Services Marine Resource Council UF IFAS Extension	Medium	2
IE-5 **Incorporate resiliency into local plans, policies, processes and objectives.**	Audit Comprehensive plan against other plans (i.e. Sustainability Plan, CRA plans, Downtown Development Plans, Economic Development Plans, LDRs,) to ensure compatibility of addressing resiliency and future development based on future conditions.	Community Services Public Works Utilities	High	1
	Assess other plans to reference the Coastal Community Services Area and incorporate language as appropriate.	Community Services	High	1
	Add and adopt policies to Comprehensive Plan, and other plans, that result from the recommendations identified in the Sustainability Plan.	Community Services	Medium	2
	Update Land Development Code to require all new development to design for a "net-zero" discharge or natural runoff.	Community Services	Medium	3
	Adopt Urban Design Guidelines that could protect and buffer structures from the impact of vulnerability hazard such as sea level rise, storm surge, flooding, wind damage, and the urban heat island effect.	Community Services	Low	4
	Develop prioritization process and funding mechanisms for infrastructure projects in the Coastal Community Services Area. Incorporate into CIP, the Stormwater master plan, long range transportation plan, and other appropriate plans and procedures.	Public Works	Low	5
	Continue to monitor sea level rise projections over time. Consider installing water monitoring stations to measure sea level rise within the City.	All Departments	Low	5+

Infrastructure and Environment

Objective	Task / Recommendation	Department	Priority	Year
IE-6 **Preserve and adapt the built environment to keep people and property safe**	Update Comprehensive Plan and Codes to ensure all affordable or low income developments are located outside of the Coastal Community Services Area and the 100-year flood zone.	Community Services	High	1
	Provide dedicated funding for annual tree maintenance near power lines to help prevent storm damage and allow access for electricity providers to fix broken power lines in an efficient manner following a natural disaster.	City Administration Public Works	Medium	2
	Research appropriate strategies for at-risk public infrastructure identified as part of the natural hazard vulnerability assessment.	Utilities Public Works	Medium	3
	Develop incentives for developers to build outside vulnerable areas or build in a resilient/sustainable way in vulnerable areas, using methods consistent with Low Impact Development (LID) standards, Florida Green Building Coalition, and others.	Community Services	Medium	5
	Conduct a risk assessment to determine wellfields, groundwater and underground infrastructure at risk to saltwater intrusion in Cocoa and areas of service.	Utilities Public Works	Medium	5+
IE-7 **Improve community mobility while improving vulnerable transportation infrastructure.**	Identify areas where bicycle and pedestrian improvements (including use of green strategies) can be included in transportation projects that mitigate roadways vulnerable to natural hazards (green streets).	Space Coast Transportation Planning Organization Public Works	Low	3

Selected References

Link	Reference Page
https://www.flsenate.gov/Committees/BillSummaries/2015/html/1100	4
https://www.flsenate.gov/Session/Bill/2011/7207/BillText/er/PDF	4
https://www.cocoavillageplayhouse.com/	6
https://www.cocoafl.org/Facilities/Facility/Details/1	6
https://myfloridahistory.org/default	6
https://svi.cdc.gov/map.html	7
http://www.shimberg.ufl.edu/	7
https://coast.noaa.gov/floodexposure/@-9041447,3241151,8z	10
https://msc.fema.gov/portal/search	11
https://www.geoplan.ufl.edu/	12

Appendices

Lift Station Name	Storm Surge Zone	ACOE SLR Horizon	NOAA SLR Horizon	Flood Zone	Nuisance Flood Area	Combined Zone
Lift Station 1	Surge 3	2100	2100	500 Year	Yes	2100
Lift Station 2	Surge 2	2100	2100	500 Year	Yes	2100
Lift Station 3	Surge 3		2100	None	Yes	2100
Lift Station 4	None		None	None	None	None
Lift Station 5	None		None	None	None	None
Lift Station 6	None		None	500 Year	None	None
Lift Station 7	None		None	None	None	None
Lift Station 8	None		None	None	None	None
Lift Station 9	None		None		None	None
Lift Station 10	None		None	None	None	None
Lift Station 11	None		None	None	None	None
Lift Station 12	None		None	None	None	None
Lift Station 13	None		None	None	None	None
Lift Station 14	None		None	None	None	None
Lift Station 15	None		None		Yes	None
Lift Station 16	None		None	None	None	None
Lift Station 17	None		None	None	None	None
Lift Station 18	None		None	None	None	None
Lift Station 19	Surge 2	2100	2100	Zone AE	Yes	2100
Lift Station 20	None	None	None	None	None	None
Lift Station 23	None	None	None	None	None	None
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Lift Station 26	None	None	None	None	None	None
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Lift Station 43	None	None	None	None	None	None
Lift Station 44	None	None	None	None	None	None
Lift Station 45	Surge 2	2100	2100	Zone AE	Yes	2100
Lift Station 46	None	None	None	None	None	None
Lift Station 48	None	None	None	None	None	None
Lift Station 49	None	None	None	None	None	None
Lift Station 51	None	None	None	None	None	None
Lift Station 54	None	None	None	Zone AE	None	None

Technical Appendix: The Science Behind the Resilient Cocoa Project

The ECFRPC relied on several models to assess the economic impacts that each natural hazard would have on the City of Cocoa. These models have been developed by federal agencies, universities, and regional planning councils. This section provides more information about each model.

Storm Surge

The ECFRPC used the Sea, Lake, and Overland Surges from Hurricanes (SLOSH) Model developed by the National Weather Service to estimate storm surge heights. This model combines historical, hypothetical, and predicted hurricane data with atmospheric pressure, size, forward speed, and track data to determine the wind field that will drive the storm surge. The Atlantic coastline SLOSH model is divided into 32 regions or basins, categorized by their particularly vulnerable features: inlets, population densities, low-lying topography, and ports. In 2017, Florida's six basins were combined to form the South Florida Super Basin, which covers nearly all of South Florida and much of the peninsula's coastline. The storm surge analysis uses the NHC's Saffir-Simpson Hurricane Wind Scale to illustrate the storm's sustained winds, which ranges from a Category 1 to 5.

Sea Level Rise

This analysis uses two sea level rise projection curves: NOAA 2017 and US Army Corps of Engineers (USACE) 2013. The NOAA 2017 curve data was downloaded from NOAA's Digital Coast Sea Level Rise Viewer. It depicts the potential coastal inundation areas resulting from a 1- 10-foot rise in sea level above current Mean Higher High Water (MHHW) conditions. The data was produced using a "modified bathtub model" that accounts for local and regional tidal variability and hydrological connectivity. Two datasets are used to create the final inundation data: Digital Elevation Model (DEM) of the area and a tidal surface model that represents spatial tidal variability. This data does not account for erosion, subsidence or any other future changes in an area's hydrodynamics. The USACE data was obtained from the University of Florida's GeoPlan Center. This analysis also uses a "modified bathtub model" that applies a filter to remove isolated inundation areas not connected to a major waterway. The resulting inundation files represent the specific projection rate curve mapped on top of MHHW. Unfortunately, the USACE data curve begins in 2050.

Shallow Coastal Flooding

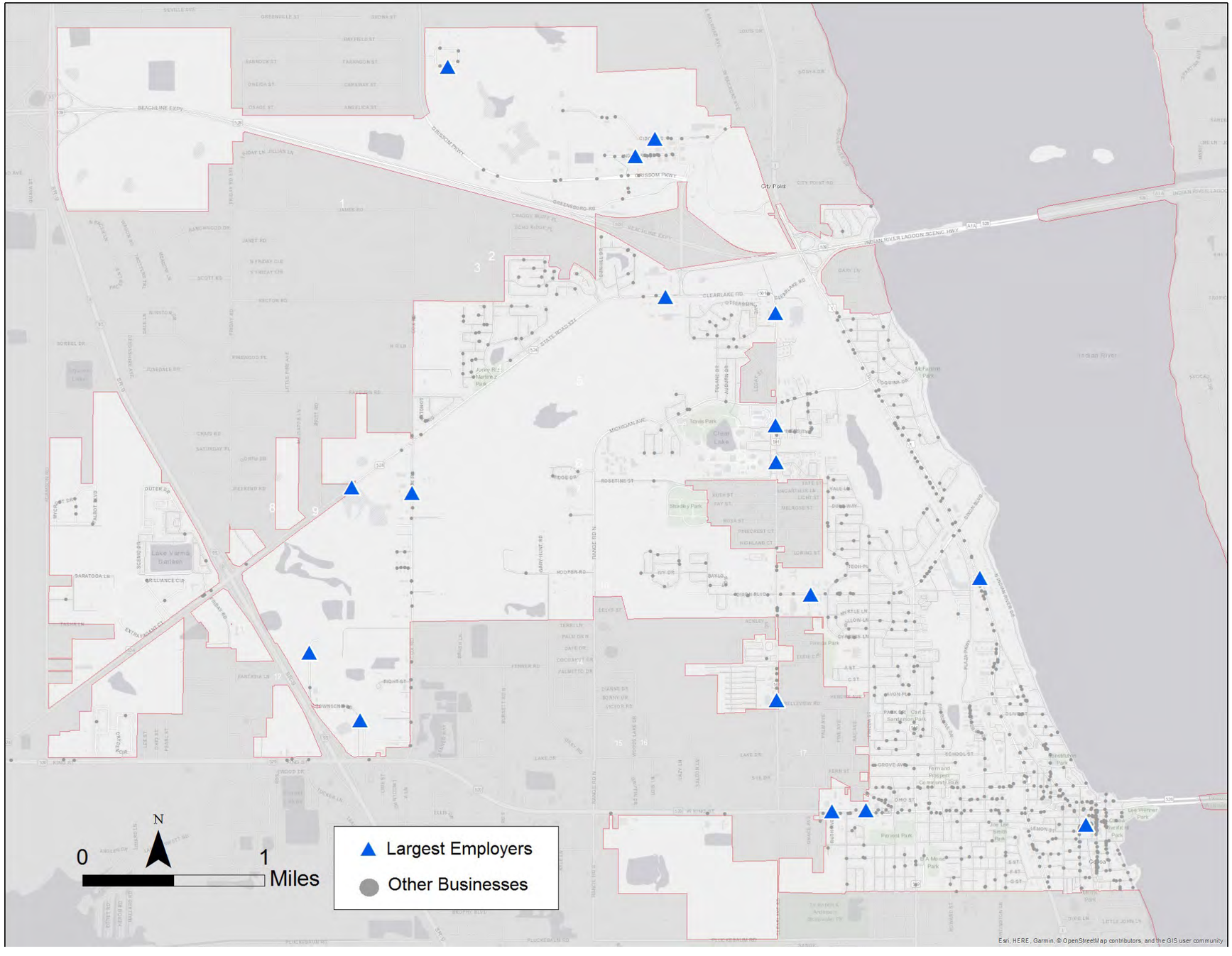
Coastal flood data was obtained from NOAA's Coastal Flood Exposure Mapper. The flood thresholds are derived from NOAA's Technical Report NOS CO-OPS 086: Patterns and Projections of High Tide Flooding along the U.S. Coastline Using a Common Impact Threshold. The report indicates that Brevard County's derived threshold for minor flooding (high tide) is 1.8 ft above mean higher high water height (MHHW). This data replaces the flood thresholds previously provided by the National Weather Service.

Storm Surge and Sea Level Rise

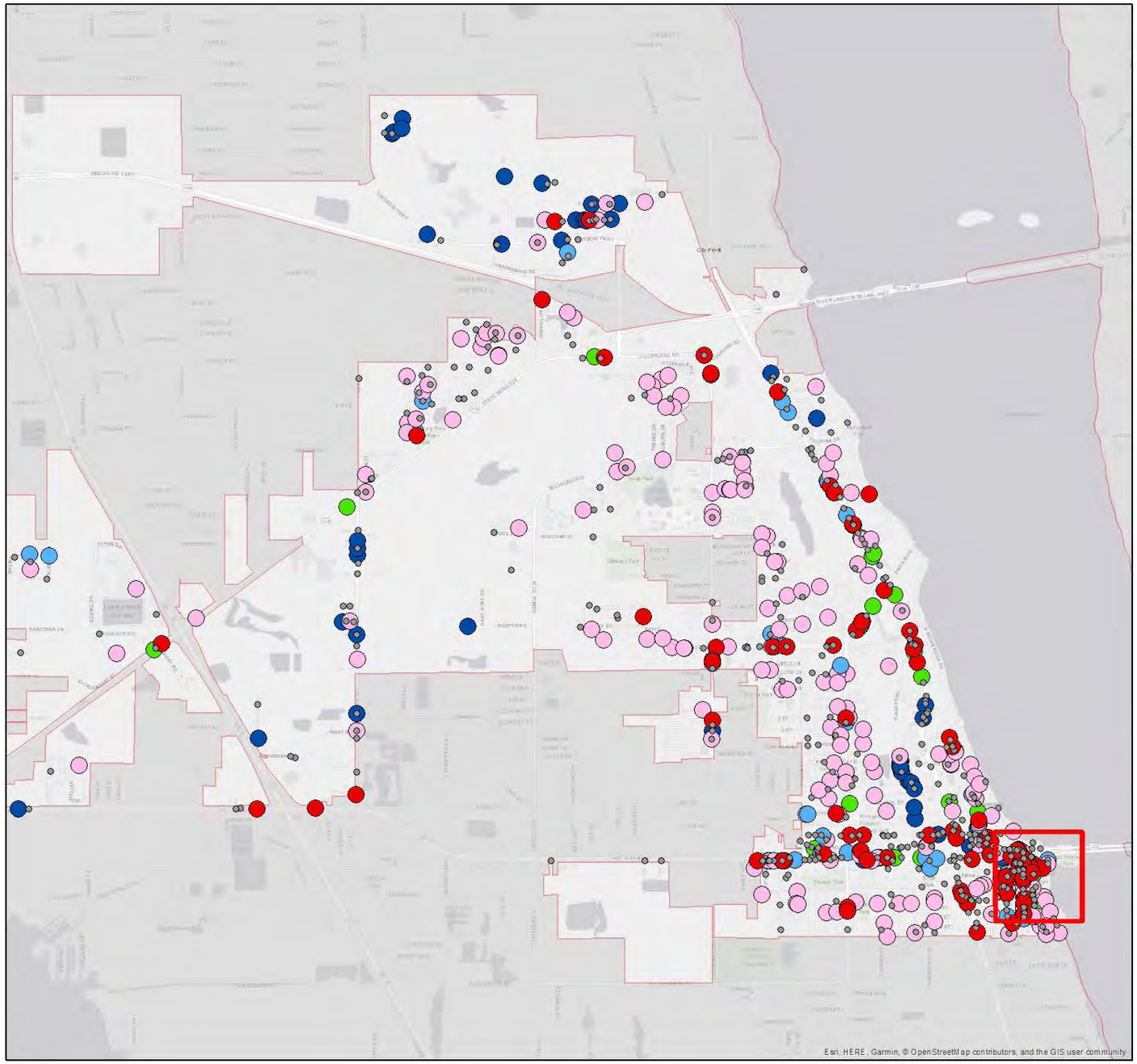
The Tampa Bay Regional Planning Council developed an ArcGIS Add-In Tool to model how future sea level rise conditions affect surge based on new National Hurricane Center's SLOSH "super basins" that provide greater resolution of data for storm surge modeling. The model allows users to analyze certain levels of sea level rise (ex: 4 feet) depending on what Horizon SLR curve they choose. The tool uses several data sources including Digital Elevation Model (DEM), SLOSH Basin, Sea Layer with hydrologic connectivity, and NOAA tidal gauges.

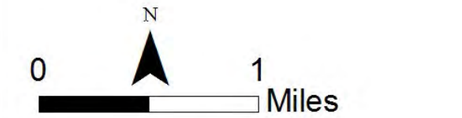
Maps

Largest Employers

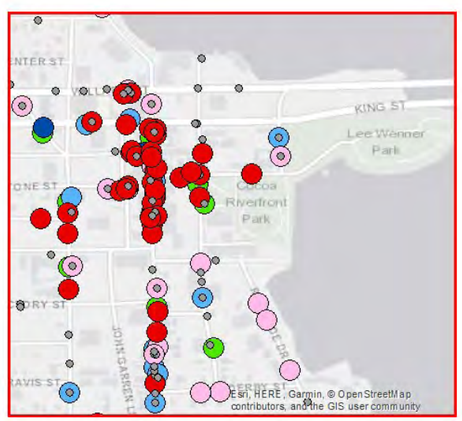


Total businesses by Type

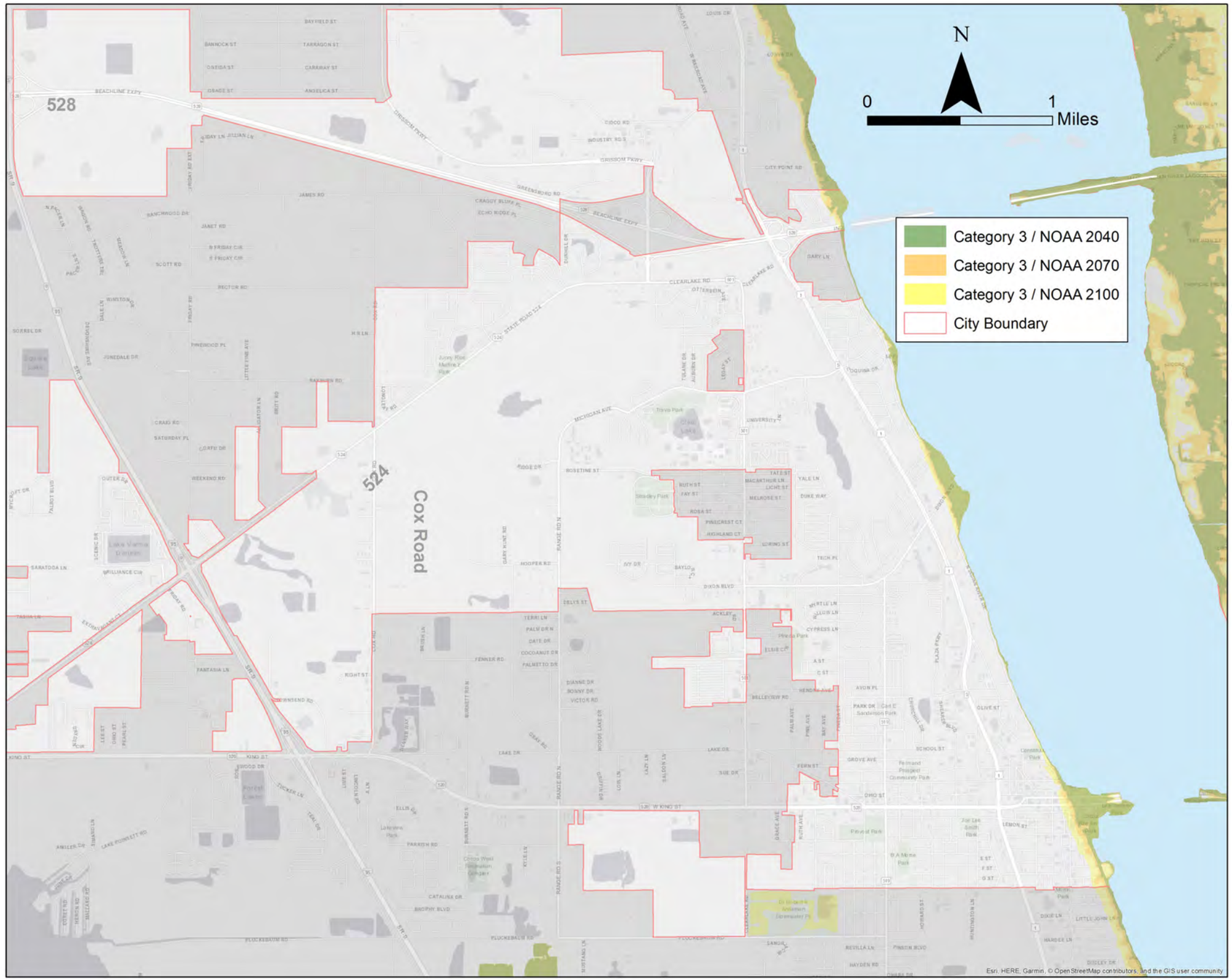




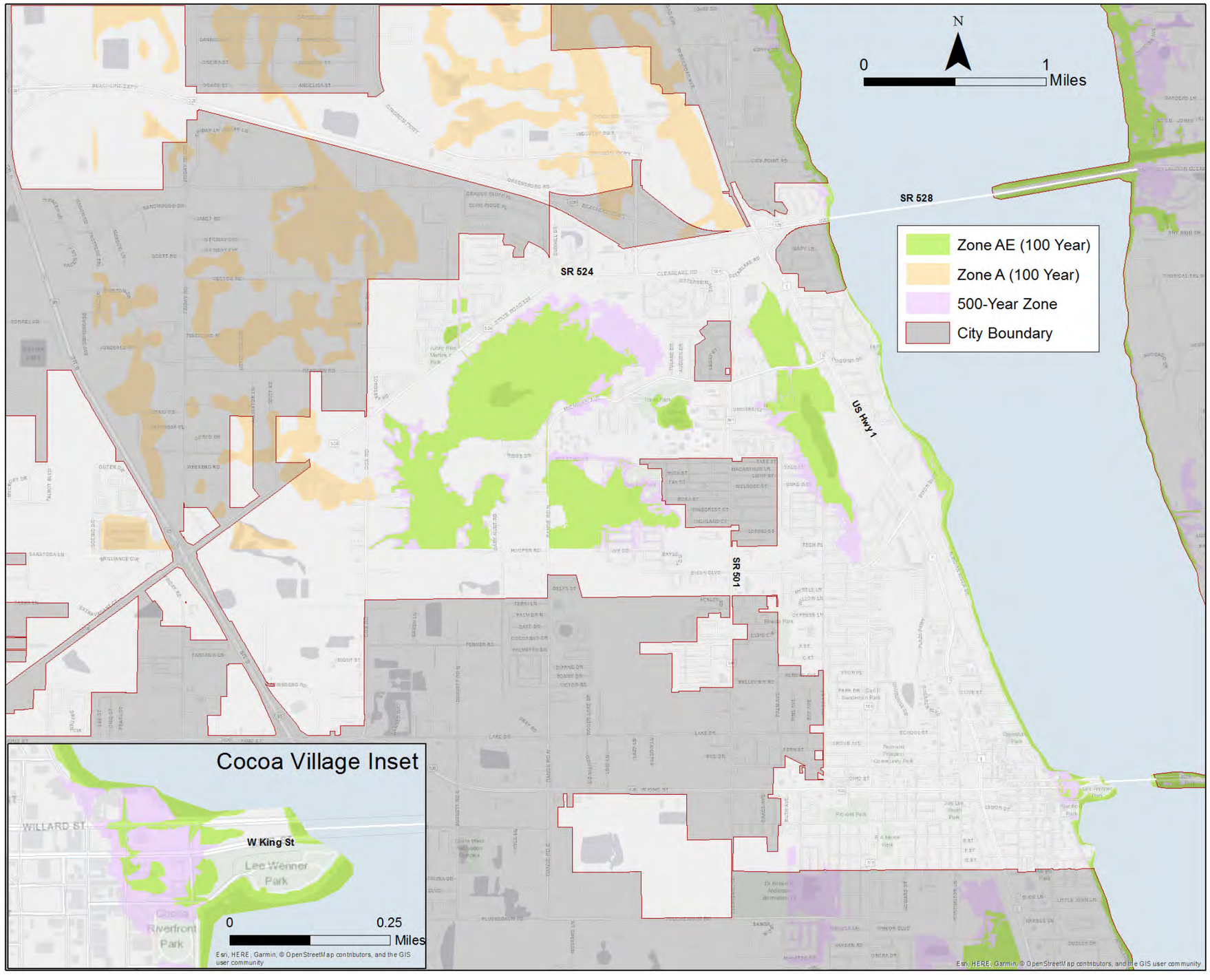
- Accomodation and Food Services
- Manufacturing
- Other Personal Services
- Real Estate
- Retail
- All Other Business Types



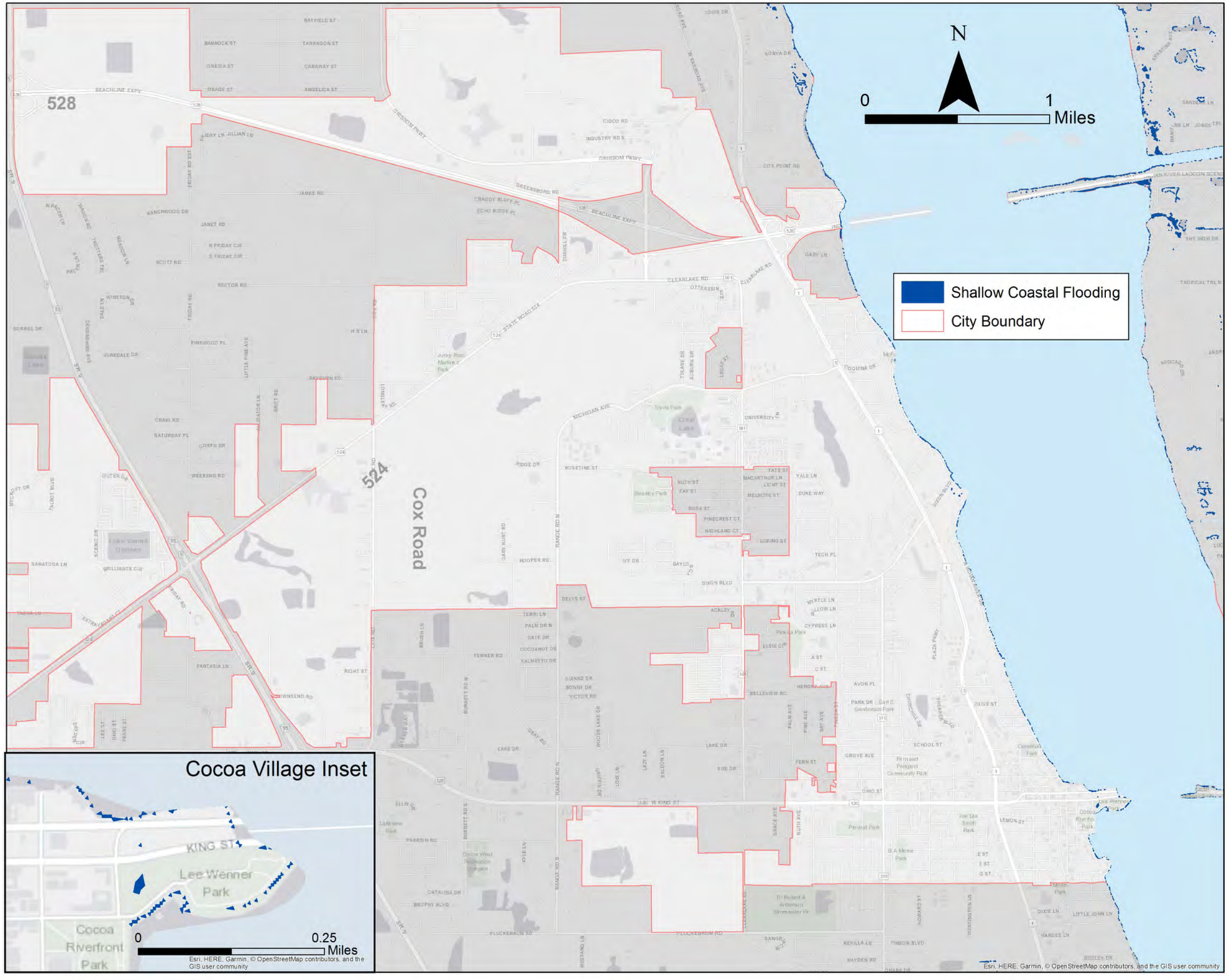
Storm Surge +Sea Level Rise Combo



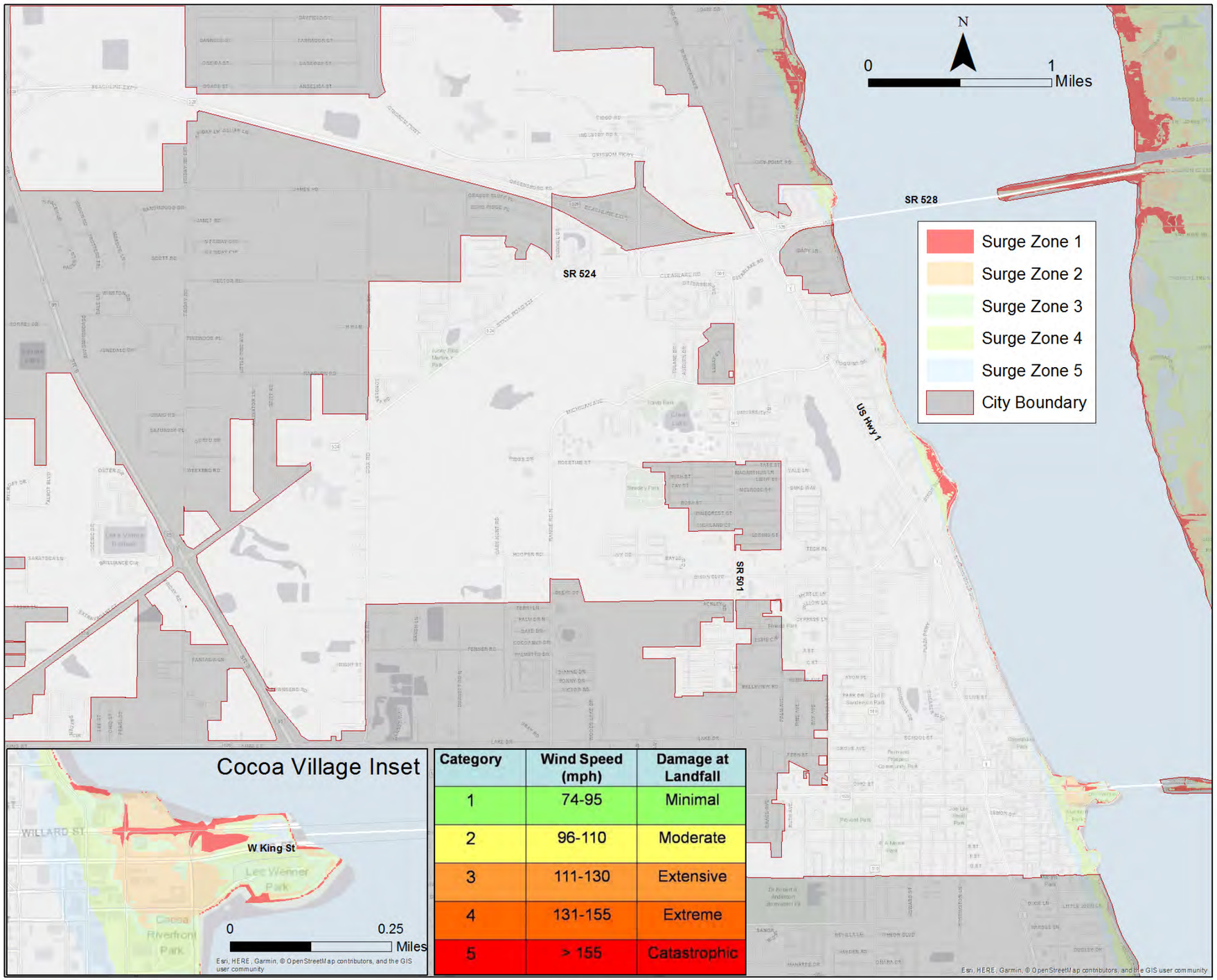
FEMA 100-Year and 500-Year Flood Zones



Shallow Coastal Flooding Map



Hurricane Storm Surge Zone



Category	Wind Speed (mph)	Damage at Landfall
1	74-95	Minimal
2	96-110	Moderate
3	111-130	Extensive
4	131-155	Extreme
5	> 155	Catastrophic

CITY OF COCOA COMPREHENSIVE PLAN 2019 - 2029

VOLUME I
GOALS, OBJECTIVES, & POLICIES

ADOPTED BY ORDINANCE 11-2010
BY ACT OF THE CITY COUNCIL
CITY OF COCOA, FLORIDA
ON OCTOBER 26, 2010
Updated by Ordinance 12-2010 on 10-26-2010
Updated by Ordinance XX-2019 on XX-XX-2019

Serving the Community

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Marilyn Green

Aleck Greenwood

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Russell Sengel

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I - FUTURE LAND USE ELEMENT



Serving the Community

GOAL 1.1: Create and maintain a broad range of land use activities that maximize the City's potential as a growth center while protecting the public health, safety, welfare, and appearance through the thoughtful planned use and development of the land and public facilities.

Objective 1.1.1: Future Land Use Categories Established. The City hereby establishes land use categories and a Future Land Use Map (FLUM) that provide for compatible and coordinated land uses, allowing for the protection of natural and historic resources as well as maximizing economic development opportunities.

Policy 1.1.1.1: Land Use Categories. The adopted FLUM contains and identifies appropriate locations for the following land use categories. The maximum densities/intensities shown in Figure FLU-1 are not guaranteed for all sites within each category. The zoning map and land development regulations may impose tighter densities and intensities of development based on land use allocation criteria policies.

Policy 1.1.1.2: Density/Intensity Standards for Future Land Use Categories. For the purposes of analyzing public facilities impacts of proposed Future Land Use Map amendments density and/or intensity shall be measured and regulated pursuant to Figure FLU-1.

Objective 1.1.2: Location Criteria for Land Uses. Future land use categories and land development regulations shall be consistent with the density and intensity standards in Policy 1.1.1.1 and be based upon the following locational and development standards and criteria:

FIGURE FLU-1
STANDARDS FOR FUTURE LAND USE CATEGORIES

Residential and Conservation Future Land Use Categories:

	Very Low Density Residential	Low Density Residential	Medium Density Residential	High Density Residential	Conservation	Rural Urban Transition
Maximum Density	4 du/acre	7 du/acre[1]	15 du/acre	25 du/acre		1 du/2.5 acres
Allowable Uses	Residential, Institutional, and Open Space/ Recreational	Residential, Institutional, and Open Space/ Recreational	Residential, Institutional, and Open Space/ Recreational	Residential, Institutional, Office and Open Space/ Recreational	Conservation and Open Space/ Recreational	Residential, Conservation Open Space/ Recreational, and Agriculture
Applicable Zoning Districts	RE, RA, RR-1, RR-2, RU-1-10, RU-1-7, RU-1-7A, RM-3 and PUD	RU-1-10, RU-1-7, RU-1-7A, RU-2-15, RM-3, RM-4 and PUD	RU-2-10, RU-2-15, RM-4, and PUD	RU-2-10, RU-2-15, RU-2-25, and PUD	Not Applicable	RA, RR-1, and RR-2
Maximum Impervious Surface Ratio	.40 .65 w/PUD	.65	.70	.80	.10	.30

FIGURE FLU-1, Continued
STANDARDS FOR FUTURE LAND USE CATEGORIES

Commercial, Industrial, Open Space/Recreational, Institutional and Mixed Use Future Land Use Categories:

	Commercial	**Neighborhood Commercial[4]**	**Regional Activity Center[5]**	**Industrial**	**Open Space Recreational**	**Institutional**	**Mixed Use**
Maximum Intensity/ Density	1.0 FAR	0.75 FAR	0.50 FAR, 25 du/acre, and 45 hotel rooms/acre	1.50 FAR	0.25 FAR	1.0 FAR 25 du/acre	25 du/acre[2&3] 1.0 FAR[3]
Allowable Uses	Commercial, Office, Institutional, and Open Space/ Recreational	Commercial, Residential, Office, Institutional, and Open Space/ Recreational	Commercial, Industrial, Hotel, Office, Residential, Institutional, and Open Space/ Recreational	Industrial and Commercial[6]	Not Applicable	Institutional	Commercial, Industrial, Hotel, Office, Residential, Institutional, and Open Space/ Recreational
Minimum Transportation Access	4 lane collector 2 lane arterial	2 lane collector	2 lane arterial that intersects SR528 or I-95	2 lane collector 2 lane arterial	Not Applicable	Not Applicable	Not Applicable
Applicable Zoning Districts	C-G, C-W, C-P, C-C, P-S, and PUD	C-N, C-R, R-P, P-S, and PUD	UMD	M-1 and M-2	All Districts	All Districts	CBD, CBD-CVO, C-C, C-N, CR, PS, PUD, RP, UMD
Maximum Impervious Surface Ratio	.90	.80	.95	.75	.25	.65	.95 1.0 in CBD

NOTES FOR FIGURE FLU-1:

1. Maximum density may be increased up to 12 du/acre as part of a planned residential development or planned redevelopment activities (*Policy 1.2.3.C*).
2. An additional 5 units per acre may be achieved if residential units are developed as part of a vertical mixed use project.
3. Maximum FAR in the Cocoa RDA is 2.0 and a bonus may permit up to an additional 2.5 FAR in the Central Business District outside the Cocoa Village Overlay sub-district. An additional 25 units per acre may be achieved in certain areas within the Cocoa RDA.
4. Four (4) acre maximum land area for new Neighborhood Commercial and one (1) acre maximum site land area.
5. Minimum land area of 50 acres and minimum cumulative gross floor area of 500,000 sq.ft. for all structures.
6. Commercial uses that are complementary to and support industrial development and operations.

Policy 1.1.2.1: **Rural/Urban Transition (RUT).** Rural/Urban Transition land use is intended to preserve conservation areas, and to provide opportunities for agricultural activities along with some residential developments. This designation will also allow for necessary supporting services such as utilities, parklands, and education facilities. The following criteria shall be used for determining appropriate locations for rural/urban transition areas.

A. Whenever an agricultural operation is annexed, the RUT land use may apply. The farming and agricultural operations may continue per the conditions set forth in the annexation agreement for the property. The continuation of agricultural uses and supporting ancillary facilities will contribute to the preservation of large expanses of open space while protecting sensitive environmental resources.

B. If more than one residential unit is developed on a parcel classified as RUT pursuant to this policy, the units may be clustered.

Policy 1.1.2.2: **Very Low Density Residential (VLDR).** Very low-density residential areas consist of neighborhoods of single family detached housing. The following criteria shall be used for determining appropriate locations for very low density residential areas.

A. Very low-density residential areas shall be buffered from the nuisance effects of agricultural uses, higher intensity uses and major traffic corridors.

B. Very low density residential developments should be located in areas where more intensive development would be unwarranted due to environmental constraints.

Policy 1.1.2.3: **Low Density Residential (LDR).** Low-density residential areas are neighborhoods of single family detached housing, limited multiple family attached housing and limited clustered single family attached housing. Institutional, open space and recreational uses are also allowed in this category. The following criteria shall be used for determining appropriate locations for low density residential areas.

A. Low-density residential areas shall be buffered from the nuisance effects of higher intensity uses and major traffic corridors.

B. Low density residential developments should be located in areas where more intensive development would be unwarranted due to environmental constraints, incompatible with surrounding land uses, or where criteria set forth in Paragraph c, below, cannot be met.

C. The City may permit increased densities up to 12 units per acre as part of planned residential development or planned redevelopment activities based on the following criteria:

1. Redevelopment through rehabilitation and improvement of substandard or deteriorating housing.

2. For planned redevelopment activities, preservation and improvement of neighborhoods containing affordable single family and multiple family housing, especially where neighborhoods contain vacant lots or abandoned commercial uses.

3. Use of a variety of building and site designs, housing types and efficient construction techniques that lower

construction costs and result in lowering housing cost.

4. Provide for more efficient use of land and protection of the existing neighborhoods, natural systems, and historic resources.

D. Clustered single family attached housing may be permitted with City Council approval, at a maximum of seven (7) units per acre, provided the development meets at least one of the qualifying criteria, is a deed restricted community, and conforms to the development standards included in the City's land development code and design criteria listed below.

1. Qualifying Criteria:

(a) Preservation of environmentally sensitive areas.

(b) Topographical constraints limiting the developable portion of the land.

2. Development Standards:

(a) Land area and project density standards shall be as follows:

(1) Minimum of one (1) acre and no more than seven (7) acres.

(2) Minimum of seven (7) dwelling units and no more than forty-nine (49) dwelling units.

(b) A project shall not be located within one-half mile of another project developed under this policy.

(c) A minimum of twenty percent (20%) of gross site acreage shall be developed as useable open space and active recreational facilities.

(d) A minimum of ten percent (10%) of developed units shall be set aside and priced affordably for qualified moderate income level families.

(e) The development project shall provide a fifteen (15) foot landscaped buffer along property lines adjoining single family residential land uses developed with detached housing.

3. Design Standards:

   (a) Individual lots, buildings, streets and parking areas should be designed and situated to minimize disruption to the site's natural drainage and topography.

   (b) Buildings developed under this policy shall contain no more than five (5) residential dwelling units per building.

   (c) To preserve and promote the single family nature of the development project, single family attached housing units shall only be horizontally attached and front facades shall be staggered.

   (d) Each dwelling units shall vary architecturally so that each presents a distinct and unique appearance as a single family residential unit. Not more than three units per building and no two adjoining units shall have the same architectural appearance and style.

   (e) Buildings shall be finished on all sides with permanent finished materials of consistent quality. Major exterior surfaces of all primary structures shall be face brick, architectural concrete, glass, stucco, synthetic stucco, decorative block, or stone.

4. Development Agreement. The City Council may require a development agreement as a condition of approving any clustered, single family attached housing project. Said agreement shall memorialize all conditions and safeguards deemed necessary by City Council and shall be recorded in the public records of Brevard County as a binding covenant on the subject property.

Policy 1.1.2.4: **Medium Density Residential (MDR).** Medium density residential areas shall be regarded as areas of moderate density detached and attached housing. The following criteria shall be used for determining appropriate locations for medium density residential areas.

A. Medium density residential areas shall have access to a minor collector street, and preferably, to a major collector street or one of higher functional classification.

B. These areas should have convenient access to community services.

C. New developments approved in accordance with the comprehensive plan shall provide amenities to include open space and buffering as required in the City's Land Development Regulations.

Policy 1.1.2.5: **High Density Residential (HDR).** High-density residential areas shall be deemed to be areas of attached multi-unit dwellings and detached housing where a mixture of unit types and a variety of buildings may be permitted. The following criteria shall be used for determining appropriate locations for high density residential areas.

A. High-density residential areas shall have access to a major collector street or a roadway with a higher functional classification.

B. It is the intent of the City to provide these areas with safe and convenient pedestrian access to nearby recreation and shopping facilities.

Policy 1.1.2.6: **Mixed-Use (MU).** The Mixed-Use land use category is intended to provide a mixture of residential, commercial, office, recreational and institutional uses along the major transportation corridors (such as SR 520 and US 1). The mixed-use could be developed as single uses on separate parcels or as a mixture of uses within a single development. Based on current land use trends, the City estimates that the mix of uses in the mixed-use category will be 50 percent residential and 50 percent non-residential. The Floor Area Ratio (FAR) measure shall not be applied to residential developments, or the residential portion of a mixed-use building or development. The following criteria shall be used for determining appropriate locations for mixed-use land use areas.

A. Areas within a quarter mile walking distances of public transit stations, transitional areas between high and low intensity uses, and areas adjacent to major corridors within the City are appropriate for Mixed-Use category.

B. The land development regulations implementing this category shall encourage a compact and walkable environment to reduce vehicle miles of travel and encourage use of public transit.

C. Development within mixed-use shall be encouraged to follow Transit Oriented Design (TOD) principles.

D. Unified architectural and streetscape themes are encouraged for all developments within the Mixed-Use category.

E. Mixed use buildings within a single development will be highly encouraged in this category.

F. For a mixed-use building, only retail sales, offices and services and restaurants are permitted on the ground floor.

G. If residential housing units are developed as part of a vertical mixed use project a bonus of up to 5 units per acre may be achieved.

H. For the purposes of analyzing public facilities impacts of proposed Future Land Use Map amendments, a mix of 50% residential and 50% non-residential land area split shall be utilized.

Policy 1.1.2.7: **Regional Activity Center (RAC).** The City's Future Land Use Map may be amended to include one or more Regional Activity Centers, as a separate and distinct future land use designation. The City shall seek opportunities to work with the private development sector to promote and plan one or more compact, high intensity, multi-use developments that will enhance the City's tax base, provide new employment opportunities and promote additional compatible development within the City. Development within any designated Regional Activity Center shall comply with the requirements of the following policies (inclusive of the applicable Subarea Policies) and all other applicable Comprehensive Plan Policies.

A. Development within this category shall include a minimum of three of the following land uses: commercial, office, residential, hotel or industrial uses and shall conform to the following development criteria:

1. Minimum land area included within the Regional Activity Center: 50 acres; and

2. Minimum cumulative gross floor area of all non-residential structures: 500,000 square feet;

3. Maximum cumulative floor area ratio for the entire Regional Activity Center: 0.50;

4. When a residential land use is a component of the development, the following shall apply:

(a) Minimum cumulative gross floor area for all residential uses shall equal 25% of the cumulative gross floor area for all non-residential uses. The minimum cumulative residential gross floor area shall only be reestablished after initial approval when increases in non-residential uses require a comprehensive plan amendment.

(b) Maximum residential density: 25 dwelling units per acre

5. Maximum hotel/ intensity: 45 rooms per acre

B. Each designated Regional Activity Center shall be subject to Subarea Policies that will establish the specific uses and maximum intensity standards applicable to that particular Regional Activity Center.

C. Each designated Regional Activity Center shall be designed to provide services to, or be regularly used by, a significant number of citizens of more than one county; shall have direct access to a major arterial roadway that intersects with SR 528 or I-95; shall include a multi-modal circulation system that is integrated with the City's overall pedestrian, bicycle and transit systems; and shall be compatible with adjacent uses.

D. Each designated Regional Activity Center shall be developed in a sustainable manner where development and design standards commonly associated with the urban design concepts of Traditional Neighborhood Design (TND) and Neo-Traditional planning principles shall serve as guiding principles, generally complying with the following:

1. Uses shall be mixed and intermingled such as commercial and residential; commercial and office; and or office and residential,

2. Site design shall provide for equal opportunities for vehicular and pedestrian travel internally throughout the site, with the exception of any portion developed wholly as industrial,

3. Interconnectivity, vehicular and pedestrian, between land use zones shall be provided,

4. Site design shall incorporate Crime Prevention Through Environmental Design (CPTED) principles.

E. Designated Regional Activity Centers shall be permitted to convert land uses and intensities within the adopted development program.

1. To ensure substantial conformity with the adopted development program and to retain the mixed-use character of a designated Regional Activity Center, a conversion of any land use category to another may only be permitted to increase or decrease by the below figures for each land use category. A proposed increase or decrease greater than the below figures shall require an amendment to the Comprehensive Plan, specifically to the Subarea policy governing the uses and intensities of the designated Regional Activity Center.

(a) Commercial: 55,000 square feet or 10% whichever is greater

(b) Office: 66,000 square feet or 10% whichever is greater

(c) Residential: 55 units or 10% whichever is greater

(d) Hotel: 83 rooms or 10% whichever is greater

(e) Industrial: 35 acres or 10% whichever is greater

2. To maintain an equivalent number of trips generated by a designated Regional Activity Center and to retain the internal trip capture characteristics, an increase (or decrease) to an approved land use category shall result in a corresponding decrease (or increase) to another approved land use category.

3. To ensure adequate public school capacity is available for designated Regional Activity Centers where a residential land use is part of the adopted development program, a proposed increase in residential land use of any amount shall require a school concurrency evaluation and determination to ensure adequate public school capacity is available to accommodate new students generated by the proposed increase in residential units.

4. For purposes of evaluating concurrency for potable water and wastewater facilities, the demand for the maximum potential development (the base development program plus the maximum allowable increase set forth above) shall be evaluated to ensure adequate public facilities are available to serve the development.

F. Notwithstanding any other provisions in this Comprehensive Plan, development within a designated Regional Activity Center existing as of July 1, 2004 will be allowed to impact wetlands if such development is consistent with the Conservation Element.

G. The development within a Regional Activity Center shall not reduce the flood storage capacity of the project site so as to impact adjoining properties or degrade the quality of the receiving surface water body.

H. The development within a designated Regional Activity Center may utilize compensating storage to achieve the density or intensity authorized in the applicable Subarea

Policies for the particular Regional Activity Center, provided that any proposed alteration to the 100-year floodplain or to isolated flood prone areas shall not adversely impact the drainage of adjacent properties or public drainage facilities.

I. If an endangered, threatened, or species of special concern is found on-site or there is evidence that the species may be present on-site following development, the development within a designated Regional Activity Center shall not commence unless and until the Florida Fish and Wildlife Conservation Commission approves a wildlife management plan (which may include offsite relocation or mitigation, as appropriate).

J. To conserve energy and reduce solid waste production, development within a designated Regional Activity Center shall have a unified solid waste management plan that provides for recycling of materials including glass, paper, aluminum, and plastics.

K. To reduce the demand for potable water, development within a designated Regional Activity Center shall connect to the City's wastewater reuse system.

L. To provide a visually pleasing sense of place, all development within a designated Regional Activity Center shall be subject to a coordinated set of design guidelines for street furniture, signage, landscaping, and public spaces that shall be reviewed and approved by the City's Community Development Director prior to issuance of the first building permit.

M. To reduce the potential for mobile source emissions individual sites developed within a designated Regional Activity Center shall:

1. Plant vegetative landscape strips along major transportation corridors;

2. Be designed to encourage walking, biking, or mass transit usage to reduce the need for vehicular use;

3. Connect to existing or planned bicycle and pedestrian systems in accordance with the City's Bicycle Path Plan.

N. **Brevard Crossings Regional Activity Center**. The City hereby establishes the following standards for the Brevard Crossings Regional Activity Center.

Subarea Policy 1 The Future Land Use Map as amended on March 12, 2002 shows the location of the approved Brevard Crossings Regional Activity Center.

The designated area has been determined by the City to be appropriate for development as a Regional Activity Center.

Subarea Policy 2 Unless increased in accordance with Future Land Use Element Policy 1.1.2.7.E, the Brevard Crossings Regional Activity Center may include a mix of only the following uses and intensities:

- 1,710,000 square feet of commercial uses;
- 300 hotel rooms; and
- 80,000 square feet (3,300 seat) theatre.

Subarea Policy 3 Commercial and office uses shall generally be oriented internal to the site, as opposed to SR 524 exclusively. Buildings shall be oriented toward the street and no greater than two bays of parking shall be permitted between primary structures fronting SR 524 public right of way.

Policy 1.1.2.8: Neighborhood Commercial (NCOMM). Neighborhood commercial areas are intended to be low-impact in nature and serve the needs of the immediate residential area. The following criteria shall be used for determining appropriate locations for neighborhood commercial land use designations on the future land use map.

A. Neighborhood commercial areas may be allowed closer to the residential neighborhoods.

B. The City anticipates that ~~by 2020,~~ the average overall mix of uses in the Neighborhood Commercial Land Use category throughout the City will be a minimum of 85% commercial/office, public/institutional and recreational and a maximum of 15% residential.

C. Pedestrian connectivity between neighborhood commercial and surrounding multi family developments is highly encouraged.

D. The following factors shall be considered when designating new Neighborhood Commercial areas or expanding existing Neighborhood Commercial areas:

1. A land use compatibility study shall be conducted by the applicant to analyze the potential impact of a proposed new Neighborhood Commercial area or Neighborhood Commercial area expansion on the character of the surrounding uses, neighborhoods and natural environment.

2. A multimodal transportation study shall be conducted by the applicant demonstrating that the transportation systems including roads, pedestrian walkways, bike ways, transit facilities affected by the proposed Neighborhood Commercial areas have sufficient current and projected capacity to the handle the travel demand generated by the increased intensity. Additionally, multimodal transportation study shall address the requirements and level of service standards of the Transportation Element.

3. The applicant shall prepare and submit a market study to demonstrate market demand and economic potential for a proposed Neighborhood Commercial area. The market study should include data and analysis concerning the existing, planned and approved supply of commercial property within the market area, occupancy patterns and trends, the demand for commercial uses allowed under the Neighborhood Commercial designation and the demand for the commercial uses specifically proposed.

4. The City may consider the following qualitative factors when reviewing proposed Neighborhood Commercial areas:

   (a) Whether existing vacant Neighborhood Commercial land in the market area can accommodate the size, shape, location, visibility, and access requirements of the proposed uses.

   (b) Whether opportunities are available to redevelop existing Neighborhood Commercial land within the market area.

   (c) Whether the proposed designation will encourage reinvestment in deteriorating or underutilized area, protect property values, discourage the proliferation of low intensity strip commercial uses and promote infill development.

E. At the discretion of the Planning and Zoning Administrator applicant submitted transportation or market studies may be waived for small scale future land use map amendments.

F. Annexed lands at the time of the initial City land use designation shall be exempt from the above study requirements provided the lands proposed for Neighborhood Commercial designation maintained a Brevard County Neighborhood Commercial future land use designation and no net increase in density or intensity will occur as a result of the City future land use designation. Notwithstanding the exemption from the above requirement any future land use map amendment is still subject to the requirements of Chapter 163 Part II Florida Statutes (F.S.). ~~and Rule 9J-5 Florida Administrative Code.~~

G. For the purposes of analyzing public facilities impacts of proposed Future Land Use Map amendments, a mix of 85% non-residential and 15% residential land area split shall be utilized.

Policy 1.1.2.9: **Commercial (COMM).** Commercial areas are intended to be areas that serve several neighborhoods, sub-regional and regional areas and provide an array of retail, personal and professional uses. The following criteria shall be used for determining appropriate locations for commercial land use designations on the future land use map.

A. Commercial areas shall have direct access from a four-lane collector or two-lane arterial.

B. New commercial uses shall be discouraged from linear development and shall be encouraged to develop in clusters, with coordinated parking facilities, and with frontage roads where practical.

C. Maximum Floor Area Ratio (FAR): 1.0. Within the Cocoa Redevelopment Area, the maximum FAR shall be 2.0. A density bonus of up to an additional 2.5 FAR shall be allowable within the Central Business District outside the Cocoa Village Overlay.

D. The following factors shall be considered when designating new commercial areas or expanding existing commercial areas.

1. *Land Use Compatibility Study.* The applicant shall analyze and consider the potential impact of a proposed Commercial area or Commercial area expansion on the character of the surrounding uses, neighborhoods and natural environment.

2. *Transportation Study*. The applicant shall prepare and submit a study demonstrating that the transportation systems affected by the proposed Commercial areas have sufficient current and projected capacity to the handle the travel demand generated by the increased intensity. Additionally, transportation studies shall address the requirements and level of service standards of the Transportation Element.

3. *Market Study*. The applicant shall prepare and submit a market study to demonstrate market demand and economic potential for a proposed Commercial area. The market study should include data and analysis concerning the existing, planned and approved supply of commercial property within the market area, occupancy patterns and trends, the demand for commercial uses allowed under the Commercial designation and the demand for the commercial uses specifically proposed.

4. The City may also consider the following qualitative factors when reviewing proposed Commercial areas:

   (a) Whether existing vacant Commercial land in the market area can accommodate the size, shape, location, visibility, and access requirements of the proposed uses.

   (b) Whether the proposed use is dependent upon proximity to another specific use.

   (c) Whether opportunities are available to redevelop existing Commercial land within the market area.

   (d) Whether opportunities are available to assemble multiple parcels of existing Commercial land under separate ownership.

   (e) Whether the proposed designation will encourage reinvestment in deteriorating or underutilized area, protect property values, discourage the proliferation of low intensity strip commercial uses and promote infill development.

E. At the discretion of the Planning and Zoning Administrator applicant submitted transportation or market studies may be waived for small scale future land use map amendments.

F. Annexed lands at the time of the initial City land use designation shall be exempt from the above study requirements provided the lands proposed for Commercial

designation maintained a Brevard County Community Commercial future land use designation and no net increase in density or intensity will occur as a result of the City future land use designation. Notwithstanding the exemption from the above requirement any future land use map amendment is still subject to the requirements of Chapter 163 Part II F.S. ~~and Rule 9J-5 Florida Administrative Code.~~

Policy 1.1.2.10: **Industrial (IND).** Industrial areas shall be regarded as appropriate for activities associated with industrial development, which can include materials processing, materials assembly, product manufacturing, and storage of finished products. Uses can include manufacturing facilities, warehouse distribution centers and truck terminals. The following criteria shall be used for determining appropriate locations for industrial land use designations on the future land use map.

A. Industrial areas shall also serve as an area to locate businesses with principal uses and activities which could have adverse secondary effects (i.e., increase crime; neighborhood deterioration and blight; property devaluation; economic deterioration; and health risks) on residential areas, religious establishments, schools, parks, or day care centers located within the City; including, but not limited to adult entertainment establishments.

B. Commercial and office uses that are complementary to and support industrial development and operations may be permitted within industrial designated areas.

C. Future industrial areas should be planned with extensive landscaping, and coordinated parking. Industrial areas shall have immediate access to a two-lane collector and/or two-lane arterial.

D. Industrial development shall be designed to minimize the negative impacts on lower intensity land uses through such means as, for example, landscaping and appropriate transitional uses including low scale professional offices or medium density residential development.

Policy 1.1.2.11: **Institutional (INST).** The Institutional land use category is intended to accommodate existing and planned public and semi-public services including: governmental buildings; public schools and educational institutions; hospital facilities and supportive health care units; arts and cultural or civic facilities; essential public services and facilities; cemeteries; fire and emergency operation facilities; utilities; extensive open areas comprising major committed public and semi-public open spaces, and other similar activities. The following criteria

shall be used for determining appropriate locations for institutional land use designations on the future land use map.

A. Public, semi-public and institutional uses shall also be allowed within other land use categories as support uses and as provided for in the zoning regulations.

B. The City shall monitor the need for increased land area for public/institutional uses and shall assure that this land use category on the FLUM is expanded to accommodate the development of public and semi-public facilities (such as governmental buildings; fire, police and rescue services; educational institutions and similar public uses), and facilities that are generator of private sector activities (such as civic centers, museums and arena).

Policy 1.1.2.12: **Open Space/Recreational (OS-REC)**. The open space/recreational land use category is intended to accommodate existing and planned public and private parks and recreation areas and extensive open space areas such as the golf courses; and similar uses. The following criteria shall be used for determining appropriate locations for open space/recreation land use designations on the future land use map.

A. Except as required for other public purposes, publicly owned land identified as open space/recreational on the Future Land Use Map will only be used for park, recreational, and ancillary uses.

B. In designating open space recreational areas, the City will assure consistency with policies provided in the Recreation and Open Space Element.

C. Through the development review process and Capital Improvements Program, the City will attempt to link open space areas to residential areas by bikeways, sidewalks, or footpaths.

D. In developing open space and recreational areas, the City will minimize or eliminate the impact of active uses on sensitive environmental features to the maximum extent possible.

Policy 1.1.2.13: **Conservation (CONS).** The Conservation Future Land Use Category is intended to protect environmentally sensitive natural resource systems as defined in Chapter 163 Part II F.S. ~~. The conservation land use category identifies lands that are environmentally fragile natural resources for long term preservation as defined in §9J-5.003(28), FAC.~~ The following criteria shall be used for designating properties as Conservation on the Future Land Use Map.

A. Any Future Land Use Map amendment adopted after December 1, 2003 shall assign the Conservation Future Land

Use Category to wetlands within the area subject to amendment**.**

B. The boundaries of the Conservation Future Land Use category may be adjusted to be consistent with a wetland jurisdictional line determination by the SJRWMD without the need for a comprehensive plan amendment. In those areas initially presumed but later determined not to be classified as a wetland will take on the future land use category assigned to the upland portion of the development site.

C. At the time of development, wetlands within the Conservation Future Land Use category shall be encumbered by a perpetual conservation easement.

D. Allowable uses, intensities, and impacts within the Conservation Future Land Use category shall be in conformance with those uses, intensities, and impacts listed in the Conservation Element.

Objective 1.1.3: Public Utilities. The City shall maintain regulations to require the provision of sufficient land area for the siting of public facilities and utilities to support development, redevelopment, land use plan amendments and changes to the zoning of a site.

Policy 1.1.3.1: Prior to the issuance of a building permit, the City shall review the impacts of all development proposals on existing public facilities and services to ensure that service levels are not degraded below adopted level of service standards as adopted in this Comprehensive Plan.

Policy 1.1.3.2: The City shall continue to require dedication of land for roadways, stormwater management and utilities.

Policy 1.1.3.3: Require new development to provide necessary services and facilities or to pay a fair share of the cost of those services and facilities, through impact fees, special assessments, exactions, conveyance of land or easements, pro-rata agreements or in-kind professional services directly related to the associated impact.

Policy 1.1.3.4: The City shall encourage requests for voluntary annexation of all the enclaves and logical extensions of the existing City limits to efficiently use public facilities and services, to eliminate areas of jurisdictional problems, and to provide for sound growth and development of the City and surrounding area.

Policy 1.1.3.5: The City shall examine the utility of developing a Joint Planning Area agreement with Brevard County to address future development along the County/City interface.

Objective 1.1.4: Redevelopment. The City shall encourage redevelopment of areas that are exhibiting evidence of decline (i.e., disproportionate number of vacant, dilapidated

and/or substandard structures) through redevelopment programs and through maintaining land development regulations that contain standards and procedures to encourage redevelopment where desirable.

Policy 1.1.4.1: The City shall continue to promote vitality and redevelopment of the three community redevelopment areas established pursuant to Chapter 163, F.S.: Cocoa (Downtown) Redevelopment Area, Diamond Square Redevelopment Area and U.S. 1 Corridor Redevelopment Area.

Policy 1.1.4.2: The highest densities and intensities of use in the Cocoa Redevelopment Area are in the Central Business District (CBD), designated commercial areas to the northwest of the CBD, designated mixed-use along US 1 and SR 520, and designated high-density residential areas as shown on the Future Land Use Map. Development bonuses within the Cocoa (Downtown) Redevelopment Area are as follows:

A. Within the Cocoa (Downtown) Redevelopment Area, the maximum FAR shall be 2.0. A density bonus of up to an additional 2.5 FAR shall be allowable within the Central Business District outside the Cocoa Village Overlay sub-district.

B. Certain areas within the Cocoa (Downtown) Redevelopment Area may achieve up to an additional 25 units per acre.

Policy 1.1.4.3: The City shall redevelop the Central Business District as a viable business district while preserving the historic character of Cocoa Village and of adjacent historic resources, housing and residential neighborhoods, and with protecting natural resources.

Policy 1.1.4.4: The CBD overlaps with the Cocoa (Downtown) Redevelopment Area. The three redevelopment areas outside the CBD are intended to complement, and not compete, with the CBD.

Policy 1.1.4.5: The City shall protect and buffer residential areas in the Cocoa (Downtown) Redevelopment Area from uses of high density or intensity.

Policy 1.1.4.6: The City shall redevelop affordable housing in the Cocoa (Downtown) Redevelopment Area through rehabilitation programs and shall redevelop vacant lots for housing in residential areas by, for example, developing an affordable housing bonus program with the private sector.

Policy 1.1.4.7: The adopted Community Redevelopment Area plans shall be consistent with the City's Future Land Use Map.

Policy 1.1.4.8: The City shall continue to monitor and, as appropriate, conduct parking studies to examine the demand and availability of parking in the Cocoa (Downtown) Redevelopment Area.

Policy 1.1.4.9: On a continuing basis, the City shall review and update, as necessary, the Redevelopment Area Plans.

Policy 1.1.4.10: The City will encourage infill development and redevelopment in blighted areas or areas in transition, and encourage new housing development in appropriate areas where community services exist or are programmed to occur.

Policy 1.1.4.11: The City shall encourage the public to identify established neighborhoods in need of revitalization and develop neighborhood plans with resident participation to establish steps to clean up, reuse, infill and redevelop as needed.

Policy 1.1.4.12: The City shall coordinate redevelopment issues with the private sector to promote mobilization of public and private resources necessary to effectively carry out redevelopment efforts.

Objective 1.1.5: Neighborhood Protection. The City shall ensure that additional growth and development will be respectful of established neighborhoods that define much of the City's character.

Policy 1.1.5.1: More intense development such as commercial, mixed-use and industrial uses shall be designed to minimize the negative impacts on lower intensity land uses through such means as, for example, landscaping and appropriate transitional uses including low-scale professional offices or medium density residential development. In the absence of transitional land uses, potential adverse impacts to surrounding residential should be mitigated through the use of:

A. Buffer areas that will provide a separation between commercial and single-family residential structures;

B. Landscaping and/or trees separating the commercial and residential land use; and

C. Walls and/or opaque vegetative screens separating the commercial and single-family residential land use.

Policy 1.1.5.2: The City shall consider developing neighborhood plans, as needed, to either strengthen preservation of established neighborhoods or encourage redevelopment of transitional neighborhoods.

Policy 1.1.5.3: The City's land development regulations shall maintain appropriate standards and nuisance regulations to limit the impact of more intense development on established residential zones.

Objective 1.1.6: Historic and Archeological Resources. All development activities undertaken in the City will be consistent with and supportive of the plan's goals, objectives, and policies for protecting historic and archeological resources.

Policy 1.1.6.1: The City shall undertake the necessary steps to identify its historical and archeological resources and create a local register of historic places. The local register will list all the properties within the City that have been designated as an individual historic resource or historic districts.

Policy 1.1.6.2: The City shall consider creating design regulations to protect the locally designated historic sites and districts.

Policy 1.1.6.3: ~~By 2012, the~~The City shall consider a historic preservation ordinance to protect significant historic, cultural and archaeological resources.

Policy 1.1.6.4: Nominations may, with the owner's consent, be made to the National Historic Registers based upon the periodic review of properties.

Policy 1.1.6.5: The City shall facilitate the education of the public regarding the significance and historic values associated with the City's architectural, historical, geological, and archaeological resources, and the costs associated with the loss of such resources.

Policy 1.1.6.6: The City shall give consideration to the establishment of an historic zoning district.

Policy 1.1.6.7: The City shall establish a program for public, private, or public and private purchase, within funding capabilities, of development rights to preserve properties identified as historically significant at local or national levels.

Policy 1.1.6.8: The City shall adopt land development regulations that include a requirement for development plans in any areas of the City to identify potential historic resources, to mitigate adverse impacts of development on potentially significant historic resources and to minimize any adverse impacts of development on sites or structures identified as historically significant, except when demolition is required because neither rehabilitation nor relocation is practical.

Policy 1.1.6.9: The City shall look for funding, including grants, to update and expand the 1991 "Historic Buildings of Cocoa" survey.

Policy 1.1.6.10: The location and density of new residential development shall be compatible with historic and natural resources.

Objective 1.1.7: Natural Resources. Natural resources, environmental lands and coastal resources shall be protected through identification, classification, planning and management, and limitations on use consistent with the degree of protection required.

Policy 1.1.7.1: The City shall protect and conserve its wetlands and wetland functions through the implementation of the Conservation Element.

Policy 1.1.7.2: The City shall regulate land use and development to protect water resources and the functions of natural drainage through limiting the percent of impervious coverage for development sites consistent with the Impervious Surface Ratios (ISR) contained in Figure FLU-1 and the Stormwater Management Element.

Policy 1.1.7.3: The City shall include regulations in its land development code that ensure consideration of topography and soil types in the review of proposed development projects to ensure minimal impact on the environment.

Policy 1.1.7.4: Flood plains and floodways shall be identified during the development review process and development shall be limited consistent with FEMA requirements.

Objective 1.1.8: Coastal Planning Areas. The City shall ensure the protection of coastal resources such as marine wildlife, wetland areas, shoreline vegetation and water quality.

Policy 1.1.8.1: Proposed land use plan amendments shall be coordinated with the Brevard local mitigation strategy and the regional hurricane evacuation study.

Policy 1.1.8.2: Population densities in the Coastal High Hazard Areas (CHHA) shall be coordinated with the East Central Florida Regional Planning Council Hurricane Evacuation Study, as updated from time to time.

Policy 1.1.8.3: The City shall implement the applicable recommendations of the Brevard Local Mitigation Strategy as practical and feasible.

Policy 1.1.8.4: The City shall coordinate proposed land use plan amendments with the Indian River Lagoon Comprehensive Conservation & Management Plan and the Brevard County Manatee Protection Plan.

Policy 1.1.8.5: Construction of new marinas or improvements to the existing marinas shall be consistent with criteria listed in the Coastal Management Element.

Objective 1.1.9: Sustainability/Energy Efficiency. The City shall aim at achieving a sustainable/energy efficient environment by minimizing the emission of greenhouse gases and reducing the vehicle miles traveled.

Policy 1.1.9.1: The City shall encourage the development community to obtain green certifications under the United States Green Building Council, Florida Green Building Coalition, Florida Yards and Neighborhoods

Program, Energy Star and Florida Water Star™ programs by providing incentives that make these certifications advantageous.

Policy 1.1.9.2: The City shall promote walking, bicycle riding and use of public transit by requiring compact design, shared facilities between adjacent or nearby uses, and providing for interconnected walkways, bicycle ways and parking, and bus stops as part of development approvals, where applicable.

Policy 1.1.9.3: The City shall continue to utilize and enhance bicycle parking standards, including quantity and location of bike racks, to help reduce parking demand and encourage the use of alternative transportation modes.

Policy 1.1.9.4: The City will support, as applicable, incentives and programs by State and federal governments to promote energy efficiency and conservation and the use of solar and other clean alternative energy sources. The City will also consider the provisions of incentives to support developers interested in building green projects.

Policy 1.1.9.5: The City will promote education of City Staff and public awareness in energy conservation practices and promote green certifications.

Policy 1.1.9.6: The City will support, as applicable, intergovernmental programs with adjacent jurisdictions to promote energy conservation and education.

Objective 1.1.10: Plan Implementation. The City shall maintain, amend and develop land development regulations that guide future growth and development, discourage the proliferation of urban sprawl and implement the goals, objectives and policies of this comprehensive plan.

Policy 1.1.10.1: The City shall maintain land development regulations as required by F.S. that shall contain specific and detailed provisions required to implement the Comprehensive Plan.

Policy 1.1.10.2: Future development and redevelopment activities shall be directed toward appropriate areas considering the topography, soil conditions and availability of facilities and services, and consistent with sound planning principles, minimal natural constraints, and the goals, objectives, and policies provided in the Comprehensive Plan.

Policy 1.1.10.3: Innovative land use development patterns, including PUDs and Cluster Zoning shall be permitted and encouraged in appropriate areas, as defined in the land development regulations.

Policy 1.1.10.4: The City may permit non-residential uses (e.g., schools, churches, recreational facilities, and other public uses) in residential areas where such uses are compatible with residential uses.

Policy 1.1.10.5: The City intends for future elementary and middle schools to be sited as closely to urban residential areas as practical, preferably within walking and/or bicycle distance of the primary residential areas to be served.

Policy 1.1.10.6: The City shall encourage the co-location of public facilities, such as parks, libraries, and community centers, with schools, to the maximum extent feasible.

Policy 1.1.10.7: Existing land uses which are incompatible or inconsistent with the City's Future Land Use Map will continue to be identified and addressed.

Policy 1.1.10.8: Within three years after the adoption of the comprehensive plan update, the City shall have eliminated all inconsistencies between the Official Zoning Map and the Future Land Use Map.

Policy 1.1.10.9: The City shall consider conducting a survey to identity the incompatible uses in the CRAs and major commercial corridors.

Policy 1.1.10.10: The City shall review the non-conforming section of the land development code to ensure its effectiveness.

~~**Policy 1.1.10.10:**~~**Policy 1.1.10.11:** Land development regulations must be made consistent with updates to the comprehensive plan within one year of the plan amendment submittal, as required by F.S.

GOAL 1.2: The City of Cocoa shall place a strong emphasis on requiring quality integrated mixed-use development to improve the appearance of the City, increase property values and achieve a higher quality of life for its businesses, residents and visitors.

Objective 1.2.1: Smart Growth Principles. New development in the City shall incorporate "Smart Growth" principles that will lead to compact development standards as opposed to conventional development standards that encourage urban sprawl.

Policy 1.2.1.1: The City should encourage public-private partnership to develop mixed-use projects at key-locations in the Central Business District, and entice others to do the same.

Policy 1.2.1.2: Development in the Mixed-Use land use category shall provide pedestrian-friendly street design (examples: buildings close to street; providing porches, windows and doors oriented to the street; tree-lined streets; hidden parking lots; garages in rear; narrow, slow-speed streets).

Policy 1.2.1.3: The City shall consider development incentives to encourage developers to revitalize/redevelop abandoned strip malls and commercial sites by converting them into mixed-use developments.

Policy 1.2.1.4: The City shall adopt a pedestrian routes and bike trails master plan. The plan may identify primary and secondary pedestrian routes and bike routes that will connect neighborhoods to parks, downtown and other major destinations in the City.

Policy 1.2.1.5: The City shall increase coordination with SCAT to integrate bike routes and public transit in the City, to increase the transit safety and to expand the transit service routes.

Policy 1.2.1.6: New development, as well as infill development shall provide interconnected street grid networks, where feasible, to disperse traffic and encourage walkability. Developments may include a hierarchy of narrow streets, boulevards and alleys; high-quality pedestrian networks; designs that encourage a greater use of bicycles, rollerblades, scooters and walking as daily transportation; connectivity to public transit; and a land use mix that demonstrates reduced external trips by encouraging internal trips.

Policy 1.2.1.7: Developments that require site plan review and approval shall be evaluated on the use of site and building design that emphasizes beauty, aesthetics, human comfort, creating a sense of place, special placement of civic uses and sites and human-scale architecture and amenities, especially at street level.

Policy 1.2.1.8: Building height and intensification should follow a transect approach, with maximum intensities and heights (>80') allowed in the central business disitirct, medium intensities and heights (40' to 80') allowed within the mixed-use district, and the lowest intensities and heights (<40') allowed when transitioning into established low-density neighborhoods.

Objective 1.2.2: Image and Identity. The City shall ~~establish a~~maintain and update its vision for the City's urban form as needed ~~by 2012.~~.

~~**Policy 1.2.2.1:** By 2012, the City shall update the Vision Plan to clarify and redefine the vision for the City.~~

~~**Policy 1.2.2.2:**~~**Policy 1.2.2.1:** The City shall examine the feasibility of establishing form-based design guidelines for City-wide as well as for specific areas in the City including CRAs, major corridors and waterfront. The standards could include streetscape standards, building signage, architectural styles and gateway designs to highlight the entrances to the City.

~~**Policy 1.2.2.3:**~~**Policy 1.2.2.2:** The City shall develop residential and commercial design standards to ensure attractive, compatible, safe, high-quality development and to encourage Crime Prevention Through

Environmental Design (CPTED) principles in order to increase the safety of commercial and residential development.

~~Policy 1.2.2.4:~~Policy 1.2.2.3: The City shall evaluate the need to amend the Land Development Code to incorporate CPTED principles for residential and commercial developments.

GOAL 1.3: The City of Cocoa shall enhance the quality of life and prosperity of its citizens through the retention and creation of a wide range of profitable business opportunities and jobs.

Objective 1.3.1: Economic Base Enhancement. The City of Cocoa shall seek to establish and maintain a stable and growing economic base through strategic incentive programs and diversification of the economy.

Policy 1.3.1.1: The City will establish a list of the types of businesses it should target to diversify the economy, which shall be known as "target businesses." Efforts to assist the retention and expansion of local business and attract new enterprises shall be concentrated on industry clusters which will make the greatest contribution to job growth and wealth creation.

Policy 1.3.1.2: The City shall recruit targeted business sectors to diversify the economy through an aggressive strategic marketing program, including utilization of publications and a website, providing information and matching sites and services to prospective businesses, impact fee subsidies and other incentives.

Policy 1.3.1.3: The City shall continue to assist developers of new and renovated commercial development by providing technical and administrative support regarding permitting and regulations to maintain a production capacity level sufficient to meet the demand. Technical assistance may include, but not be limited to the following:

- Continue to foster partnerships with private and non-profit sector business groups that can help a business relocate,
- Provide assistance in how to meet the development review requirements of the City and other regulatory agencies; and
- A shortened review process for qualified businesses.

Policy 1.3.1.4: The City shall work to improve the efficiency and convenience of its development review services to its business customers.

Policy 1.3.1.5: The City shall provide referral services to appropriate agencies for information and assistance to prospective and growing businesses in meeting zoning and infrastructure standards as well as requirements imposed by various government agencies.

Policy 1.3.1.6: The City will target businesses with incentive packages and programs including Florida Enterprise Zones, Small Business Assistance programs, Community Façade Programs, HUB Zones, Tax Abatement programs, Brownfield Redevelopment program and Foreign Trade Zone.

Policy 1.3.1.7: The City shall consider adding to the stock of available commercially, recreational and industrially zoned lands as when supply and demand begin to dictate need for more land.

Policy 1.3.1.8: The City shall maintain an office of Economic Development to coordinate between agencies, to develop economic development programs, to retain existing businesses and to actively recruit "target businesses" to the City.

Policy 1.3.1.9: To involve community stakeholder, the City should consider creating an Economic Development Advisory Board consisting of local community and leaders.

Policy 1.3.1.10: The City shall continue efforts to promote business/convention tourism, ecotourism, and sports related tourism in cooperation with the Brevard County Tourist Development Council**.**

Policy 1.3.1.11: The City of Cocoa shall coordinate its economic development programs with other agencies, such as the Economic Development Commission of Florida's Space Coast to expand opportunities.

Objective 1.3.2: Maintain Infrastructure. The City shall maintain adequate infrastructure for encouraging economic activities in the industrial and commercial sectors.

Policy 1.3.2.1: To the extent financially feasible, the City shall continue providing adequate supporting infrastructure (i.e. paved streets, sanitary sewer, drainage, potable water, etc.) in strategic locations throughout the City to appropriately entice economic development.

Objective 1.3.3: Workforce/Wage Enhancement: The City shall improve the quality of life and employability of its citizens by promoting and attracting high technology industries, and higher education opportunities.

Policy 1.3.3.1: To improve the training and education of its work force, the City of Cocoa shall coordinate with the Brevard County Public Schools, Brevard Community College, Webster University and the University of Central Florida.

Policy 1.3.3.2: The City shall work with other government agencies and businesses to match education opportunities to educational and employment needs.

II - TRANSPORTATION ELEMENT

Serving the Community

GOAL 2.1: The City shall provide a safe, efficient, and comprehensive multi-modal transportation system available to all residents of and visitors to the City of Cocoa. When possible, these facilities should be developed so as to enhance the City's greenways.

Objective 2.1.1: Functionality. The City shall maximize existing roadway functionality through alternate modes of transportation.

Policy 2.1.1.1: The City shall maintain for the purpose of issuing building permits and development orders the following list of major roadway facilities:

City of Cocoa Jurisdiction		**Minimum LOS**
Forrest Avenue		E
Cox Road (within city limits)		E
Fiske Boulevard (from SR 520 to Dixon Boulevard)		E
Indian River Drive (C.R. 515)		E
Peachtree Street (from Clearlake Road to U.S. 1/S.R. 5)		E
Florida Avenue (within city limits)		E
Other or Multi-Jurisdictional	**Jurisdiction**	**Minimum LOS**
Pineda Street (from Lake Drive to SR 501)	City/County	E
Michigan Boulevard	County	E
Dixon Boulevard	County	E
Range Road	County	E
Rosetine Street	County	E
Adamson Road (SR 524 to Pine)	County	D
Friday Road (SR 524 to SR 520)	County	E
Grissom Parkway (Industry to Canaveral Groves)	County	E
Industry Road (SR 524 to Grissom Pwky)	County	E
SR 528 (Beachline Expressway)	State	D
SR 520 (from Clearlake Road to U.S. 1/ S.R. 5)	State	D
SR 520 (from SR 524 to Burnett Rd)	State	D
SR 519 (Fiske Boulevard south of SR 520)	State	D
U.S. 1/S.R. 5 (from SR 528 to south of SR 520)	State	D
SR 524 (from SR 520 to SR 528)	State	D
SR 501 (Clearlake Road)	State	D
Interstate Highway 95 (I-95) (SR 519/Fiske Blvd to SR 520)	State	E
Interstate Highway 95 (I-95) (SR 520 to SR 524)	State	E
Interstate Highway 95 (I-95) (SR 524 to SR 528)	State	E

Policy 2.1.1.2: The City shall require that traffic signalization, roadway signage, roadway intersections and operational capacities are designed to optimize traffic flow and enhance the roadway network on City-controlled streets. The City shall carry out the following actions on local streets as necessary, and shall petition the county and state, as appropriate, for action on county and state roadways:

A. Traffic signals shall be computer-coordinated or fully actuated to affect optimal flow to the maximum extent possible;

B. Roadway signage shall conform to the Manual of Uniform Traffic Control Devices (MUTCD) and provide a safe, clear indication of roadway design geometry, traffic hazards, upcoming roadways, and other applicable standards;

C. Roadway intersection design shall include adequate storage lanes and turning lanes to facilitate movement through intersections;

D. Ordinances shall be reviewed and amended as necessary in order to require safe and convenient flow of on-site traffic. Parking for motorized and non-motorized vehicles shall be regulated ; and

E. Intersections shall be designed in accordance with appropriate access management and design manuals.

Objective 2.1.2: Transportation Concurrency. The City shall ensure that transportation facilities are available at the time of development.

Policy 2.1.2.1: Since 2009, the~~The~~ City has been ~~designated a "Dense Urban Land Area" (DULA) and is~~ exempt from state-mandated transportation concurrency. However, ~~T~~the City will~~shall~~ continue to monitor transportation as a matter of local law as addressed in this Comprehensive Plan.

Policy 2.1.2.2: As part of the Concurrency Management System, the City shall review proposed new developments for their impact on the roadway network.

Objective 2.1.3: Mobility Strategies. The City shall develop mobility strategies to reduce the dependency on vehicles, reduce vehicle miles traveled and enhance alternative modes of transportation.

Policy 2.1.3.1: The City shall develop transportation mobility strategies ~~by 2011~~ that ensure the improvement of alternate modes of transportation and ultimately reduce the dependency of the automobile and include, but are not limited to:

A. Providing a network of local streets, collectors and arterials to relieve traffic demand on state and federal highways, including development of parallel roadway facilities, grid street network and connectivity to disperse travel, and to provide convenient pedestrian and bicycle facilities;

B. Managing access and traffic operations to minimize traffic accidents, avoid traffic backups and make the most efficient use of highway capacity, including signal timing optimization, access management plans and strategies, transportation

systems management measures, and railroad grade crossing improvements;

C. Managing traffic demand, where feasible, to manage peak hour traffic loads on major arterials, including working with local employment centers to implement staggered work shifts and flex time programs, telecommuting, ridesharing and vanpool programs, compressed work weeks and parking management;

D. Providing alternative modes of transportation such as bicycle and pedestrian facilities, expanded transit service, park and ride facilities; and

E. Managing land use to limit vehicular demand on state and federal highways by encouraging compact land use and infill, transit oriented development, mixed use and higher density land use patterns.

Policy 2.1.3.2: ~~By 2012, the~~The City shall evaluate the use of mobility fees in lieu of transportation impact fees.

Objective 2.1.4: Proportionate Fair Share. The City shall require new development to bear the full burden of the cost of roadway improvements necessitated by impacts to the roadway network caused by traffic generated by said development through the adopted site approval process.

Policy 2.1.4.1: The City shall utilize the principle of equitable cost participation in the following manner as a guide in development approval decisions, including allocation of costs among private parties benefiting from or creating the need for transportation improvements:

A. New development shall be required to pay its fair share as a condition for development approval based on impact fees, special assessments or other local exaction methods.

B. Existing unmet needs shall be identified, to include an assessment of the need and estimated cost of fulfillment. Assessment shall occur on an annual basis preceding budget adoption.

C. Existing land uses and activities which benefit from better access shall be required to participate in the cost of the roadway improvement in the form of user fees or special assessments. New construction that is located on land improved with better access may be required to pay a pro-rata share of the cost.

D. Provisions shall be made in development orders to include the mitigation of adverse impacts on the state highway system.

Objective 2.1.5: Right-of-Way Preservation. The City shall formally identify right-of-way needs and a priority schedule for acquisition or reservation shall be maintained. Protection of existing right-of-way from building encroachment shall be assured.

Policy 2.1.5.1: The City shall require the dedication of rights-of-way and easements to support private development-related traffic and to maintain adequate levels of service on the roadway network. The developer shall bear the expense of the improvement through donation or dedication of rights-of-way to the extent legally permissible. The City may participate in the expense of the improvement only if the City determines that participation will significantly benefit the general public.

Policy 2.1.5.2: The City shall require that if the transfer of property is to be compensated by the entity building the roadway, the land value shall be assessed on the condition of the land prior to road improvements, not on an inflated value due to a new roadway being present.

Policy 2.1.5.3: The City shall reserve or pursue the purchase of right-of-way as far in the future as possible for planned roadway projects, so as to minimize excessive costs for land purchases and so that the locations and widths of these roads can be considered in ongoing transportation system planning and design activities.

Policy 2.1.5.4: The City shall initiate and coordinate the dedication of right-of-way necessary for roadway improvements identified in the TPO Plan or other officially recognized long-range plan with FDOT and Brevard County.

Policy 2.1.5.5: The City shall seek alternative funding sources for roadway improvements, including but not limited to, tax increment financing.

Objective 2.1.6: Pedestrian and Bicycle Facilities. The City shall ensure safe and adequate movement of pedestrians and bicyclists.

Policy 2.1.6.1: The City shall conduct pedestrian movement and safety studies to determine high travel patterns and accident areas, and remedial actions shall be taken by the City where feasible and practical to mitigate safety problems where conditions have been determined to be unacceptable.

Policy 2.1.6.2: For new development and redevelopment projects, the City shall require sidewalks to be provided where feasible and appropriate along all roadways in or near residential areas that lead to:

- recreation facilities;
- schools;

- commercial centers; and
- employment centers when the need for such facilities has been identified.

Policy 2.1.6.3: The City shall consider bicycle facilities as components of standard design criteria for new and reconstructed roadway facilities of regional significance, except for expressways and freeways, in urban areas pursuant to the requirements of Section 335.065, F.S.

Policy 2.1.6.4: The City shall continue to promote bicycle safety education and encourage local safety personnel to conduct periodic presentations as part of other safety programs.

Policy 2.1.6.5: The City shall assess high vehicle and bicycle/pedestrian conflict areas periodically and a program for lessening the propensity for conflicts shall be initiated.

Objective 2.1.7: Reduction of Greenhouse Gas Emissions. The City shall develop strategies through transportation decisions and planning to address the reduction of greenhouse gas emissions, energy conservation and energy-efficient design.

Policy 2.1.7.1: The City shall coordinate with SCAT to promote car-pooling opportunities for commuters with the same destination.

Policy 2.1.7.2: The City's land development regulations shall require new and infill development and redevelopment, when feasible, to provide interconnections and access to existing and planned multi-modal transportation facilities, including sidewalks and bicycling and transit facilities.

Policy 2.1.7.3: The City shall coordinate with Brevard County, the Space Coast TPO and adjacent municipalities to:

A. Initiate a marketing campaign to promote bicycle, pedestrian and other non-motorized transportation options.

B. Provide additional multi-modal transportation facilities, including sidewalks and bicycle paths/lanes and the expansion of transit service to include a circulator route in the City and vicinity if warranted by ridership and vehicular usage trends.

C. Upgrade existing and provide new transit facilities as warranted such as park and ride lots, bus stops, bus shelters and signage.

Policy 2.1.7.4: In order to discourage urban sprawl, encourage infill development, reduce greenhouse gases and congestion, the City shall evaluate several strategies for alternatives to transportation concurrency including, but not limited to a Transportation Concurrency

Management Area (TCMA), Multi-modal Transportation District (MTD) and Long Term Transportation Concurrency Management System (LTCMS).

Policy 2.1.7.5: The City shall include landscaping and streetscaping as roadway design components in order to enhance the aesthetic and safety of roadways for all users.

Policy 2.1.7.6: The City shall pursue grant opportunities for median landscaping and road beautification.

Objective 2.1.8: Transportation Facilities Improvement Coordination. The City shall continuously coordinate transportation improvement requirements with all other affected governmental entities to ensure that the efficient and cost-effective course of action is followed. Annual plan updates shall consider the FDOT 5-Year Transportation Plan, the Space Coast Transportation Planning Organization and the plans of neighboring jurisdictions.

Policy 2.1.8.1: The City shall continuously coordinate with local, TPO, regional and state plans to accomplish interlocal solutions to the transportation needs and problems of the City.

Policy 2.1.8.2: The City shall seek coordinating actions or interlocal agreements between local government entities for the purposes of addressing transportation impacts of a development project in one jurisdiction on an adjacent jurisdiction based upon actual traffic loadings contributed by the project, the development of the transportation elements of comprehensive plans (Section 163.3177, F.S.) and in ensuring that transportation planning and programming are part of the comprehensive planning process in the region.

Policy 2.1.8.3: The City shall conduct interagency coordination to determine and designate transportation corridors of major statewide or regional significance to develop strategies to provide for the orderly and systematic acquisition of rights-of-way located within the designated corridors and to develop transportation facilities and services within the corridors.

Policy 2.1.8.4: The City shall coordinate with FDOT and Brevard County to develop a road improvement program which will result in the modernization of state and county roads within the City by changing the design of these roads from the existing "rural section" with swales to an "urban section" with curbs, sidewalks and subsurface drainage.

Policy 2.1.8.5: The City shall continue to partner with property owners, the Space Coast TPO, Brevard County, the FDOT and other government

agencies to construct new transportation corridors to relieve arterial and collector road congestion.

Objective 2.1.9: Scenic Roadways Program. The City shall ~~retain the ability to designate certain roadways in the City as scenic when specific criteria are met. Said criteria shall be formulated and adopted by City Council for local and primary roadways by 2012.~~continue to support the Florida Scenic Highways and National Scenic Byways programs.

Policy 2.1.9.1: The City shall ~~establish a scenic roadway designation~~continue to utilize the scenic highways and byways programs for the purpose of protecting and maintaining the appearance and aesthetics of each scenic roadway.

Policy 2.1.9.2: The City shall ~~establish different minimum~~evaluate levels of service standards and standard roadway widths, rights-of-way and other roadway-related requirements on designated scenic roadways where the value, significance, or maintenance of the character and appearance of a scenic roadway outweighs the benefits of increasing vehicular capacity or other considerations.

Objective 2.1.10: Coordination with Future Land Use. The City shall coordinate transportation planning with the land uses shown on the Future Land Use Map, the FDOT 5-Year Transportation Plan, the Space Coast TPO Long Range Transportation Plan and plans of neighboring jurisdictions.

Policy 2.1.10.1: The City's Community Services Department shall review subsequent versions of the FDOT 5-Year Transportation Plan, in order to update or modify this element, if necessary.

Policy 2.1.10.2: The City shall review, for compatibility with this element, the transportation plans and programs of the unincorporated county and neighboring municipalities as they are amended in the future.

Policy 2.1.10.3: All proposed amendments to this Transportation Element shall include a statement of findings supporting such proposals.

Policy 2.1.10.4: As warranted, the City shall undertake a traffic study that will determine the origin and destination of traffic from outside the City in order to better account for who should bear the cost for future road improvements.

Objective 2.1.11: Access. Access to minor arterials, major arterials, expressway, and to a lesser extent, collectors, shall be limited in the following manner by the City, County and the Florida Department of Transportation in order to maximize their traffic-carrying capacity and safety.

Policy 2.1.11.1: The functional classification of each roadway segment being used as a basis for determining the number of access points allowed and types

and extent of traffic flow enhancement measures needed to maintain the capacity.

Policy 2.1.11.2: The issuance of access and connection permits to the roadway network shall be limited to the minimum number necessary to provide safe and reasonable access.

Policy 2.1.11.3: Deceleration lanes being required at all access points on collectors, minor arterials, major arterials, and expressways.

Policy 2.1.11.4: Shared access points being used wherever possible in order to minimize the necessity of one or more access points to adjacent small businesses.

Policy 2.1.11.5: The need for and feasibility of frontage roads being constructed along new or reconstructed major arterials and expressways to increase roadway capacity and to reduce conflicts between local and through traffic.

Policy 2.1.11.6: Access points to parcels with frontage along two or more roadways being located on the roadway of lower functional classification.

Objective 2.1.12: Public Transit. Public transit services shall be based on existing and proposed major trip generators and attractors, new subdivisions, and population growth.

Policy 2.1.12.1: The City shall conduct annual coordination meetings with the Space Coast Area Transit (SCAT) to identify new major trip generators and attractors, new subdivisions and population growth areas in order to establish new public transportation management solutions and routes.

Policy 2.1.12.2: The City shall encourage land uses which promote public transportation in public transportation corridors.

Policy 2.1.12.3: The City shall coordinate with Brevard County, Space Coast TPO, neighboring municipalities, and SCAT to determine needed public transit stops, terminals, maintenance, and improvements to serve the general population and identified special needs populations.

Policy 2.1.12.4: Service provision, including planned transit stop improvements and transit services, for the transportation disadvantaged shall be monitored, through the coordination with Brevard County, to ensure that this segment of the population has adequate mobility.

Policy 2.1.12.5: Transit should routinely be considered as an alternative to roadway widening and as a supplement to roadway improvement projects.

Policy 2.1.12.6: Land development regulations should be periodically reviewed to ensure that development allows and encourages accessibility to public transit.

Policy 2.1.12.7: The City shall consider establishing incentives to be offered to developers that provide access to public transit.

Policy 2.1.12.8: Transportation and mobility shall be monitored using measurable indicators including modal split, annual transit trips per capita, and automobile occupancy rates.

Objective 2.1.13: Alternate Routes to Intrastate System. The City shall establish strategies to facilitate local traffic to use alternatives to the Florida Intrastate System to protect its inter-regional intrastate functions.

Policy 2.1.13.1: New major collectors and arterials shall be constructed in such a manner to help alleviate traffic volumes on the intrastate system.

Policy 2.1.13.2: Synchronization of traffic signals shall occur on all existing major collectors and arterials to reduce the negative impacts of stop and go movements.

Policy 2.1.13.3: Intersectional improvements shall occur on all existing major collector and arterials where necessary to reduce the negative impacts of delayed turning movements.

Policy 2.1.13.4: The ongoing accident surveillance program shall continue to be maintained by the City's Police Department.

Objective 2.1.14: Intermodal Facilities. The City shall coordinate with the Canaveral Port Authority, the Florida East Coast Railroad, and the Space Coast Executive Airport to maximize use of intermodal transportation nodes.

Policy 2.1.14.1: The City shall continue to conduct coordination meetings with the Florida East Coast (FEC) Railroad and Amtrak to establish a future passenger transportation terminal within the City limits.

Policy 2.1.14.2: The City shall conduct annual coordination meetings with the Space Coast Executive Airport and the Canaveral Port Authority to share information on their facility improvements, and the City's future growth and all Developments of Regional Impact (DRI).

Policy 2.1.14.3: The City shall continue to be receptive to alternate means of public transportation which will reduce the demand on the existing infrastructure system.

Policy 2.1.14.4: The City shall develop Transit Oriented Development (TOD) design criteria in the Land Development Regulations.

Objective 2.1.15: **Parking.** The City shall develop parking strategies to support the transportation goals.

Policy 2.1.15.1: The City shall seek a public-private partnership to help establish a multi-use, multi-level parking facility to reduce traffic congestion and increase pedestrian safety, reduce the amount of surface parking lots and increase green space within the Central Business District.

Policy 2.1.15.2: New development shall consider parking for motorized and non-motorized vehicles in site design.

Policy 2.1.15.3: The City shall update parking standards to minimize the amount of surface parking through the establishment of maximum parking standards and shared and co-located parking.

III - HOUSING ELEMENT

Serving the Community

GOAL 3.1: The City shall encourage and promote the provision of decent, safe, and sanitary housing to meet the needs of the present and future population of the City.

Objective 3.1.1: Housing Supply. Assist the private sector to create additional units and preserve existing units to satisfy the projected demand of dwelling units of various types, sizes, and costs ~~by 2020~~ which will be needed to house the City's anticipated population through the planning horizon.

Policy 3.1.1.1: The City's Future Land Use Map shall provide adequate lands to accommodate the projected housing growth.

Policy 3.1.1.2: The City shall continue to provide land use designations and zoning districts on the Future Land Use and the Official Zoning Maps to ensure a variety of housing types including single family, duplex, and multifamily are allowed within the City.

Policy 3.1.1.3: The City shall continue to utilize local government partnerships with the private sector in order to improve the efficiency and expand the capacity of the housing delivery system.

Policy 3.1.1.4: The City shall continue to provide information, technical assistance and housing data to the private sector in order to maintain sufficient housing production capacity. Technical assistance includes, but is not limited to, assistance meeting the development review requirements of the City and other regulatory agencies; referral to appropriate agencies for information; assistance in meeting infrastructure standards and requirements imposed by the City; and provision of data regarding housing needs and conditions.

Policy 3.1.1.5: The City's land development regulations shall allow manufactured buildings (as defined in Chapter 553, F.S.) in all residential zoning districts provided the units comply with all relevant building code standards ~~of Chapters 320 and 553, F.S.,~~ and the U.S. Department of Housing and Urban Development Manufactured Home Construction and Safety Standards.

Policy 3.1.1.6: The City shall promote mixed-use developments that include provisions for a wide variety of housing types and prices.

Policy 3.1.1.7: In order to maintain housing policies responsive to changing conditions, problems, and issues, the City shall undertake special housing studies as needed in order to develop specific local strategies for resolving unanticipated housing problems and issues.

Objective 3.1.2: Elimination of Substandard Housing. The City shall seek ways to eliminate substandard housing conditions and seek ways to improve the structural and aesthetic value of existing homes.

Policy 3.1.2.1: The City shall periodically review and update established housing policies to guide in the conservation, rehabilitation, and demolition program techniques and strategies.

Policy 3.1.2.2: The City of Cocoa will endeavor to eliminate slum and blight throughout the City.

Policy 3.1.2.3: The City shall identify existing housing units that need structural and aesthetic improvements and those that are beyond repair and rehabilitation should be demolished.

Policy 3.1.2.4: The City shall continue to enforce the Florida Building Code and the City of Cocoa's Property Maintenance Standards and Rental Regulations to ensure the construction and maintenance of sound and safe housing and, to encourage the correction of housing code violations, and to set the standards for quality housing within the City. Low income owner-occupants will continue to be referred to available housing assistance programs.

Policy 3.1.2.5: The City shall continue its proactive code enforcement program to monitor the conditions of the City's housing stock, reduce the amount of substandard housing, discourage boarded-up buildings, increase the number of affordable units, and preserve available housing stock using city, county, state or federal funds as available and within the scope of funding capabilities.

Objective 3.1.3: Relocation Housing. The City shall provide uniform and equitable treatment to persons displaced by State and local government programs, consistent with Section 421.55, F.S., and to persons displaced by public projects or programs for which federal or federal-aid funds are available or are used, in accordance with the Surface Transportation and Uniform Relocation Assistance Act of 1987, (Public Law 100-17, Apr. 2, 1987, 101 Stat. 132).

Policy 3.1.3.1: When residents are displaced as a result of redevelopment, demolition or other public projects, the City shall attempt to ensure the residents are able to relocate to appropriate housing.

Policy 3.1.3.2: The City shall coordinate with appropriate agencies to prepare plans of action regarding relocation of residents before programs are enacted that will create displaced households. Such plans shall include, but are not limited to, the following:

- Timing of the relocation;
- Assessment of the need for the program that will displace households;
- Costs associated with the displacement of such households; and

- An assessment of the household's needs and the impact of the relocation on the household, including:
  - Location and the effect of a new neighborhood location on the household's distance to job, schools, and social activities; and
  - The adequacy of public transit, if applicable at the time, to serve the displaced household.

Policy 3.1.3.3: The City shall assure that reasonably located standard housing, at affordable costs, continues to be available to persons displaced through public or quasi-public action prior to their displacement. When federal funds are used for acquisition, demolition, rehabilitation, or conversion, the City shall comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act and with Section 104(d) of the Housing & Community Development Act of 1974 (excluding acquisition), as amended from time to time and as implemented in the City's local housing assistance plans.

Policy 3.1.3.4: Relocation housing should be comparable to the existing dwelling as much as possible, with an emphasis on the number of rooms, size of living space, location to commercial and public facilities and place of employment, and shall be within the financial means of the displaced household. Relocation housing shall be a sound, safe, and sanitary dwelling meeting adopted housing and property maintenance codes.

Policy 3.1.3.5: In the event the City of Cocoa is declared a Federal Disaster Area and in an effort to prevent the relocation of residents whose homes have been declared unsafe for occupancy as a result of a tornado, hurricane or other disaster related event, the City of Cocoa shall permit the location and occupancy of a Federal Emergency Management Agency (FEMA) sponsored trailer on the affected single-family residential lot during the reconstruction of the principal structure. The FEMA sponsored trailer shall be removed once the Certificate of Occupancy for the principal structure is issued by the City's Building Official (if not sooner by mandate of FEMA).

Objective 3.1.4: **Coordination.** The City shall continue to coordinate with public and private sector entities that provide housing services.

Policy 3.1.4.1: The City shall monitor housing, community, and redevelopment proposals for consistency with this Comprehensive Plan.

Policy 3.1.4.2: The City shall continue to coordinate affordable housing, housing development and redevelopment activities with:

- Adjacent municipalities and Brevard County;

- State agencies (such as the Florida Department of Transportation);
- Brevard County School Board;
- East Central Florida Regional Planning Council;
- The Housing Authority of the City of Cocoa; and
- Brevard County HOME Consortium.

Objective 3.1.5: Energy Efficiency. The City shall encourage energy efficiency in the design, construction and rehabilitation of new and existing residential buildings in the City and incorporate alternative energy technologies in the land development regulations.

Policy 3.1.5.1: The City shall consider adopting an ordinance that promotes energy efficiency, use of alternative energy, and conservation alternatives in the construction and rehabilitation of existing buildings.

Policy 3.1.5.2: The City shall create incentive programs for housing projects that seek certification by Florida Green Building Coalition, United States Green Building Coalition (LEED Certifications), Energy Star, Water Star, or other types of certifications acceptable by the City. The incentives may be in the form of expedited plan review and permitting, flexibility of development standards, or monetary incentives.

Policy 3.1.5.3: The City shall consider creating a cross-departmental sustainability team to revise green building policies and engage the development community.

Policy 3.1.5.4: The City shall encourage City staff to obtain LEED accreditation.

Policy 3.1.5.5: The City shall continue the ongoing review and improvement of City codes to remove obstacles to green building.

Policy 3.1.5.6: The City shall promote energy conservation through its land development regulations.

Policy 3.1.5.7: The City shall continue to support Florida Power & Light (FPL) energy efficiency programs by informing residents of the programs that are offered by FPL.

Objective 3.1.6: Location of Housing. The City shall provide appropriate and adequate locations for very low income, low income, and moderate income housing, and provide for adequate sites for mobile and manufactured homes.

Policy 3.1.6.1: The City shall establish and maintain zoning classifications which allow for flexibility in land use design, density, housing types, and price levels to preserve affordable housing and residential neighborhoods, and allow for appropriate land use mixes for very low income, low income, and moderate income households, mobile

homes, manufactured homes, group homes and foster care facilities, and households with special needs including rural and farm worker households

Policy 3.1.6.2: The City shall ensure supporting infrastructure and public facilities are available and maintained to support the location of very low income, low income, and moderate income households as well as for mobile and manufactures homes.

Policy 3.1.6.3: The City shall review and amend its land development regulations to reflect the conditions and criteria consistent with Chapter 419, F.S., guiding the location of group homes and foster care facilities licensed or funded by the Florida Department of Children and Family Services that foster non-discrimination, and encourage the development of community residential alternatives to institutionalization including the infrastructure and public facilities.

Policy 3.1.6.4: The City shall include in its land development regulations site selection criteria for the location of housing for low and moderate-income families, group homes, foster care facilities, and manufactured homes which take into account the accessibility, convenience, and availability of public and private services because low-income families and the elderly often have no private means of transportation.

Policy 3.1.6.5: Should a need be demonstrated for rural and farmworker housing, the City will consider provisions for such housing opportunities.

Objective 3.1.7: Housing Programs. The City shall develop housing programs to improve the structural and aesthetic value of existing homes and the creation of new homes to meet the current and anticipated future residents of the City.

Policy 3.1.7.1: The City shall strengthen public education measures through affirmative outreach efforts to low income households to ensure that the persons or neighborhoods eligible for assistance are aware of its availability as well as the procedures for obtaining such assistance. Public workshops shall be held in areas where the needs are demonstrated.

Policy 3.1.7.2: The City will continue to seek and apply for funding programs to assist in housing rehabilitation, demolition, and preservation for qualified applicants. Housing ownership opportunities for low-income households will continue to be provided through federal and state housing programs.

Policy 3.1.7.3: The City shall survey all homeowners receiving housing rehabilitation assistance after receiving assistance to evaluate the quality of the work and to determine homeowner satisfaction with the program.

Policy 3.1.7.4: The City of Cocoa shall promote personal investment in the community and homeownership by encouraging residents, especially those participating in housing assistance programs, to become involved in community service organizations, projects, and City Boards.

GOAL 3.2: In order to encourage the preservation of the existing housing stock and minimize the relocation of residents and the demolition of housing, the city shall ensure the availability and maintenance of supporting infrastructure and avoid the concentration of affordable housing units only in specific areas of the city.

Objective 3.2.1: Housing Stock and Neighborhoods. The City shall encourage the stabilization of neighborhoods by extending the useful life of the existing housing stock through the enforcement of City codes that preserve neighborhood quality and maintain community facilities.

Policy 3.2.1.1: The placement of public facilities shall be planned so as to minimize the demolition of housing and related relocation of residents. When housing must be removed as a result of City actions, the City shall assess the feasibility of moving the housing to another location and rehabilitating it to standard, affordable conditions to preserve it as part of the City housing stock.

Policy 3.2.1.2: The City shall encourage the stabilization of neighborhoods by maintaining the quality of existing neighborhoods, by upgrading the supporting infrastructure and facilities, including paved public road access; stormwater management facilities and flood protection; wastewater disposal facilities; potable water facilities; solid waste collection service; electric utility service; and by protecting natural and historic resources.

Objective 3.2.2: Historically Significant Housing. Housing designated as historically significant by virtue of architecture, social significance, or ethnic heritage will continue to be identified and continue to be preserved and protected, and if possible, maintained for residential uses.

Policy 3.2.2.1: Applications will be submitted by the City to the Florida Division of Historical Resources for the housing units which have been and may be designated as individual structures or as part of a locally significant historic district to be included on the Florida Master Site File.

Policy 3.2.2.2: The City shall pursue available grants and alternative funding, where appropriate, to expand the local knowledge and awareness of existing historic and archaeological sites and structures.

Policy 3.2.2.3: The City shall assist owners of designated historically significant housing to apply for and utilize state and federal assistance programs.

Policy 3.2.2.4: The City shall encourage the continued identification, analysis, and preservation of the City's historical resources. Such efforts shall include determination of their significance and vulnerability, as well as implementation of preservation management policies. Environmental reviews of units assisted with governmental resources shall be conducted as required.

Policy 3.2.2.5: The City will encourage the retention and preservation of historically significant structures, while discouraging their destruction by requiring that a need for demolition or significant alteration must be demonstrated prior to the issuance of a demolition permit or development order, with need being based on structural integrity, lack of economic feasibility of rehabilitation, restoration, or preservation, and absence of any feasible alternative, for the rehabilitation, restoration, adaptive reuse, or other alteration which would preserve the historic character of the structure. Where such need is demonstrated, relocation of the structure to an appropriate site may be waived if the applicant establishes the lack of feasibility of relocation. Where neither rehabilitation nor relocation is possible, mitigation of the loss of such properties through documentation techniques, including but not limited to measured drawings, photographs and descriptive narrative, will be the recommended treatment.

Policy 3.2.2.6: The City will adopt incentives to retain historically significant residential structures in the City through a variety of strategies and procedures including zoning, land development regulations, public and private land acquisition programs, and other techniques.

Policy 3.2.2.7: The City may require independent feasibility assessments of the feasibility of restoring or rehabilitating architecturally or historically significant residential resources as an alternative to demolition or significant alteration at the applicant's expense.

Policy 3.2.2.8: The City will establish a program for the preservation and improvement of historically significant housing, sites, and structures through participating with owners, citizens' groups, business organizations, and state and federal agencies in restoration, rehabilitation, and public or private purchase with the owner's consent of historically significant housing, sites or structures for the purpose of preservation.

Policy 3.2.2.9: The City shall not seek the local designation of a property or structure as historically significant without the owner's permission.

Policy 3.2.2.10: In identifying and improving historically significant housing, the City shall be guided by the Standards for Rehabilitation of the U.S.

Department of the Interior, as amended. Criteria such as the following shall be employed:

A. The distinguished original qualities or character of a building structure or site and its environment shall not be destroyed. The removal or alterations of any historic material or distinctive architectural features should be avoided when possible.

B. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.

C. Changes that have taken place in the course of time are evidence of the history and development of a building, structure, neighborhood or site and its environment. These changes may have acquired significance in their own right, such as the relocation of a structure many years ago, and this significance shall be recognized and respected.

D. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building structure, neighborhood or site shall be treated with sensitivity.

E. Deteriorated architectural features shall be repaired rather than replaced whenever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic physical or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

F. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.

G. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material and design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.

H. Whenever possible, new additions or alterations to structure shall be done in a manner so that removal of such additions

or alterations in the future would not impair the essential form and integrity of the structure.

I. Applications for rehabilitation of housing which also are eligible for consideration, as historic resources or which are potentially significant historic structures shall be processed in conformance with state and federal guidelines.

J. The City shall employ available measures with particular sensitivity for rehabilitation and preservation of housing which has historic significance by virtue of social factors or ethnic heritage.

Objective 3.2.3: Housing Safety. The City of Cocoa shall utilize Crime Prevention Through Environmental Design (CPTED) principles in order to increase the safety of housing developments through the planning process and incorporate them in the land development regulations. CPTED principles and strategies shall include natural access control, natural surveillance, territorial reinforcement, and target hardening.

Policy 3.2.3.1: The City shall develop guidelines for the development community against which projects will be evaluated to ensure the incorporation of CPTED principles.

Policy 3.2.3.2: The City shall provide technical assistance to housing developers and non-profit housing providers to ensure compliance with CPTED principles.

Objective 3.2.4: Neighborhood Preservation. The City of Cocoa shall promote neighborhood preservation through the continued application and enforcement of zoning district regulations, land development regulations, and nuisance abatement regulations.

Policy 3.2.4.1: The City shall provide for the protection of residential neighborhoods from secondary effects of nearby commercial development.

Policy 3.2.4.2: The City shall require buffering and screening of residential neighborhoods from nearby incompatible land uses through significant landscaped buffer yards and/or compatible transitional uses.

Policy 3.2.4.3: The City shall protect residential neighborhoods from through-traffic with traffic calming measures as well as through the use of selected roadway materials, restrictions on use of roadways by nonresidential vehicles and redirecting traffic flow patterns.

Policy 3.2.4.4: The City shall protect residential neighborhoods from noise, water, and air pollution by regulating land development practices to ensure all applicable local, state, and federal air & water quality standards are met and maintained. Activities creating noise related disturbances

shall be restricted from inappropriate locations or required to provide more stringent attenuation measures.

Policy 3.2.4.5: The City shall encourage mass transit in residential neighborhoods, where appropriate, through the coordination of public transit routes and land use activity.

Policy 3.2.4.6: The City shall support neighborhood serving retail uses ~~appropriately~~ located in close proximity to residential property.

Policy 3.2.4.7: The City shall continue inspection of residential rental properties periodically to protect the health, safety, and welfare of the tenants. The City will continue to initiate inspections of properties in conjunction with appropriate state agencies in situations where: 1) a complaint has been filed with codes enforcement, 2) there exists an obvious code violation, or 3) when the owner applies for a building permit to expand his or her property. All inspectors shall be qualified and licensed to interpret the Florida Building Code and/or the ICC International Property Maintenance Code.

Policy 3.2.4.8: The City shall consider the potential impact of proposed projects on achieving reductions in the concentration of affordable multifamily housing when evaluating applications, awarding discretionary funds, and making recommendations concerning certified affordable housing projects, tax credits, and bond projects.

Policy 3.2.4.9: The City will preserve residential neighborhoods containing affordable housing through appropriate zoning classifications and housing rehabilitation programs which protect their residential integrity and character. The City will give great weight to preserving the residential integrity and character of such neighborhoods in considering petitions by property owners for zoning changes.

Policy 3.2.4.10: The City will support programs and partnerships with the private and non-profit sectors to improve coordination among participants in housing production to preserve, improve, and produce affordable housing through means such as providing grants for land acquisition for production of affordable housing; waiving or subsidizing impact, hook-up, or permitting fees; providing technical assistance; streamlining the permitting and inspection process; providing landscaping or infrastructure improvements to support residential development and rehabilitation; providing density bonuses; or providing funding for capacity building.

GOAL 3.3: The City shall ensure the provision and distribution of adequate sites for affordable housing for present and future populations of the City.

Objective 3.3.1: Incentives for Affordable Housing. The City shall maintain land development regulations and procedures which assist the private and non-profit sector in providing identified housing needs of various types, sizes and costs.

Policy 3.3.1.1: The City shall continue and promote its density bonus program to encourage the private sector to provide affordable housing. The following guidelines shall be utilized in the implementation of the density bonus program.

A. AMOUNT OF BONUS.

For each newly constructed unit of qualifying affordable housing as defined below, the developer shall be entitled to an increase of ten thousand (10,000) square feet of floor area bonus for new construction within the CBD. For a substantial rehabilitation of qualifying affordable housing defined below, the developer shall be entitled to an increase of five thousand (5,000) square feet of floor area bonus for new construction within the CBD. Such bonus is transferable.

B. QUALIFYING AFFORDABLE HOUSING.

1. Qualifying affordable housing shall be newly constructed single-family housing or substantial rehabilitation of housing, made available for purchase by a qualifying low income household, and subject to the following restrictions:

(a) Housing units must be available for purchase and must actually be purchased by a low income household (as defined in Section 420.0004(11), F.S.) at a monthly cost including property taxes, ~~and~~ utilities, and insurance not exceeding thirty percent (30%) of the purchasing household's median gross annual income.~~onthly income.~~

(b) The purchaser of such affordable housing unit must, at the time of purchase, grant to the administering corporation a note and second mortgage interest in the housing unit, payable upon resale, in the amount of fifteen thousand dollars ($15,000.00) (i) which note shall not bear interest and may be forgiven at the rate of one thousand five hundred dollars ($1,500.00) per year and retired after ten (10) years and (ii) which second mortgage shall (a) provide for a twenty-year term; (b) contain a right of first refusal at a price equal to a bona fide written offer of a third-party to purchase

the unit; and (c) contain an agreement to pay to the administering corporation one-half of any profit upon resale of the unit, including a sale upon exercise of said right of first refusal. In the event the purchaser secures a purchase mortgage loan under the Florida Homeownership Assistance Program pursuant to section 420.5088, Florida Statutes (1989), as may be amended, or should the administering corporation be selected as a sponsor under the aforesaid program, the second mortgage interest set forth in this subsection may be denoted as a third mortgage interest in the housing unit.

(c) It shall be the obligation of the administering corporation to exercise the right of first refusal and second mortgage interest to ensure that upon resale of the housing unit, the resale purchaser is also a low income household, or, if unable to exercise the right of first refusal, to apply funds received upon satisfaction of such second mortgage interest to the development or preservation of other affordable housing units within a designated redevelopment area. Any such funds not so applied within five (5) years of receipt by the administering corporation shall be remitted to the City of Cocoa.

Policy 3.3.1.2: The City shall provide information and incentives, such as minimum lot sizes, minimum floor areas, setbacks, and residential land uses to the private sector to ensure that sufficient housing of various types, designs sizes, and costs are constructed.

Policy 3.3.1.3: The City may allow single family dwellings on non-conforming infill lots for affordable and workforce housing development projects.

Policy 3.3.1.4: The City shall continue to provide incentives to developments with affordable housing and workforce housing units. These incentives could include, but are not limited to, increased densities; a streamlined permitting processes to prevent delays; flexible development regulations; and deferment, subsidy and/or waiver of building permit fees, impact fees and inspection fees.

Objective 3.3.2: Adequate Sites for Housing. The City shall provide adequate sites ensuring housing availability for the very low-income, low-income, and moderate-income

households, as well as sites for mobile and manufactured homes for the present and future population of the City.

Policy 3.3.2.1: The City shall affirmatively support proposals for affordable housing that are consistent with the use and density provisions of the Comprehensive Plan.

Policy 3.3.2.2: The City shall support amendments to the Comprehensive Plan and associated land development regulations that permit affordable housing proposals provided such locations; avoid concentrations of low and very low income households; provide full urban services and facilities; are environmentally sensitive; and would create a livable and supportive environment.

Policy 3.3.2.3: The City shall discourage concentrations of affordable multi-family housing in economically and socially distressed areas.

Policy 3.3.2.4: The City shall continue to require that sites for affordable housing have access to the following facilities, services and/or activity centers:

- Potable water and central wastewater systems;
- Employment centers, including shopping centers which accommodate stores offering household goods and services needed on a frequent and recurring basis;
- A collector roadway or higher; and
- Public parks, recreation areas, and/or open space systems.

Policy 3.3.2.5: The City shall encourage the provision of affordable housing in infill/redevelopment areas by providing incentives. The City shall also encourage the development of affordable housing in the Community Redevelopment Areas.

Policy 3.3.2.6: The City shall ensure, to the greatest extent possible, that regulatory techniques and review procedures do not create barriers to infill and affordable housing, when updating its land development regulations.

Policy 3.3.2.7: The City may, through the land development regulations, encourage the development/redevelopment of housing that will integrate a variety of housing types and styles in all neighborhoods.

Objective 3.3.3: Housing Programs. The City shall seek to utilize, leverage and maximize federal, state, and local programs for the present and future population of the City.

Policy 3.3.3.1: The City will continue to support and seek new funding from appropriate federal, state and local sources for rehabilitation of rental units and rental assistance for low income families.

Policy 3.3.3.2: The City will continue to provide housing assistance to income eligible residents by allocating resources received through federal and state housing grants.

Policy 3.3.3.3: The City will continue to explore and consider alternative sources of money and initiatives to improve housing stock and availability. In addition, the City will coordinate with the County to advertise the availability of any funds to the public. These funds will ensure the availability of decent, safe, sanitary, and affordable units to low income residents.

Policy 3.3.3.4: The City shall leverage available funds with federal, state and local subsidy programs to assist the largest number of units possible.

Policy 3.3.3.5: The City shall annually monitor affordable housing projects receiving financial grant assistance or incentives to ensure units are in compliance with affordability requirements.

Policy 3.3.3.6: The City shall partner with the Brevard County Finance Authority in the use of tax exempt financing to provide mortgages at below market interest rates to first time homebuyers.

Policy 3.3.3.7: The City shall promote awareness among the elderly and low-income rental families regarding housing programs which are available to assist them in Cocoa.

Policy 3.3.3.8: The City may participate in and support the activities of private not-for-profit Community Development Corporations (CDC's) and Community Housing Development Organizations (CHDO's) to provide technical assistance and housing information to City and County constituents. Such support may include, but not limited to, financial and/or technical assistance and alternative development standards and code requirements.

Policy 3.3.3.9: The City shall continue to support affordable housing programs and maintain communication with non-profit organizations to promote neighborhood pride, identity, organization, and communication between citizens and City government.

Policy 3.3.3.10: The City shall continue to provide assistance to outside agencies offering counseling referral services for families and individuals seeking affordable housing opportunities.

Policy 3.3.3.11: The City shall participate in and support activities that discourage the use of predatory lending practices. Such support may include, but not be limited to, the provision of financial and or technical assistance to community groups that specialize in education and outreach against predatory lending.

Policy 3.3.3.12: The City shall prioritize projects that utilize public/private partnerships to produce housing and provide support of services to low income families. These programs could include, but not limited to, financial counseling, day care, health care, and transportation.

Policy 3.3.3.13: The City shall participate in Regional Planning Council initiatives directed toward educating local governments about new techniques, especially those programs which promote affordable housing.

GOAL 3.4: The City shall continue encouraging and assisting in the conversion of undue concentrations of public rental housing in the City of Cocoa to affordable home ownership. Where public housing remains, the City shall seek to ensure it's decent, safe, and sanitary for the present and future residents of the City.

Objective 3.4.1: Cooperative Relationship. The City shall establish an ongoing cooperative working relationship with the Housing Authority of the City of Cocoa to provide for and preserve public housing and assist in the conversion of undue concentrations of public housing to affordable home ownership.

Policy 3.4.1.1: The City shall promote educational opportunities and provide training and technical assistance to lower income public housing tenants in preparation for home ownership.

Policy 3.4.1.2: The City shall assist the Housing Authority of the City of Cocoa and/or public housing tenants in seeking financial incentives to facilitate the purchase of owner-occupied housing and/or, to support the cost associated with converting public housing units to owner-occupied or mixed-income units.

Policy 3.4.1.3: The City shall pursue housing resources for low income residents other than public housing or Section 8 tenant-based assistance.

Policy 3.4.1.4: The City shall leverage affordable housing resources in the community through the creation of mixed-finance housing, and encourage and facilitate the conversion of public housing units to owner occupancy.

Policy 3.4.1.5: The City shall pursue financial resources to assist in the rehabilitation of public housing units, or when beyond repair, the demolition and replacement of dilapidated units to new owner-occupied units.

GOAL 3.5: The City shall promote non-discrimination and ensure fair and equal housing opportunities for residents of the City of Cocoa.

Objective 3.5.1: Fair Housing. The City shall remain committed to affirmatively further fair housing.

Policy 3.5.1.1: The City will fully comply with and require the private sector to comply with the Fair Housing Act of 1968 and the local Fair Housing Ordinance. All housing development and redevelopment activities

shall be compatible with and further the purpose of the Fair Housing Act of 1968.

Policy 3.5.1.2: The City shall conduct periodic reviews and amend as necessary all land and housing development regulations to ensure compliance with Federal and State laws on accessibility.

Policy 3.5.1.3: The City shall continue to periodically review the local Fair Housing Ordinance and update as necessary.

Policy 3.5.1.4: The City shall continue to support local fair housing enforcement organizations such as the Fair Housing Continuum.

Policy 3.5.1.5: The City shall encourage public housing agencies to start a counseling program to help housing choice voucher recipients to locate housing outside of poverty concentrated areas.

Policy 3.5.1.6: The City's housing programs shall encourage banks and other lending organizations to operate in areas that are underserved and to provide services to underserved populations.

GOAL 3.6: The City shall encourage the provision of housing opportunities for people with special needs such as the homeless, the elderly, and the physically and/or mentally disabled.

Objective 3.6.1: Group Homes and Foster Care Facilities. The City shall assist the private sector to ensure adequate sites are available in residential areas, or areas of residential character, for group homes and foster care facilities licensed or funded by the Florida Department of Children and Family Services to satisfy the current and future residents of the City.

Policy 3.6.1.1: The City shall continue to review, and revise where necessary, land development regulations to ensure adequate sites in residential areas are provided for special needs populations by means of group homes and foster care facilities licensed or funded by the State of Florida or other such means as shall be deemed appropriate by the Community Development Director.

Policy 3.6.1.2: The City shall continue to provide, in the Land Development Code, adequate location standards for sites in residential areas or areas of residential character for community residential homes, including group homes, retirement homes, and foster care facilities, in accordance with applicable Florida Statutes. These facilities should be located in a variety of urban and rural locations, as appropriate.

Objective 3.6.2: Special Needs Housing. The City shall assist the private sector to create additional units and preserve existing units for households with special needs ~~including rural and farm worker housing~~ to satisfy the projected demand of dwelling units of various types, sizes, and costs ~~by 2020~~.

Policy 3.6.2.1: The City shall continue to support a variety of public and private housing initiatives for affordable housing for special needs populations in areas in close proximity to shopping, public transportation, health services, schools, infrastructure availability, and employment opportunities.

Policy 3.6.2.2: The City shall continue to support organizations which provide shelter and related services to the special needs and homeless population. Such support may include but not be limited to financial and/or technical assistance and alternative design standards and code requirements.

Policy 3.6.2.3: The City shall continue to support organizations, which assist special needs, elderly and handicapped citizens in finding decent, accessible, and affordable housing. Such support may include but not be limited to financial and/or technical assistance and alternative design standards and code requirements.

Policy 3.6.2.4: In an effort to address problems of housing for lower income elderly residents and other households with special housing needs, the City shall allow for the placement of retirement communities and elderly care facilities in areas of residential character as long as they are designed in a manner that is compatible with the character of the neighborhood.

Objective 3.6.3: Homeless. The City shall continue to seek supportive housing opportunities for the homeless and those at risk for homelessness, and ensure that Cocoa and other governments and agencies are working jointly to address these needs.

Policy 3.6.3.1: The City shall remain an active participant in the Brevard County Continuum of Care Coalition to address homelessness in the City.

Policy 3.6.3.2: The City shall designate appropriate areas for providing services for the homeless.

GOAL 3.7: The City shall promote opportunities for the creation of housing and infill development within the City.

Objective 3.7.1: Infill Development. The City shall continue to promote infill housing development by supporting alternative development standards where appropriate and feasible.

Policy 3.7.1.1: The City shall provide and retain residential land uses at varying densities and locations through comprehensive land use planning and land development regulations for affordable housing to satisfy the projected demand of dwelling units of various types, sizes, and costs by 2020, which will be needed to house the City's anticipated population through the planning horizon.

Policy 3.7.1.2: The City shall ensure adequate sites are correctly planned and zoned to accommodate the projected housing growth, including low and very low income housing, and mobile homes.

Objective 3.7.2: Vacant Land Inventory. The City shall continue to monitor and inventory vacant and underused residential land and provide this information to housing developers to stimulate the development of infill housing.

Policy 3.7.2.1: The City shall survey vacant and underutilized land within the Heart of Cocoa and Diamond Square Redevelopment Area to determine which land can be declared surplus and/or publicly acquired to be made available with conditions sufficient to stimulate the development of affordable and infill housing.

Objective 3.7.3: Land Development Regulations. To the greatest extent possible, the City's land development regulations shall not contribute to increased housing costs.

Policy 3.7.3.1: The City shall conduct periodic reviews of existing land development regulations and consider before adoption, policies, procedures, ordinances, regulations, or plan provisions that may have an impact on the cost of housing.

Policy 3.7.3.2: The City shall continue to review and assess the structuring of impact fees in relation to City housing goals and shall make recommendations for amendments to the appropriate codes if necessary.

Objective 3.7.4: Permitting Reviews. The City, where appropriate, may provide priority consideration and permitting review for affordable and infill housing projects in an effort to reduce costs and delays in the permitting review process.

Policy 3.7.4.1: The development review and permitting process for affordable and infill housing shall be streamlined through an ongoing review of the process and the adoption of a more efficient regulatory and permitting process.

Policy 3.7.4.2: The City shall continue to reduce building permit and inspection fees for City-sponsored projects that preserve or produce affordable housing.

Objective 3.7.5: Community Revitalization. The City shall continue to support the revitalization of its Florida Enterprise Zone, its designated Florida Brownfield Area, the Diamond Square Redevelopment Area and the Heart of Cocoa Area concentrating on issues such as crime, economic development, and affordable housing.

Policy 3.7.5.1: The City shall support reasonable efforts to make these areas economically diversified neighborhoods with housing, shopping, public transportation, health services, schools, and employment opportunities for all.

Policy 3.7.5.2: The City shall encourage new construction of single family homes for moderate and upper income households.

Policy 3.7.5.3: The City shall encourage neighborhood revitalization, affordable housing, and homeownership in these areas by implementing programs and regulations that promote a wide variety of housing types, sizes, and prices.

Policy 3.7.5.4: The City shall continue to pursue environmentally-related grants, such as Brownfields Assessment and Cleanup Grants, to advance the cleanup, restoration and redevelopment of City designated Brownfields areas and sites.

Policy 3.7.5.5: The City shall encourage an overall mixture of housing tenure by actively encouraging owner-occupancy within these areas.

Policy 3.7.5.6: The City shall promote design standards that encourage image improvement opportunities in the neighborhood.

Objective 3.7.6: Economic Development. The City shall seek economic solutions to address affordable housing.

Policy 3.7.6.1: To address the needs of the residents of affordable housing, the City shall explore and seek partnerships with the private and public sectors for the creation of employment and training opportunities.

IV - SANITARY SEWER ELEMENT

Serving the Community

GOAL 4.1: The City of Cocoa will provide cost effective and environmentally sound wastewater treatment service to meet existing and projected demands identified in this Plan.

Objective 4.1.1: Maintain Level of Service. Based upon adopted level of service standards, the City shall annually adopt programs and activities to facilitate implementation of a wastewater utility to serve existing and new development as well as areas where septic systems are failing.

Policy 4.1.1.1: Projected flow rates will be updated periodically based on best available data.

Policy 4.1.1.2: The City adopts the following levels of service for wastewater generation:

Development Type	Wastewater Generation
Industrial	0.02 gallons per sq. ft. per day
Office Space	15 gpd per capita
Residential	319 gallons per day per household
Schools	15 gpd per capita
Hotel/Motel	100 gpd per room
Restaurant	50 gpd per seat
Bar Lounge	20 gpd per seat

Policy 4.1.1.3: All land use plan amendments shall require an analysis of the impact of such amendment on the adopted level of service standard and existing sanitary sewer facilities.

Policy 4.1.1.4: All expansions and other improvements of residential, institutional, office, commercial and industrial uses that increase the demand on public infrastructure and require permitting shall comply with the adopted levels of service.

Policy 4.1.1.5: When evaluating collection force main and lift station capacity, the City shall use a peak factor of 3.0 times the average daily flows (ADF).

Policy 4.1.1.6: The City shall encourage continuing education of operating staff to ensure proficiency with respect to optimization of sanitary sewer maintenance and operation processes.

Policy 4.1.1.7: The City shall comply with bond covenants, if any, to ensure the maintenance and operations of facilities, and to provide recommendations for system maintenance and improvements.

Policy 4.1.1.8: Sanitary sewer facilities shall be replaced and existing deficiencies shall be corrected based upon the following priorities:

A. Any project correcting an immediate threat to the health, safety, or welfare of the City's residents will receive priority over the expansion of a facility or the correction or replacement of a non-threatening facility.

B. Any project that will correct an existing deficiency will receive priority over a project to expand the system.

C. Projects that will result in the system exceeding the adopted level of service will be denied.

Objective 4.1.2: Future Sanitary Sewer System. The City shall ensure that the sanitary sewer system is adequate to service the incorporated limits of the City, where the City has an existing legal commitment to provide services, and additional areas outside the incorporated limits as deemed feasible and practical by the City.

Policy 4.1.2.1: When feasible the City will enter into agreements with other government agencies related to the provision of treated wastewater effluent outside of the City's corporate limits. Such agreements will include all necessary legal requirements, rates, financing, specifications, and relevant information pertinent to the provision of treated wastewater effluent to and from the City.

Policy 4.1.2.2: ~~By 2012~~ ~~T~~the City will continue to coordinate with Brevard County to encourage support of all wastewater objectives and policies that are relevant to the enclaves or areas identified through an urban reserve agreement. The City will inform the County of all changes in its service area for utilities and will request that the County inform the City of all proposed development within this service area.

Policy 4.1.2.3: The wastewater system will operate as an enterprise fund, on a revenue-supported basis with user fees covering all operational costs. Revenue bonds and grant funds will provide additional financing for system improvements and expansion.

Policy 4.1.2.4: The City will maintain a plan for extending the wastewater collection system and necessary pumping facilities to developing parts of the City and to areas for potential annexation outside the City.

Policy 4.1.2.5: Following a determination of concurrency for sanitary sewer, and adequate sanitary sewer facilities are in place prior to the impact of development, the City shall require payment of applicable sewer impact fees upon development approval prior to issuance of a certificate of occupancy.

Policy 4.1.2.6: By ordinance, the City shall mandate connection to the City's central sewerage system when available.

Objective 4.1.3: Treatment and Disposal. The existing treatment system will operate at the tertiary treatment level including all appropriate tests and procedures as

required by FDEP and any other relevant governmental agency. System modification and expansion shall include consideration of appropriate changes in treatment level.

Policy 4.1.3.1: The City's sanitary sewer system will be operated in compliance with all local, state and federal regulations and standards.

Policy 4.1.3.2: The City will participate in intergovernmental strategies and programs related to the provision of wastewater service and disposal of treated wastewater effluent within Brevard County, including the coordination of consolidation of wastewater treatment service when it is in the best interest of the citizens of Cocoa.

Policy 4.1.3.3: The City shall coordinate its utility and transportation planning efforts to take advantage of the most economical construction and maintenance costs possible when installing, repairing and/or replacing utility lines, roads and sewers.

Policy 4.1.3.4: The City shall continue the implementation of the reclaimed water system as deemed feasible.

Policy 4.1.3.5: Sludge disposal agreements will be maintained with the Brevard County Landfill (dry) and at least one private contractor (wet).

Policy 4.1.3.6: Wastewater reuse for irrigation and other non-potable uses will be expanded into areas throughout the City where customer use is anticipated to be 25% or greater within five years of installation.

Objective 4.1.4: On-site Wastewater Disposal. The permitting and installation of additional septic tanks or package plants within the incorporated city limits will be discouraged or prohibited, except where on-site disposal represents the most efficient cost effective and environmentally compatible alternative. That decision will be based on availability of central sanitary sewer facilities and on available technical information regarding soils, groundwater table elevations, subsurface hydrology, percolation rates and other factors.

Policy 4.1.4.1: The City will coordinate with health officials to assure sewer availability to developed properties with failing septic systems.

Policy 4.1.4.2: The City will coordinate with Brevard County Consumer Health Services to evaluate each permit for a septic tank system located within the incorporated City limits.

Policy 4.1.4.3: The City will coordinate with Brevard County Consumer Health Services to establish procedures for the monitoring of all septic tanks within the incorporated City limits.

Policy 4.1.4.4: The City will develop a plan to phase-out septic tank use wherever feasible and cost effective.

Policy 4.1.4.5: The City will coordinate with Brevard County to support this objective with regard to the enclaves and any areas identified through an urban reserve agreement.

Policy 4.1.4.6: Wastewater package plants will only be allowed in the event that sewer capacity is not scheduled to be available or to satisfy on-site pretreatment required by the City.

Policy 4.1.4.7: ~~By 2012 the~~The City will adopt an ordinance prohibiting package plants within the incorporated City limits and will coordinate with Brevard County to encourage support of all objectives and policies that are relevant to the enclaves or areas identified through an urban reserve agreement.

Objective 4.1.5: Land Development Regulations. The land development regulations shall be evaluated periodically to ensure that future development within the incorporated limits of the City is coordinated with City wastewater plans.

Policy 4.1.5.1: Approval of new development will be based in part, upon an evaluation of the impact of the development on the City's wastewater treatment system.

Policy 4.1.5.2: The City will require all new collection lines and lift stations constructed by public and private developers to be constructed according to City standards, and, at the City's option, to be dedicated to the City.

Policy 4.1.5.3: The City will require the total costs (extension of lines, alterations to lift stations and the cost of plant capacity) for providing new wastewater service to be borne by the specific users of the new service. Reduction in costs to the new users may be made if deemed necessary or beneficial by the City to accomplish specific goals (e.g. environmental concerns, economic growth, and customer base growth).

V - SOLID WASTE ELEMENT

Serving the Community

GOAL 5.1: The City will provide efficient solid waste collection service to the residents of Cocoa while protecting the environment and public health.

Objective 5.1.1: Solid Waste Collection. The City shall continue to provide for solid waste collection services to City residents and commercial establishments throughout the planning horizon.

Policy 5.1.1.1: The collection service will be operated with revenues from monthly service fees.

Policy 5.1.1.2: The City will maintain land development regulations that require development review procedures to evaluate the impact of proposed land development projects on the collection system through concurrency review procedures.

Policy 5.1.1.3: The City shall ensure adequate equipment to maintain the following level of service standard for solid waste collection:

Solid Waste	Disposal (Brevard County Landfill) Cocoa Distribution Rate: 1.2 tons per capita per year
	Collection Residential: 1 to 2 times per week as needed, each household Non-residential: 2 to 6 times per week as needed, each location Green Waste and Recyclable: Once per week

Policy 5.1.1.4: The City will maintain and enforce the litter ordinance, including the removal of litter from drainage ditches.

Objective 5.1.2: Solid Waste Disposal. The City shall continue to coordinate with Brevard County for the processing and disposal of solid waste at the county facility in a safe and efficient manner.

Policy 5.1.2.1: The City will deliver its solid waste to the Central Brevard Solid Waste Processing facility in accordance with Brevard County requirements.

Policy 5.1.2.2: City participation in any activities related to the expansion of the solid waste processing facility to meet future needs will be based on annual summaries of proportional use data from Brevard County for solid waste service.

Policy 5.1.2.3: The City shall coordinate with Brevard County and the East Central Florida Regional Planning Council to monitor and control the disposal of hazardous wastes in accordance with state law.

Policy 5.1.2.4: The City shall require that all hazardous waste generators within the City properly manage their hazardous wastes in conformance with mandates of the Federal Resource Conservation and Recovery Act and other applicable laws.

Policy 5.1.2.5: The City shall continue to cooperate with and promote Brevard County's public information program to increase public awareness of the nature, harmful effects and proper disposal methods of hazardous waste.

Policy 5.1.2.6: The City shall continue to develop educational programs for the general public and solid waste professionals to encourage hazardous waste source reduction and recycling.

Policy 5.1.2.7: The City shall continue to provide applicable employee training for inspection, identification and disposal of hazardous waste materials.

Objective 5.1.3: Recycling. The City shall encourage~~require~~ the reduction in the volume of solid waste collected through resource recovery, recycling, and conservation programs.

Policy 5.1.3.1: The City shall continue to develop educational programs for the general public and solid waste professionals to encourage waste reduction.

Policy 5.1.3.2: To the fullest extent feasible, the City will encourage public and private sector participation in solid waste recovery, recycling, and conservation programs.

Policy 5.1.3.3: The City shall coordinate with Brevard County with respect to solid waste management and waste recycling programs.

Policy 5.1.3.4: The City will assist the efforts of Brevard County in promoting the reduction of the solid waste stream.

VI - STORMWATER MANAGEMENT ELEMENT

Serving the Community

GOAL 6.1: The City shall ensure the provision of a stormwater management system of appropriate capacity and functionality to protect public health and safety, fulfill requirements of the National Pollutant Discharge Elimination System (NPDES) and Total Maximum Daily Loads (TMDL's).

Objective 6.1.1: Protect Groundwater Recharge, Natural Drainage Features and Water Quality. The City shall continue to require, through the enforcement of development standards, the protection of groundwater recharge, natural drainage features and surface water quality from the impacts of development.

Policy 6.1.1.1: The City's land development regulations shall contain standards that require post-development groundwater recharge rates equal to or greater than pre-development rates.

Policy 6.1.1.2: The City shall include stormwater treatment measures and associated "best management practices" such as earthen berms, swales, settling basins, retention/detention facilities, filtration facilities, natural vegetation and vegetative buffers, oil/grease baffles and skimmers, porous pavement materials, street sweeping and similar devices and practices intended to improve overall water quality in any adopted design standards and land development regulations.

Policy 6.1.1.3: The City will continue to reduce the quantity and improve the quality of stormwater discharge into receiving water bodies and wetlands by continuing to maintain and operate the following stormwater storage/treatment systems:

A. The Rockpond Project treats stormwater runoff from 170+ acres of developed land in Cocoa that discharges into the St. Johns River. This project is a cooperative effort with the City of Rockledge and Brevard County.

B. Bracco Pond treats 1800 acres of untreated stormwater in the City that currently drain directly into the Indian River Lagoon, and continues to be utilized, as permitted, as a supplemental water supply to the City's Reclaimed Water System. Water quality will be monitored in accordance with its Florida Department of Environmental Protection (FDEP) requirements.

C. The Riverfront Park Project stormwater treatment system treats urban stormwater runoff from 20+ acres and will continue to be monitored for its performance in accordance with its St. Johns River Water Management District. permit

D. North Fiske Stormwater Pond treats stormwater runoff from Florida Department of Transportation's widening of US 1.

E. Continue to seek additional projects for retrofitting stormwater systems utilizing best management practices and seeking grants as available.

Policy 6.1.1.4: The City shall require that proposed new development does not alter natural drainage patterns and water storage capabilities so that increased volumes of water are discharged onto surrounding properties or that surface drainage flow are not impeded or retarded so as to create or contribute to flooding or diminished land usage, unless such lands have been purchased or designated by the City for stormwater storage purposes.

Policy 6.1.1.5: The City shall inspect businesses as needed to protect against illegal dumping or drainage of hazardous, toxic or deleterious substances into the City's stormwater management system for conveyance into receiving water bodies.

Policy 6.1.1.6: The City, as required by NPDES permit and the Basin Management Action Plan (BMAP) process, shall collect, compile and evaluate water quantity and quality data for conveyance systems and water bodies that transport and receive flow from stormwater runoff originating from within City Limits. The City will use the surface water quality monitoring program for the purposes of assisting in:

A. Establishing baseline or ambient water quality conditions where none presently exist, and updating existing data on present conditions;

B. Determining the quality of discharges from particular stormwater outfalls suspected of being significant sources of pollutant discharge;

C. Identifying further capital improvements or performance standards for development which are needed to protect aquatic grass beds, wetlands, and water bodies.

Policy 6.1.1.7: The City shall maintain a comprehensive inventory of all components of the City's surface water management system as part of the City's Surface Water Management Plan, which will be updated in 2012 and every five years thereafter, to include the determination and identification of:

A. Water flow patterns, hydro periods and the boundaries of all drainage basins within the City that receive stormwater from within the City, and those basins that receive stormwater from within and outside of the City;

B. Current land uses within each of the identified drainage basins;

C. All point source discharges;

D. Surface water that does not meet Florida Department of Environmental Protection (FDEP) standards;

E. 100-year flood-prone areas, including all floodplains;

F. Extent of existing excess (uncommitted) water flow and storage capacity;

G. Extent of existing deficiencies, including flow and storage capacities;

H. Improvements necessary for the proper operation and management of the Surface Water Management System; and

I. Engineering, biological, and other studies needed to develop the prioritized needs, types and locations of public capital improvement projects and additional performance standards for development.

Objective 6.1.2: Maintenance and Operation of Public Stormwater Facilities. The City shall ensure that all stormwater management systems under the City's authority receive the proper levels of operation and maintenance necessary for the effective accomplishment of their intended water management functions.

Policy 6.1.2.1: Surface water management projects will be implemented in accordance with the adopted Surface Water Management Plan, as updated, and the Capital Improvements Element.

Policy 6.1.2.2: The City shall inspect public stormwater management system components and undertake required maintenance on at least an annual basis.

Policy 6.1.2.3: The City shall coordinate with various public entities such as the SJRWMD, FDEP, Brevard County, and with various civic organizations, in the preparation and dissemination of information to the public regarding litter control, fertilizers, pesticides and herbicides usage and proper application procedures, and the proper disposal of pollution-causing substances and materials.

Policy 6.1.2.4: The City shall continue to implement and update the Surface Water Management Plan. Specifically, the plan will contain such elements as the following as they are developed by the City or other agencies acting to protect and enhance the waters outlined in the plan:

A. Determine the boundaries of all drainage basins within the City limits to which stormwater within the City drains and the boundaries of all drainage basins, within and outside of the City limits, from which the City receives drainage;

B. Identify, quantify, and prioritized flooding situations by magnitude, frequency and severity of impact, including the ability of existing wetlands and water bodies to assimilate stormwater, based on an analysis of plant communities,

without degrading the vitality of the natural wetland communities;

C. Develop a plan for solving or avoiding flooding situations including a preferred alternative and at least one alternative solution for each flooding situation that will accomplish significant reduction or elimination of pollutants in both stormwater and point source discharge from reaching receiving water bodies and wetlands for each drainage basin. Solutions shall make use of non-structural methods, including performance standards for development, wherever possible;

D. Assess the general vitality and distribution of grass beds in water bodies as well as natural wetland plant communities in wetlands for those water bodies which currently receive, or can reasonably be expected to receive in the future, stormwater or point source discharges from within the City limits. Where grass beds for wetland plant communities have been or may be adversely affected by stormwater or point source discharges, develop specific strategies and an implementation schedule for eliminating these adverse impacts;

E. Design and implement a surface water monitoring protocol, including:

1. Identification of the entity charged with the responsibility of carrying out this work;
2. The type, location, and frequency of monitoring; and
3. Where the monitoring program indicates permit violations or degradation of the receiving waters or wetlands or their grass beds or plant communities, requires that retrofitting, replacement, or redesign of stormwater systems or point source discharges must be done.

F. Identify prioritized actions regarding flood control and abatement, stormwater management, environmental and resource protection and water pollution control problems, needs, issues and opportunities;

G. Identify performance standards needed to assure protection of water quality and water flow regimes and native plant communities in wetlands and water bodies; and

H. Identify the entity assigned the responsibility of undertaking or overseeing each recommended action.

Objective 6.1.3: Intergovernmental Coordination. The City shall maintain effective levels of intergovernmental coordination and cooperation with affected units of federal, state, and local government having responsibility for, or being involved in the planning,

design, construction and operation of stormwater management systems under the jurisdiction of multiple governmental agencies.

Policy 6.1.3.1: Interagency staff coordination through formal and informal means (e.g. interlocal agreements, jointly sponsored projects, watershed working groups and staff-to-staff liaison) will be maintained with Brevard County and other governmental agencies regarding downstream drainage canal capacities to ensure that flooding problems are not created by insufficient downstream flow capacity.

Policy 6.1.3.2: Information about the City's surface water management system will be provided to other agencies as requested for use in the planning, design and implementation of surface water management systems operated by other agencies.

Policy 6.1.3.3: The City shall actively participate in the preparation and implementation of applicable Surface Water Improvement and Management (SWIM) plans being undertaken by the SJRWMD that will involve or include land areas in the City or water bodies affected by drainage from the City. The City shall review and provide input to the SJRWMD in its update of the applicable SWIM plans for the Indian River Lagoon and St. Johns River. As part of the implementation of the SWIM Plan, the City shall develop and adopt specific strategies to protect and restore grass beds or wetland plant communities that have been or may be adversely affected by stormwater or point source discharge from the City, to include performance standards for development and prioritized actions to be taken by the City.

Policy 6.1.3.4: The City shall seek the advice and assistance of appropriate agencies in the design, establishment and implementation of the surface water monitoring program as required in the Joint Stipulation Agreement and Amended Final Order of the Florida Administration Commission, to include but not limited to Brevard County, the City of Rockledge, the SJRWMD, the FDEP and the U. S. Environmental Protection Agency.

Policy 6.1.3.5: Except as provided in Future Land Use Element Policy 1.1.2.7 (H), the City will require non-structural methods for flood control, wherever possible, that are designed to maintain natural flow rates and quantities of water.

Policy 6.1.3.6: Except as provided in Future Land Use Element Policy 1.1.2.7 (H), flood control for new development will be accomplished through the limitation of fill in the 100-year floodplain when economically feasible. In cases where there is no practical alternative to fill in the 100-year floodplain, compensatory storage shall be provided through excavation of a volume equivalent to the loss of storage within the

100-year floodplain resulting from the placement of fill in adjacent upland areas (above the 100-year floodplain) where such compensatory storage can be accomplished in an environmentally sound and economically feasible manner.

Objective 6.1.4: Stormwater Facilities Capacity. The City shall maximize the use of existing stormwater management facilities and require new development to construct facilities to achieve and maintain adopted stormwater management level of service standards that fulfill NPDES and TMDL mandates for stormwater quality and quantity.

Policy 6.1.4.1: The City, as part of the Surface Water Management Plan updates, shall identify and perform a comparative analysis of all capital, operational and maintenance costs associated with the identified preferred and secondary alternatives intended to address flooding, pollution control and environmental degradation problems and needs, including the following:

A. The estimated costs of undertaking individual actions involving public construction projects or major manpower commitments and an economically feasible funding source for each;

B. The proposed prioritized plan of implementation;

C. The recommended time schedule for undertaking the prioritized actions, based on levels of degradation suffered by or anticipated for wetlands and water bodies, financial capabilities and time requirements to undertake the individual actions; and

D. The list of necessary revisions to the Capital Improvements Element, including the Five-year Schedule of Capital Improvements, to reflect the prioritized actions which involve funding commitments.

Policy 6.1.4.2: Every five years, the City shall publish reports describing data obtained and progress made toward accomplishing the goals of the Surface Water Management Plan.

Policy 6.1.4.3: The City shall utilize funds from the stormwater assessment fee for correcting deficiencies in the public stormwater management system and funds from the stormwater utility service fee to provide funding for financing proposed improvements related to new development.

Policy 6.1.4.4: New development shall design stormwater management systems to meet the rules and criteria established by the City of Cocoa, the SJRWMD and the Florida Department of Environmental Protection, as applicable.

Policy 6.1.4.5: At a minimum, the existing stormwater management systems and current levels of service shall be maintained. The City shall achieve and maintain the following adopted stormwater management level of service (LOS) standards for new development and redevelopment:

STORMWATER MANAGEMENT	DESIGN STORM EVENT 25-year frequency/24-hour duration event
	ON-SITE STORMWATER MANAGEMENT Retention of the first one inch of rainfall runoff for areas of one acre or more; or retention of first one-half inch of rainfall runoff for drainage areas of less than one acre.
	STORMWATER QUANTITY Post development stormwater runoff flow rates, quantities, peaks, and velocities shall be equal to or less than levels that existed prior to development.
	STORMWATER QUALITY No significant degradation of water quality in receiving water bodies

Policy 6.1.4.6: The City shall inspect individual on-site stormwater treatment facilities following their construction and periodically to ensure proper operation and maintenance.

Objective 6.1.5: Sustainable Stormwater Management Strategies. The City shall encourage the use of sustainable, low impact development (LID) strategies to address stormwater management for developments ranging from individual building sites, to subdivisions, to large planned developments.

Policy 6.1.5.1: The City shall coordinate with local, regional, state and federal agencies to provide educational materials and forums to the public and the development community on the value and benefits of sustainable stormwater management facilities design.

Policy 6.1.5.2: For new construction or redevelopment of City buildings and facilities, the City shall utilize LID principles to the extent practicable to address stormwater management needs and to model innovative techniques:

- Manage stormwater as close to its origin as possible by using many small-scale LID techniques.
- Create a site design that slows surface flows, ~~and~~ increases the amount of time stormwater flows over the site and implements/retains pervious surfaces (areas maintained in their natural conditions or materials that permit the infiltration or percolation of water into the ground) where appropriate.~~.~~
- Increase the reliability of the stormwater system by using multiple, redundant stormwater controls.
- Integrate stormwater controls into the design of the site and use the controls as site amenities.
- Reduce the reliance on traditional collection and conveyance stormwater practices.

Policy 6.1.5.3: The City shall consider updating land development regulations to permit innovative LID techniques in the design of stormwater management facilities for development and redevelopment sites including, but not limited to the following:

- Bioretention cells or swales (also known as rain gardens);
- Cisterns and rooftop rainwater harvesting;
- Permeable concrete pavers or pavement.

Policy 6.1.5.4: The stormwater master plan shall incorporate an increase in green engineering/infrastructure solutions to reduce run off into the lagoon either directly or indirectly and provide additional opportunities for water capture and filtration. These solutions shall include but not be limited to bioswales, water detention/retention ponds, seasonal stormwater parks, trees and other native vegetation, rain gardens and other water flow diversion and capture solutions.

Policy 6.1.5.5: The City shall consider the acquisition of properties in the 100-year flood plain that can be used for public open space and function as part of a hybrid stormwater master plan that utilizes green engineering techniques such as stormwater parks, bioswales, rain gardens and others that will result the capture of water and provide natural filtration prior to entering the lagoon and will result in the removal of coastal real property from flood zone designations established by the Federal Emergency Management Agency (FEMA). These projects shall be designed in a manner that will allow for continued functionality when considering future effects from sea level rise.

Policy 6.1.5.6: The City shall administer land development regulations that promote a "natural runoff" or "net-zero discharge" for all site plans in the 100-year floodplain.

VII - POTABLE WATER ELEMENT



Serving the Community

GOAL 7.1: The City shall plan for and assure an adequate supply of potable water to the citizens of Cocoa, municipalities and unincorporated areas within the franchise area granted by the State, Federal installations within the franchise area, and other customers in accordance with City of Cocoa agreements.

Objective 7.1.1: Maintain Level of Service. Based upon the adopted level of service (LOS) standards, the City shall adopt programs and activities as needed to correct existing deficiencies and maintain the public water system.

Policy 7.1.1.1: LOS standards are as follows:

AVERAGE FLOW: 122 gallons per capita per day (gpcpd) per Equivalent Residential Connection (ERC), or 340 gallons per day per ERC
PEAK DAILY FLOW: 510 gallons per day per ERC
PEAK FLOW COEFFICIENT: 1.5
PRESSURE: Normal: 55-65 psi. Peak Hour: 40-50 psi. During Fire: 20 psi.

Policy 7.1.1.2: The City shall update its LOS based on changes to the Regional and State Plans and the St. Johns River Water Management District (SJRWMD) Water Supply Facility Management Plan.

Policy 7.1.1.3: The City shall issue no development orders or permits without first determining whether adequate water supplies to serve the development will be available no later than the anticipated date of issuance by the City of a certificate of occupancy or its functional equivalent. The City will also ensure that adequate water supplies and facilities are available and in place prior to issuing a certificate of occupancy or its functional equivalent.

Objective 7.1.2: Plant Capacity. The City's Water Treatment Plant will continue to maintain sufficient design capacity to meet existing and projected flow rates based on annual summaries of capacity and demand information prepared by the City's Utilities Department.

Policy 7.1.2.1: Projected flow rates will be updated annually based on best available data.

Policy 7.1.2.2: Expansion of the design capacity of the Water Treatment Plants will be consistent with the goals, objectives and policies of the Plan and multi-jurisdictional water planning efforts in central Brevard County.

Objective 7.1.3: Service Area Development. The City will continue to provide potable water to its franchise area.

Policy 7.1.3.1: Potable water contractual agreements will include all necessary legal requirements, rates, service area specifications and relevant information pertinent to the provision of potable water service.

Policy 7.1.3.2: Development within the franchise area will be coordinated with the City specifications and requirements for provision of potable water service.

Policy 7.1.3.3: Expansion of the distribution system will continue to be funded by user fees and connection charges and supplemented with grant funds when appropriate.

Objective 7.1.4: Water Conservation. Water conservation will be ensured through standards established in the City's Consumptive Use Permit issued by the St. John's River Water Management District. All goals, objectives, and policies of the Conservation Element pertaining to use of potable water shall apply.

Policy 7.1.4.1: The City's land development regulations will include water conservation strategies. Conservation strategies may include, but are not limited to:

A. Installation of water conserving plumbing fixtures in new or renovated building construction that is, at a minimum, consistent with the requirements of the State Water Conservation Act. ~~(Section 553.14, F.S.),~~ and the Brevard County Water Conservation Plan.

B. Water reuse and/or reclamation, for irrigation, industrial use and other appropriate non-potable water use applications.

C. Requesting new development to use natural vegetation and/or drought resistant plants.

D. Continued utilization of escalating block rate water pricing for potable water use.

E. The City shall require all new development and substantial redevelopment to connect to the reclaimed water system, if available. If not available, but availability is planned within five years, require installation of dry lines for future connection to the reclaim system.

F. Continue requiring the installation of meters for reclaim service.

G. Where feasible, the City shall require reuse water or some other non-potable source of water, such as stormwater, for irrigation of all public areas owned by the City.

H. ~~By 2011, the~~The City shall continue to implement best management practices for water conservation, including any new technology not yet developed.

I. ~~By 2011, the~~The City shall adopt a water conservation ordinance for the incorporated City requiring use of such water conservation methods as use of "Florida Friendly Landscape Techniques", conduct landscape irrigation audits, conduct irrigation conservation presentations for local schools and organizations, and research and adopt low impact development techniques such as Florida's Water Star program.

J. The City shall evaluate offering incentives for increased water efficiency by giving a corresponding reduction in the standard water, sewer, and reuse water fees for new developments with proven water efficiency.

K. Encourage the use of third party, sustainable building rating and certification systems, such as the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system on all new developments as well as renovation projects including both private and public buildings.

Policy 7.1.4.2: The City will support water conservation through participation in existing county, state and federal programs, and by establishing its own programs, including but not limited to, developing a program to encourage retrofitting existing high volume flush toilets with low flow toilets.

Objective 7.1.5: Water Supply Facilities Work Plan (Work Plan). The City shall maintain a Water Supply Facilities Work Plan that covers a minimum ten-year planning period addressing water supply facilities necessary to serve existing and future development within the City's water service area.

Policy 7.1.5.1: The City hereby adopts into the Comprehensive Plan by reference, its Water Supply Facilities Work Plan. To ensure ongoing consistency and compliance with the SJRWMD Water Supply Management Plan as it may be amended from time-to-time, this plan will be updated through amendments to the Comprehensive Plan.

Policy 7.1.5.2: On an annual basis, the City shall update the Capital Improvements Statement attached to the Water Supply Facilities Work Plan as an appendix to update the listing of projects needed to support the Work Plan.

Policy 7.1.5.3: Within 18 months of the SJRWMD updating its Water Supply Management Plan, the City shall adopt changes to its Water Supply Facilities Work Plan as needed to keep said plan current and

consistent with the SJRWMD's plan, including population and capacity projections.

Policy 7.1.5.4: In conjunction with the SJRWMD, the City shall develop a plan to increase its use of alternative water sources. The City shall continue to participate in the Cocoa / Rockledge Interconnect and the St Johns River / Taylor Creek Reservoir alternative water supply projects.

Policy 7.1.5.5: As required by State Statute and law, the City shall maintain an annually updated ~~"cost feasible"~~ Capital Improvements Plan~~, to be updated annually~~ in conjunction with updates to the Capital Improvements Element of the City of Cocoa Comprehensive Plan.

Policy 7.1.5.6: The Water Supply Facilities Work Plan will be consistent with the potable water level of service standards established in Policy 7.1.1.1.

Policy 7.1.5.7: The Water Supply Facilities Work Plan will be updated within 18 months of any ~~the~~ District Water Supply Plan SJRWMD ~~2005~~ updates that affects the City.

Policy 7.1.5.8: When updating the Water Supply Facilities Work Plan the City will seek alternative sources of water in order to meet projected demand increases.

Policy 7.1.5.9: The Water Supply Facilities Work Plan will be used to prioritize and coordinate the expansion and upgrade of facilities used to withdraw, transmit, treat, store and distribute potable water to meet future needs.

Policy 7.1.5.10: The City will establish and maintain at a minimum a current five year ~~"cost feasible"~~ schedule of capital improvements for the improvement, extension, and / or increase in capacity of water facilities.

Policy 7.1.5.11: The City will compare the CIP with the CIE of the Comprehensive Plan annually to ensure compatibility and consistency between the two documents.

Policy 7.1.5.12: The City shall develop and maintain a water quality calibrated hydraulic model and accurate GIS maps for the potable water system.

Policy 7.1.5.13: The City shall develop and maintain a 20-year master plan for the potable water system with comprehensive updates conducted not less frequently than once every five years.

Objective 7.1.6: Alternative Water Supply. The City shall identify and use water supply sources that are consistent with the Water Supply Facilities Work Plan and the SJRWMD Water Supply Management Plan.

Policy 7.1.6.1: The City shall develop feasible alternative sources of water, while avoiding adverse impacts on the natural environment.

Policy 7.1.6.2: The City shall maximize the use of alternative water supplies and implement management techniques in order to sustain water resources, and enhance existing supplies.

Objective 7.1.7: Water Supply Sources. The City will identify and utilize sources of water that can be used to meet existing and future needs when maintaining and updating the Water Supply Facilities Work Plan.

Policy 7.1.7.1: In conjunction with the SJRWMD and other local governments the City will seek the development of efficient cost effective and technically feasible water sources that will supplement future demands without causing adverse impacts to water quality wetlands and aquatic systems. These sources may include but are not limited to brackish groundwater, surface water, and seawater.

Policy 7.1.7.2: The City will maximize the use of existing potable water facilities through the implementation of management techniques that can enhance a source of supply, sustain water resources, and related natural systems and/or optimize water supply. These techniques may include but are not limited to aquifer storage recovery; reclaimed water system interconnects, and water conservation.

Policy 7.1.7.3: The City's annual water consumption will be equal to or less than the amount allocated under the District issued consumptive use permit.

Policy 7.1.7.4: The City will participate in updates of the SJRWMD's water supply assessments and updates of the District Water Supply Plan to enable the City to effectively update design and implementation aspects of the City's water supply plan.

Objective 7.1.8: Provision of Potable Water on a Wholesale Basis. When feasible, the City will enter into agreements to provide potable water on a wholesale basis to other potable water suppliers in need of potable water outside of the City's franchise area.

Policy 7.1.8.1: Any wholesale water agreements will include all necessary legal requirements, rates, financing specifications, and relevant information pertinent to the provision of potable water on a wholesale basis.

Policy 7.1.8.2: All wholesale water agreements will be consistent with the standards and requirements established in the City's Consumptive Use Permit(s) issued by the St. Johns River Water Management District.

VIII - NATURAL GROUNDWATER AQUIFER RECHARGE ELEMENT

CITY OF COCOA

Serving the Community

GOAL 8.1: The City shall protect and preserve the function of the surficial fresh-water aquifer and recharge areas within the City of Cocoa to ensure an adequate source of quality and quantity of potable water.

Objective 8.1.1: Intergovernmental Coordination. The City shall coordinate with other agencies and continue to enforce measures in the City Code that will ensure preservation of natural recharge to the City's groundwater resource and conservation of its potable water sources.

Policy 8.1.1.1: The City shall coordinate with Brevard County, the SJRWMD and other state and federal agencies in the education of residents and business owners on water conservation and the protection of groundwater.

Policy 8.1.1.2: The City shall continue to coordinate with Brevard County, Orange County, the SJRWMD and state and federal agencies to achieve regional aquifer recharge protection objectives.

Policy 8.1.1.3: In order to reduce the potential for saltwater intrusion and to protect existing groundwater supplies, the City shall continue to require the expansion of the alternative water supply and distribution system.

Objective 8.1.2: Best Management Practices. The City shall recognize best management practices and include these in the land development regulations to protect and preserve the quality and quantity of groundwater occurring in the City of Cocoa.

Policy 8.1.2.1: The City shall continue to enforce land development regulations that establish standards for development to protect recharge areas through the requirement for landscaping and open space.

Policy 8.1.2.2: The City shall continue enforcement of its land development regulations to ensure that land uses requiring the routine application of pesticides or herbicides or requiring underground storage of hazardous materials maintain a groundwater monitoring program designed to detect contamination of the surficial aquifer.

Policy 8.1.2.3: The City shall require that development within high aquifer recharge areas maintain pre-development net recharge in the post-development condition to protect ground and surface water quality.

Policy 8.1.2.4: The City shall identify critical high aquifer recharge areas that are vital to the protection of natural systems and/or current or future sources of potable water and require a higher level of protection for these areas than required elsewhere in the City, including, but not limited to, lower impervious surface ratios, higher open space requirements and enhanced stormwater runoff protection measures.

Policy 8.1.2.5: Pervious surface shall be defined as land that is not built upon with any structure or pavement nor has any feature that prevents surface

water from percolating into the ground and recharging the aquifer. Wet stormwater ponds, wetlands and lakes shall be excluded from meeting the pervious surface requirement.

IX - COASTAL MANAGEMENT ELEMENT

CITY OF COCOA

Serving the Community

GOAL 9.1: ~~The~~ The natural resources of the City's coastal planning area shall be preserved, protected or enhanced, as physically, fiscally, and practically feasible in light of impacts from sea level rise, to provide the highest possible water quality, habitat for fish and wildlife and use for public recreation while safeguarding human life, property and public expenditures.~~natural resources of the City's coastal planning area shall be preserved, protected or enhanced to provide the highest possible water quality, habitat for fish and wildlife and use for public recreation.~~

Objective 9.1.1: Coastal Planning Area: The Coastal Planning Area (CPA) shall be defined as the hazard area as delineated in Figure CM-1 which includes:

(1) The Coastal High Hazard Area (CHHA);

(2) Areas of the City vulnerable to a Category 3 storm surge as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model;

(3) Areas of the City vulnerable to sea level rise by 2070 based on the 2013 USACE High sea-level-rise curve;

(4) Other areas of the City identified by the City Council as being subject to, or in the immediate vicinity of areas subject to, coastal erosion, flooding or sea level rise.

Policy 9.1.1.1: If 20% or more of a parcel is located within the CPA, then the entire parcel shall be considered within the CPA.

Policy 9.1.1.2: The CPA shall also serve as the Adaptation Action Area in accordance with Sections 163.3164(1) and 163.3177(6)(g)10 Florida Statutes with the purpose of increasing funding opportunities (such as grants) and identifying creative solutions for increasing the resiliency of the Adaption Action Area against natural hazards, flooding and sea level rise, so that the City may:

(1) Protect the health, safety and welfare of residents

(2) Prevent damage to public and private property

(3) Reduce National Flood Insurance Program premiums to property owners

(4) Prioritize policies, projects and funding that implement flood alleviation improvements and mitigation projects

~~**Policy 9.1.1.1:**~~**Policy 9.1.1.3:** Every 7 years, the City shall use public input, subject matter experts and best available science/data to refine the identification of the Coastal Planning Area.

Objective 9.1.2: Protection of Marine Resources. The City shall protect and restore, where possible, the following natural resources and environmental attributes within its control: endangered species and their habitat, native vegetation and wildlife, fisheries and estuarine habitat, water quality, wetlands, and floodplains.

Policy 9.1.2.1: The City shall continue to coordinate coastal planning area environmental protection and restoration efforts with adjacent local governments, and shall institute procedures to ensure that development and restoration activities are consistent with existing resource protection plans.

Policy 9.1.2.2: The City shall, with the assistance of the Marine Resources Council of East Florida, identify all resource protection plans for the Indian River and Cocoa coastal planning area which exist or are in development.

Policy 9.1.2.3: The City shall ensure that its plans, procedures, and development criteria conform to the guidelines provided by resource protection plans for the Cocoa coastal planning area.

Policy 9.1.2.4: The City shall minimize the disturbance of natural shorelines to improve and continue the stabilization, protection and habitat benefits natural shorelines provide through the prioritization of the use of living shorelines over new or replacement armoring in the coastal planning area. The City shall review and update related City Ordinance(s), to require evidence as to whether a project is eligible for permitting by the US Army Corps of Engineers under "Nationwide Permit (54) Living Shorelines" and evidence as to whether a living shoreline offers sufficient protection to the property. If "evidence" as described in the updated ordinance demonstrates that a living shoreline is not sufficient to protect property and life, additional structural elements may be added but must be accompanied by living shoreline elements to the extent practical and feasible.

Policy 9.1.2.5: The City shall maintain shoreline protection and erosion control by working with property owners and Brevard County to facilitate the installation and maintenance of native shoreline vegetation, oyster matts and other natural techniques along appropriate areas.

Policy 9.1.2.6: Public expenditures in the coastal planning area, when available, will consider including programming improvements that restore and enhance natural resources.

~~**Policy 9.1.2.1:** The coastal planning area shall be that area as defined by the Coastal High Hazard Area.~~

~~**Policy 9.1.2.2:** The City shall continue to coordinate coastal planning area environmental protection and restoration efforts with adjacent local governments, and shall institute procedures to ensure that development and restoration activities are consistent with existing resource protection plans.~~

~~**Policy 9.1.2.3:** The City shall, with the assistance of the Marine Resources Council of East Florida, identify all resource protection plans for the Indian River and Cocoa coastal planning area which exist or are in development.~~

~~**Policy 9.1.2.4:** The City shall ensure that its plans, procedures, and development criteria conform to the guidelines provided by resource protection plans for the Cocoa coastal planning area.~~

Objective 9.1.3: Estuarine Environmental Quality. ~~The~~ The City shall preserve and protect the environmental quality of estuarine environments by limiting specific impacts and cumulative impacts of development or redevelopment while considering future impacts of sea level rise and flooding.~~City shall preserve and protect the environmental quality of estuarine environments by limiting specific impacts and cumulative impacts of development or redevelopment.~~

Policy 9.1.3.1: The City shall actively participate in the Surface Water Improvement and Management (SWIM) Plan administered by the St. Johns River Water Management District (SJRWMD) for the Indian River Lagoon.

Policy 9.1.3.2: The City shall participate in future updates to the Indian River Lagoon Comprehensive Conservation and Management Plan, most recently updated in 2008, and will continue to support and implement the action plan items applicable to the City.

Policy 9.1.3.3: The City shall coordinate with the SJRWMD, the Florida Department of Environmental Protection (FDEP), the U.S. Army Corps of Engineers, and/or any other relevant regulatory agency, to conserve, enhance, and protect coastal wetlands.

Policy 9.1.3.4: The City shall, through its land development regulations, protect coastal natural resources from the impacts of development.

Policy 9.1.3.5: The City shall continue to work with Brevard County to implement the recommendations of the Brevard County Manatee Protection Plan as well as Save Our Indian River Lagoon Projects. ~~-~~

Policy 9.1.3.6: The City shall continue to implement National Pollution Discharge Elimination System (NPDES) nonpoint source permitting program.

Policy 9.1.3.7: The City shall coordinate estuarine water quality with the Brevard County Natural Resource Management Office. Corrective actions shall be coordinated with the SJRWMD and FDEP.

Policy 9.1.3.8: The City shall continue to use alternative methods of effluent disposal such as re-use and land spreading/spray irrigation to reduce nutrient loadings in the rivers and estuaries.

Policy 9.1.3.9: The City shall work with property owners to encourage and implement minimum buffer, where feasible, of native vegetation between the shoreline and turf.

Objective 9.1.4: Priority of Lagoon Shoreline Land Uses. The City shall continue to promote appropriate land uses along the Lagoon consistent with the public need, while protecting natural resources.

Policy 9.1.4.1: The City shall give priority in coastal development to those land uses that are dependent on or related to water access.

Policy 9.1.4.2: The approval of shoreline development proposals by the City shall be based upon the following shoreline use priorities:

A. Water dependent uses such as recreation, marinas and water dependent industry and utilities and uses approved as part of the City's Redevelopment Plan.

B. Water-related or enhanced uses such as certain utilities, water-related commerce and water enhanced recreation.

Policy 9.1.4.3: Industrial uses along the Indian River Lagoon in the City shall be prohibited.

Policy 9.1.4.4: The City shall require that new marinas, mooring fields and substantial improvements or additions to existing marinas demonstrate compliance with the following criteria:

A. Economic need and feasibility;

B. Land use compatibility with surrounding land uses;

C. Availability of upland support services;

D. Availability for public use;

E. A plan to ensure that water quality will not be degraded below existing FDEP water classification standards. The plan shall address the maintenance and containment of stormwater runoff and wash-down water for dry storage areas and sanitary sewer disposal;

~~E.~~F. Minimize shoreline hardening structures

~~F.~~G. Hurricane contingency planning;

H. Designation by the Clean Marina Program;

~~G.~~I. A plan for mitigation activities in the event that the environment is adversely affected;~~ and~~

J. An educational plan for users regarding impacts on the Lagoon is in place; and

K. A plan for adaptation or mitigation strategies for sea level rise through 2070 and flood impacts to vulnerable infrastructure or facilities on the property in order to minimize damage and impacts to the property and lagoon.

~~H.~~**Policy 9.1.4.5:** The City shall promote strategies and site development techniques with existing and new marinas to reduce impacts from sea level rise, flooding and storm surge such as, but not limited to, natural shorelines, dry or wet flood proofing, elevation of structures and infrastructure, and floating docks.

Objective 9.1.5: Public Expenditures in the Coastal Planning Area. The use of public funds for infrastructure improvements which subsidizes increased development in the Coastal Planning Area (CPA) will prioritize projects which restore or enhance natural resources, are part of the City's Redevelopment Plan and/or serve to reduce risk of existing development and property hazards such as sea level rise, flooding and storm surge.

Policy 9.1.5.1: Public expenditures for capital improvements that promote public access, hazard mitigation and use of coastal areas shall be reviewed through the annual budget process to minimize loss potential and account for future impacts from sea level rise and flooding.

~~**Objective 9.1.5:** Public Expenditures in Coastal High Hazard Area. The use of public funds for infrastructure improvements which subsidize increased development in the Coastal High-Hazard Area (CHHA) will be restricted to those projects which restore or enhance natural resources and/or part of the City's Redevelopment Plan.~~

~~**Objective 9.1.6:** The CHHA is delineated as the area below the elevation of the Category 1 storm surge line as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model.~~

~~**Objective 9.1.7:** Public expenditures for capital improvements that promote public access and use of coastal areas shall be reviewed through the annual budget process to minimize loss potential.~~

~~**Policy 9.1.7.1:**~~**Policy 9.1.5.2:** ~~The use of local funds to subsidize new development in the CHHA shall be thoroughly considered prior to public investment and limited in most cases.~~Local funds used to subsidize new development through new or improved infrastructure shall be limited within the CPA. New or improved infrastructure in the CPA shall not be used to justify new development in the CPA where the new or improved infrastructure removes previous capacity/safety impediments to additional development.

~~**Objective 9.1.8:**~~**Objective 9.1.6: Public Access to the Lagoon.** The City shall continue to promote public access to the Lagoon consistent with the public need and to

promote scenic views, while protecting natural resources and mitigating risk from natural hazards.

~~Policy 9.1.8.1:~~Policy 9.1.6.1: The City shall, where appropriate and to the extent physically and financially feasible while considering impacts from sea level rise and flooding, maintain and preserve all public access and water-related recreational facilities and shall inventory existing public access to the lagoon and water-related recreational facilities to identify deficiencies and opportunities.

~~Policy 9.1.8.2:~~Policy 9.1.6.2: The City shall encourage the preservation of recreational and commercial working waterfronts as defined in section 342.07, F.S.

~~Policy 9.1.8.3:~~Policy 9.1.6.3: The City shall adopt Brevard County's marina siting criteria by ~~2012.~~2022.

~~Policy 9.1.8.4:~~Policy 9.1.6.4: The City shall continue to consider the purchase of frontage areas along the Indian River Lagoon, as needed, to ensure adequate public access, improve the estuarine area and serve as areas to mitigate impacts from storm surge, sea level rise and flooding.

~~Policy 9.1.8.5:~~Policy 9.1.6.5: The City shall continue to seek County, state and federal programs to provide funding for purchase of riverfront property.

~~Policy 9.1.8.6:~~Policy 9.1.6.6: The City shall coordinate with the County to ensure bikeway linkages to waterfront parks and public water access.

~~Policy 9.1.8.7:~~Policy 9.1.6.7: The City shall continue to coordinate with other coastal cities and Brevard County to investigate and implement equitable measures to promote the provision or funding of public access ways to the Indian River Lagoon by new development.

~~Policy 9.1.8.8:~~Policy 9.1.6.8: The City shall encourage, through the development review and approval process, the voluntary dedication of access to public waterways including designated scenic areas, conservation easements and other green space or natural areas with infrastructure strictly limited to that necessary for safe public access.

GOAL 9.2: The City shall, as practically and financially feasible, establish and implement strategies for new development, redevelopment and investment in public facilities, utilities and infrastructure to protect and mitigate losses to human life and property in areas subject to natural disasters, flooding, and sea level rise. ~~establish strategies to protect human life and property in areas subject to destruction by natural disasters.~~

Objective 9.2.1: Coastal High Hazard Area (CHHA). The City shall continue to direct population concentrations away from the CHHA through implementation of the

future land use map, land development code and through the development review and approval process.

Policy 9.2.1.1: The Coastal High Hazard Area is delineated as the area below the elevation of the Category 1 storm surge line as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model.

~~**Policy 9.2.1.1:**~~**Policy 9.2.1.2:** The City shall continue to evaluate non-conforming land uses within the CHHA.

Policy 9.2.1.3: In order to continue to direct population away from the CHHA, any~~the~~ increase of density~~ties~~ for~~of~~ properties within the CHHA shall generally be discouraged from the time of this plan's adoption.

Objective 9.2.2: Development, redevelopment, rebuilds, retrofits and additions in the City shall be planned and managed through strategies and design principles that are consistent with sound planning practices that protect life and property from the effects of flooding, storm surge and related impacts of sea level rise and that protect the long-term financial viability of the City.

Policy 9.2.2.1: All new development and redevelopment shall be consistent with, or more stringent than, the flood resistant construction requirements in the Florida Building Code and applicable flood plain management regulations set forth in 44 C.F.R. part 60.

Policy 9.2.2.2: The City shall require site development techniques that encourage more efficient and climate resilient development practices that include, but are not limited to:

- Low impact development techniques on private and public property that provide for site design, engineering and stormwater management to reduce stormwater runoff, encourage greater onsite storage, reuse or absorption and mitigate flood impacts such as pervious pavement, native vegetation, rain gardens or barrels, etc.
- Prioritization of living shoreline installation and maintenance.
- Allowance of specialized fortification techniques as recommended by the Florida Green Building Council.

Additionally, the City shall continue to further explore standards that increase the City's coastal resiliency, such as requiring development to build at least three feet above the area's Base Flood Elevation or reducing the development's total amount of required parking while increasing the facility's potential for water absorption and retention.

Policy 9.2.2.3: The City shall utilize, but not be limited to, the following tools, site development techniques and strategies for use within the coastal planning area and areas within the 100-year floodplain to implement and integrate in order to mitigate flooding and effects of sea level rise and storm surge in order to protect property, to the greatest physical and financial extent possible:

(1) Green street techniques to divert, capture or absorb water in a way to reduce flood impacts on private property, including, but not limited to street trees, landscaped areas and vegetative curb extensions, bioswales, vernacular streetscapes, and roadway re-design.

(2) Hybrid stormwater masterplan to integrate a combination of green and gray infrastructure, including but not limited to bioretention, increasing pipe capacity, stormwater parks, rain gardens/bioswales, pumps, and water flow diversion strategies.

(3) Underground utilities in vulnerable and feasible areas;

(4) Establish new parking standards and parking lot site plan design with greater water capture techniques;

(5) Increase of set-back lines for properties in the CPA

(6) Natural dune restoration

(7) Permeable pavement

(8) Dry and Wet flood proofing of structures

(9) Green/Open space

Policy 9.2.2.4: The City shall not allow nursing homes, assisted living facilities, hospitals, or other group homes to be located in the Coastal Planning Area.

Objective 9.2.3: Plan and Process Consistency. The City will work to institute the practice of adapting and mitigating the built environment to address natural hazards, flooding, and impacts from sea level rise across all plans, policies, procedures and coordination with partner agencies.

Policy 9.2.3.1: The City shall audit and update all plans, policies, processes and other related documents to be consistent with the peril of flood goals, objectives and policies set forth in the comprehensive plan.

Policy 9.2.3.2: The City will work with City staff and the public to integrate and implement the 2019 City of Cocoa Resilience Action Plan.

Policy 9.2.3.3: The City, as per its adoption of the East Central Florida Regional Resilience Action Plan, will continue to collaborate regionally with

other entities and stakeholders to advance resilience across the region.

Policy 9.2.3.4: The City, as per adoption of the East Central Florida Regional Resilience Action Plan will integrate the regional approach to sea level rise planning with its plans, procedures and policies. The City will consider a range of rise based upon the vulnerability, allowable risk, and project service life and the forecast project "in-service" date of a facility or development. The range will include a minimum rise of 5.15 feet by 2100 (2013 USACE High) with an upper range of 8.48 feet by 2100 (2017 NOAA High). Short-term planning should consider impacts out to 2040, 1.22 -1.85 feet (20-year planning horizon), medium-term planning should consider impacts out to 2070 (2.85-4.47 feet) (50-year planning horizon), and long-term planning should extend out to 2100 (80-year planning horizon).

Policy 9.2.3.5: The City shall assess current policies, ordinances and codes to increase mixed-use development in areas outside the 100-year flood plain, sea level rise, and flooding.

~~**Objective 9.2.2:**~~**Objective 9.2.4:** **Evacuation Times.** The City shall cooperate with Brevard County to ensure evacuation times are maintained or reduced and to ensure efficient evacuation of threatened residents to areas of safety in the event of a natural disaster.

~~**Policy 9.2.2.1:**~~**Policy 9.2.4.1:** In the event of a hurricane emergency the City will respond to the direction of the Brevard County Office of Emergency Management in the implementation of emergency plans. Coordinated emergency activities will include, but are not limited to warning, public information, communications, evacuation, public shelters and related welfare services.

Policy 9.2.4.2: The City will continue to require that development and redevelopment activities minimize the risks to life and property from natural disasters by evaluating the effects on evacuation times within the hurricane vulnerability zones.

~~**Policy 9.2.2.2:**~~**Policy 9.2.4.3:** The City shall generally discourage any increase in density within the Coastal High Hazard Area.

Objective 9.2.5: **Post-Disaster Redevelopment Plan.** The City shall develop a post-disaster redevelopment plan (PDRP) to establish, at minimum, long-term policies regarding redevelopment, infrastructure, densities, nonconforming uses, and future land use patterns.

~~**Policy 9.2.2.3:**~~**Policy 9.2.5.1:** The City shall ~~adopt a post-disaster redevelopment plan by 2014.~~develop a City specific post-disaster redevelopment plan by 2024.

~~**Policy 9.2.2.4:**~~**Policy 9.2.5.2:** Appropriate redevelopment activities in the Coastal Planning Area will be conducted through means which will institute appropriate resilience planning for private property in coordination with goals, objectives and policies consistent with the comprehensive plan, mitigate conditions hazardous to life and property; identify, preserve, and improve historic resources and significant historic structures, sites, neighborhoods, and districts; preserve and improve natural resources; encourage recreational opportunities; and encourage appropriate commercial uses as physically and financially feasible when considering increasing levels of flooding, storm surge and the effects of sea level rise.~~redevelopment activities in the Coastal Planning Area will be conducted through means which will preserve and improve residential neighborhoods, eliminate unsafe conditions; identify, preserve, and improve historic resources and significant historic structures, sites, neighborhoods, and districts; preserve and improve natural resources; encourage recreational opportunities; and encourage appropriate commercial uses.~~

~~**Policy 9.2.2.5:**~~**Policy 9.2.5.3:** Guidelines for post-disaster redevelopment and hazard mitigation will continue to be developed and included in the City's land development regulations. These guidelines will be designed to reduce or eliminate the exposure of human life and limit repeat damage to public and private property due to hurricane hazards, account for the future impacts of sea level rise, and to promote the long-term economic and fiscal viability of the City. The guidelines will incorporate Brevard County's Local Mitigation Strategies into recommendations on hazard mitigation and other applicable interagency reports, as well as applicable chapters of the City Code or articles thereof.~~for post-disaster redevelopment and hazard mitigation will continue to be developed and included in the City's land development regulations. These guidelines will be designed to reduce or eliminate the exposure of human life and limit repeat damage to public and private property due to hurricane hazards. The guidelines will incorporate Brevard County's Local Mitigation Strategies into recommendations on hazard mitigation and other applicable interagency reports, as well as applicable chapters of the City Code or articles thereof.~~

~~**Policy 9.2.2.6:**~~**Policy 9.2.5.4:** Post-disaster redevelopment will be coordinated jointly by the Community Development, Public Works, and Code Enforcement departments and, if applicable, with the Federal Emergency Management Agency. Priority will be given to those post-disaster tasks needed to protect the health and safety of the public, restore public services and repair damaged infrastructure.

Policy 9.2.5.5: The City shall prepare inventories of properties for acquisition and removal, including repetitive loss properties and establish clear priorities for the use of acquisition resources.

Policy 9.2.5.6: The City shall continue to participate in the National Flood Insurance Program Community Rating System administered by the Federal Emergency Management Agency to achieve flood insurance premium discounts for their residents.

~~**Policy 9.2.2.7:**~~**Policy 9.2.5.7:** Procedures for post-disaster action shall include a system for distinguishing between immediate repair and clean-up actions needed to protect the public health and safety, versus long-term repair and redevelopment activities.~~.~~

~~**Policy 9.2.2.8:**~~**Policy 9.2.5.8:** ~~Procedures for post-disaster action shall include a system for distinguishing between immediate repair and clean-up actions needed to protect the public health and safety, versus long-term repair and redevelopment activities.~~The City requires that any structure, including those abandoned, sustaining damage in excess of 50% of the building's assessed value comply with all City ordinances and current standards.

~~**Policy 9.2.2.9:** Reconstruction shall be required to meet current standards for coastal construction, so as to reduce future exposure.~~

Policy 9.2.5.9: Recommendations provided by local agencies and in interagency hazard mitigation reports will be reviewed as available and will be implemented as feasible.

Policy 9.2.5.10: Temporary-building moratoriums may be declared in the coastal planning area when 50% or more of the structures have been damaged by 50% or greater to assess the impacts and feasibility of redevelopment.

Objective 9.2.6: Disaster Preparedness for Entities Critical to Redevelopment. The City shall develop and implement pre-and-post disaster preparedness measures critical for redevelopment.

Policy 9.2.6.1: The City shall work with local businesses and organizations to aid in disaster planning and recovery through the development of Continuity of Operations Plans and other preparedness strategies including employee coordination.

Policy 9.2.6.2: The City shall work with local merchant associations to provide an information program about hurricane preparedness for local businesses.

~~**Policy 9.2.2.10:**~~**Policy 9.2.6.3:** As part of outreach, education and other preparedness activities, the City shall assess the development of a program to work with local businesses to certify them as hurricane prepared which will help the community recover more quickly following a storm.

Objective 9.2.7: Historically and Archaeologically Significant Resources. The City shall protect and preserve architecturally, historically and archaeologically significant resources in the City's coastal planning area through the adoption of the land development regulations, zoning code provisions, a program for public and private site acquisition, within the City's funding capabilities and with the owner's consent, and sensitive reuse of historic resources.

~~Policy 9.2.2.11:~~ **Policy 9.2.7.1:** The City shall protect historical and archaeological resources in the CPA, as physically and financially feasible, while considering future impacts, long-term strategies, and cost-benefit of the protection or adaptation measures.

~~Policy 9.2.2.12:~~ **Policy 9.2.7.2:** The City shall compile a list of all properties which have been designated as historically, architecturally or archaeologically significant on a local, state or national basis within the coastal planning area.

~~Policy 9.2.2.13:~~ **Policy 9.2.7.3:** The City shall discourage development activities that have the potential of endangering historic resources located within the coastal planning area.

~~Policy 9.2.2.14:~~ **Policy 9.2.7.4:** The City will encourage the retention of all historic properties in the City, with sensitive, adaptive reuse being examined as an alternative to demolition. Rehabilitation, restoration, relocation, mitigation, and reuse plans and designs will be guided by the recommended approaches identified in objective criteria published by governmental agencies, preservation organizations and which the City may adopt from time to time.

~~Policy 9.2.2.15:~~ **Policy 9.2.7.5:** The City will encourage individuals, groups and organizations to submit reliable information about the history or architectural historical significance of individual properties in the City as an aid in the documentation of their significance.

~~Policy 9.2.2.16:~~ **Policy 9.2.7.6:** The City will prepare an information document containing an identification of historic resources in the City, to include address, map location, brief notation of historical significance, landmark status, ownership (Public/Private), vulnerabilities and other relevant information for public information purposes. The City will seek state funds for the preparation of the document.

~~Policy 9.2.2.17:~~ **Policy 9.2.7.7:** The City will participate, within its financial resources, with other governmental agencies, civic organizations, business groups and interested persons to purchase historic resources with the owner's consent and to accept responsibility for restoration in support with the property owner, in an "adopt-a-house" or similar

program for the purpose of maintaining historic properties in good repair, form and appearance, and for functional uses.

~~Objective 9.2.3:~~Objective 9.2.8: **Infrastructure in the Coastal Planning Area.** Level of service standards and service areas for the City as a whole, as adopted in the Capital Improvements Element, may apply to the infrastructure within the coastal planning area but with the need to consider long-term implications of increased hazards due to sea level rise and flooding and balances design considerations for the current and future impacts of sea level rise and flooding with the benefits and challenges of incorporating the impacts and maintenance during the service-life utility of infrastructure.~~of service standards and service areas for the City as a whole, as adopted in the Capital Improvements Element, will apply to the infrastructure within the coastal planning area.~~

~~Policy 9.2.3.1:~~Policy 9.2.8.1: Phasing of infrastructure will occur according to the Capital Improvements Element and in accordance with development regulations adopted subsequent to this plan with specific consideration given to protection of coastal resources.

~~Policy 9.2.3.2:~~Policy 9.2.8.2: The level of service standards adopted in other elements of this Comprehensive Plan ~~shall~~ may apply within the coastal planning area depending on evaluation of factors such as cost-benefit analysis that considers, among other factors, number of times infrastructure has been damaged, upgraded, or rebuilt; number of people served by the infrastructure; whether alternatives for the services provided by the infrastructure are present; criticality of the infrastructure for protection of safety; potential increased hazards to first responders; etc.

Policy 9.2.8.3: Consideration shall be given to alternative locations of infrastructure, hardening, elevating or other strategies if located in the coastal planning ~~high hazard~~ area to reduce potential public losses.

Policy 9.2.8.4: Infrastructure and roadway improvements within already developed public rights-of-way will be maintained as determined feasible and reasonable by City policy in good-faith attempts.

Policy 9.2.8.5: When constructing or reconstructing utilities or infrastructure, the City shall assess vulnerabilities and resilience to sea level rise, flooding and storm surge, and identify cost-effective strategies to minimize exposure and reduce impacts.

~~Policy 9.2.3.3:~~Policy 9.2.8.6: The City shall prioritize the use of Green Street techniques (reference Policy 9.2.2.2 (1)) within the Stormwater Master Plan, on public rights-of-way, to the extent financially and physically possible, to alleviate flood impacts to streets and buildings and maintain its level of service standards.

X - RECREATION AND OPEN SPACE ELEMENT

Serving the Community

GOAL 10.1: Recreational Provisions. To ensure that Cocoa residents have access to a full range of recreational opportunities.

Objective 10.1.1: The City will coordinate resources with Brevard County Parks and Recreation, the Brevard County School Board, and private resources, to meet the projected demand for parks, recreational facility and open space needs for the residents of Cocoa.

Policy 10.1.1.1: Continue the inter-governmental coordination involved in the established Brevard County Parks and Recreation District 4.

Policy 10.1.1.2: Continue to work with the School Board through the District 4 Parks and Recreation Office to expand the use and availability of School facilities to the citizens of Cocoa.

Policy 10.1.1.3: The City shall adopt the following Level of Service (LOS) for recreation needs:

Neighborhood Parks, Community Parks, and Urban District Parks	1.25 acres per 1000 population

Policy 10.1.1.4: The City shall periodically update its inventory of all recreational facilities in order to compare the level of maintenance and quality of those facilities with surrounding communities.

Policy 10.1.1.5: The City shall ensure the provision of a range of different types of facilities for passive outdoor recreational activities including nature trails or boardwalks, waterway trails, interpretive displays, educational programs, and/or wildlife observation areas.

Policy 10.1.1.6: The City will continue to coordinate with local service organizations annually to encourage participation in landscaping, supporting, and establishing recreational facility development.

Policy 10.1.1.7: The City will continue to work with Brevard County Parks and Recreation District 4 to achieve multiple community benefits during the development of parks and recreational areas.

Policy 10.1.1.8: The City will ensure that all recreational facilities are well maintained and redeveloped as needed.

Policy 10.1.1.9: The City will consider the creation of a Recreation Zoning District in the land development code.

Objective 10.1.2: The City shall provide accessibility to the recreational facilities and natural resources of the City for the enjoyment of all users.

Policy 10.1.2.1: The City will continue to work with the Brevard County Parks and Recreation District 4 to ensure the accessibility of recreational facilities for the handicapped, elderly and economically disadvantaged.

Policy 10.1.2.2: All new development of recreational facilities in the City shall be required to meet the Florida Accessibility Code.

Policy 10.1.2.3: The City will continue to work with the Brevard County Parks and Recreation Department to bring all existing recreation facilities into compliance with the Florida Accessibility Code.

Policy 10.1.2.4: The City will consider the siting of future Neighborhood Parks based on a walkable distance from residential dwellings to ensure an adequate dispersal of parks throughout the City.

Objective 10.1.3: The City shall provide interconnectivity between recreational facilities and the surrounding community.

Policy 10.1.3.1: New residential development providing recreational facilities shall be required to provide bicycle and pedestrian connections (such as sidewalks and bike paths), between all forms of recreation and the surrounding community.

Policy 10.1.3.2: Bicycle parking facilities shall be required at all new parks.

Policy 10.1.3.3: The City will work with the Brevard County Parks and Recreation Department to ensure that bicycle parking facilities are provided at all existing recreation facilities.

Policy 10.1.3.4: The City will follow the adopted WaterFront Master Plan as a supplemental plan which supports the connectivity objectives of the Comprehensive Plan.

Policy 10.1.3.5: The City will work to incorporate connectivity wherever feasible between recreational facilities in the City and the existing Brevard County Greenways and Trails Master Plan system.

Policy 10.1.3.6: The City will consider developing and adopting its own Parks and Recreation Master Plan, as well as a Pedestrian Routes and Bike Trails Master Plan.

GOAL 10.2: Open Space Provisions. Ensure the conservation of open space areas in the city to provide aesthetically pleasing buffer areas and visual open space, to serve as wildlife habitats, to act as groundwater recharge areas, to give definition to the urban area, and to enhance and preserve natural resources.

Objective 10.2.1: The land development regulations will include provisions for addressing the open space needs of the City.

Policy 10.2.1.1: The City will develop an ordinance which will define open space and set standards for open space preservation in local land development regulations.

Policy 10.2.1.2: The City will approve locating environmentally sound public access to conservation areas, nature trails, parks and passive recreational uses within dedicated upland buffers to wetlands in accordance with the policies in the Conservation Element, and only when the City determines that such uses will not adversely affect the buffers' primary functions of wetland buffering, provision of transition zone wildlife habitat, noise buffering, filtration/storage of overland stormwater runoff, visual screening and other applicable benefits. The City will not approve other uses for the buffer zone.

Policy 10.2.1.3: The City will coordinate with pertinent state and wildlife agencies and other agencies necessary to identify natural area greenways and wildlife corridors and to link existing public parks, and provide similar areas for conservation purposes.

Policy 10.2.1.4: The City shall provide efforts to coordinate the resources of other public and private natural resource preservation agencies, and will enhance efforts to fiscally support and encourage a program of public land acquisition in conjunction with current land use planning and development regulations and to create a system of natural area greenways and wildlife corridors.

Policy 10.2.1.5: The City will pursue acquisition of appropriate parcels of land through the Florida Forever Program or other appropriate City/State partnerships for the protection of environmentally sensitive lands, which protect unique, rare and/or endangered habitat, assure survival of listed wildlife species, protect scenic highway and water corridors and their shoreline ecosystems and provide public access and open space.

Policy 10.2.1.6: Uses allowed in open space and conservation areas within the City shall be limited to those compatible with and which preserve the natural character of the area, such as passive recreation, observation areas, hiking/biking and nature trails, canoeing/kayaking, primitive camping and environmental education facilities.

Policy 10.2.1.7: The City of Cocoa shall pursue a program to identify, ensure preservation of, and provide appropriate public access to areas of natural beauty and scenic importance.

Policy 10.2.1.8: The City will consider adopting the Department of Environmental Protection's definitions for "Conservation Open Space" and "Urban Open Space" as separate uses from recreation, which will be used to conserve potentially environmentally sensitive lands as well as wetlands and floodways; and will establish appropriate safeguards to ensure the future preservation of such lands in a natural state with minimal man-made impact.

Policy 10.2.1.9: The City will consider the creation of a Conservation Zoning District in the land development code.

XI - PUBLIC SCHOOLS FACILITIES ELEMENT



Serving the Community

GOAL 11.1: The City of Cocoa will ensure, through effective planning and coordination with the School District, that adequate school capacity is available to accommodate enrollment demand for City residents.

Objective 11.1.1: The City shall ensure adequate public school facilities are available in the City of Cocoa by adopting and implementing a school concurrency management system to address both short and long term planning needs.

Policy 11.1.1.1: The City adopts and shall utilize the following ~~tiered~~ Level of Service (LOS) standards for public schools adopted by the School District. The permanent capacity of a school shall be that number contained in the Florida Inventory of School Houses (FISH) maintained by the Florida Department of Education (FDOE). Currently, the LOS for the School District is 100%. ~~Once the School District achieves a 100% LOS for all schools of the same type by School Year 2011-2012, the tiered LOS shall terminate and the LOS for the purpose of determining concurrency shall be 100%. It should be noted that at the time the school concurrency management system is being implemented that all public school facilities serving Cocoa residents are operating below the desired level of service.~~

~~Facility Type~~	~~2009-2010~~	~~2010-2011~~	~~2011-2012~~
~~Elementary Schools~~	~~115%~~	~~105%~~	~~100%~~
~~Middle Schools~~	~~100%~~	~~100%~~	~~100%~~
~~Junior/Senior High Schools~~	~~110%~~	~~105%~~	~~100%~~
~~High Schools~~	~~115%~~	~~100%~~	~~100%~~

Policy 11.1.1.2: When necessary, the School Board shall initiate appropriate program changes, boundary adjustments, and/or additional capacity to prevent the tiered LOS standards from being exceeded.

Policy 11.1.1.3: Concurrency shall be measured and applied using a geographic area known as a Concurrency Service Area (CSA) which shall coincide with the school attendance boundaries adopted by the School District. Either the City or the School District may propose a change to the CSA boundaries. The following procedures shall be used for modifying the CSA map:

A. The School District will transmit proposed CSA map modifications, with supporting data and analysis, to the City, other local governments, and the Capital Outlay Committee (COC). Any proposed change to a CSA shall require a demonstration by the School District that the change complies with the public school LOS standard and that utilization of school capacity is maximized to the greatest extent possible, taking into account transportation costs, court approved desegregation plans and other relevant factors. Adjustment measures to achieve the LOS standard shall include school boundary adjustments, shifts to

contiguous CSA's with available capacity, proportionate share mitigation (land donation or payment), or construction of a traditional or charter school or permanent expansions.

B. The City and the COC will review the proposed modification of the CSA and send their comments to the School District within 45 days of receipt of the proposed change.

C. The modification of a CSA shall be effective upon adoption by the School Board.

Policy 11.1.1.4: For purposes of determining a proposed development's impact, the total number of students expected to be generated by the development, the projected number and type of residential units of the proposed development shall be multiplied by the School District Student Generation Multiplier (SGM). The SGM shall be reviewed annually and amended as necessary to reflect the most recent district-wide generation rates.

Policy 11.1.1.5: The City shall participate with the School District, utilizing the following process, in considering and processing changes in the use of schools:

A. Following a determination by the School District that a school change is appropriate, considering the appropriate use of the school and utilization requirements, the School District shall transmit the proposed school use change and the associated data and analysis in support of the requested change to the Capital Outlay Committee and Staff Working Group.

B. The Capital Outlay Committee and Staff Working Group shall review the proposed changes to the school use, along with the supporting data and analysis, and send their comments to the School District within forty five (45) days of receipt.

C. The change in school use shall become effective upon final approval by the School Board.

Objective 11.1.2: The City shall ensure adequate public school capacity exists to accommodate new students generated by residential development. The City shall forward all applications for a residential development permit to the School District for a school concurrency evaluation and determination.

Policy 11.1.2.1: The City shall adopt necessary and appropriate provisions into its Land Development Regulations (LDR) to implement school concurrency management as contemplated in the Interlocal Agreement with the Brevard County School District and consistent with the objectives and policies of its Public Schools Facilities Element.

Policy 11.1.2.2: The City shall not approve any non-exempt residential development application for a new residential preliminary subdivision, site plan or functional equivalent until the School District School has issued a School Capacity Availability Determination Letter (SCADL) verifying available capacity.

Policy 11.1.2.3: The City shall consider the following criteria to exempt residential uses from the requirements of school concurrency:

A. Single family lots of record existing prior to the commencement date of the School Concurrency Program.

B. Any new residential development that has preliminary subdivision or site plan approval or the functional equivalent for a site specific development order prior to the commencement date of the School Concurrency Program.

C. Any amendment to any previously approved residential development that does not increase the number of dwelling units or change the type of dwelling units (single-family to multi-family, etc.).

D. Age restricted communities with no permanent residents under the age of 18. Exemption of an age restricted community will be subject to a restrictive covenant limiting the age of permanent residents to 18 years and older.

E. The replacement of an existing residential dwelling unit, including those partially or entirely damaged, destroyed or demolished, with a new unit of the same type and use provided that the existing unit has been occupied at some time during the five-year period immediately preceding the construction of the new unit.

Policy 11.1.2.4: The City, through its land development regulations, and in conjunction with the School District, shall establish a school concurrency review process for all residential projects that are not exempt under Policy 11.1.2.3.

The minimum process requirements shall be as follows:

A. A residential development application including a School Impact Analysis (SIA) is submitted to the City for review.

B. The City determines application is sufficient and complete and transmits the SIA application to the School District for review.

C. The School District reviews the SIA application for available capacity and issues a School Capacity Availability Determination Letter (SCADL) to the City consistent with the following:

1. Where capacity is available within the affected CSA, the School District shall issue a SCADL verifying available capacity.
2. Where capacity is not available within the affected CSA, capacity availability in one or more contiguous CSAs shall be reviewed.
3. If capacity is available in one or more of the contiguous CSAs, the School District shall issue a SCADL verifying available capacity in the adjacent CSAs.
4. If capacity is not available in the contiguous CSAs, the School District shall issue a SCADL indicating the development is not in compliance with the adopted LOS and offers the developer a 90-day timeframe in which to negotiate with the City and the School District regarding mitigation options or alternatives.

Policy 11.1.2.5: New school capacity within a CSA which is in place or under actual construction within three (3) years after the issuance of final subdivision or site plan approval, or the functional equivalent, shall be counted as available capacity for the residential development under review.

Policy 11.1.2.6: The City, in conjunction with the School District, shall review applications for proportionate share mitigation projects to add school capacity necessary to accommodate the impacts of a proposed residential development. Mitigation options may include, but are not limited to:

A. Contribution of land or payment for land acquisition in conjunction with the provision of additional school capacity; or
B. Mitigation banking based on the construction of a public school facility in exchange for the right to sell capacity credits; or
C. Donation of buildings for use as a primary or alternative learning facility; or
D. Renovation of existing buildings for use as learning facilities; or
E. Construction or expansion of permanent student stations or core capacity; or
F. Construction of a public school facility in advance of the time set forth in the School District's Five-Year District Facilities Work Program.

Policy 11.1.2.7: The estimated cost to construct the mitigating improvement(s), consistent with the mitigation options listed in Policy 11.1.2.4, shall

be calculated to reflect, and consider, the estimated future construction costs at the time of the anticipated construction.

A. Improvements contributed by the developer shall receive school impact fee credit.

B. The cost difference between the developer's mitigation costs and the impact fee credit, if greater, shall be the responsibility of the developer.

Policy 11.1.2.8: Consistent with Policy 11.1.2.4.C.4, the City and the School District shall provide a 90-day negotiation period to allow for the review and negotiation of proportionate share mitigation proposals offered by a developer.

A. Where mitigation is approved, the City and the School District shall enter into a binding and enforceable agreement with the developer, the improvement(s) will be included in the School District's annually adopted Five-Year District Facilities Work Program, and the improvement(s) will be reflected in the next update to the Capital Improvements Element.

B. Where mitigation is denied, the City must deny the application for residential based upon insufficient school capacity being available.

C. The City shall not issue any permit(s) for a residential development until receiving confirmation of available school capacity in the form of a SCADL from the School District.

Policy 11.1.2.9: The City shall notify the School District when an approved residential development has paid impact fees and when the development order for the residential development expires.

Policy 11.1.2.10: The City may allow a landowner to proceed with development of a specific parcel of land notwithstanding a failure of the development to satisfy school concurrency, if all the following factors are shown to exist:

A. The proposed development would be consistent with the future land use designation for the specific property and with pertinent portions of the City of Cocoa Comprehensive Plan.

B. The CIE and the Brevard School Board's Work Plan provide for school facilities adequate to serve the proposed development or the project includes a plan that demonstrates that the capital facilities needed as a result of the project can be reasonably provided.

~~**Policy 11.1.2.9:**~~C. The landowner is assessed a proportionate share of the cost of providing the school facilities necessary to serve the proposed development.

Objective 11.1.3: Beginning with an effective date of 2009 and no later than December 1st of each year thereafter, the City will include in its Capital Improvements Element (CIE), the School District's annually updated five-year schedule of capital improvements as adopted by the School Board, which identifies school facility capacity projects necessary to address existing deficiencies and meet future needs based upon achieving and maintaining the adopted level of service standard for schools.

Policy 11.1.3.1: The City of Cocoa hereby adopts by reference the School District's Five-Year District Facilities Work Program for the planning period ~~2010-2011~~2018-2019 through ~~2014-2015~~2022-2023, approved on ~~September 28, 2010~~October 23, 2018.~~.~~

Policy 11.1.3.2: The City shall annually update the Capital Improvements Element to incorporate the School District's annually adopted Five-Year District Facilities Work Program's "Summary of Capital Improvements Program" and "Summary of Estimated Revenue" Tables which shall identify school facility capacity projects which are necessary to address existing deficiencies and meet future needs and demonstrate the School District can maintain the adopted LOS standard for the five-year planning period, as supported by data and analysis. ~~demonstrating financial feasibility.~~

Policy 11.1.3.3: The City shall, in conjunction with the School District, other local governments and through the Capital Outlay Committee, review school enrollment projections and provide an annual update of the process, including the Public School Facilities Element and maintain a public school facilities map series which are coordinated with the City's Future Land Use Map or Map Series, including the planned general location of schools and ancillary facilities for the five-year planning period and the long-range planning period. At a minimum, the Map Series shall include:

A. Concurrency Service Area Map;

B. Existing Public School Facilities Map - type and location of ancillary plants;

C. Five-Year Planning Period Map - generally planned public school facilities and ancillary plants; and

D. Long Range Planning Period Map – generally planned areas of future public school facility needs.

Objective 11.1.4: The City shall participate with the School District, through its membership on the Capital Outlay Committee (COC), to monitor the implementation and administration of school concurrency as well as to further coordinate planning and school concurrency issues.

GOAL 11.2: The City, working cooperatively with the School District, shall ensure new public schools are appropriately located and integrated into the community where they provide the greatest maximum benefit to the residents of the City and are valued as a vital community resource and amenity.

Objective 11.2.1: New public schools built within the City will be coordinated with the School District to ensure consistency and conformity with the City's adopted Comprehensive Plan and its implementing land development regulations except where exempted by statutory authority, such as local landscape ordinance requirements.

Policy 11.2.1.1: The School District shall avoid locating new public schools on the periphery of the City's boundaries or in areas that would encourage urban sprawl.

Policy 11.2.1.2: The City shall review construction and/or site plans in a timely manner and provide comments to the School District as to the consistency with the City's adopted comprehensive plan and implementing land development regulations.

Objective 11.2.2: New public schools built within the City will be coordinated with the School District to ensure that proposed school facilities are located proximate to existing and proposed residentially developing areas, within appropriate existing and future land uses; serve as community focal points; are co-located with other appropriate public facilities; will have needed supporting public facilities and services; and be compatible with surrounding land uses.

Policy 11.2.2.1: The City, in conjunction with the School District, shall jointly determine the need for, and timing of, on-site and off-site improvements necessary to support a new school.

Policy 11.2.2.2: The City shall enter into an agreement with the School Board identifying the timing, location, and the party or parties responsible for the planning, constructing, operating, and maintaining off-site improvements necessary to support a new school or school improvement to ensure that the necessary infrastructure is in place prior to or concurrent with construction.

Policy 11.2.2.3: The City shall encourage the location of schools near residential areas by:

A. Assisting the School District in the identification of funding and/or construction opportunities (including developer participation or City capital budget expenditures) for sidewalks, traffic signalization, access, water, sewer, drainage and other infrastructure improvements.

B. Reviewing and providing comments on all new school sites including the compatibility and integration of new schools with surrounding land uses.

C. Allowing schools within all residential land use categories.

Policy 11.2.2.4: The City, in conjunction with the School District, shall seek opportunities to co-locate schools with public facilities, such as parks, libraries, and community centers, as the need for these facilities is identified.

Policy 11.2.2.5: The City, in conjunction with the School District, shall identify issues relating to public school emergency preparedness, such as:

A. The determination of evacuation zones, evacuation routes, and shelter locations.

B. The design and use of public schools as emergency shelters.

C. The designation of sites other than public schools as long-term shelters, to allow schools to resume normal operations following emergency events.

XII - CONSERVATION ELEMENT

Serving the Community

GOAL 12.1: Conserve, protect and appropriately manage the natural resources and environmentally sensitive areas of the City of Cocoa to ensure the highest environmental quality possible.

Objective 12.1.1: Environmentally Sensitive Areas. At a minimum, Environmentally Sensitive Areas shall contain one or more of the following natural resources:

A. Rare, threatened or endangered wildlife and/or vegetation, e.g., wildlife (scrub jay, osprey, manatee); vegetation (American chaffseed). A complete list is defined by the U.S. Fish and Wildlife Service, Florida Fish and Wildlife Conservation Commission and the East Central Florida Regional Planning Council;

B. Rare and unique upland habitat or Florida Natural Areas Inventory (FNAI) "imperiled" or "critically imperiled" communities, e.g., sand pine scrub;

C. Wetlands or deepwater habitats;

D. Special geologic formations;

E. Artifacts of archaeological or historic significance;

F. Within floodways and areas subject to flooding.

Policy 12.1.1.1: The City shall coordinate with appropriate governmental entities to protect environmentally sensitive lands which extend into adjacent municipalities. This coordination shall include the Florida Natural Areas Inventory, East Central Florida Regional Planning Council (ECFRPC), the Florida Fish and Wildlife Conservation Commission, St. John's River Water Management District (SJRWMD) and based on the information generated from the data.

Objective 12.1.2: Air Quality. Air quality in the City of Cocoa shall meet or exceed the minimum criteria set by the Florida Department of Environmental Protection (FDEP).

Policy 12.1.2.1: Roadway segments and intersections under the city's jurisdiction which are predicted to approach or exceed FDEP allowable maximum concentrations for air pollutants shall be given priority in the planning of transportation improvements.

Policy 12.1.2.2: The City shall coordinate with the County, adjacent municipalities and the Florida Department of Transportation in the monitoring of transportation related air quality impacts, and the planning of improvements needed on regionally significant roadways to rectify observed or predicted air quality problems on those roads.

Policy 12.1.2.3: New development, whether public or private, shall be designed to accommodate and encourage alternative modes of transportation to

the maximum extent practical. Appropriate measures may include, but are not limited to construction of bicycle facilities along new roadways; construction of pedestrian sidewalks along roads and within developments; provision of passenger shelters for users of mass transit.

Policy 12.1.2.4: The City shall encourage the establishment and use of mass transit transportation alternatives wherever such alternatives cannot be shown to be infeasible or impractical.

Policy 12.1.2.5: In order to reduce peak traffic loads on roadways that contribute to air quality degradation, the City shall encourage government and private sector businesses to adopt alternative work schedules where they are practical.

Policy 12.1.2.6: The City shall ensure, through the development approval and monitoring process, that new facilities which are subject to permitting as major air pollution sources by the FDEP are designed to use and maintain the best available emission control technology in order to reduce adverse impacts from such facilities on the environment.

Policy 12.1.2.7: The City shall promote planned unit development and mixed-use development to reduce the potential for mobile source emissions.

Objective 12.1.3: Groundwater. The City shall continue to reduce per capita consumption of fresh groundwater by its residents through conservation and reuse of existing water supplies, and through the establishment and use of non-potable supplies.

Policy 12.1.3.1: The City shall regulate the design, installation and operation of air/water heat pumps in a manner consistent with County policy, in order to reduce the wasteful use of groundwater by such systems.

Policy 12.1.3.2: The City shall require the use of reclaimed wastewater for irrigation or other non-potable uses wherever such water is reasonably available to water users.

Policy 12.1.3.3: In order to reduce the amount of water used in the irrigation of landscaping, the City shall encourage the use of native or drought resistant plants in the landscaping of new development or redevelopment.

Policy 12.1.3.4: The City shall continue to encourage conservation of water by supporting the retrofit of low-volume plumbing fixtures in existing development, and by requiring the use of such fixtures in new development and re-development.

Policy 12.1.3.5: New development shall not be approved unless a demonstrably secure source of potable and/or non-potable water is available to meet the projected water use demands of the development.

Policy 12.1.3.6: The City shall assist the St. Johns River Water Management District (SJRWMD) in the enforcement of the provisions of emergency water shortage plans at those times when an official emergency water shortage declaration is made by the SJRWMD Governing Board.

Policy 12.1.3.7: The City shall encourage, and to the extent possible, require use of *Florida friendly yard or landscape* (as provided for in Section 373.185, F.S.) that incorporates the Best Management Practices and philosophies described in "A Guide to Florida-Friendly Landscaping", Third Edition, 2006, as may subsequently be amended.

Policy 12.1.3.8: The City Code will require all new development and substantial redevelopment to connect to the reclaimed water system, if available. If not available, but availability is planned within five years, require installation of dry lines for future connection to the reclaim system.

Policy 12.1.3.9: The City shall disseminate water conservation information to the public consistent with the adopted City of Cocoa Water Supply Facilities Work Plan.

Policy 12.1.3.10: The City shall implement water conservation practices consistent with the adopted City of Cocoa Water Supply Facilities Work Plan.

Policy 12.1.3.11: The City shall continue to coordinate with water supply recipients concerning the sharing of information to meet the on-going water supply needs.

Objective 12.1.4: Water Quality Protection. Surface and groundwater quality in the City of Cocoa shall meet or exceed the minimum criteria set by the Florida Department of Environmental Protection.

Policy 12.1.4.1: The City shall establish site design standards and regulations for the control of stormwater runoff to ensure the adequate treatment of stormwater from all new development or re-development prior to its discharge to surface waters, consistent with the policies contained in the Stormwater Management Element and the Surface Water Management Plan.

Policy 12.1.4.2: The City shall identify means for reducing the volume of untreated stormwater discharged to surface waters, as part of the Surface Water Management Plan, with emphasis also being placed on the treatment of stormwater being discharged from lands and storm sewer systems in the City. The Surface Water Management Plan will identify priorities among drainage areas for providing treatment for stormwater.

Policy 12.1.4.3: The City shall ensure that land uses which require the routine application of pesticides or herbicides (e.g., agriculture, golf courses)

maintain a groundwater monitoring program designed to detect and eliminate contamination of the surficial aquifer by those substances. Upon detection of contamination, the City shall require the contaminator to discontinue the contamination and to take corrective action where feasible.

Policy 12.1.4.4: In order to protect the groundwater from contamination by hazardous wastes or materials, the City shall require that industrial parks which include tenants who use hazardous materials or generate hazardous wastes: (a) prepare hazardous materials spill containment and clean-up plans; (b) design drainage and sewer facilities to prevent contamination of soils, groundwater or surface waters from hazardous materials spills; and (c) provide interim storage facilities for hazardous materials generated on-site.

Policy 12.1.4.5: In order to reduce the potential for salt-water intrusion, the City shall require the use of native or drought-resistant plants, as appropriate, in the landscaping of new development or re-development.

Policy 12.1.4.6: The City shall monitor and restrict, if necessary, activities and land uses known to adversely affect the quality of identified water resources.

Objective 12.1.5: Endangered & Threatened Species. The distribution and abundance of endangered and threatened species within the City will be identified, and the habitat of viable populations of any such species shall be protected and managed, or the impacts to such habitat shall be adequately mitigated, so as to ensure their continued existence.

Policy 12.1.5.1: The City shall sponsor a biological survey of natural habitats within municipal limits to identify areas of suitable habitat for listed species, and to estimate population size and viability for those species which do occur.

Policy 12.1.5.2: Areas known to support a viable population of a listed species, or which provide habitat of a size and character that is suitable for long term protection of a listed species, shall be given priority in the acquisition of public parks or preserves. Any such park shall be managed in a manner consistent with preservation of the listed species and its habitat.

Policy 12.1.5.3: The City shall seek the cooperation of government and private conservation agencies in the preservation of lands which harbor a viable population of one or more listed species and their habitat.

Policy 12.1.5.4: Development approval in areas which have been identified as providing habitat of a size and character that is suitable for long term protection of a viable population of one or more listed species shall

be contingent upon the formulation of a management plan which would to the greatest extent possible eliminate adverse effects to any listed species which occur or are discovered on the development site.

Policy 12.1.5.5: The City shall consult with the FGFWFC and/or the FDEP in the review of listed species management plans prepared by private developers, and shall implement the recommendations of those agencies in the issuance of development orders.

Policy 12.1.5.6: The City shall discourage development within a habitat area dedicated to the public through a conservation easement.

Policy 12.1.5.7: With the exception of areas designated as handicap parking, any area identified for parking shall be stabilized using some type of pervious stabilizer, such as grass pavers, and the area shall be finished to look natural.

Policy 12.1.5.8: The City shall protect listed animal species and/or native habitat listed species in accordance with the Florida Fish and Wildlife Conservation Commission.

Objective 12.1.6: Hydrology, Vegetation, and Wildlife. Protect and conserve soils and native vegetation communities, and maintain the natural functions of the City's ecological zones in a manner consistent with the Goals, Objectives and Policies of the Future Land Use Element.

Policy 12.1.6.1: The City shall sponsor a biological survey of native vegetative communities within municipal limits to inventory the listed wildlife species that occur as permanent residents.

Policy 12.1.6.2: The City shall preserve natural communities in the siting, design, development and maintenance of public parks. Wherever possible, existing natural plant communities should be maintained undisturbed as a part of new parks developments except for relatively minor alterations, such as nature trails or boardwalks, which do not alter the wildlife habitat values of the system.

Policy 12.1.6.3: Areas of natural habitat within the 100-year floodplain shall be given priority consideration in the identification of lands that address passive recreational demand and open space objectives, except in those instances where a proposed development is determined by the City to be consistent with the Goals, Objectives and Policies of the Future Land Use Element.

Policy 12.1.6.4: In order to reduce the adverse consequences of floodplain development and simultaneously encourage the conservation of natural habitat, the City's Flood Damage Prevention ordinance shall be amended to discourage construction in the floodplain, unless the

proposed construction is expressly authorized by this Comprehensive Plan. Development plans shall preserve the natural functions of floodplains when practical. Compensatory storage for fill placed within the floodplain shall be allowed only when the applicant demonstrated the absence of adverse consequences of compensatory storage and demonstrates compliance with other applicable provisions of this Comprehensive Plan.

Policy 12.1.6.5: The City shall encourage the protection of critical natural vegetative communities and wildlife habitat by public purchase programs and by private property owners through donations, transfers of development rights, purchase of development rights, conservation easements or other appropriate mechanisms.

Policy 12.1.6.6: The City shall protect species which are listed as Endangered, Threatened or a Species of Special Concern by the Florida Fish and Wildlife Conservation Commission, the U.S. Fish and Wildlife Service or the Florida Committee on Rare and Endangered Plants and Animals (FCREPA) and shall not approve any development which proposes to destroy natural vegetative communities known to provide habitat to listed species except where the developer has submitted a management plan which minimizes adverse affects on the species to the greatest extent possible. The management plan shall be approved by St. John's River Water Management District.

Policy 12.1.6.7: The City shall not approve any development except as provided in the Goals, Objectives and Policies of the Future Land Use Element that would adversely alter the ecological functions of freshwater wetlands or deepwater habitat. Ecological functions include: (a) provision of wildlife and fisheries habitat; (b) maintenance of in-stream flows and lake levels during periods of high and/or low rainfall; (c) erosion control; (d) water quality enhancement; and (e) natural vegetative communities.

Policy 12.1.6.8: The City shall require that the following non-native plant species be removed from the limits of construction and required buffer areas from all sites which are developed or re-developed: Causarina cunninghamiana (beefwood), Causarina qlauca (scaly-bark beefwood), Causarina equisetifolia (Australian pine), Dioscorea blulbifera (air potato), Malateuca quinquenervia (punk tree), Rincinus communis (castor bean), Sansevieria hyacinthoides (African bowstring), Schinus terebinthifolius (Brazilian pepper)~~,~~ Broussonetia papyrifera (male mulberry), Enterolobium contortisiliquum (ear tree), Eucalyptus spp. (eucalyptus tree), Melaleuca quinquenervia (punk tree), Melia azedarach (chinaberry), Prunus caroliniana (cherry laurel), Auracaria wrightii (monkey puzzle), Grevillea robusta (silk oak tree), Albizia spp. (mimosa, woman's tongue), Prunus serotina (wild cherry), Sapium sebiferum (Chinese tallow), Leucaena leucocephala (lead

tree), Dalbergia sissoo (rosewood), Acacia auriculiformis (earleaf acacia), Eugenia uniflora (Surinam cherry), Cupaniopsis anacardiodes (carrotwood), and Koelreuteria paniculata (golden rain tree). No listed exotic species shall be used for planting purposes adjacent to protected lands.

Policy 12.1.6.9: The City shall not approve any development that is inconsistent with the requirements of applicable natural resource Goals, Objectives and Policies contained elsewhere in this Plan.

Policy 12.1.6.10: The City shall promote the use of native vegetation as specified in its ordinance for all development.

Policy 12.1.6.11: The City shall protect rare, unique, or significant-natural habitats within the City.

Policy 12.1.6.12: The City shall protect the habitat of gopher tortoises, gopher frogs, eastern indigo snakes, eagles, ospreys, alligators, pileated woodpeckers, manatees and river otters.

Policy 12.1.6.13: The City shall consider the abundance, status, and distribution of endangered ecosystems and other environmentally sensitive lands when reviewing land use proposals and acquisitions such as:

A. Management plans which protect endangered wildlife which utilize critical habitats;

B. Mitigation plans for critical habitat which is unavoidably altered; and,

C. Restrictions of the use of critical habitats to those which are found to be compatible with the requirements of wildlife species which are threatened, endangered, or of special concern.

Policy 12.1.6.14: The City shall participate with the St. John's River Water Management District, the county, and other appropriate agencies to re-establish the historic hydrologic connections at the Cocoa Conservation Area and borrow pits within the county.

Policy 12.1.6.15: Wetlands and wetland functions shall be protected and conserved by restricting direct and indirect development impacts.

A. *General.*

1. The City shall avoid, or when unavoidable, minimize development impacts on wetlands; direct incompatible land uses away from wetlands; require wetland buffers; allow wetland losses only where all reasonable measures have been applied to avoid such losses; and allow for effective mitigation.

2. Land use planning and site design shall support development patterns that minimize the impact of development on wetlands.
3. The City shall maintain a Generalized Wetlands Map as part of the Comprehensive Plan. This map shall be based on the U.S. Fish and Wildlife Service, National Wetlands Inventory.

B. *Existing development.* Existing uses in wetlands may continue, but shall not expand unless they are allowed, permitted, or exempted by the SJRWMD and this policy.

C. *New development and redevelopment with no significant impact.* New development and redevelopment having no significant impact on the net wetland functions shall be permitted. They include only the following:

1. *Water dependent uses.* An activity which can only be conducted on, in, over, or adjacent to water areas because the activity requires direct access to the water body or sovereign submerged lands for transportation, recreation, energy production or transmission, or source of water, and where the use of the water or sovereign submerged lands is an integral part of the activity. ~~Water dependent uses as defined by Rule 9J-5.003(137) F.A.C.~~
2. *Passive recreation.* Walking nature trails or elevated wooden boardwalks designed to minimize wetland system disturbance and to provide limited access for passive recreation or access to other portions of the site or adjacent waters, which are otherwise inaccessible.
3. *Insect control structures.*
4. *Utilities installation.* Temporary impacts associated with the installation of cables, conduits, and pipelines that transmit electricity, communication signals, potable water, raw water, reclaimed water, domestic wastewater, propane gas, natural gas, or similar infrastructure.
5. *Rights-of-way and easements.* Minor activities by FDOT, the City, and Brevard County within existing rights-of-way or easements.
6. *F.A.C. exemptions.* Exemptions listed in the rules of the SJRWMD.
7. *Environmental restoration, enhancement, and research uses.*

8. *Dredging and filling.* Uses that require the dredging and filling of less than one-hundred (100) square feet of wetlands.

D. *New development and redevelopment with impact.* New development and redevelopment having impact on the net wetland functions shall be permitted only if the activity conforms to City's mitigation requirements listed in this policy and meets at least one of the following criteria:

1. *Road crossings.* Road crossings which impact wetlands shall be allowed if shown to be in the public interest (e.g. the construction of local, collector or arterial road linkages). When allowed, road crossings shall occur at the narrowest practical point constrained by safe roadway design and shall provide for hydrologic connectivity and aquatic species movement.

2. *Access to uplands across wetlands.* Access to uplands property may cross wetland areas, provided that:

   (a) No other access to such property is practical.

   (b) Such limited access will not adversely affect any of the primary functions of the wetlands to be preserved on-site.

   (c) The location of and construction methods employed for such access would result in minimal environmental impact of the wetlands to be preserved on-site.

3. *Low quality wetlands.* If the SJRWMD determines a wetland (or portion thereof) is low quality and has minimal restoration potential, and beneficial restoration or enhancement mitigation of another wetland would be achieved as a result of mitigation permitting development in this low quality wetland (or portion thereof), then the future land use category shall apply.

4. *Isolated wetlands for stormwater management systems.* As determined by the City, development may incorporate isolated wetlands into storm water management systems, provided the storm water runoff is pre-treated before entering the wetland, so that the wetland is used for nutrient and volume attenuation. The City shall encourage designs, which maintain existing natural wetlands community, except where permitting agencies impose conditions favoring a different plant community as more desirable for the

purpose of providing habitat, improving water quality, or enhancing other wetland values.

5. *Isolated wetlands less than 5 acres with no significant and sustainable wildlife values.* The City shall request the comment and opinion of the SJRWMD or a professional biologist as to whether the wetland of less than 5 acres has significant wildlife values, based on the following factors:

   (a) The extent the isolated wetland acts in concert with the broader regional landscape to provide both food support and habitat for wildlife;

   (b) The potential cumulative impacts to isolated wetland wildlife functions at a regional level;

   (c) Individual wetland features that are important to wildlife;

   (d) Whether the isolated wetland is used by endangered or threatened species or species of special concern; and

   (e) The degree to which adjacent existing or planned development will affect the use of the wetland by wildlife.

   If the biological evaluation determines the isolated wetland of less than 5 acres has significant and sustainable wildlife values, the wetland shall be afforded the same level of protection as all other similar wetlands. However, if the evaluation determines no significant and sustainable wildlife values, then the future land use category of the adjacent uplands of the site shall apply. This does not preclude the application of any regulatory requirements of federal, state, or regional agencies.

6. *Non-residential uses.* Non-residential uses shall be permitted within wetlands, subject to the following minimum requirements:

   (a) Clearing or removal of native vegetation shall not exceed ten (10) percent of the wetlands on the site. Exotic vegetation may be removed without regard to this limitation provided, however if the area cleared of exotic vegetation exceeds the applicable ten (10) percent maximum, it is replanted with native wetland vegetation.

(b) A restrictive or conservation easement to preserve open space shall be required.

(c) Allowable non-residential land uses within the Conservation future land use category shall be limited to those uses allowed in the future land use category of the adjacent uplands of the site.

(d) If areas annexed into the City from Brevard County have been designated with a Brevard County commercial or industrial future land use category prior to February 23, 1996, then those properties shall be subject to the wetlands protection policies of the Brevard County Comprehensive Plan Conservation Element as of the effective date of the annexation, and only if all other requirements of Policy 12.1.6.15.D.6 cannot be satisfied.

E. *Upland buffers.*

1. *General.* Upland buffers are considered an integral component of a functioning wetland and shall be afforded the same types and levels of protection as the wetland itself. Upland buffers shall not be developed, cleared, or landscaped that would decrease their effectiveness in supporting wetland functions, and shall not include turfed, landscaped, or impervious surfaces.

2. *Minimum width.* Where wetlands exist, upland buffers shall be provided at a minimum width of fifteen (15) feet and an average width of twenty-five (25) feet beyond the perimeter of the wetland.

3. *Encroachment.* Encroachment into upland buffers for the purpose of hydrologic connection of drainage systems and creation of mitigation areas shall be permitted and shall not require additional buffering compensation.

4. *Additional requirement.* The City may require the extension of upland buffers beyond twenty-five (25) feet if necessary to connect isolated wetlands with other protected wetlands existing within one-hundred (100) feet depending on the existence of listed species and habitat valuation.

5. *Average width exception.* Uplands buffer widths may be adjusted downward below the required minimum average on a case-by-case basis if the developable

portion of existing lots of record as of December 1, 2003 does not have sufficient size or dimensions to allow for a reasonable use of the property based on the designated future land use category. In this instance, the remaining upland buffers shall be enhanced with native species to minimize development impacts and enhance the functioning value of the wetlands buffer area.

6. *Passive recreation.* The City may approve, as appropriate, minimal use in clearing for nature trails and other passive recreational uses compatible with the purpose of the buffer zone.

F. Implementation and mitigation.

1. *Future land use category assignment.* The Conservation Future Land Use category shall be assigned to all wetland areas subject to a Future Land Use Map amendment adopted after December 1, 2003. For the purposes of initially determining appropriate wetland areas the City shall utilize the National Wetlands Inventory.

2. *Delineation.* In order to properly identify and delineate wetlands prior to development, the City shall rely on the delineation of wetlands and surface waters certified by the SJRWMD. The delineation shall be reproduced on development plans which are submitted for review by the City. For other review purposes which do not specifically permit development (e.g. plan amendments, rezonings, etc.), the extent of on-site wetlands shall be estimated and no delineation is required unless otherwise required by the City.

3. *Site and development review.* Wetlands existing on a proposed development parcel shall be shown as a part of the development plans submitted to the City for review. Additionally, the development plans shall show the delineation of the upland buffer for portion of a development parcel which does not require a SJRWMD permit. For projects requiring a SJRWMD permit, the City shall require as a condition of development approval that wetland buffers shall be protected and encumbered by a perpetual conservation easement.

4. *Onsite transfer of density.* Development densities/intensities may be transferred out of the undeveloped wetland areas on a one-for-one (1:1)

basis to upland portions of a development site. Offsite transfer of density is prohibited.

5. *Creation of new lots.* New lots shall not be created and/or platted that do not contain sufficient buildable upland areas in order to provide a reasonable use for the lot under the requirements of the Comprehensive Plan.

6. *Mitigation.*

(a) *General.* The purpose of mitigation is to offset environmental impacts. Mitigation activities approved by a federal, state, or regional agency are supported by the City. However, the issuance of a permit by any other agency, with or without mitigation, shall conform to the requirements the Comprehensive Plan.

(b) *Location.* Mitigation shall be permitted by both City Council and the SJRWMD within the appropriate SJRWMD watershed basin, as determined by SJRWMD and in the following manner:

(1) First priority - On-site.

(2) Second priority - Within the City limits.

(3) Third priority - Within five (5) miles of the City limits.

(4) Fourth priority - Within ten (10) miles of the City limits.

(5) Fifth priority - Within Brevard County.

(6) Sixth priority – Outside of Brevard County.

Policy 12.1.6.16: The City shall protect existing natural reservations identified in the Recreation and Open Space Element.

Objective 12.1.7: Fisheries and Estuarine Habitat. The city shall cooperate with and assist St. John's River Water Management District (SJRWMD) and the Department of Environmental Protection (DEP) to continue to protect or restore the aquatic vegetation including, but not limited to, aquatic weed control, restoration or creation of aquatic grass beds or shoreline restoration. In addition, the City will protect the diversity of submerged and emergent aquatic vegetation and fish species as well as the quality of fresh water (estuarine), found in the City's lakes and tributaries associated with St. John's River, and in the Indian River within the zone between the Cocoa shoreline and the Intracoastal

Waterway. The protection shall be as great, or greater, than they were in 1988, as determined by SJRWMD and the DEP, using DEP established standards.

Policy 12.1.7.1: The City shall continue to implement alternative means of wastewater effluent discharge (such as effluent reuse) which will reduce the volume of wastewater discharged to the Indian River Lagoon.

Policy 12.1.7.2: The City shall establish site design standards and regulations for the control of stormwater runoff to ensure the reduction of, and the adequate treatment of stormwater runoff from all new development or re-development prior to its discharge to surface waters.

Policy 12.1.7.3: The City through the Surface Water Management Plan shall reduce the volume of untreated stormwater discharged to surface waters, and shall develop a program to take corrective action.

Policy 12.1.7.4: The City shall not permit shoreline development activities that would destroy or degrade the function of estuarine shoreline or deepwater habitat. The applicant shall demonstrate how any potential adverse impact shall be reduced or avoided.

Policy 12.1.7.5: Areas within the Indian River Lagoon and the tributaries to St. John's River basin, lands acquired by City for passive recreation with littoral zones shall be designated as conservation.

Policy 12.1.7.6: The City supports the objectives of the Indian River Lagoon Comprehensive Conservation and Management Plan 2008 update.

Objective 12.1.8: Hazardous Waste and Materials. The City shall coordinate with Brevard County to establish procedures and regulations which support State and County hazardous material management objectives, and which will reduce the number of sites at which improper use, storage or disposal of hazardous materials occurs.

Policy 12.1.8.1: The City shall coordinate with the FDEP and Brevard County in the establishment of Amnesty Days for the collection of hazardous domestic wastes.

Policy 12.1.8.2: The City shall ensure that businesses which store, generate, or transport hazardous wastes or materials do so in accordance with Federal and State guidelines and regulations.

Policy 12.1.8.3: Industrial parks which include tenants who use hazardous materials or generate hazardous wastes shall be required to: (a) prepare hazardous materials spill containment and clean-up plans; (b) design drainage and sewer facilities to prevent the contamination of soils, groundwater or surface waters from hazardous materials spills; and (c) provide interim storage facilities for hazardous wastes generated on-site.

Policy 12.1.8.4: The City shall provide the greatest support practical to Federal, State and County hazardous waste and materials management programs.

Objective 12.1.9: Floodplain Management. The City shall protect the flood storage and conveyance functions of the 100-year floodplain.

Policy 12.1.9.1: In order to reduce the adverse consequences of floodplain development and simultaneously encourage the conservation of natural habitat, the City's Flood Damage Prevention ordinance shall be updated as needed to maintain compliance with the National Flood Insurance Program and to discourage construction in the floodplain, unless the proposed construction is expressly authorized by this Comprehensive Plan. Developmental plans shall preserve the natural functions of floodplains when practical. The provision of compensatory storage for fill placed within the floodplain shall be allowed only when the applicant demonstrates the absence of adverse consequences of compensatory storage and demonstrates compliance with other applicable provisions of this Comprehensive Plan.

Policy 12.1.9.2: Developers shall be encouraged to incorporate those portions of sites that are within the 100-year floodplain as open space preservation.

Policy 12.1.9.3: The City shall promote wetlands preservation and non-structural floodplain management by encouraging the use of isolated wetlands as detention areas, where such use is consistent with good engineering practice and does not significantly degrade the ecological value of wetlands. Pre-treatment of stormwater run off by diversion of the "first flush" shall be required prior to discharge to wetland detention areas.

Policy 12.1.9.4: The City shall encourage public and private agencies, including but not limited to the Florida Department of Environmental Protection, the Florida Game and Freshwater Fish Commission, the St. Johns River Water Management District, The Nature Conservancy, The Trust for Public Lands and Brevard County, in acquiring wetlands and floodplains.

Objective 12.1.10: Soil Conservation and Mineral Resources. Land development and mineral extraction activities shall be regulated so as to conserve mineral resources and limit the adverse effects of soil erosion and sediment transport on air and water quality.

Policy 12.1.10.1: The City shall continue to regulate resource extraction activities so as to both protect and conserve mineral resources and protect the environment.

Policy 12.1.10.2: The City shall require that all land clearing for agriculture, excavation or development activities be conducted in compliance with soil erosion Best Management Practices published by the SCS, FDOT,

FDEP, FDACS or IFAS. Land clearing for resource extraction or development shall be limited to the minimum amount necessary.

Policy 12.1.10.3: Land developers and excavators shall prepare and implement reclamation plans that establish a biologically productive landscape comprised of native plants. The City shall require land developers and excavators to demonstrate financial responsibility for future reclamation activities prior to approval of development.

Policy 12.1.10.4: The City shall employ Best Management Practices for control of erosion and sedimentation for road and other City projects.

Objective 12.1.11: Energy Reduction and Conservation. The City will take steps to reduce the consumption of energy through promoting more efficient land use development patterns and uses which provide alternatives to commuting to and from employment.

Policy 12.1.11.1: The City will promote the use of infill development along its existing commercial corridors to increase the diversity of uses located in close proximity to one another to reduce the need for multiple trips or to travel cross town.

Policy 12.1.11.2: Where feasible and compatible with adjacent land uses, the City will support requests for higher densities and intensities.

Policy 12.1.11.3: The City will promote mixed-use development patterns in new projects to provide greater diversity of use in close proximity of one another to promote reduced dependence on automobiles, and increased use of pedestrian and bicycle travel.

Policy 12.1.11.4: To the greatest extent possible, the City should work with providers of multimodal transportation systems, such as SCAT, to encourage them to expand, or establish service in and around the City to reduce resident's dependence on use of automobiles.

Policy 12.1.11.5: The City will develop a bicycle/pedestrian master plan to provide a blueprint for the development of a City-wide trail plan to provide interconnectivity of residential and commercial areas to promote bicycle and pedestrian travel as an alternative to the automobile.

Policy 12.1.11.6: The City will continue to promote itself as a desirable place for new clean business and industry to move to with the intention of increasing employment opportunities for Cocoa residents to reduce or eliminate the need to commute to and from work.

Policy 12.1.11.7: Continue working to improve citizens awareness of the need to conserve energy through continued participation of Florida Power and Lights Household Energy Makeover Initiative (HEMI) to educate residents, especially those with older less energy efficient homes, of the savings in not only the natural resources used to create

energy, but also the expenses associated with inefficient heat and air conditioning units and appliances.

Policy 12.1.11.8: The City supports Federal and State incentives to promote use of energy efficient technology, including but not limited to solar heating, photovoltaic cells, more efficient insulation systems, and other clean energy sources.

Policy 12.1.11.9: The City shall review, and where feasible, adopt conservation oriented building methods and materials, such as those promoted through the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system.

Policy 12.1.11.10: To the greatest extent possible, any new structures constructed by the City shall meet, at a minimum, the Silver rating of the LEED rating system.

XIII - INTERGOVERNMENTAL COORDINATION ELEMENT



Serving the Community

GOAL 13.1: The City shall maintain an ongoing commitment to Intergovernmental Coordination to ensure that the growth management goals of the comprehensive plan will be effectively implemented.

Objective 13.1.1: Coordinate Comprehensive Plan. The City shall continue to coordinate comprehensive planning and intergovernmental issues with Brevard County, adjacent municipalities and the East Central Florida Regional Planning Council (ECFRPC).

Policy 13.1.1.1: The City shall exchange intergovernmental information and services with appropriate local governments through scheduled meetings and as requested.

Policy 13.1.1.2: The City shall engage in mutual discussion with Brevard County and adjacent municipalities to establish an annexation policy to direct an orderly and timely process of annexing unincorporated lands adjacent to Cocoa's municipal boundaries.

Policy 13.1.1.3: In the event of a conflict with the comprehensive plan of another local government that cannot be successfully resolved within a reasonable period of time, the City will appeal to the ECFRPC's informal mediation process. Wherever possible, the appeal will be submitted as a joint request by the local governments. The City shall work with Brevard County to adopt a Joint Planning Agreement (JPA) to address long-term planning and decision making for the region, including the issue of future annexations.

Policy 13.1.1.4: The City shall review and update all interlocal agreements to ensure consistency with the requirements of Florida Statutes.

Objective 13.1.2: Impacts of Development. The City of Cocoa shall ensure that the impacts resulting from the implementation of the comprehensive plan upon development in adjacent municipalities, unincorporated areas, regions and the State are evaluated and addressed with such jurisdictions.

Policy 13.1.2.1: The City staff will evaluate development projects in Cocoa to include an assessment of impacts on the comprehensive plans of adjacent jurisdictions.

Policy 13.1.2.2: The City staff will assess future amendments to its comprehensive plan, including the Future Land Use and Capital Improvements elements, for impact on the comprehensive plans of adjacent jurisdictions.

Policy 13.1.2.3: The City shall coordinate with the City of Rockledge to institute joint planning activities in areas of joint concern and influence. The activities shall include land use, landscaping, urban design and urban form of new development in the area.

Policy 13.1.2.4: The City shall coordinate transportation planning activities with the Florida Department of Transportation (FDOT), ECFRPC, the Space Coast TPO, Brevard County and the adjacent municipalities to protect and preserve necessary future rights-of-way and to adopt corridor roadway systems in and around the City of Cocoa.

Objective 13.1.3: Coordinate Level of Service Standards. The City shall continue to coordinate with responsible local, regional, and State authorities, as appropriate, to ensure consistency of adopted level of service (LOS) standards across jurisdictions.

Policy 13.1.3.1: The City shall continue to contract with a private service provider for solid waste collection service and disposal at the Brevard County landfill and will coordinate adopted LOS standards with the County.

Policy 13.1.3.2: The City shall continue to function as the primary provider for potable water service within its franchise area in central Brevard County and will coordinate with adjacent jurisdictions using potable water services regarding LOS standards and the extension of water and wastewater services to the new users of the Cocoa water system.

Policy 13.1.3.3: The City shall continue to coordinate with FDOT, the Space Coast TPO and Brevard County to establish concurrency management mechanisms that will provide consistent LOS standards to be maintained on major roadways in and around the City of Cocoa.

Objective 13.1.4: Housing and Recreational Facilities. The City shall provide appropriate mechanisms to coordinate information and programs for the provision of housing and recreational facilities.

Policy 13.1.4.1: The City shall solicit recommendations and assistance from various public agencies and quasi-public organizations such as the Florida Department of State, Division of Historic Resources, the state land planning agency, ~~the Florida Department of Economic Opportunity (DEO),~~ Florida Department of Children & Families, Brevard County Housing Authority and local Chambers of Commerce to assist in program funding, identification of structures and areas to be preserved for historical purposes.

Policy 13.1.4.2: The City shall continue both formal and informal communication with appropriate State and regional agencies, such as the ~~DEO~~ state land planning agency and the ECFRPC, to ensure availability of information on specific programs, projects, and legislation pertinent to affordable housing and to provide technical assistance for potential grants.

Policy 13.1.4.3: The City shall engage in efforts with Brevard County and the Brevard County School Board for procurement, operation and maintenance of parks and recreation facilities.

Policy 13.1.4.4: The City shall continue to cooperate with state agencies as well as non-profit environmental organizations in identifying programs and funding sources to promote further development of community parks, open space and recreation facilities and to coordinate with them in effectively managing existing natural areas and open space.

Objective 13.1.5: Natural Resources. The City will continue to strengthen existing, and establish new, intergovernmental relationships to ensure natural resource management and protection.

Policy 13.1.5.1: The City shall coordinate with existing resource protection plans of other government agencies and entities including the FDEP, SJRWMD, as well as with nonprofit environmental organizations to appropriately conserve and manage natural areas, water supply sources and open space.

Policy 13.1.5.2: The City shall coordinate with Brevard County and adjoining municipalities to ensure that natural resources occurring in, or affecting more than one governmental jurisdiction, are effectively managed to preserve, protect and enhance natural systems, wildlife, fisheries and habitat. This includes ensuring the City's stormwater management, aquifer recharge and reuse water policies and projects are consistent with the goals of the SJRWMD's water supply plan and the Upper St. Johns River Surface Water Improvement and Management (SWIM) Plan to protect or enhance water quality and natural systems.

Objective 13.1.6: Coordinate with Brevard County School Board. The City shall continue to coordinate with the Brevard County School Board with regard to school site selection and the implementation of school concurrency consistent with the adopted Interlocal Agreement.

Policy 13.1.6.1: The City and the Brevard County School Board shall discuss and coordinate development plans for expansion of existing schools or development of new education facilities within the City to assure such activities are consistent with growth management directives established within the City's comprehensive plan. Issues shall include the impacts of facilities on adopted LOS standards established for public school facilities, transportation, potable water, wastewater, drainage and solid waste services.

Policy 13.1.6.2: The City shall provide the Brevard County School Board with information regarding proposed new developments to assist its efforts in planning new schools and to solicit its review comments.

Policy 13.1.6.3: In cooperation with the Brevard County School Board, Brevard County, and other local jurisdictions the City will implement the Interlocal Agreement which includes procedures for the coordination

of land use and school capacity, and the sharing of information, including population and student enrollment projections.

Objective 13.1.7: St. Johns River Water Management District. The City shall continuously monitor the St. Johns River Water Management District (SJRWMD) Water Supply Plan for revisions and amendments on an annual basis to determine whether revisions to the City's Water Supply Management Plan are needed.

Policy 13.1.7.1: The City shall maintain a Water Supply Facilities Work Plan consistent with the SJRWMD's Water Supply Plan.

Policy 13.1.7.2: Within 18 months of any changes to the above referenced plan by SJRWMD, the City shall evaluate its adopted Water Supply Facilities Work Plan for updates necessary to keep it consistent with the SJRWMD's plan.

Policy 13.1.7.3: Supply and demand projections will be consistent with the above-mentioned plans, assessments and processes.

Policy 13.1.7.4: The City will continue to actively participate in water supply planning work groups and meetings on an as-needed basis.

Policy 13.1.7.5: The City shall participate in the updates to the SJRWMD's water supply assessment and District Water Supply Plan and other water supply development-related initiatives facilitated by the SJRWMD that affect the City.

XIV - CAPITAL IMPROVEMENTS ELEMENT

Serving the Community

GOAL 14.1: Through the use of sound fiscal policies, the City of Cocoa shall provide adequate public facilities to all residents within its jurisdiction in a timely and efficient manner that promotes orderly compact urban growth and discourages urban sprawl.

Objective 14.1.1: Level of Service Standards. The City shall adopt levels of service (LOS) standards for public facilities and capital improvement projects within its jurisdictional responsibility.

Policy 14.1.1.1: The following LOS standards are hereby adopted and shall be used as the basis for determining the availability of public facilities for new development and redevelopment in the City.

PUBLIC FACILITIES	
WASTEWATER Source: Chapter 64E 6.008, Florida Administrative Code; Standard for Onsite Sewage Treatment and Disposal Systems, Revisions Effective ~~September 5, 2000~~July 16, 2013	DEVELOPMENT TYPE Industrial — 0.02 gallons per sq. ft. per day Office Space — 15 gallons per capita per day Hotel/Motel — 100 gallons per day per room Residential — 319 gallons per day per household Restaurant — 50 gallons per capita per day Bar/Lounge — 20 gallons per day per seat
STORMWATER MANAGEMENT	DESIGN STORM EVENT 25-year frequency/24-hour duration event
	ON-SITE STORMWATER MANAGEMENT Retention of the first one inch of rainfall runoff for areas of one acre or more; or retention of first one-half inch of rainfall runoff for drainage areas of less than one acre.
	STORMWATER QUANTITY Post development stormwater runoff flow rates, quantities, peaks, and velocities shall be equal to or less than levels that existed prior to development.
	STORMWATER QUALITY No significant degradation of water quality in receiving water bodies
POTABLE WATER	AVERAGE FLOW 122 gallons per capita per day (gpcd) per household, or 340 gallons per day per equivalent residential connection (ERC)
	PEAK FLOW - 510 gallons per day per ERC
	PEAK FLOW COEFFICIENT - 1.5
	PRESSURE Normal: 55-65 psi Peak Hour: 40-50 psi During Fire: 20 psi
SOLID WASTE	DISPOSAL (BREVARD COUNTY LANDFILL) Cocoa Contribution Rate – 1.2 tons per capita per year

	COLLECTION Residential: 2 times per week, each household Non-residential: 2 to 6 times per week As needed, each location Green Waste and Recyclables: Once per week	
ROADWAYS		
CITY OF COCOA JURISDICTION		MINIMUM LOS
Forrest Avenue		E
Cox Road (within city limits)		E
Fiske Boulevard (from SR 520 to Dixon Boulevard)		E
Indian River Drive (CR 515)		E
Peachtree Street (from Clearlake Road to US 1/SR 5)		E
Florida Avenue (within city limits)		E
OTHER OR MULTI-JURISDICTIONAL	JURISDICTION	MINIMUM LOS
Pineda Street (from Lake Drive to SR 501)	City/County	E
Michigan Boulevard	County	E
Dixon Boulevard	County	E
Range Road	County	E
Rosetine Street	County	E
Adamson Road (SR 524 to Pine)	County	D
Friday Road (SR 524 to SR 520)	County	E
Grissom Parkway (Industry to Canaveral Groves)	County	E
Industry Road (SR 524 to Grissom Pkwy)	County	E
SR 528 (Beachline Expressway)	State	D
SR 520 (from Clearlake Road to US 1/SR 5)	State	D
SR 520 (from SR 524 to Burnett Rd)	State	D
SR 519 (Fiske Boulevard south of SR 520)	State	D
US 1/SR 5 (from SR 528 to south of SR 520)	State	D
SR 524 (from SR 520 to SR 528)	State	D
SR 501 (Clearlake Road)	State	D
Interstate Highway 95 (I-95) (SR 519/Fiske Blvd to SR 520)	State	E
Interstate Highway 95 (I-95) (SR 520 to SR 524)	State	E
Interstate Highway 95 (I-95) (SR 524 to SR 528)	State	E
RECREATION		
1.25 acres of developed recreational area per 1000 population		

The uniform LOS standards for public schools shall be those established in the Public Schools Facilities Element. ~~Upon achieving the LOS standard of 100% permanent FISH Capacity, by school year 2011/2012, the Tiered LOS will be terminated.~~Currently, the LOS for the School District is 100%.

~~Facility Type~~	~~2009-2010~~	~~2010-2011~~	~~2011-2012~~
~~Elementary Schools~~	~~115%~~	~~105%~~	~~100%~~
~~Middle Schools~~	~~100%~~	~~100%~~	~~100%~~
~~Junior/Senior High Schools~~	~~110%~~	~~105%~~	~~100%~~
~~High Schools~~	~~115%~~	~~100%~~	~~100%~~

Policy 14.1.1.2: By December 1st of each year the City shall adopt as part of its Capital Improvements Element the Brevard County School District Five Year Work Program approved by the School as part of the School District budget. The City of Cocoa hereby adopts by reference the Five-Year District Facilities Work Program (~~2010/20011~~ 2018-2019 through ~~2014/2015~~2022-2023) as approved by the School Board on ~~September 28, 2010~~ October 23, 2018. Included therein shall be planned facilities and funding sources ~~to ensure a financially feasible capital improvements program and~~ to ensure the level of service standards will be achieved by the end of the five-year period.

Objective 14.1.2: Concurrency Management System. The City shall implement the Concurrency Management System (CMS) adopted in the City Code, which is consistent with sections 163.3177 and 163.3180, F.S. ~~and the minimum requirements for concurrency established in section 9J-5.0055 (3), F.A.C.~~ to manage the land development process so that public facility needs created by previously issued development orders or future development do not exceed the City's ability to fund and provide needed capital improvements.

Policy 14.1.2.1: The concurrency evaluation system shall measure the potential impact of any development proposal on the established minimum acceptable LOS standards for sanitary sewer, solid waste, stormwater, potable water, parks and recreation and transportation facilities, unless the development is exempt from the review requirements of the CMS.

Policy 14.1.2.2: No development permit or order shall be issued unless adequate public facilities are available to serve the proposed development as determined by the concurrency evaluation in the adopted CMS.

Policy 14.1.2.3: The City shall require all public and private capital facilities to provide service at the LOS standards adopted in this comprehensive plan for previously vested, existing and future permitted development. These capital facilities shall be provided concurrently with the impacts of development based on the minimum requirements in the City's adopted CMS.

Objective 14.1.3: Evaluation of Capital Projects. The City's capital projects shall be evaluated to determine if they meet prioritization criteria and consistency with adopted LOS standards and/or public need.

Policy 14.1.3.1: Requests for capital projects shall ~~be~~ generally be evaluated on their impact ~~on~~ to the City budget ~~and the financial feasibility of the project~~ based on the following ~~criteria~~factors:

- Meet existing deficiencies;
- Provide repair or replacement of existing facilities; ~~and~~
- Accommodate desired future growth; and~~.~~
- Consistency with the City's Budget Prioritization list.

Policy 14.1.3.2: The Finance Director shall determine if the capital project can be funded from existing cash, future revenues or through borrowing. In addition, the finance director shall assign revenue sources to fund the project.

Policy 14.1.3.3: The Finance Director shall prepare a report evaluating the funding options, the effect of the improvement on future revenues and the effect of the improvement on operation and maintenance costs.

Policy 14.1.3.4: The City shall adopt the following policy statements as guides for capital programming:

A. The City shall make all capital improvements in accordance with an adopted Capital Improvements Program (CIP).

B. The City shall develop a multi-year ~~"cost feasible"~~ plan for capital improvements and update it annually.

C. The City shall enact an annual capital budget based on the multi-year CIP. Future capital expenditures necessitated by changes in population, changes in real estate development or changes in economic base will be calculated and included in capital budget projections.

D. The City shall coordinate development of the capital improvement budget with development of the operating budget. Future operating costs associated with new capital improvement will be projected and included in operating budget forecasts.

E. The City shall use intergovernmental assistance to finance only those capital improvements that are consistent with the CIP and city priorities, and whose operating and maintenance costs have been included in operating budget forecast.

F. The City shall maintain all its assets at a level adequate to protect its capital investment and to minimize future maintenance and replacement costs.

G. The City shall project its equipment replacement and maintenance needs for the next several years and will update this projection each year. From this projection, a maintenance and replacement schedule will be developed and followed.

H. The City shall identify the estimated costs and potential funding sources for each capital project proposal before it is submitted to Council for approval.

I. The City shall determine the least costly financing method for all new projects.

Policy 14.1.3.5: Capital improvements planning will include evaluations of the costs and benefits of upgrading, expanding or modifying regionally significant public facilities versus the cost of constructing new facilities.

Policy 14.1.3.6: Projects of the five-year Capital Improvements ~~Schedule designated as meeting future needs will be given a Level Two or Three Priority.~~Schedule shall be prioritized based on the following:

CRITERIA FOR PRIORITY RANKING OF CAPITAL IMPROVEMENT PROJECTS:

PRIORITY ONE

1) The project addresses a condition dangerous to public health, safety and welfare.~~is needed to protect public health and safety.~~

2) The project ~~fulfills the City's legal commitment to provide facilities and services.~~ achieves compliance with a mandate or other legal obligation (contract/development order).

3) The project ~~corrects an existing facility deficiency or provides for needed replacement of facility components, in order to preserve or achieve full use of existing facilities.~~ alleviates an emergency service disruption or deficiency.

4) The project prevents irreparable damage to a critical public facility.

PRIORITY TWO

1) The project is identified in the 2016-2021 Strategic Plan and will stimulate economic growth and induces opportunity to attract private capital investment.

2) The project's deferment would result in severe degradation of public facilities and/or reduction in level of service.

3) The project leverages available federal, state or county funding or public-private partnerships (grant awarded or

public-private partnership, matching requirement considerations).

4) The project reduces demand on natural resources and/or promotes sustainability.

~~1)~~5) The project increases efficient use of existing facilities.

~~2)~~6) The project ~~prevents or reduces future improvement costs.~~reduces future operating and maintenance costs and advances fiscal sustainability.

~~3)~~7) The project provides service to developed areas lacking full service.

~~4)~~8) The project promotes in-fill development.

PRIORITY THREE

1) The project rehabilitates or replaces an obsolescent public facility.

2) The project provides a new or expanded level of service to City of Cocoa residents and/or business owners.

3) The project leverages available federal, state or county funding (grant opportunities/joint funding).

4) The project enhances natural or cultural resources.

~~1)~~5) The project represents a logical extension of facilities.

PRIORITY FOUR

1) The project promotes and enhances the City of Cocoa's image, physically or emotionally.

2) The project enhances and expands recreational or community amenities.

3) The project presents an opportunity to enhance and strengthen community identification within the Space Coast region.

Objective 14.1.4: Public Facility Improvements for New Growth. Public facility improvements that are needed to support new growth will maintain adopted levels of service. Improvements to public facilities that result from the impact of new development will require equitable cost participation by the developer.

Policy 14.1.4.1: All development order applications shall be evaluated as to the impact of the development on capital facilities and the operation and maintenance of those facilities. The evaluation shall include, but not be limited to, the following:

A. Expected capital costs, including the installation of required new facilities that are related to the development.

B. Expected operation and maintenance costs associated with the new facilities required by the development.

C. Anticipated revenues from the development, including impact fees, user fees and future taxes.

Policy 14.1.4.2: New development shall be responsible for installing all internal water and sewer systems, traffic circulation systems and internal recreation/open space facilities within the development. In addition, connections of internal systems to the City's designated water and sewer systems and traffic circulation network shall be the financial responsibility of the developer. Nothing herein shall preclude the City from adopting a development agreement for the purposes of entering into a public-private partnership to participate in funding improvements.

Policy 14.1.4.3: The City will not approve development that requires public facility improvements that exceed the City's ability to provide these in accordance with the adopted LOS standards.

Policy 14.1.4.4: Service areas designated for public facilities, as defined in the comprehensive plan, will be utilized to guide the availability of public facilities for future development.

Policy 14.1.4.5: The City, through adoption and implementation of land development regulations, comprehensive plan goals, objectives and policies, impact fees, other impact exactions, implementation of the annual budget and five-year capital improvements schedule, shall ensure the availability of public facilities and services concurrent with the impacts of development. Development shall not be approved unless the necessary infrastructure items and services are available subsequent to plan adoption.

~~**Policy 14.1.4.5:**~~**Policy 14.1.4.6:** Public expenditures which fund infrastructure improvements within the Coastal Planning Area shall abide by the limitations expressed in the Coastal Management Element (Objective 9.1.5. and Policies 9.1.5.1-2).

Objective 14.1.5: Coastal High Hazard Expenditures. Public expenditures for capital improvements in the coastal high hazard area (as hurricane vulnerability area) will be limited to repair and replacement of existing facilities, correcting existing deficiencies and hazards, and improvements to the potable water system unless the improvements are included in the plans of the City's community redevelopment areas.

Policy 14.1.5.1: The City will comply with appropriate regulatory requirements regarding development in the coastal high hazard area.

Objective 14.1.6: Multi-Jurisdictional Coordination. The City will continue coordination that provides for multi-jurisdictional approaches to the provision of needed public facilities.

Policy 14.1.6.1: The City will appoint representatives to participate in intergovernmental activities pertaining to public facility issues and comprehensive plan implementation in Brevard County.

Policy 14.1.6.2: The City Manager and the Planning and Zoning Board will work closely to address multi-jurisdictional issues concerning the funding of public services.

Policy 14.1.6.3: Additional City services to the two county enclaves will be predicated on annexation.

Policy 14.1.6.4: All capital projects shall be reviewed as to their compatibility and timing in relation to capital projects being implemented or planned by Brevard County, the Florida Department of Transportation, the St. Johns River Water Management District, the Brevard County School Board, the Florida Department of Environmental Protection, and/or any other applicable government agency.

Policy 14.1.6.5: Consistent with other applicable elements of this Plan, the City will provide for the provision of potable water, wastewater, surface water management, solid waste services, and other public services where the City has a legal commitment to provide such services.

Objective 14.1.7: Schedule of Capital Improvements. An annual review of the Capital Improvements Element (CIE) will be included in the City's budget process.

Policy 14.1.7.1: As part of the annual review of the CIE, the Finance Department shall be responsible for addressing the fiscal impact of capital improvement projects on revenue and expenditures and updating the fiscal assessment section of the CIE.

Policy 14.1.7.2: The fiscal assessment review and update will be carried out by the Finance Office and will include, at minimum, the following:

A. Forecasted summary of revenues and expenditures

B. Projected debt service capacity including:

1. Projected revenue bond debt service as a percentage of total debt;
2. Ratio of total debt to total revenue;
3. Projected ad valorem tax base, assessment ratio and millage rate;
4. Projection of operating cost considerations.

C. Verify financial feasibility of the CIE

Policy 14.1.7.3: The City shall adopt a Capital Improvement Program (CIP) as part of the annual budgeting process. The CIP will be derived from and

coordinated with the annual review of the Capital Improvements Element.

Policy 14.1.7.4: The City hereby adopts the Five-Year Schedule of Capital Improvements included in this element and shall update the projects annually via resolution to reflect any changes to the CIE and CIP.

Policy 14.1.7.5: The City shall, on an annual basis, amend its CIE to reflect any changes to its water treatment and distribution system needed to maintain the adopted level of service for all residents and customers.

Policy 14.1.7.6: The Water and Sewer Enterprise Fund will provide capital improvement revenue and bonding capacity for the expansion of the water and sewer system as identified in the Public Facilities Element and the Capital Improvements Element. The City shall seek supplemental grant funds whenever possible.

Policy 14.1.7.7: The City shall continue to utilize "user pays" financing strategies in land development regulations including, but not limited to, impact fees, user charges, special assessments and contribution in lieu of payment.

Policy 14.1.7.8: In providing capital improvements, the City shall limit the maximum ratio of outstanding indebtedness to no greater than 15% of the property tax base.

CAPITAL IMPROVEMENTS ELEMENT IMPLEMENTATION

- Five Year Schedule of Capital Improvements
- Location of Projects
- Programs to Ensure the Implementation of the Capital Improvements Element, Goals, Objectives and Policies.
- Monitoring and Evaluation

PROGRAMS TO ENSURE THE IMPLEMENTATION OF THE CAPITAL IMPROVEMENTS ELEMENT, GOALS, OBJECTIVES AND POLICIES

1) The Capital Improvements Element will be updated annually as part of the City's budget cycle.
2) The Department of Community Development will monitor land use decisions for consistency with the Capital Improvements Element and Future Land Use Element.
3) Maintaining the adopted LOS will function as primary criteria for assessing the impact of new development on public facilities.
4) The Public Works and Engineering Departments will continue to tract facility demand and capacity information as site plans and subdivision plats are approved.
5) Financial operations of the City will include maintaining enterprise and special funds, connection fees, and general fund balance as revenue sources for capital improvement projects.

MONITORING AND EVALUATION

The role of monitoring and evaluation is vital to the effectiveness of any planning program and particularly for the Capital Improvements Element. This is largely because the City's revenue and expenditure streams are subject to fluctuations in the market and economy. It is the behavior of these streams that will be used to predict fiscal trends in order to maintain the City's adopted level of service standards for public facilities. Therefore, the Capital Improvements Element requires a continuous program for monitoring and evaluation, and pursuant to Chapter 163, F.S., this element will be reviewed on an annual basis to ensure that required fiscal resources are available to provide public facilities needed to support adopted LOS standards. The annual review will be the responsibility of the City Council, City Manager, Department(s) of Community ~~Development and Public Works~~Services, Finance ~~Office~~, Public Works, and Utilities, and the Planning and Zoning Board~~, and the City Council.~~ The review may~~will~~ include the following considerations as appropriate~~, and will include an examination of these considerations in order to determine their continued appropriateness~~:

1) Any corrections, updates, and modifications concerning costs; revenue sources; acceptance of facilities pursuant to dedications which are consistent with the element; or the date of construction of any facility enumerated in the element;

2) The Capital Improvement Element's consistency with the other elements and is support of the Future Land Use Element;

3) The City's ability to provide public facilities and services within the urban service area in order to determine any need for boundary modification or adjustment;

4) The priority assignment of existing public facility deficiencies;

5) The City's progress in meeting those needs determined to be existing deficiencies;

6) The criteria used to evaluate capital improvement projects in order to ensure that projects are being ranked in their appropriate order of priority;

7) The City's effectiveness in maintaining the adopted LOS standards;

8) The City's effectiveness in reviewing the impacts of plans and programs of state agencies and water management districts that provide public facilities within the county's jurisdiction;

9) The effectiveness of potential impact fees, and mandatory dedications or fees in lieu of, for assessing new development a pro rata share of the improvement costs which they generate;

10) The impacts of special districts and any regional facility and service provision upon the City's ability to maintain its adopted LOS standards;

11) The ratio of outstanding indebtedness to city revenue;

12) Efforts made to secure grants or private funds, whenever available, to finance the provision of capital improvements;

13) The transfer of any unexpended account balances;

14) The criteria used to evaluate proposed plan amendments and requests for new development or redevelopment; and

15) Capital improvements needed for the latter part of the planning period, for inclusion in the 5-Year Schedule of Improvements.

City of Cocoa Five-Year Schedule of Capital Improvements

FY ~~2010-11~~ 2018-2019 through FY ~~2014-15~~2022-2023

CITY OF COCOA
COMPREHENSIVE PLAN

EAR AMENDMENT MAP SERIES

September 2019

LIST OF MAPS

Future Land Use Element:

Map M-I-7: Future Land Use Map

Coastal Management Element:

Map CM-1: Coastal Planning Area Map
Map CM-2: Existing Land Use within the Coastal Planning Area
Map CM-3: Future Land Use within the Coastal Planning Area
Map CM-4: FEMA Floodplain within the Coastal Planning Area
Map CM-5: Surge Hazard Map
Map CM-6: Sea Level Rise Projections

Conservation Element:

Map M-XII-1: Wetlands Map

Future Land Use Map

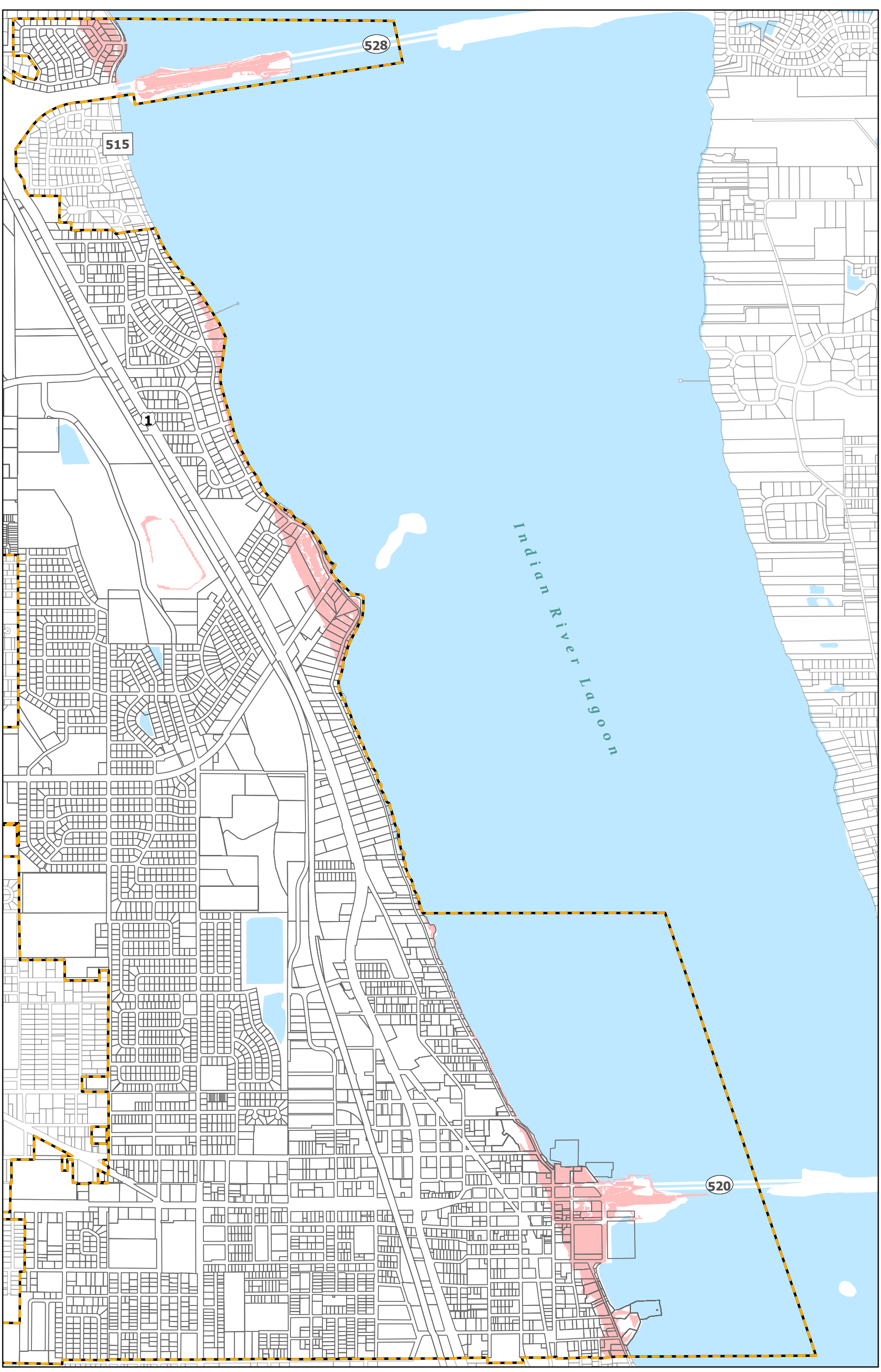
COCOA FLORIDA

- Cocoa City Limits
- Very Low Density Residential
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Mixed Use
- Regional Activity Center
- Neighborhood Commercial
- Commercial
- Industrial
- Institutional
- Recreation/Open Space
- Conservation

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Miles

This map was compiled from the Geographic Information Services and does not reflect an actual survey. It is intended for reference purposes only. © 2019

Map M-I-7



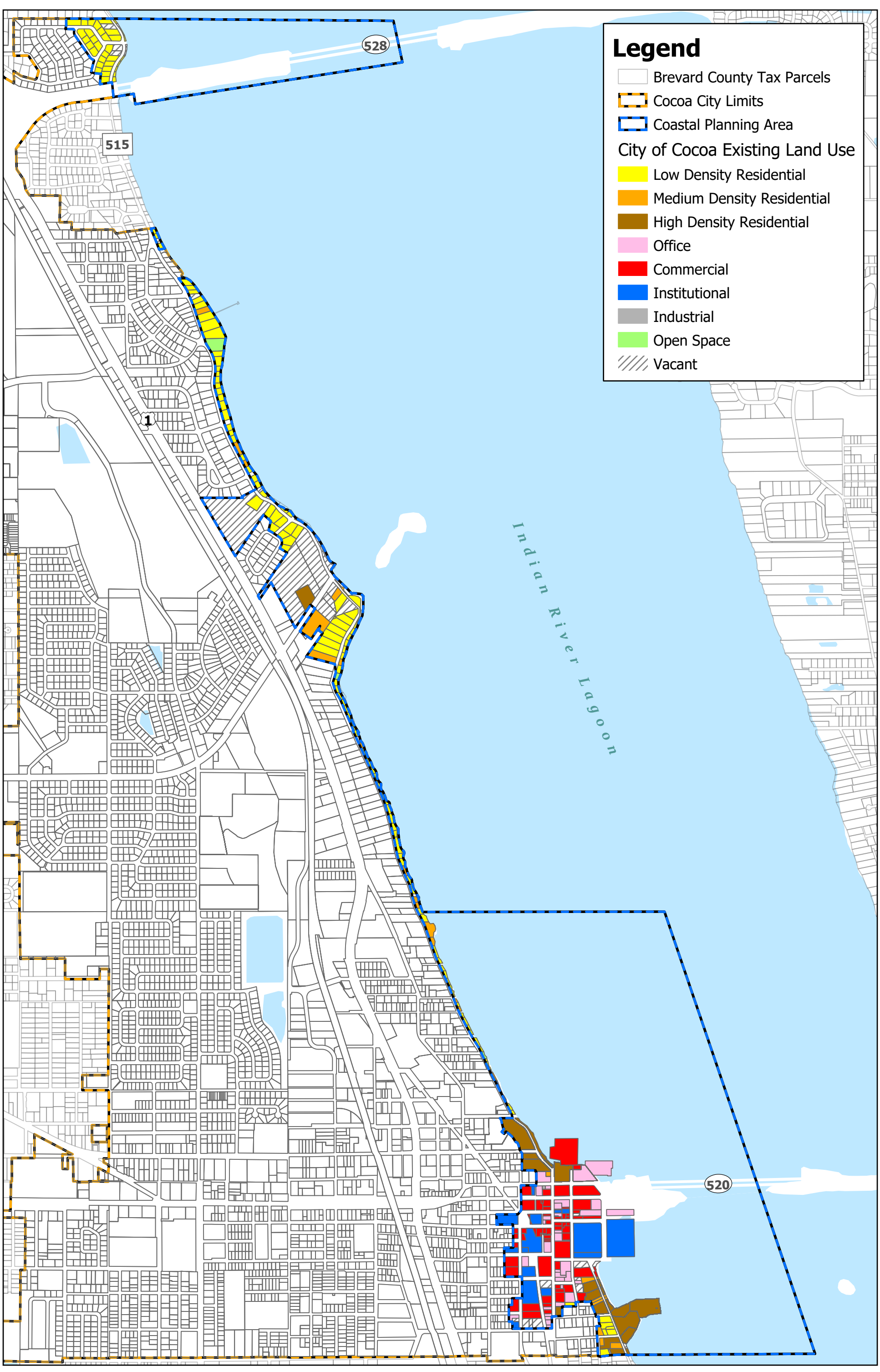
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CM-1: Coastal Planning Area Map

COCOA FLORIDA



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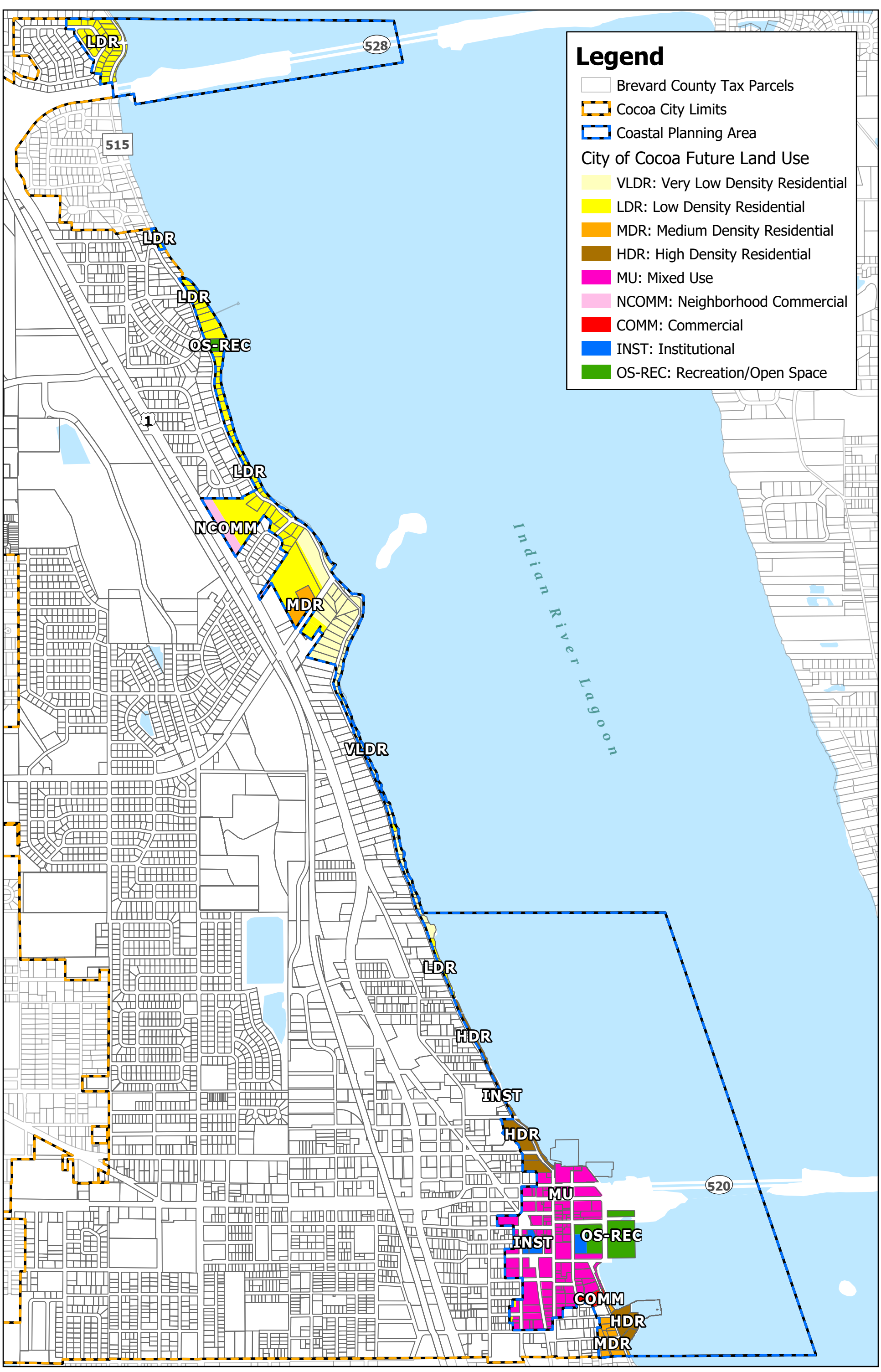
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Existing Land Use

Within the Coastal Planning Area

COCOA FLORIDA



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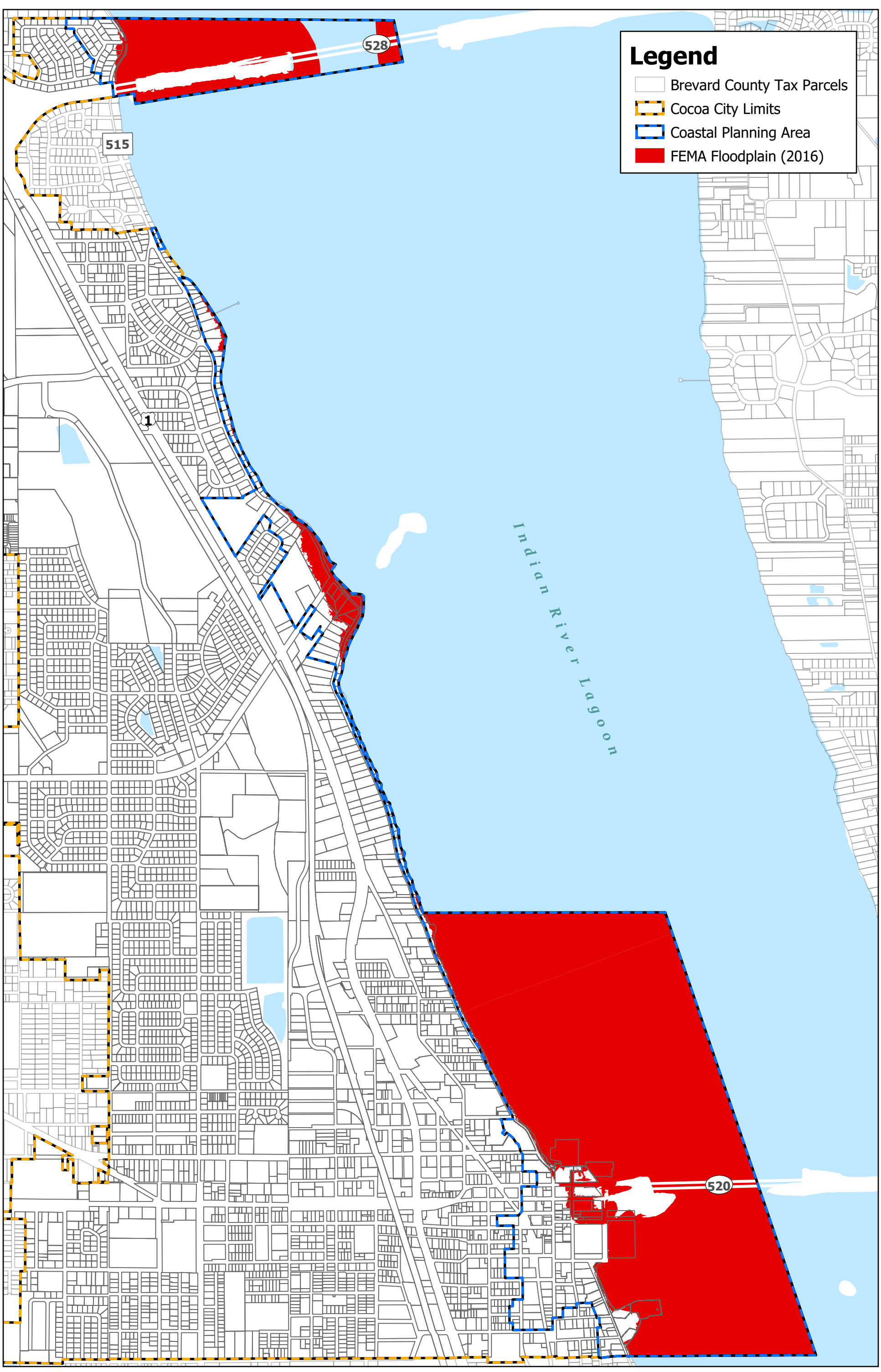
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Future Land Use

Within the Coastal Planning Area

COCOA FLORIDA



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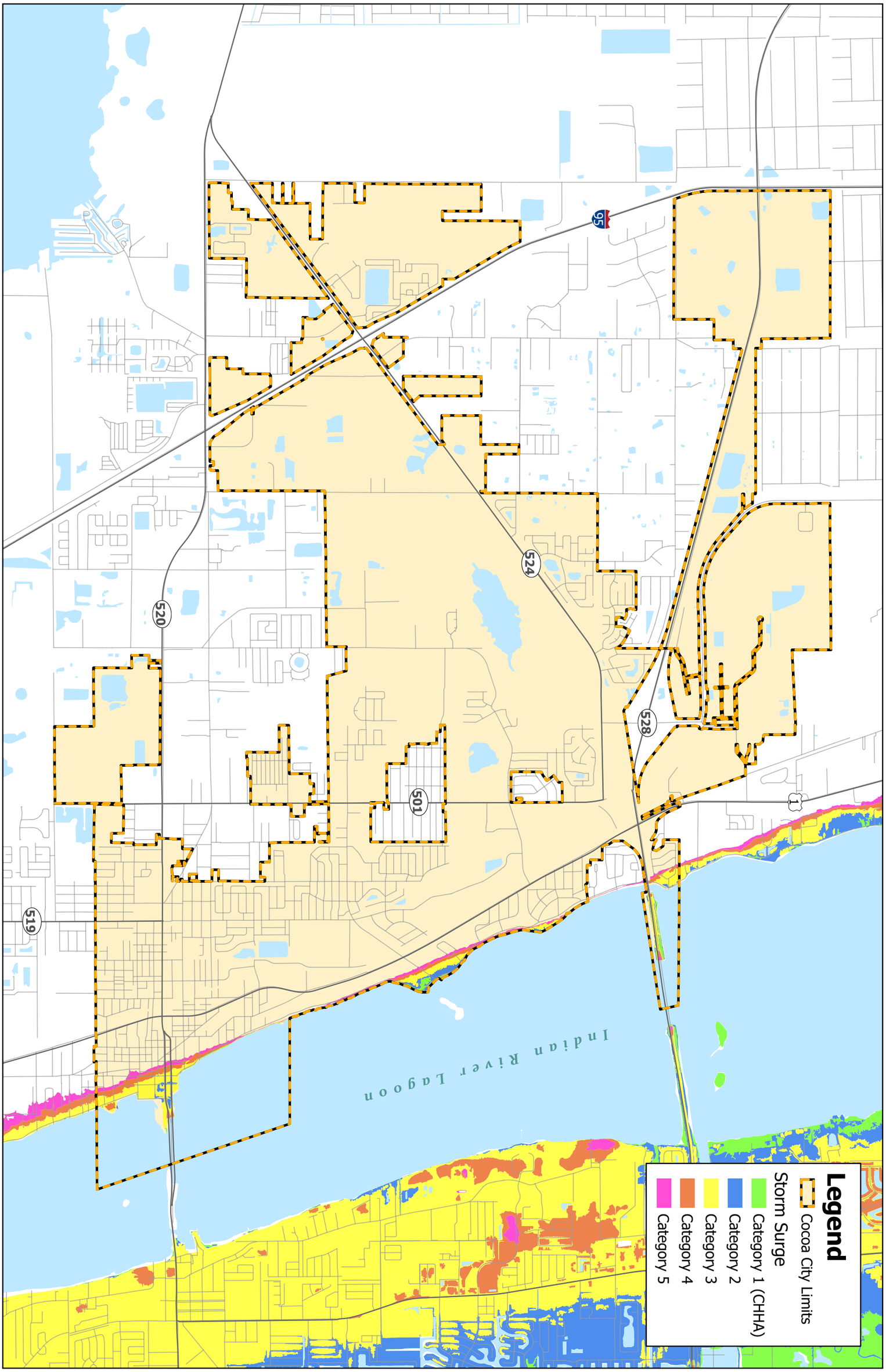
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FEMA Floodplain

Within the Coastal Planning Area

COCOA FLORIDA



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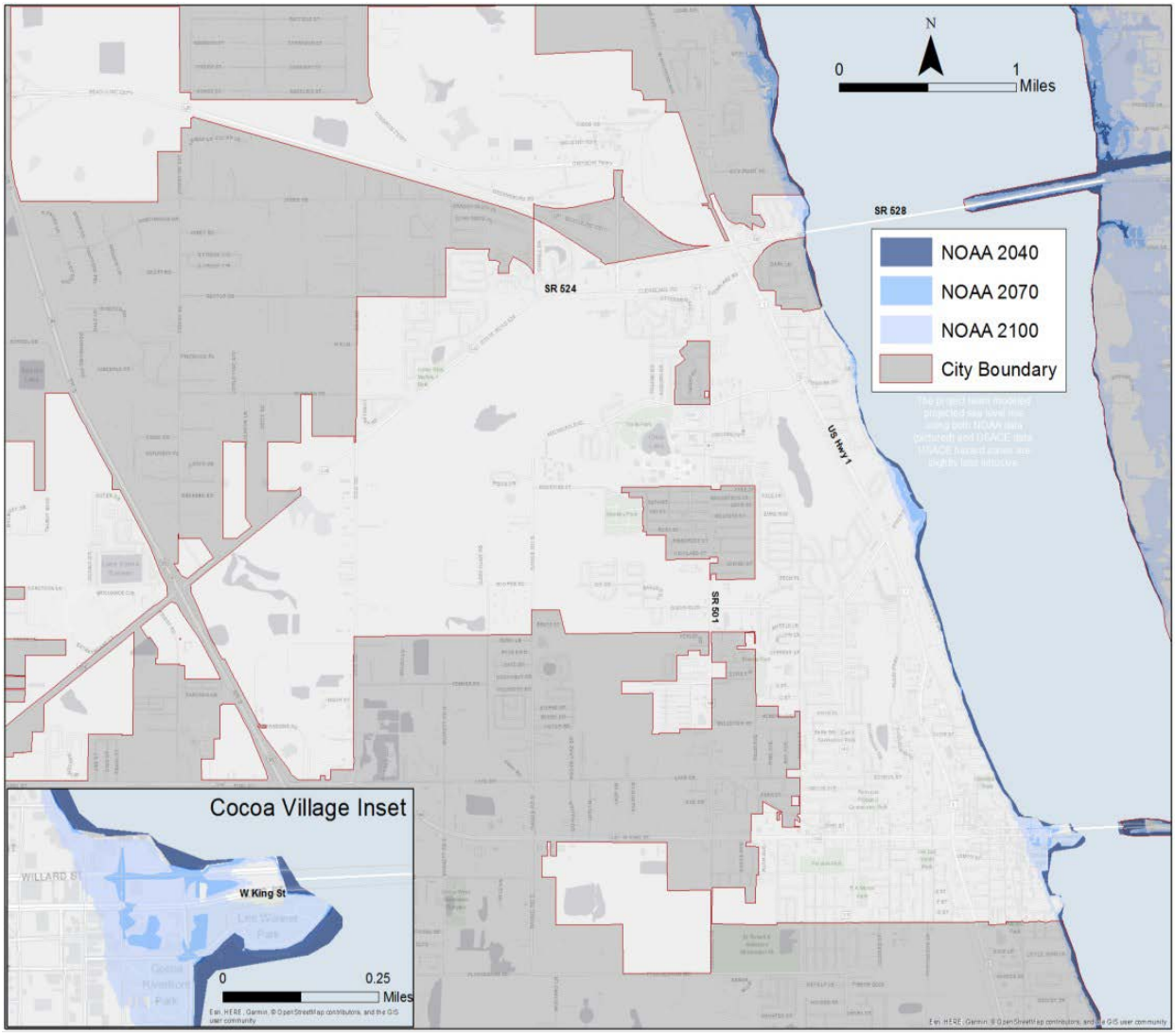
Surge Hazard Map

Within Cocoa City Limits

COCOA FLORIDA

Sea Level Rise Projections

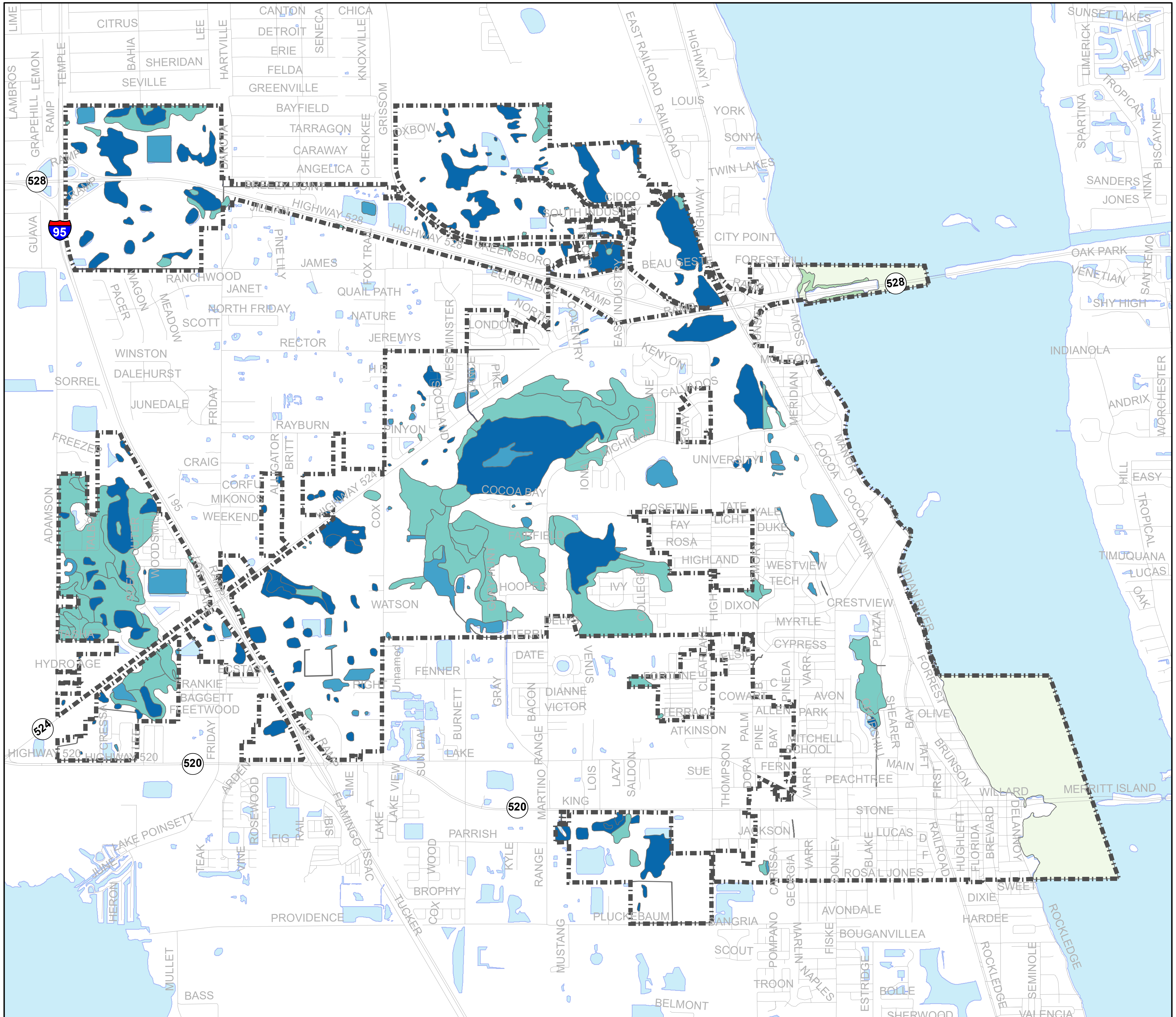
Based on National Oceanographic and Atmospheric Administration (NOAA)



Information provided from the 2019 Resilient Cocoa plan.

Wetland Map

COCOA FLORIDA



Wetlands

WETLAND TYPE

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine
- Waterbodies
- Cocoa City Limits

0 1 2
Miles

This map was compiled from Geographic Information Services and does not reflect an actual survey. It is intended for reference purposes only. © 2019

Map M-XII-1

CITY OF COCOA COMPREHENSIVE PLAN 2019 - 2029

VOLUME I
GOALS, OBJECTIVES, & POLICIES

ADOPTED BY ORDINANCE 11-2010
BY ACT OF THE CITY COUNCIL
CITY OF COCOA, FLORIDA
ON OCTOBER 26, 2010
Updated by Ordinance 12-2010 on 10-26-2010
Updated by Ordinance XX-2019 on XX-XX-2019

Serving the Community

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I - FUTURE LAND USE ELEMENT



Serving the Community

GOAL 1.1: Create and maintain a broad range of land use activities that maximize the City's potential as a growth center while protecting the public health, safety, welfare, and appearance through the thoughtful planned use and development of the land and public facilities.

Objective 1.1.1: Future Land Use Categories Established. The City hereby establishes land use categories and a Future Land Use Map (FLUM) that provide for compatible and coordinated land uses, allowing for the protection of natural and historic resources as well as maximizing economic development opportunities.

Policy 1.1.1.1: Land Use Categories. The adopted FLUM contains and identifies appropriate locations for the following land use categories. The maximum densities/intensities shown in Figure FLU-1 are not guaranteed for all sites within each category. The zoning map and land development regulations may impose tighter densities and intensities of development based on land use allocation criteria policies.

Policy 1.1.1.2: Density/Intensity Standards for Future Land Use Categories. For the purposes of analyzing public facilities impacts of proposed Future Land Use Map amendments density and/or intensity shall be measured and regulated pursuant to Figure FLU-1.

Objective 1.1.2: Location Criteria for Land Uses. Future land use categories and land development regulations shall be consistent with the density and intensity standards in Policy 1.1.1.1 and be based upon the following locational and development standards and criteria:

FIGURE FLU-1
STANDARDS FOR FUTURE LAND USE CATEGORIES

Residential and Conservation Future Land Use Categories:

	Very Low Density Residential	Low Density Residential	Medium Density Residential	High Density Residential	Conservation	Rural Urban Transition
Maximum Density	4 du/acre	7 du/acre[1]	15 du/acre	25 du/acre		1 du/2.5 acres
Allowable Uses	Residential, Institutional, and Open Space/ Recreational	Residential, Institutional, and Open Space/ Recreational	Residential, Institutional, and Open Space/ Recreational	Residential, Institutional, Office and Open Space/ Recreational	Conservation and Open Space/ Recreational	Residential, Conservation Open Space/ Recreational, and Agriculture
Applicable Zoning Districts	RE, RA, RR-1, RR-2, RU-1-10, RU-1-7, RU-1-7A, RM-3 and PUD	RU-1-10, RU-1-7, RU-1-7A, RU-2-15, RM-3, RM-4 and PUD	RU-2-10, RU-2-15, RM-4, and PUD	RU-2-10, RU-2-15, RU-2-25, and PUD	Not Applicable	RA, RR-1, and RR-2
Maximum Impervious Surface Ratio	.40 .65 w/PUD	.65	.70	.80	.10	.30

FIGURE FLU-1, Continued
STANDARDS FOR FUTURE LAND USE CATEGORIES

Commercial, Industrial, Open Space/Recreational, Institutional and Mixed Use Future Land Use Categories:

	Commercial	**Neighborhood Commercial[4]**	**Regional Activity Center[5]**	**Industrial**	**Open Space Recreational**	**Institutional**	**Mixed Use**
Maximum Intensity/ Density	1.0 FAR	0.75 FAR	0.50 FAR, 25 du/acre, and 45 hotel rooms/acre	1.50 FAR	0.25 FAR	1.0 FAR 25 du/acre	25 du/acre[2&3] 1.0 FAR[3]
Allowable Uses	Commercial, Office, Institutional, and Open Space/ Recreational	Commercial, Residential, Office, Institutional, and Open Space/ Recreational	Commercial, Industrial, Hotel, Office, Residential, Institutional, and Open Space/ Recreational	Industrial and Commercial[6]	Not Applicable	Institutional	Commercial, Industrial, Hotel, Office, Residential, Institutional, and Open Space/ Recreational
Minimum Transportation Access	4 lane collector 2 lane arterial	2 lane collector	2 lane arterial that intersects SR528 or I-95	2 lane collector 2 lane arterial	Not Applicable	Not Applicable	Not Applicable
Applicable Zoning Districts	C-G, C-W, C-P, C-C, P-S, and PUD	C-N, C-R, R-P, P-S, and PUD	UMD	M-1 and M-2	All Districts	All Districts	CBD, CBD-CVO, C-C, C-N, CR, PS, PUD, RP, UMD
Maximum Impervious Surface Ratio	.90	.80	.95	.75	.25	.65	.95 1.0 in CBD

NOTES FOR FIGURE FLU-1:

1. Maximum density may be increased up to 12 du/acre as part of a planned residential development or planned redevelopment activities (*Policy 1.2.3.C*).
2. An additional 5 units per acre may be achieved if residential units are developed as part of a vertical mixed use project.
3. Maximum FAR in the Cocoa RDA is 2.0 and a bonus may permit up to an additional 2.5 FAR in the Central Business District outside the Cocoa Village Overlay sub-district. An additional 25 units per acre may be achieved in certain areas within the Cocoa RDA.
4. Four (4) acre maximum land area for new Neighborhood Commercial and one (1) acre maximum site land area.
5. Minimum land area of 50 acres and minimum cumulative gross floor area of 500,000 sq.ft. for all structures.
6. Commercial uses that are complementary to and support industrial development and operations.

Policy 1.1.2.1: **Rural/Urban Transition (RUT).** Rural/Urban Transition land use is intended to preserve conservation areas, and to provide opportunities for agricultural activities along with some residential developments. This designation will also allow for necessary supporting services such as utilities, parklands, and education facilities. The following criteria shall be used for determining appropriate locations for rural/urban transition areas.

A. Whenever an agricultural operation is annexed, the RUT land use may apply. The farming and agricultural operations may continue per the conditions set forth in the annexation agreement for the property. The continuation of agricultural uses and supporting ancillary facilities will contribute to the preservation of large expanses of open space while protecting sensitive environmental resources.

B. If more than one residential unit is developed on a parcel classified as RUT pursuant to this policy, the units may be clustered.

Policy 1.1.2.2: **Very Low Density Residential (VLDR).** Very low-density residential areas consist of neighborhoods of single family detached housing. The following criteria shall be used for determining appropriate locations for very low density residential areas.

A. Very low-density residential areas shall be buffered from the nuisance effects of agricultural uses, higher intensity uses and major traffic corridors.

B. Very low density residential developments should be located in areas where more intensive development would be unwarranted due to environmental constraints.

Policy 1.1.2.3: **Low Density Residential (LDR).** Low-density residential areas are neighborhoods of single family detached housing, limited multiple family attached housing and limited clustered single family attached housing. Institutional, open space and recreational uses are also allowed in this category. The following criteria shall be used for determining appropriate locations for low density residential areas.

A. Low-density residential areas shall be buffered from the nuisance effects of higher intensity uses and major traffic corridors.

B. Low density residential developments should be located in areas where more intensive development would be unwarranted due to environmental constraints, incompatible with surrounding land uses, or where criteria set forth in Paragraph c, below, cannot be met.

C. The City may permit increased densities up to 12 units per acre as part of planned residential development or planned redevelopment activities based on the following criteria:

1. Redevelopment through rehabilitation and improvement of substandard or deteriorating housing.

2. For planned redevelopment activities, preservation and improvement of neighborhoods containing affordable single family and multiple family housing, especially where neighborhoods contain vacant lots or abandoned commercial uses.

3. Use of a variety of building and site designs, housing types and efficient construction techniques that lower

construction costs and result in lowering housing cost.

4. Provide for more efficient use of land and protection of the existing neighborhoods, natural systems, and historic resources.

D. Clustered single family attached housing may be permitted with City Council approval, at a maximum of seven (7) units per acre, provided the development meets at least one of the qualifying criteria, is a deed restricted community, and conforms to the development standards included in the City's land development code and design criteria listed below.

1. Qualifying Criteria:

(a) Preservation of environmentally sensitive areas.

(b) Topographical constraints limiting the developable portion of the land.

2. Development Standards:

(a) Land area and project density standards shall be as follows:

(1) Minimum of one (1) acre and no more than seven (7) acres.

(2) Minimum of seven (7) dwelling units and no more than forty-nine (49) dwelling units.

(b) A project shall not be located within one-half mile of another project developed under this policy.

(c) A minimum of twenty percent (20%) of gross site acreage shall be developed as useable open space and active recreational facilities.

(d) A minimum of ten percent (10%) of developed units shall be set aside and priced affordably for qualified moderate income level families.

(e) The development project shall provide a fifteen (15) foot landscaped buffer along property lines adjoining single family residential land uses developed with detached housing.

3. Design Standards:

   (a) Individual lots, buildings, streets and parking areas should be designed and situated to minimize disruption to the site's natural drainage and topography.

   (b) Buildings developed under this policy shall contain no more than five (5) residential dwelling units per building.

   (c) To preserve and promote the single family nature of the development project, single family attached housing units shall only be horizontally attached and front facades shall be staggered.

   (d) Each dwelling units shall vary architecturally so that each presents a distinct and unique appearance as a single family residential unit. Not more than three units per building and no two adjoining units shall have the same architectural appearance and style.

   (e) Buildings shall be finished on all sides with permanent finished materials of consistent quality. Major exterior surfaces of all primary structures shall be face brick, architectural concrete, glass, stucco, synthetic stucco, decorative block, or stone.

4. Development Agreement. The City Council may require a development agreement as a condition of approving any clustered, single family attached housing project. Said agreement shall memorialize all conditions and safeguards deemed necessary by City Council and shall be recorded in the public records of Brevard County as a binding covenant on the subject property.

Policy 1.1.2.4: **Medium Density Residential (MDR).** Medium density residential areas shall be regarded as areas of moderate density detached and attached housing. The following criteria shall be used for determining appropriate locations for medium density residential areas.

A. Medium density residential areas shall have access to a minor collector street, and preferably, to a major collector street or one of higher functional classification.

B. These areas should have convenient access to community services.

C. New developments approved in accordance with the comprehensive plan shall provide amenities to include open space and buffering as required in the City's Land Development Regulations.

Policy 1.1.2.5: **High Density Residential (HDR).** High-density residential areas shall be deemed to be areas of attached multi-unit dwellings and detached housing where a mixture of unit types and a variety of buildings may be permitted. The following criteria shall be used for determining appropriate locations for high density residential areas.

A. High-density residential areas shall have access to a major collector street or a roadway with a higher functional classification.

B. It is the intent of the City to provide these areas with safe and convenient pedestrian access to nearby recreation and shopping facilities.

Policy 1.1.2.6: **Mixed-Use (MU).** The Mixed-Use land use category is intended to provide a mixture of residential, commercial, office, recreational and institutional uses along the major transportation corridors (such as SR 520 and US 1). The mixed-use could be developed as single uses on separate parcels or as a mixture of uses within a single development. Based on current land use trends, the City estimates that the mix of uses in the mixed-use category will be 50 percent residential and 50 percent non-residential. The Floor Area Ratio (FAR) measure shall not be applied to residential developments, or the residential portion of a mixed-use building or development. The following criteria shall be used for determining appropriate locations for mixed-use land use areas.

A. Areas within a quarter mile walking distances of public transit stations, transitional areas between high and low intensity uses, and areas adjacent to major corridors within the City are appropriate for Mixed-Use category.

B. The land development regulations implementing this category shall encourage a compact and walkable environment to reduce vehicle miles of travel and encourage use of public transit.

C. Development within mixed-use shall be encouraged to follow Transit Oriented Design (TOD) principles.

D. Unified architectural and streetscape themes are encouraged for all developments within the Mixed-Use category.

E. Mixed use buildings within a single development will be highly encouraged in this category.

F. For a mixed-use building, only retail sales, offices and services and restaurants are permitted on the ground floor.

G. If residential housing units are developed as part of a vertical mixed use project a bonus of up to 5 units per acre may be achieved.

H. For the purposes of analyzing public facilities impacts of proposed Future Land Use Map amendments, a mix of 50% residential and 50% non-residential land area split shall be utilized.

Policy 1.1.2.7: **Regional Activity Center (RAC).** The City's Future Land Use Map may be amended to include one or more Regional Activity Centers, as a separate and distinct future land use designation. The City shall seek opportunities to work with the private development sector to promote and plan one or more compact, high intensity, multi-use developments that will enhance the City's tax base, provide new employment opportunities and promote additional compatible development within the City. Development within any designated Regional Activity Center shall comply with the requirements of the following policies (inclusive of the applicable Subarea Policies) and all other applicable Comprehensive Plan Policies.

A. Development within this category shall include a minimum of three of the following land uses: commercial, office, residential, hotel or industrial uses and shall conform to the following development criteria:

1. Minimum land area included within the Regional Activity Center: 50 acres; and

2. Minimum cumulative gross floor area of all non-residential structures: 500,000 square feet;

3. Maximum cumulative floor area ratio for the entire Regional Activity Center: 0.50;

4. When a residential land use is a component of the development, the following shall apply:

(a) Minimum cumulative gross floor area for all residential uses shall equal 25% of the cumulative gross floor area for all non-residential uses. The minimum cumulative residential gross floor area shall only be reestablished after initial approval when increases in non-residential uses require a comprehensive plan amendment.

(b) Maximum residential density: 25 dwelling units per acre

5. Maximum hotel/ intensity: 45 rooms per acre

B. Each designated Regional Activity Center shall be subject to Subarea Policies that will establish the specific uses and maximum intensity standards applicable to that particular Regional Activity Center.

C. Each designated Regional Activity Center shall be designed to provide services to, or be regularly used by, a significant number of citizens of more than one county; shall have direct access to a major arterial roadway that intersects with SR 528 or I-95; shall include a multi-modal circulation system that is integrated with the City's overall pedestrian, bicycle and transit systems; and shall be compatible with adjacent uses.

D. Each designated Regional Activity Center shall be developed in a sustainable manner where development and design standards commonly associated with the urban design concepts of Traditional Neighborhood Design (TND) and Neo-Traditional planning principles shall serve as guiding principles, generally complying with the following:

1. Uses shall be mixed and intermingled such as commercial and residential; commercial and office; and or office and residential,

2. Site design shall provide for equal opportunities for vehicular and pedestrian travel internally throughout the site, with the exception of any portion developed wholly as industrial,

3. Interconnectivity, vehicular and pedestrian, between land use zones shall be provided,

4. Site design shall incorporate Crime Prevention Through Environmental Design (CPTED) principles.

E. Designated Regional Activity Centers shall be permitted to convert land uses and intensities within the adopted development program.

1. To ensure substantial conformity with the adopted development program and to retain the mixed-use character of a designated Regional Activity Center, a conversion of any land use category to another may only be permitted to increase or decrease by the below figures for each land use category. A proposed increase or decrease greater than the below figures shall require an amendment to the Comprehensive Plan, specifically to the Subarea policy governing the uses and intensities of the designated Regional Activity Center.

(a) Commercial: 55,000 square feet or 10% whichever is greater

(b) Office: 66,000 square feet or 10% whichever is greater

(c) Residential: 55 units or 10% whichever is greater

(d) Hotel: 83 rooms or 10% whichever is greater

(e) Industrial: 35 acres or 10% whichever is greater

2. To maintain an equivalent number of trips generated by a designated Regional Activity Center and to retain the internal trip capture characteristics, an increase (or decrease) to an approved land use category shall result in a corresponding decrease (or increase) to another approved land use category.

3. To ensure adequate public school capacity is available for designated Regional Activity Centers where a residential land use is part of the adopted development program, a proposed increase in residential land use of any amount shall require a school concurrency evaluation and determination to ensure adequate public school capacity is available to accommodate new students generated by the proposed increase in residential units.

4. For purposes of evaluating concurrency for potable water and wastewater facilities, the demand for the maximum potential development (the base development program plus the maximum allowable increase set forth above) shall be evaluated to ensure adequate public facilities are available to serve the development.

F. Notwithstanding any other provisions in this Comprehensive Plan, development within a designated Regional Activity Center existing as of July 1, 2004 will be allowed to impact wetlands if such development is consistent with the Conservation Element.

G. The development within a Regional Activity Center shall not reduce the flood storage capacity of the project site so as to impact adjoining properties or degrade the quality of the receiving surface water body.

H. The development within a designated Regional Activity Center may utilize compensating storage to achieve the density or intensity authorized in the applicable Subarea

Policies for the particular Regional Activity Center, provided that any proposed alteration to the 100-year floodplain or to isolated flood prone areas shall not adversely impact the drainage of adjacent properties or public drainage facilities.

I. If an endangered, threatened, or species of special concern is found on-site or there is evidence that the species may be present on-site following development, the development within a designated Regional Activity Center shall not commence unless and until the Florida Fish and Wildlife Conservation Commission approves a wildlife management plan (which may include offsite relocation or mitigation, as appropriate).

J. To conserve energy and reduce solid waste production, development within a designated Regional Activity Center shall have a unified solid waste management plan that provides for recycling of materials including glass, paper, aluminum, and plastics.

K. To reduce the demand for potable water, development within a designated Regional Activity Center shall connect to the City's wastewater reuse system.

L. To provide a visually pleasing sense of place, all development within a designated Regional Activity Center shall be subject to a coordinated set of design guidelines for street furniture, signage, landscaping, and public spaces that shall be reviewed and approved by the City's Community Development Director prior to issuance of the first building permit.

M. To reduce the potential for mobile source emissions individual sites developed within a designated Regional Activity Center shall:

1. Plant vegetative landscape strips along major transportation corridors;

2. Be designed to encourage walking, biking, or mass transit usage to reduce the need for vehicular use;

3. Connect to existing or planned bicycle and pedestrian systems in accordance with the City's Bicycle Path Plan.

N. **Brevard Crossings Regional Activity Center**. The City hereby establishes the following standards for the Brevard Crossings Regional Activity Center.

Subarea Policy 1 The Future Land Use Map as amended on March 12, 2002 shows the location of the approved Brevard Crossings Regional Activity Center.

The designated area has been determined by the City to be appropriate for development as a Regional Activity Center.

Subarea Policy 2 Unless increased in accordance with Future Land Use Element Policy 1.1.2.7.E, the Brevard Crossings Regional Activity Center may include a mix of only the following uses and intensities:

- 1,710,000 square feet of commercial uses;
- 300 hotel rooms; and
- 80,000 square feet (3,300 seat) theatre.

Subarea Policy 3 Commercial and office uses shall generally be oriented internal to the site, as opposed to SR 524 exclusively. Buildings shall be oriented toward the street and no greater than two bays of parking shall be permitted between primary structures fronting SR 524 public right of way.

Policy 1.1.2.8: Neighborhood Commercial (NCOMM). Neighborhood commercial areas are intended to be low-impact in nature and serve the needs of the immediate residential area. The following criteria shall be used for determining appropriate locations for neighborhood commercial land use designations on the future land use map.

A. Neighborhood commercial areas may be allowed closer to the residential neighborhoods.

B. The City anticipates that the average overall mix of uses in the Neighborhood Commercial Land Use category throughout the City will be a minimum of 85% commercial/office, public/institutional and recreational and a maximum of 15% residential.

C. Pedestrian connectivity between neighborhood commercial and surrounding multi family developments is highly encouraged.

D. The following factors shall be considered when designating new Neighborhood Commercial areas or expanding existing Neighborhood Commercial areas:

1. A land use compatibility study shall be conducted by the applicant to analyze the potential impact of a proposed new Neighborhood Commercial area or Neighborhood Commercial area expansion on the character of the surrounding uses, neighborhoods and natural environment.

2. A multimodal transportation study shall be conducted by the applicant demonstrating that the transportation systems including roads, pedestrian walkways, bike ways, transit facilities affected by the proposed Neighborhood Commercial areas have sufficient current and projected capacity to the handle the travel demand generated by the increased intensity. Additionally, multimodal transportation study shall address the requirements and level of service standards of the Transportation Element.

3. The applicant shall prepare and submit a market study to demonstrate market demand and economic potential for a proposed Neighborhood Commercial area. The market study should include data and analysis concerning the existing, planned and approved supply of commercial property within the market area, occupancy patterns and trends, the demand for commercial uses allowed under the Neighborhood Commercial designation and the demand for the commercial uses specifically proposed.

4. The City may consider the following qualitative factors when reviewing proposed Neighborhood Commercial areas:

   (a) Whether existing vacant Neighborhood Commercial land in the market area can accommodate the size, shape, location, visibility, and access requirements of the proposed uses.

   (b) Whether opportunities are available to redevelop existing Neighborhood Commercial land within the market area.

   (c) Whether the proposed designation will encourage reinvestment in deteriorating or underutilized area, protect property values, discourage the proliferation of low intensity strip commercial uses and promote infill development.

E. At the discretion of the Planning and Zoning Administrator applicant submitted transportation or market studies may be waived for small scale future land use map amendments.

F. Annexed lands at the time of the initial City land use designation shall be exempt from the above study requirements provided the lands proposed for Neighborhood Commercial designation maintained a Brevard County Neighborhood Commercial future land use designation and no net increase in density or intensity will occur as a result of the City future land use designation. Notwithstanding the exemption from the above requirement any future land use map amendment is still subject to the requirements of Chapter 163 Part II Florida Statutes (F.S.).

G. For the purposes of analyzing public facilities impacts of proposed Future Land Use Map amendments, a mix of 85% non-residential and 15% residential land area split shall be utilized.

Policy 1.1.2.9: **Commercial (COMM).** Commercial areas are intended to be areas that serve several neighborhoods, sub-regional and regional areas and provide an array of retail, personal and professional uses. The following criteria shall be used for determining appropriate locations for commercial land use designations on the future land use map.

A. Commercial areas shall have direct access from a four-lane collector or two-lane arterial.

B. New commercial uses shall be discouraged from linear development and shall be encouraged to develop in clusters, with coordinated parking facilities, and with frontage roads where practical.

C. Maximum Floor Area Ratio (FAR): 1.0. Within the Cocoa Redevelopment Area, the maximum FAR shall be 2.0. A density bonus of up to an additional 2.5 FAR shall be allowable within the Central Business District outside the Cocoa Village Overlay.

D. The following factors shall be considered when designating new commercial areas or expanding existing commercial areas.

1. *Land Use Compatibility Study.* The applicant shall analyze and consider the potential impact of a proposed Commercial area or Commercial area expansion on the character of the surrounding uses, neighborhoods and natural environment.

2. *Transportation Study.* The applicant shall prepare and submit a study demonstrating that the transportation

systems affected by the proposed Commercial areas have sufficient current and projected capacity to the handle the travel demand generated by the increased intensity. Additionally, transportation studies shall address the requirements and level of service standards of the Transportation Element.

3. *Market Study*. The applicant shall prepare and submit a market study to demonstrate market demand and economic potential for a proposed Commercial area. The market study should include data and analysis concerning the existing, planned and approved supply of commercial property within the market area, occupancy patterns and trends, the demand for commercial uses allowed under the Commercial designation and the demand for the commercial uses specifically proposed.

4. The City may also consider the following qualitative factors when reviewing proposed Commercial areas:

   (a) Whether existing vacant Commercial land in the market area can accommodate the size, shape, location, visibility, and access requirements of the proposed uses.

   (b) Whether the proposed use is dependent upon proximity to another specific use.

   (c) Whether opportunities are available to redevelop existing Commercial land within the market area.

   (d) Whether opportunities are available to assemble multiple parcels of existing Commercial land under separate ownership.

   (e) Whether the proposed designation will encourage reinvestment in deteriorating or underutilized area, protect property values, discourage the proliferation of low intensity strip commercial uses and promote infill development.

E. At the discretion of the Planning and Zoning Administrator applicant submitted transportation or market studies may be waived for small scale future land use map amendments.

F. Annexed lands at the time of the initial City land use designation shall be exempt from the above study requirements provided the lands proposed for Commercial designation maintained a Brevard County Community Commercial future land use designation and no net increase

in density or intensity will occur as a result of the City future land use designation. Notwithstanding the exemption from the above requirement any future land use map amendment is still subject to the requirements of Chapter 163 Part II F.S.

Policy 1.1.2.10: **Industrial (IND).** Industrial areas shall be regarded as appropriate for activities associated with industrial development, which can include materials processing, materials assembly, product manufacturing, and storage of finished products. Uses can include manufacturing facilities, warehouse distribution centers and truck terminals. The following criteria shall be used for determining appropriate locations for industrial land use designations on the future land use map.

A. Industrial areas shall also serve as an area to locate businesses with principal uses and activities which could have adverse secondary effects (i.e., increase crime; neighborhood deterioration and blight; property devaluation; economic deterioration; and health risks) on residential areas, religious establishments, schools, parks, or day care centers located within the City; including, but not limited to adult entertainment establishments.

B. Commercial and office uses that are complementary to and support industrial development and operations may be permitted within industrial designated areas.

C. Future industrial areas should be planned with extensive landscaping, and coordinated parking. Industrial areas shall have immediate access to a two-lane collector and/or two-lane arterial.

D. Industrial development shall be designed to minimize the negative impacts on lower intensity land uses through such means as, for example, landscaping and appropriate transitional uses including low scale professional offices or medium density residential development.

Policy 1.1.2.11: **Institutional (INST).** The Institutional land use category is intended to accommodate existing and planned public and semi-public services including: governmental buildings; public schools and educational institutions; hospital facilities and supportive health care units; arts and cultural or civic facilities; essential public services and facilities; cemeteries; fire and emergency operation facilities; utilities; extensive open areas comprising major committed public and semi-public open spaces, and other similar activities. The following criteria shall be used for determining appropriate locations for institutional land use designations on the future land use map.

A. Public, semi-public and institutional uses shall also be allowed within other land use categories as support uses and as provided for in the zoning regulations.

B. The City shall monitor the need for increased land area for public/institutional uses and shall assure that this land use category on the FLUM is expanded to accommodate the development of public and semi-public facilities (such as governmental buildings; fire, police and rescue services; educational institutions and similar public uses), and facilities that are generator of private sector activities (such as civic centers, museums and arena).

Policy 1.1.2.12: **Open Space/Recreational (OS-REC)**. The open space/recreational land use category is intended to accommodate existing and planned public and private parks and recreation areas and extensive open space areas such as the golf courses; and similar uses. The following criteria shall be used for determining appropriate locations for open space/recreation land use designations on the future land use map.

A. Except as required for other public purposes, publicly owned land identified as open space/recreational on the Future Land Use Map will only be used for park, recreational, and ancillary uses.

B. In designating open space recreational areas, the City will assure consistency with policies provided in the Recreation and Open Space Element.

C. Through the development review process and Capital Improvements Program, the City will attempt to link open space areas to residential areas by bikeways, sidewalks, or footpaths.

D. In developing open space and recreational areas, the City will minimize or eliminate the impact of active uses on sensitive environmental features to the maximum extent possible.

Policy 1.1.2.13: **Conservation (CONS).** The Conservation Future Land Use Category is intended to protect environmentally sensitive natural resource systems as defined in Chapter 163 Part II F.S. The following criteria shall be used for designating properties as Conservation on the Future Land Use Map.

A. Any Future Land Use Map amendment adopted after December 1, 2003 shall assign the Conservation Future Land Use Category to wetlands within the area subject to amendment**.**

B. The boundaries of the Conservation Future Land Use category may be adjusted to be consistent with a wetland

jurisdictional line determination by the SJRWMD without the need for a comprehensive plan amendment. In those areas initially presumed but later determined not to be classified as a wetland will take on the future land use category assigned to the upland portion of the development site.

C. At the time of development, wetlands within the Conservation Future Land Use category shall be encumbered by a perpetual conservation easement.

D. Allowable uses, intensities, and impacts within the Conservation Future Land Use category shall be in conformance with those uses, intensities, and impacts listed in the Conservation Element.

Objective 1.1.3: Public Utilities. The City shall maintain regulations to require the provision of sufficient land area for the siting of public facilities and utilities to support development, redevelopment, land use plan amendments and changes to the zoning of a site.

Policy 1.1.3.1: Prior to the issuance of a building permit, the City shall review the impacts of all development proposals on existing public facilities and services to ensure that service levels are not degraded below adopted level of service standards as adopted in this Comprehensive Plan.

Policy 1.1.3.2: The City shall continue to require dedication of land for roadways, stormwater management and utilities.

Policy 1.1.3.3: Require new development to provide necessary services and facilities or to pay a fair share of the cost of those services and facilities, through impact fees, special assessments, exactions, conveyance of land or easements, pro-rata agreements or in-kind professional services directly related to the associated impact.

Policy 1.1.3.4: The City shall encourage requests for voluntary annexation of all the enclaves and logical extensions of the existing City limits to efficiently use public facilities and services, to eliminate areas of jurisdictional problems, and to provide for sound growth and development of the City and surrounding area.

Policy 1.1.3.5: The City shall examine the utility of developing a Joint Planning Area agreement with Brevard County to address future development along the County/City interface.

Objective 1.1.4: Redevelopment. The City shall encourage redevelopment of areas that are exhibiting evidence of decline (i.e., disproportionate number of vacant, dilapidated and/or substandard structures) through redevelopment programs and through maintaining land development regulations that contain standards and procedures to encourage redevelopment where desirable.

Policy 1.1.4.1: The City shall continue to promote vitality and redevelopment of the three community redevelopment areas established pursuant to Chapter 163, F.S.: Cocoa (Downtown) Redevelopment Area, Diamond Square Redevelopment Area and U.S. 1 Corridor Redevelopment Area.

Policy 1.1.4.2: The highest densities and intensities of use in the Cocoa Redevelopment Area are in the Central Business District (CBD), designated commercial areas to the northwest of the CBD, designated mixed-use along US 1 and SR 520, and designated high-density residential areas as shown on the Future Land Use Map. Development bonuses within the Cocoa (Downtown) Redevelopment Area are as follows:

A. Within the Cocoa (Downtown) Redevelopment Area, the maximum FAR shall be 2.0. A density bonus of up to an additional 2.5 FAR shall be allowable within the Central Business District outside the Cocoa Village Overlay sub-district.

B. Certain areas within the Cocoa (Downtown) Redevelopment Area may achieve up to an additional 25 units per acre.

Policy 1.1.4.3: The City shall redevelop the Central Business District as a viable business district while preserving the historic character of Cocoa Village and of adjacent historic resources, housing and residential neighborhoods, and with protecting natural resources.

Policy 1.1.4.4: The CBD overlaps with the Cocoa (Downtown) Redevelopment Area. The three redevelopment areas outside the CBD are intended to complement, and not compete, with the CBD.

Policy 1.1.4.5: The City shall protect and buffer residential areas in the Cocoa (Downtown) Redevelopment Area from uses of high density or intensity.

Policy 1.1.4.6: The City shall redevelop affordable housing in the Cocoa (Downtown) Redevelopment Area through rehabilitation programs and shall redevelop vacant lots for housing in residential areas by, for example, developing an affordable housing bonus program with the private sector.

Policy 1.1.4.7: The adopted Community Redevelopment Area plans shall be consistent with the City's Future Land Use Map.

Policy 1.1.4.8: The City shall continue to monitor and, as appropriate, conduct parking studies to examine the demand and availability of parking in the Cocoa (Downtown) Redevelopment Area.

Policy 1.1.4.9: On a continuing basis, the City shall review and update, as necessary, the Redevelopment Area Plans.

Policy 1.1.4.10: The City will encourage infill development and redevelopment in blighted areas or areas in transition, and encourage new housing development in appropriate areas where community services exist or are programmed to occur.

Policy 1.1.4.11: The City shall encourage the public to identify established neighborhoods in need of revitalization and develop neighborhood plans with resident participation to establish steps to clean up, reuse, infill and redevelop as needed.

Policy 1.1.4.12: The City shall coordinate redevelopment issues with the private sector to promote mobilization of public and private resources necessary to effectively carry out redevelopment efforts.

Objective 1.1.5: Neighborhood Protection. The City shall ensure that additional growth and development will be respectful of established neighborhoods that define much of the City's character.

Policy 1.1.5.1: More intense development such as commercial, mixed-use and industrial uses shall be designed to minimize the negative impacts on lower intensity land uses through such means as, for example, landscaping and appropriate transitional uses including low-scale professional offices or medium density residential development. In the absence of transitional land uses, potential adverse impacts to surrounding residential should be mitigated through the use of:

A. Buffer areas that will provide a separation between commercial and single-family residential structures;

B. Landscaping and/or trees separating the commercial and residential land use; and

C. Walls and/or opaque vegetative screens separating the commercial and single-family residential land use.

Policy 1.1.5.2: The City shall consider developing neighborhood plans, as needed, to either strengthen preservation of established neighborhoods or encourage redevelopment of transitional neighborhoods.

Policy 1.1.5.3: The City's land development regulations shall maintain appropriate standards and nuisance regulations to limit the impact of more intense development on established residential zones.

Objective 1.1.6: Historic and Archeological Resources. All development activities undertaken in the City will be consistent with and supportive of the plan's goals, objectives, and policies for protecting historic and archeological resources.

Policy 1.1.6.1: The City shall undertake the necessary steps to identify its historical and archeological resources and create a local register of historic places. The local register will list all the properties within the City that have been designated as an individual historic resource or historic districts.

Policy 1.1.6.2: The City shall consider creating design regulations to protect the locally designated historic sites and districts.

Policy 1.1.6.3: The City shall consider a historic preservation ordinance to protect significant historic, cultural and archaeological resources.

Policy 1.1.6.4: Nominations may, with the owner's consent, be made to the National Historic Registers based upon the periodic review of properties.

Policy 1.1.6.5: The City shall facilitate the education of the public regarding the significance and historic values associated with the City's architectural, historical, geological, and archaeological resources, and the costs associated with the loss of such resources.

Policy 1.1.6.6: The City shall give consideration to the establishment of an historic zoning district.

Policy 1.1.6.7: The City shall establish a program for public, private, or public and private purchase, within funding capabilities, of development rights to preserve properties identified as historically significant at local or national levels.

Policy 1.1.6.8: The City shall adopt land development regulations that include a requirement for development plans in any areas of the City to identify potential historic resources, to mitigate adverse impacts of development on potentially significant historic resources and to minimize any adverse impacts of development on sites or structures identified as historically significant, except when demolition is required because neither rehabilitation nor relocation is practical.

Policy 1.1.6.9: The City shall look for funding, including grants, to update and expand the 1991 "Historic Buildings of Cocoa" survey.

Policy 1.1.6.10: The location and density of new residential development shall be compatible with historic and natural resources.

Objective 1.1.7: Natural Resources. Natural resources, environmental lands and coastal resources shall be protected through identification, classification, planning and management, and limitations on use consistent with the degree of protection required.

Policy 1.1.7.1: The City shall protect and conserve its wetlands and wetland functions through the implementation of the Conservation Element.

Policy 1.1.7.2: The City shall regulate land use and development to protect water resources and the functions of natural drainage through limiting the percent of impervious coverage for development sites consistent with the Impervious Surface Ratios (ISR) contained in Figure FLU-1 and the Stormwater Management Element.

Policy 1.1.7.3: The City shall include regulations in its land development code that ensure consideration of topography and soil types in the review of proposed development projects to ensure minimal impact on the environment.

Policy 1.1.7.4: Flood plains and floodways shall be identified during the development review process and development shall be limited consistent with FEMA requirements.

Objective 1.1.8: Coastal Planning Areas. The City shall ensure the protection of coastal resources such as marine wildlife, wetland areas, shoreline vegetation and water quality.

Policy 1.1.8.1: Proposed land use plan amendments shall be coordinated with the Brevard local mitigation strategy and the regional hurricane evacuation study.

Policy 1.1.8.2: Population densities in the Coastal High Hazard Areas (CHHA) shall be coordinated with the East Central Florida Regional Planning Council Hurricane Evacuation Study, as updated from time to time.

Policy 1.1.8.3: The City shall implement the applicable recommendations of the Brevard Local Mitigation Strategy as practical and feasible.

Policy 1.1.8.4: The City shall coordinate proposed land use plan amendments with the Indian River Lagoon Comprehensive Conservation & Management Plan and the Brevard County Manatee Protection Plan.

Policy 1.1.8.5: Construction of new marinas or improvements to the existing marinas shall be consistent with criteria listed in the Coastal Management Element.

Objective 1.1.9: Sustainability/Energy Efficiency. The City shall aim at achieving a sustainable/energy efficient environment by minimizing the emission of greenhouse gases and reducing the vehicle miles traveled.

Policy 1.1.9.1: The City shall encourage the development community to obtain green certifications under the United States Green Building Council, Florida Green Building Coalition, Florida Yards and Neighborhoods Program, Energy Star and Florida Water Star™ programs by providing incentives that make these certifications advantageous.

Policy 1.1.9.2: The City shall promote walking, bicycle riding and use of public transit by requiring compact design, shared facilities between adjacent or nearby uses, and providing for interconnected walkways, bicycle ways and parking, and bus stops as part of development approvals, where applicable.

Policy 1.1.9.3: The City shall continue to utilize and enhance bicycle parking standards, including quantity and location of bike racks, to help reduce parking demand and encourage the use of alternative transportation modes.

Policy 1.1.9.4: The City will support, as applicable, incentives and programs by State and federal governments to promote energy efficiency and conservation and the use of solar and other clean alternative energy sources. The City will also consider the provisions of incentives to support developers interested in building green projects.

Policy 1.1.9.5: The City will promote education of City Staff and public awareness in energy conservation practices and promote green certifications.

Policy 1.1.9.6: The City will support, as applicable, intergovernmental programs with adjacent jurisdictions to promote energy conservation and education.

Objective 1.1.10: Plan Implementation. The City shall maintain, amend and develop land development regulations that guide future growth and development, discourage the proliferation of urban sprawl and implement the goals, objectives and policies of this comprehensive plan.

Policy 1.1.10.1: The City shall maintain land development regulations as required by F.S. that shall contain specific and detailed provisions required to implement the Comprehensive Plan.

Policy 1.1.10.2: Future development and redevelopment activities shall be directed toward appropriate areas considering the topography, soil conditions and availability of facilities and services, and consistent with sound planning principles, minimal natural constraints, and the goals, objectives, and policies provided in the Comprehensive Plan.

Policy 1.1.10.3: Innovative land use development patterns, including PUDs and Cluster Zoning shall be permitted and encouraged in appropriate areas, as defined in the land development regulations.

Policy 1.1.10.4: The City may permit non-residential uses (e.g., schools, churches, recreational facilities, and other public uses) in residential areas where such uses are compatible with residential uses.

Policy 1.1.10.5: The City intends for future elementary and middle schools to be sited as closely to urban residential areas as practical, preferably within

walking and/or bicycle distance of the primary residential areas to be served.

Policy 1.1.10.6: The City shall encourage the co-location of public facilities, such as parks, libraries, and community centers, with schools, to the maximum extent feasible.

Policy 1.1.10.7: Existing land uses which are incompatible or inconsistent with the City's Future Land Use Map will continue to be identified and addressed.

Policy 1.1.10.8: Within three years after the adoption of the comprehensive plan update, the City shall have eliminated all inconsistencies between the Official Zoning Map and the Future Land Use Map.

Policy 1.1.10.9: The City shall consider conducting a survey to identity the incompatible uses in the CRAs and major commercial corridors.

Policy 1.1.10.10: The City shall review the non-conforming section of the land development code to ensure its effectiveness.

Policy 1.1.10.11: Land development regulations must be made consistent with updates to the comprehensive plan within one year of the plan amendment submittal, as required by F.S.

GOAL 1.2: The City of Cocoa shall place a strong emphasis on requiring quality integrated mixed-use development to improve the appearance of the City, increase property values and achieve a higher quality of life for its businesses, residents and visitors.

Objective 1.2.1: Smart Growth Principles. New development in the City shall incorporate "Smart Growth" principles that will lead to compact development standards as opposed to conventional development standards that encourage urban sprawl.

Policy 1.2.1.1: The City should encourage public-private partnership to develop mixed-use projects at key-locations in the Central Business District, and entice others to do the same.

Policy 1.2.1.2: Development in the Mixed-Use land use category shall provide pedestrian-friendly street design (examples: buildings close to street; providing porches, windows and doors oriented to the street; tree-lined streets; hidden parking lots; garages in rear; narrow, slow-speed streets).

Policy 1.2.1.3: The City shall consider development incentives to encourage developers to revitalize/redevelop abandoned strip malls and commercial sites by converting them into mixed-use developments.

Policy 1.2.1.4: The City shall adopt a pedestrian routes and bike trails master plan. The plan may identify primary and secondary pedestrian routes and bike routes that will connect neighborhoods to parks, downtown and other major destinations in the City.

Policy 1.2.1.5: The City shall increase coordination with SCAT to integrate bike routes and public transit in the City, to increase the transit safety and to expand the transit service routes.

Policy 1.2.1.6: New development, as well as infill development shall provide interconnected street grid networks, where feasible, to disperse traffic and encourage walkability. Developments may include a hierarchy of narrow streets, boulevards and alleys; high-quality pedestrian networks; designs that encourage a greater use of bicycles, rollerblades, scooters and walking as daily transportation; connectivity to public transit; and a land use mix that demonstrates reduced external trips by encouraging internal trips.

Policy 1.2.1.7: Developments that require site plan review and approval shall be evaluated on the use of site and building design that emphasizes beauty, aesthetics, human comfort, creating a sense of place, special placement of civic uses and sites and human-scale architecture and amenities, especially at street level.

Policy 1.2.1.8: Building height and intensification should follow a transect approach, with maximum intensities and heights (>80') allowed in the central business disitirct, medium intensities and heights (40' to 80') allowed within the mixed-use district, and the lowest intensities and heights (<40') allowed when transitioning into established low-density neighborhoods.

Objective 1.2.2: Image and Identity. The City shall maintain and update its vision for the City's urban form as needed.

Policy 1.2.2.1: The City shall examine the feasibility of establishing form-based design guidelines for City-wide as well as for specific areas in the City including CRAs, major corridors and waterfront. The standards could include streetscape standards, building signage, architectural styles and gateway designs to highlight the entrances to the City.

Policy 1.2.2.2: The City shall develop residential and commercial design standards to ensure attractive, compatible, safe, high-quality development and to encourage Crime Prevention Through Environmental Design (CPTED) principles in order to increase the safety of commercial and residential development.

Policy 1.2.2.3: The City shall evaluate the need to amend the Land Development Code to incorporate CPTED principles for residential and commercial developments.

GOAL 1.3: The City of Cocoa shall enhance the quality of life and prosperity of its citizens through the retention and creation of a wide range of profitable business opportunities and jobs.

Objective 1.3.1: Economic Base Enhancement. The City of Cocoa shall seek to establish and maintain a stable and growing economic base through strategic incentive programs and diversification of the economy.

Policy 1.3.1.1: The City will establish a list of the types of businesses it should target to diversify the economy, which shall be known as "target businesses." Efforts to assist the retention and expansion of local business and attract new enterprises shall be concentrated on industry clusters which will make the greatest contribution to job growth and wealth creation.

Policy 1.3.1.2: The City shall recruit targeted business sectors to diversify the economy through an aggressive strategic marketing program, including utilization of publications and a website, providing information and matching sites and services to prospective businesses, impact fee subsidies and other incentives.

Policy 1.3.1.3: The City shall continue to assist developers of new and renovated commercial development by providing technical and administrative support regarding permitting and regulations to maintain a production capacity level sufficient to meet the demand. Technical assistance may include, but not be limited to the following:

- Continue to foster partnerships with private and non-profit sector business groups that can help a business relocate,
- Provide assistance in how to meet the development review requirements of the City and other regulatory agencies; and
- A shortened review process for qualified businesses.

Policy 1.3.1.4: The City shall work to improve the efficiency and convenience of its development review services to its business customers.

Policy 1.3.1.5: The City shall provide referral services to appropriate agencies for information and assistance to prospective and growing businesses in meeting zoning and infrastructure standards as well as requirements imposed by various government agencies.

Policy 1.3.1.6: The City will target businesses with incentive packages and programs including Florida Enterprise Zones, Small Business Assistance programs, Community Façade Programs, HUB Zones, Tax

Abatement programs, Brownfield Redevelopment program and Foreign Trade Zone.

Policy 1.3.1.7: The City shall consider adding to the stock of available commercially, recreational and industrially zoned lands as when supply and demand begin to dictate need for more land.

Policy 1.3.1.8: The City shall maintain an office of Economic Development to coordinate between agencies, to develop economic development programs, to retain existing businesses and to actively recruit "target businesses" to the City.

Policy 1.3.1.9: To involve community stakeholder, the City should consider creating an Economic Development Advisory Board consisting of local community and leaders.

Policy 1.3.1.10: The City shall continue efforts to promote business/convention tourism, ecotourism, and sports related tourism in cooperation with the Brevard County Tourist Development Council**.**

Policy 1.3.1.11: The City of Cocoa shall coordinate its economic development programs with other agencies, such as the Economic Development Commission of Florida's Space Coast to expand opportunities.

Objective 1.3.2: Maintain Infrastructure. The City shall maintain adequate infrastructure for encouraging economic activities in the industrial and commercial sectors.

Policy 1.3.2.1: To the extent financially feasible, the City shall continue providing adequate supporting infrastructure (i.e. paved streets, sanitary sewer, drainage, potable water, etc.) in strategic locations throughout the City to appropriately entice economic development.

Objective 1.3.3: Workforce/Wage Enhancement: The City shall improve the quality of life and employability of its citizens by promoting and attracting high technology industries, and higher education opportunities.

Policy 1.3.3.1: To improve the training and education of its work force, the City of Cocoa shall coordinate with the Brevard County Public Schools, Brevard Community College, Webster University and the University of Central Florida.

Policy 1.3.3.2: The City shall work with other government agencies and businesses to match education opportunities to educational and employment needs.

II - TRANSPORTATION ELEMENT

Serving the Community

GOAL 2.1: The City shall provide a safe, efficient, and comprehensive multi-modal transportation system available to all residents of and visitors to the City of Cocoa. When possible, these facilities should be developed so as to enhance the City's greenways.

Objective 2.1.1: Functionality. The City shall maximize existing roadway functionality through alternate modes of transportation.

Policy 2.1.1.1: The City shall maintain for the purpose of issuing building permits and development orders the following list of major roadway facilities:

City of Cocoa Jurisdiction		**Minimum LOS**
Forrest Avenue		E
Cox Road (within city limits)		E
Fiske Boulevard (from SR 520 to Dixon Boulevard)		E
Indian River Drive (C.R. 515)		E
Peachtree Street (from Clearlake Road to U.S. 1/S.R. 5)		E
Florida Avenue (within city limits)		E
Other or Multi-Jurisdictional	**Jurisdiction**	**Minimum LOS**
Pineda Street (from Lake Drive to SR 501)	City/County	E
Michigan Boulevard	County	E
Dixon Boulevard	County	E
Range Road	County	E
Rosetine Street	County	E
Adamson Road (SR 524 to Pine)	County	D
Friday Road (SR 524 to SR 520)	County	E
Grissom Parkway (Industry to Canaveral Groves)	County	E
Industry Road (SR 524 to Grissom Pwky)	County	E
SR 528 (Beachline Expressway)	State	D
SR 520 (from Clearlake Road to U.S. 1/ S.R. 5)	State	D
SR 520 (from SR 524 to Burnett Rd)	State	D
SR 519 (Fiske Boulevard south of SR 520)	State	D
U.S. 1/S.R. 5 (from SR 528 to south of SR 520)	State	D
SR 524 (from SR 520 to SR 528)	State	D
SR 501 (Clearlake Road)	State	D
Interstate Highway 95 (I-95) (SR 519/Fiske Blvd to SR 520)	State	E
Interstate Highway 95 (I-95) (SR 520 to SR 524)	State	E
Interstate Highway 95 (I-95) (SR 524 to SR 528)	State	E

Policy 2.1.1.2: The City shall require that traffic signalization, roadway signage, roadway intersections and operational capacities are designed to optimize traffic flow and enhance the roadway network on City-controlled streets. The City shall carry out the following actions on local streets as necessary, and shall petition the county and state, as appropriate, for action on county and state roadways:

A. Traffic signals shall be computer-coordinated or fully actuated to affect optimal flow to the maximum extent possible;

B. Roadway signage shall conform to the Manual of Uniform Traffic Control Devices (MUTCD) and provide a safe, clear indication of roadway design geometry, traffic hazards, upcoming roadways, and other applicable standards;

C. Roadway intersection design shall include adequate storage lanes and turning lanes to facilitate movement through intersections;

D. Ordinances shall be reviewed and amended as necessary in order to require safe and convenient flow of on-site traffic. Parking for motorized and non-motorized vehicles shall be regulated ; and

E. Intersections shall be designed in accordance with appropriate access management and design manuals.

Objective 2.1.2: Transportation Concurrency. The City shall ensure that transportation facilities are available at the time of development.

Policy 2.1.2.1: Since 2009, the City has been exempt from state-mandated transportation concurrency. However, the City will continue to monitor transportation as a matter of local law as addressed in this Comprehensive Plan.

Policy 2.1.2.2: As part of the Concurrency Management System, the City shall review proposed new developments for their impact on the roadway network.

Objective 2.1.3: Mobility Strategies. The City shall develop mobility strategies to reduce the dependency on vehicles, reduce vehicle miles traveled and enhance alternative modes of transportation.

Policy 2.1.3.1: The City shall develop transportation mobility strategies that ensure the improvement of alternate modes of transportation and ultimately reduce the dependency of the automobile and include, but are not limited to:

A. Providing a network of local streets, collectors and arterials to relieve traffic demand on state and federal highways, including development of parallel roadway facilities, grid street network and connectivity to disperse travel, and to provide convenient pedestrian and bicycle facilities;

B. Managing access and traffic operations to minimize traffic accidents, avoid traffic backups and make the most efficient use of highway capacity, including signal timing optimization, access management plans and strategies, transportation systems management measures, and railroad grade crossing improvements;

C. Managing traffic demand, where feasible, to manage peak hour traffic loads on major arterials, including working with local employment centers to implement staggered work shifts and flex time programs, telecommuting, ridesharing and vanpool programs, compressed work weeks and parking management;

D. Providing alternative modes of transportation such as bicycle and pedestrian facilities, expanded transit service, park and ride facilities; and

E. Managing land use to limit vehicular demand on state and federal highways by encouraging compact land use and infill, transit oriented development, mixed use and higher density land use patterns.

Policy 2.1.3.2: The City shall evaluate the use of mobility fees in lieu of transportation impact fees.

Objective 2.1.4: Proportionate Fair Share. The City shall require new development to bear the full burden of the cost of roadway improvements necessitated by impacts to the roadway network caused by traffic generated by said development through the adopted site approval process.

Policy 2.1.4.1: The City shall utilize the principle of equitable cost participation in the following manner as a guide in development approval decisions, including allocation of costs among private parties benefiting from or creating the need for transportation improvements:

A. New development shall be required to pay its fair share as a condition for development approval based on impact fees, special assessments or other local exaction methods.

B. Existing unmet needs shall be identified, to include an assessment of the need and estimated cost of fulfillment. Assessment shall occur on an annual basis preceding budget adoption.

C. Existing land uses and activities which benefit from better access shall be required to participate in the cost of the roadway improvement in the form of user fees or special assessments. New construction that is located on land improved with better access may be required to pay a pro-rata share of the cost.

D. Provisions shall be made in development orders to include the mitigation of adverse impacts on the state highway system.

Objective 2.1.5: Right-of-Way Preservation. The City shall formally identify right-of-way needs and a priority schedule for acquisition or reservation shall be maintained. Protection of existing right-of-way from building encroachment shall be assured.

Policy 2.1.5.1: The City shall require the dedication of rights-of-way and easements to support private development-related traffic and to maintain adequate levels of service on the roadway network. The developer shall bear the expense of the improvement through donation or dedication of rights-of-way to the extent legally permissible. The City may participate in the expense of the improvement only if the City determines that participation will significantly benefit the general public.

Policy 2.1.5.2: The City shall require that if the transfer of property is to be compensated by the entity building the roadway, the land value shall be assessed on the condition of the land prior to road improvements, not on an inflated value due to a new roadway being present.

Policy 2.1.5.3: The City shall reserve or pursue the purchase of right-of-way as far in the future as possible for planned roadway projects, so as to minimize excessive costs for land purchases and so that the locations and widths of these roads can be considered in ongoing transportation system planning and design activities.

Policy 2.1.5.4: The City shall initiate and coordinate the dedication of right-of-way necessary for roadway improvements identified in the TPO Plan or other officially recognized long-range plan with FDOT and Brevard County.

Policy 2.1.5.5: The City shall seek alternative funding sources for roadway improvements, including but not limited to, tax increment financing.

Objective 2.1.6: Pedestrian and Bicycle Facilities. The City shall ensure safe and adequate movement of pedestrians and bicyclists.

Policy 2.1.6.1: The City shall conduct pedestrian movement and safety studies to determine high travel patterns and accident areas, and remedial actions shall be taken by the City where feasible and practical to mitigate safety problems where conditions have been determined to be unacceptable.

Policy 2.1.6.2: For new development and redevelopment projects, the City shall require sidewalks to be provided where feasible and appropriate along all roadways in or near residential areas that lead to:

- recreation facilities;
- schools;

- commercial centers; and
- employment centers when the need for such facilities has been identified.

Policy 2.1.6.3: The City shall consider bicycle facilities as components of standard design criteria for new and reconstructed roadway facilities of regional significance, except for expressways and freeways, in urban areas pursuant to the requirements of Section 335.065, F.S.

Policy 2.1.6.4: The City shall continue to promote bicycle safety education and encourage local safety personnel to conduct periodic presentations as part of other safety programs.

Policy 2.1.6.5: The City shall assess high vehicle and bicycle/pedestrian conflict areas periodically and a program for lessening the propensity for conflicts shall be initiated.

Objective 2.1.7: Reduction of Greenhouse Gas Emissions. The City shall develop strategies through transportation decisions and planning to address the reduction of greenhouse gas emissions, energy conservation and energy-efficient design.

Policy 2.1.7.1: The City shall coordinate with SCAT to promote car-pooling opportunities for commuters with the same destination.

Policy 2.1.7.2: The City's land development regulations shall require new and infill development and redevelopment, when feasible, to provide interconnections and access to existing and planned multi-modal transportation facilities, including sidewalks and bicycling and transit facilities.

Policy 2.1.7.3: The City shall coordinate with Brevard County, the Space Coast TPO and adjacent municipalities to:

A. Initiate a marketing campaign to promote bicycle, pedestrian and other non-motorized transportation options.

B. Provide additional multi-modal transportation facilities, including sidewalks and bicycle paths/lanes and the expansion of transit service to include a circulator route in the City and vicinity if warranted by ridership and vehicular usage trends.

C. Upgrade existing and provide new transit facilities as warranted such as park and ride lots, bus stops, bus shelters and signage.

Policy 2.1.7.4: In order to discourage urban sprawl, encourage infill development, reduce greenhouse gases and congestion, the City shall evaluate several strategies for alternatives to transportation concurrency including, but not limited to a Transportation Concurrency

Management Area (TCMA), Multi-modal Transportation District (MTD) and Long Term Transportation Concurrency Management System (LTCMS).

Policy 2.1.7.5: The City shall include landscaping and streetscaping as roadway design components in order to enhance the aesthetic and safety of roadways for all users.

Policy 2.1.7.6: The City shall pursue grant opportunities for median landscaping and road beautification.

Objective 2.1.8: Transportation Facilities Improvement Coordination. The City shall continuously coordinate transportation improvement requirements with all other affected governmental entities to ensure that the efficient and cost-effective course of action is followed. Annual plan updates shall consider the FDOT 5-Year Transportation Plan, the Space Coast Transportation Planning Organization and the plans of neighboring jurisdictions.

Policy 2.1.8.1: The City shall continuously coordinate with local, TPO, regional and state plans to accomplish interlocal solutions to the transportation needs and problems of the City.

Policy 2.1.8.2: The City shall seek coordinating actions or interlocal agreements between local government entities for the purposes of addressing transportation impacts of a development project in one jurisdiction on an adjacent jurisdiction based upon actual traffic loadings contributed by the project, the development of the transportation elements of comprehensive plans (Section 163.3177, F.S.) and in ensuring that transportation planning and programming are part of the comprehensive planning process in the region.

Policy 2.1.8.3: The City shall conduct interagency coordination to determine and designate transportation corridors of major statewide or regional significance to develop strategies to provide for the orderly and systematic acquisition of rights-of-way located within the designated corridors and to develop transportation facilities and services within the corridors.

Policy 2.1.8.4: The City shall coordinate with FDOT and Brevard County to develop a road improvement program which will result in the modernization of state and county roads within the City by changing the design of these roads from the existing "rural section" with swales to an "urban section" with curbs, sidewalks and subsurface drainage.

Policy 2.1.8.5: The City shall continue to partner with property owners, the Space Coast TPO, Brevard County, the FDOT and other government

agencies to construct new transportation corridors to relieve arterial and collector road congestion.

Objective 2.1.9: Scenic Roadways Program. The City shall continue to support the Florida Scenic Highways and National Scenic Byways programs.

Policy 2.1.9.1: The City shall continue to utilize the scenic highways and byways programs for the purpose of protecting and maintaining the appearance and aesthetics of each scenic roadway.

Policy 2.1.9.2: The City shall evaluate levels of service standards and standard roadway widths, rights-of-way and other roadway-related requirements on designated scenic roadways where the value, significance, or maintenance of the character and appearance of a scenic roadway outweighs the benefits of increasing vehicular capacity or other considerations.

Objective 2.1.10: Coordination with Future Land Use. The City shall coordinate transportation planning with the land uses shown on the Future Land Use Map, the FDOT 5-Year Transportation Plan, the Space Coast TPO Long Range Transportation Plan and plans of neighboring jurisdictions.

Policy 2.1.10.1: The City's Community Services Department shall review subsequent versions of the FDOT 5-Year Transportation Plan, in order to update or modify this element, if necessary.

Policy 2.1.10.2: The City shall review, for compatibility with this element, the transportation plans and programs of the unincorporated county and neighboring municipalities as they are amended in the future.

Policy 2.1.10.3: All proposed amendments to this Transportation Element shall include a statement of findings supporting such proposals.

Policy 2.1.10.4: As warranted, the City shall undertake a traffic study that will determine the origin and destination of traffic from outside the City in order to better account for who should bear the cost for future road improvements.

Objective 2.1.11: Access. Access to minor arterials, major arterials, expressway, and to a lesser extent, collectors, shall be limited in the following manner by the City, County and the Florida Department of Transportation in order to maximize their traffic-carrying capacity and safety.

Policy 2.1.11.1: The functional classification of each roadway segment being used as a basis for determining the number of access points allowed and types and extent of traffic flow enhancement measures needed to maintain the capacity.

Policy 2.1.11.2: The issuance of access and connection permits to the roadway network shall be limited to the minimum number necessary to provide safe and reasonable access.

Policy 2.1.11.3: Deceleration lanes being required at all access points on collectors, minor arterials, major arterials, and expressways.

Policy 2.1.11.4: Shared access points being used wherever possible in order to minimize the necessity of one or more access points to adjacent small businesses.

Policy 2.1.11.5: The need for and feasibility of frontage roads being constructed along new or reconstructed major arterials and expressways to increase roadway capacity and to reduce conflicts between local and through traffic.

Policy 2.1.11.6: Access points to parcels with frontage along two or more roadways being located on the roadway of lower functional classification.

Objective 2.1.12: Public Transit. Public transit services shall be based on existing and proposed major trip generators and attractors, new subdivisions, and population growth.

Policy 2.1.12.1: The City shall conduct annual coordination meetings with the Space Coast Area Transit (SCAT) to identify new major trip generators and attractors, new subdivisions and population growth areas in order to establish new public transportation management solutions and routes.

Policy 2.1.12.2: The City shall encourage land uses which promote public transportation in public transportation corridors.

Policy 2.1.12.3: The City shall coordinate with Brevard County, Space Coast TPO, neighboring municipalities, and SCAT to determine needed public transit stops, terminals, maintenance, and improvements to serve the general population and identified special needs populations.

Policy 2.1.12.4: Service provision, including planned transit stop improvements and transit services, for the transportation disadvantaged shall be monitored, through the coordination with Brevard County, to ensure that this segment of the population has adequate mobility.

Policy 2.1.12.5: Transit should routinely be considered as an alternative to roadway widening and as a supplement to roadway improvement projects.

Policy 2.1.12.6: Land development regulations should be periodically reviewed to ensure that development allows and encourages accessibility to public transit.

Policy 2.1.12.7: The City shall consider establishing incentives to be offered to developers that provide access to public transit.

Policy 2.1.12.8: Transportation and mobility shall be monitored using measurable indicators including modal split, annual transit trips per capita, and automobile occupancy rates.

Objective 2.1.13: Alternate Routes to Intrastate System. The City shall establish strategies to facilitate local traffic to use alternatives to the Florida Intrastate System to protect its inter-regional intrastate functions.

Policy 2.1.13.1: New major collectors and arterials shall be constructed in such a manner to help alleviate traffic volumes on the intrastate system.

Policy 2.1.13.2: Synchronization of traffic signals shall occur on all existing major collectors and arterials to reduce the negative impacts of stop and go movements.

Policy 2.1.13.3: Intersectional improvements shall occur on all existing major collector and arterials where necessary to reduce the negative impacts of delayed turning movements.

Policy 2.1.13.4: The ongoing accident surveillance program shall continue to be maintained by the City's Police Department.

Objective 2.1.14: Intermodal Facilities. The City shall coordinate with the Canaveral Port Authority, the Florida East Coast Railroad, and the Space Coast Executive Airport to maximize use of intermodal transportation nodes.

Policy 2.1.14.1: The City shall continue to conduct coordination meetings with the Florida East Coast (FEC) Railroad and Amtrak to establish a future passenger transportation terminal within the City limits.

Policy 2.1.14.2: The City shall conduct annual coordination meetings with the Space Coast Executive Airport and the Canaveral Port Authority to share information on their facility improvements, and the City's future growth and all Developments of Regional Impact (DRI).

Policy 2.1.14.3: The City shall continue to be receptive to alternate means of public transportation which will reduce the demand on the existing infrastructure system.

Policy 2.1.14.4: The City shall develop Transit Oriented Development (TOD) design criteria in the Land Development Regulations.

Objective 2.1.15: Parking. The City shall develop parking strategies to support the transportation goals.

Policy 2.1.15.1: The City shall seek a public-private partnership to help establish a multi-use, multi-level parking facility to reduce traffic congestion and increase pedestrian safety, reduce the amount of surface parking lots and increase green space within the Central Business District.

Policy 2.1.15.2: New development shall consider parking for motorized and non-motorized vehicles in site design.

Policy 2.1.15.3: The City shall update parking standards to minimize the amount of surface parking through the establishment of maximum parking standards and shared and co-located parking.

III - HOUSING ELEMENT

Serving the Community

GOAL 3.1: The City shall encourage and promote the provision of decent, safe, and sanitary housing to meet the needs of the present and future population of the City.

Objective 3.1.1: Housing Supply. Assist the private sector to create additional units and preserve existing units to satisfy the projected demand of dwelling units of various types, sizes, and costs which will be needed to house the City's anticipated population through the planning horizon.

Policy 3.1.1.1: The City's Future Land Use Map shall provide adequate lands to accommodate the projected housing growth.

Policy 3.1.1.2: The City shall continue to provide land use designations and zoning districts on the Future Land Use and the Official Zoning Maps to ensure a variety of housing types including single family, duplex, and multifamily are allowed within the City.

Policy 3.1.1.3: The City shall continue to utilize local government partnerships with the private sector in order to improve the efficiency and expand the capacity of the housing delivery system.

Policy 3.1.1.4: The City shall continue to provide information, technical assistance and housing data to the private sector in order to maintain sufficient housing production capacity. Technical assistance includes, but is not limited to, assistance meeting the development review requirements of the City and other regulatory agencies; referral to appropriate agencies for information; assistance in meeting infrastructure standards and requirements imposed by the City; and provision of data regarding housing needs and conditions.

Policy 3.1.1.5: The City's land development regulations shall allow manufactured buildings (as defined in Chapter 553, F.S.) in all residential zoning districts provided the units comply with all relevant building code standards and the U.S. Department of Housing and Urban Development Manufactured Home Construction and Safety Standards.

Policy 3.1.1.6: The City shall promote mixed-use developments that include provisions for a wide variety of housing types and prices.

Policy 3.1.1.7: In order to maintain housing policies responsive to changing conditions, problems, and issues, the City shall undertake special housing studies as needed in order to develop specific local strategies for resolving unanticipated housing problems and issues.

Objective 3.1.2: Elimination of Substandard Housing. The City shall seek ways to eliminate substandard housing conditions and seek ways to improve the structural and aesthetic value of existing homes.

Policy 3.1.2.1: The City shall periodically review and update established housing policies to guide in the conservation, rehabilitation, and demolition program techniques and strategies.

Policy 3.1.2.2: The City of Cocoa will endeavor to eliminate slum and blight throughout the City.

Policy 3.1.2.3: The City shall identify existing housing units that need structural and aesthetic improvements and those that are beyond repair and rehabilitation should be demolished.

Policy 3.1.2.4: The City shall continue to enforce the Florida Building Code and the City of Cocoa's Property Maintenance Standards and Rental Regulations to ensure the construction and maintenance of sound and safe housing and, to encourage the correction of housing code violations, and to set the standards for quality housing within the City. Low income owner-occupants will continue to be referred to available housing assistance programs.

Policy 3.1.2.5: The City shall continue its proactive code enforcement program to monitor the conditions of the City's housing stock, reduce the amount of substandard housing, discourage boarded-up buildings, increase the number of affordable units, and preserve available housing stock using city, county, state or federal funds as available and within the scope of funding capabilities.

Objective 3.1.3: Relocation Housing. The City shall provide uniform and equitable treatment to persons displaced by State and local government programs, consistent with Section 421.55, F.S., and to persons displaced by public projects or programs for which federal or federal-aid funds are available or are used, in accordance with the Surface Transportation and Uniform Relocation Assistance Act of 1987, (Public Law 100-17, Apr. 2, 1987, 101 Stat. 132).

Policy 3.1.3.1: When residents are displaced as a result of redevelopment, demolition or other public projects, the City shall attempt to ensure the residents are able to relocate to appropriate housing.

Policy 3.1.3.2: The City shall coordinate with appropriate agencies to prepare plans of action regarding relocation of residents before programs are enacted that will create displaced households. Such plans shall include, but are not limited to, the following:

- Timing of the relocation;
- Assessment of the need for the program that will displace households;
- Costs associated with the displacement of such households; and

- An assessment of the household's needs and the impact of the relocation on the household, including:
  - Location and the effect of a new neighborhood location on the household's distance to job, schools, and social activities; and
  - The adequacy of public transit, if applicable at the time, to serve the displaced household.

Policy 3.1.3.3: The City shall assure that reasonably located standard housing, at affordable costs, continues to be available to persons displaced through public or quasi-public action prior to their displacement. When federal funds are used for acquisition, demolition, rehabilitation, or conversion, the City shall comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act and with Section 104(d) of the Housing & Community Development Act of 1974 (excluding acquisition), as amended from time to time and as implemented in the City's local housing assistance plans.

Policy 3.1.3.4: Relocation housing should be comparable to the existing dwelling as much as possible, with an emphasis on the number of rooms, size of living space, location to commercial and public facilities and place of employment, and shall be within the financial means of the displaced household. Relocation housing shall be a sound, safe, and sanitary dwelling meeting adopted housing and property maintenance codes.

Policy 3.1.3.5: In the event the City of Cocoa is declared a Federal Disaster Area and in an effort to prevent the relocation of residents whose homes have been declared unsafe for occupancy as a result of a tornado, hurricane or other disaster related event, the City of Cocoa shall permit the location and occupancy of a Federal Emergency Management Agency (FEMA) sponsored trailer on the affected single-family residential lot during the reconstruction of the principal structure. The FEMA sponsored trailer shall be removed once the Certificate of Occupancy for the principal structure is issued by the City's Building Official (if not sooner by mandate of FEMA).

Objective 3.1.4: **Coordination.** The City shall continue to coordinate with public and private sector entities that provide housing services.

Policy 3.1.4.1: The City shall monitor housing, community, and redevelopment proposals for consistency with this Comprehensive Plan.

Policy 3.1.4.2: The City shall continue to coordinate affordable housing, housing development and redevelopment activities with:

- Adjacent municipalities and Brevard County;

- State agencies (such as the Florida Department of Transportation);
- Brevard County School Board;
- East Central Florida Regional Planning Council;
- The Housing Authority of the City of Cocoa; and
- Brevard County HOME Consortium.

Objective 3.1.5: Energy Efficiency. The City shall encourage energy efficiency in the design, construction and rehabilitation of new and existing residential buildings in the City and incorporate alternative energy technologies in the land development regulations.

Policy 3.1.5.1: The City shall consider adopting an ordinance that promotes energy efficiency, use of alternative energy, and conservation alternatives in the construction and rehabilitation of existing buildings.

Policy 3.1.5.2: The City shall create incentive programs for housing projects that seek certification by Florida Green Building Coalition, United States Green Building Coalition (LEED Certifications), Energy Star, Water Star, or other types of certifications acceptable by the City. The incentives may be in the form of expedited plan review and permitting, flexibility of development standards, or monetary incentives.

Policy 3.1.5.3: The City shall consider creating a cross-departmental sustainability team to revise green building policies and engage the development community.

Policy 3.1.5.4: The City shall encourage City staff to obtain LEED accreditation.

Policy 3.1.5.5: The City shall continue the ongoing review and improvement of City codes to remove obstacles to green building.

Policy 3.1.5.6: The City shall promote energy conservation through its land development regulations.

Policy 3.1.5.7: The City shall continue to support Florida Power & Light (FPL) energy efficiency programs by informing residents of the programs that are offered by FPL.

Objective 3.1.6: Location of Housing. The City shall provide appropriate and adequate locations for very low income, low income, and moderate income housing, and provide for adequate sites for mobile and manufactured homes.

Policy 3.1.6.1: The City shall establish and maintain zoning classifications which allow for flexibility in land use design, density, housing types, and price levels to preserve affordable housing and residential neighborhoods, and allow for appropriate land use mixes for very low income, low income, and moderate income households, mobile

homes, manufactured homes, group homes and foster care facilities, and households with special needs including rural and farm worker households

Policy 3.1.6.2: The City shall ensure supporting infrastructure and public facilities are available and maintained to support the location of very low income, low income, and moderate income households as well as for mobile and manufactures homes.

Policy 3.1.6.3: The City shall review and amend its land development regulations to reflect the conditions and criteria consistent with Chapter 419, F.S., guiding the location of group homes and foster care facilities licensed or funded by the Florida Department of Children and Family Services that foster non-discrimination, and encourage the development of community residential alternatives to institutionalization including the infrastructure and public facilities.

Policy 3.1.6.4: The City shall include in its land development regulations site selection criteria for the location of housing for low and moderate-income families, group homes, foster care facilities, and manufactured homes which take into account the accessibility, convenience, and availability of public and private services because low-income families and the elderly often have no private means of transportation.

Policy 3.1.6.5: Should a need be demonstrated for rural and farmworker housing, the City will consider provisions for such housing opportunities.

Objective 3.1.7: Housing Programs. The City shall develop housing programs to improve the structural and aesthetic value of existing homes and the creation of new homes to meet the current and anticipated future residents of the City.

Policy 3.1.7.1: The City shall strengthen public education measures through affirmative outreach efforts to low income households to ensure that the persons or neighborhoods eligible for assistance are aware of its availability as well as the procedures for obtaining such assistance. Public workshops shall be held in areas where the needs are demonstrated.

Policy 3.1.7.2: The City will continue to seek and apply for funding programs to assist in housing rehabilitation, demolition, and preservation for qualified applicants. Housing ownership opportunities for low-income households will continue to be provided through federal and state housing programs.

Policy 3.1.7.3: The City shall survey all homeowners receiving housing rehabilitation assistance after receiving assistance to evaluate the quality of the work and to determine homeowner satisfaction with the program.

Policy 3.1.7.4: The City of Cocoa shall promote personal investment in the community and homeownership by encouraging residents, especially those participating in housing assistance programs, to become involved in community service organizations, projects, and City Boards.

GOAL 3.2: In order to encourage the preservation of the existing housing stock and minimize the relocation of residents and the demolition of housing, the city shall ensure the availability and maintenance of supporting infrastructure and avoid the concentration of affordable housing units only in specific areas of the city.

Objective 3.2.1: Housing Stock and Neighborhoods. The City shall encourage the stabilization of neighborhoods by extending the useful life of the existing housing stock through the enforcement of City codes that preserve neighborhood quality and maintain community facilities.

Policy 3.2.1.1: The placement of public facilities shall be planned so as to minimize the demolition of housing and related relocation of residents. When housing must be removed as a result of City actions, the City shall assess the feasibility of moving the housing to another location and rehabilitating it to standard, affordable conditions to preserve it as part of the City housing stock.

Policy 3.2.1.2: The City shall encourage the stabilization of neighborhoods by maintaining the quality of existing neighborhoods, by upgrading the supporting infrastructure and facilities, including paved public road access; stormwater management facilities and flood protection; wastewater disposal facilities; potable water facilities; solid waste collection service; electric utility service; and by protecting natural and historic resources.

Objective 3.2.2: Historically Significant Housing. Housing designated as historically significant by virtue of architecture, social significance, or ethnic heritage will continue to be identified and continue to be preserved and protected, and if possible, maintained for residential uses.

Policy 3.2.2.1: Applications will be submitted by the City to the Florida Division of Historical Resources for the housing units which have been and may be designated as individual structures or as part of a locally significant historic district to be included on the Florida Master Site File.

Policy 3.2.2.2: The City shall pursue available grants and alternative funding, where appropriate, to expand the local knowledge and awareness of existing historic and archaeological sites and structures.

Policy 3.2.2.3: The City shall assist owners of designated historically significant housing to apply for and utilize state and federal assistance programs.

Policy 3.2.2.4: The City shall encourage the continued identification, analysis, and preservation of the City's historical resources. Such efforts shall include determination of their significance and vulnerability, as well as implementation of preservation management policies. Environmental reviews of units assisted with governmental resources shall be conducted as required.

Policy 3.2.2.5: The City will encourage the retention and preservation of historically significant structures, while discouraging their destruction by requiring that a need for demolition or significant alteration must be demonstrated prior to the issuance of a demolition permit or development order, with need being based on structural integrity, lack of economic feasibility of rehabilitation, restoration, or preservation, and absence of any feasible alternative, for the rehabilitation, restoration, adaptive reuse, or other alteration which would preserve the historic character of the structure. Where such need is demonstrated, relocation of the structure to an appropriate site may be waived if the applicant establishes the lack of feasibility of relocation. Where neither rehabilitation nor relocation is possible, mitigation of the loss of such properties through documentation techniques, including but not limited to measured drawings, photographs and descriptive narrative, will be the recommended treatment.

Policy 3.2.2.6: The City will adopt incentives to retain historically significant residential structures in the City through a variety of strategies and procedures including zoning, land development regulations, public and private land acquisition programs, and other techniques.

Policy 3.2.2.7: The City may require independent feasibility assessments of the feasibility of restoring or rehabilitating architecturally or historically significant residential resources as an alternative to demolition or significant alteration at the applicant's expense.

Policy 3.2.2.8: The City will establish a program for the preservation and improvement of historically significant housing, sites, and structures through participating with owners, citizens' groups, business organizations, and state and federal agencies in restoration, rehabilitation, and public or private purchase with the owner's consent of historically significant housing, sites or structures for the purpose of preservation.

Policy 3.2.2.9: The City shall not seek the local designation of a property or structure as historically significant without the owner's permission.

Policy 3.2.2.10: In identifying and improving historically significant housing, the City shall be guided by the Standards for Rehabilitation of the U.S.

Department of the Interior, as amended. Criteria such as the following shall be employed:

A. The distinguished original qualities or character of a building structure or site and its environment shall not be destroyed. The removal or alterations of any historic material or distinctive architectural features should be avoided when possible.

B. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.

C. Changes that have taken place in the course of time are evidence of the history and development of a building, structure, neighborhood or site and its environment. These changes may have acquired significance in their own right, such as the relocation of a structure many years ago, and this significance shall be recognized and respected.

D. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building structure, neighborhood or site shall be treated with sensitivity.

E. Deteriorated architectural features shall be repaired rather than replaced whenever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic physical or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

F. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.

G. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material and design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.

H. Whenever possible, new additions or alterations to structure shall be done in a manner so that removal of such additions

or alterations in the future would not impair the essential form and integrity of the structure.

I. Applications for rehabilitation of housing which also are eligible for consideration, as historic resources or which are potentially significant historic structures shall be processed in conformance with state and federal guidelines.

J. The City shall employ available measures with particular sensitivity for rehabilitation and preservation of housing which has historic significance by virtue of social factors or ethnic heritage.

Objective 3.2.3: Housing Safety. The City of Cocoa shall utilize Crime Prevention Through Environmental Design (CPTED) principles in order to increase the safety of housing developments through the planning process and incorporate them in the land development regulations. CPTED principles and strategies shall include natural access control, natural surveillance, territorial reinforcement, and target hardening.

Policy 3.2.3.1: The City shall develop guidelines for the development community against which projects will be evaluated to ensure the incorporation of CPTED principles.

Policy 3.2.3.2: The City shall provide technical assistance to housing developers and non-profit housing providers to ensure compliance with CPTED principles.

Objective 3.2.4: Neighborhood Preservation. The City of Cocoa shall promote neighborhood preservation through the continued application and enforcement of zoning district regulations, land development regulations, and nuisance abatement regulations.

Policy 3.2.4.1: The City shall provide for the protection of residential neighborhoods from secondary effects of nearby commercial development.

Policy 3.2.4.2: The City shall require buffering and screening of residential neighborhoods from nearby incompatible land uses through significant landscaped buffer yards and/or compatible transitional uses.

Policy 3.2.4.3: The City shall protect residential neighborhoods from through-traffic with traffic calming measures as well as through the use of selected roadway materials, restrictions on use of roadways by nonresidential vehicles and redirecting traffic flow patterns.

Policy 3.2.4.4: The City shall protect residential neighborhoods from noise, water, and air pollution by regulating land development practices to ensure all applicable local, state, and federal air & water quality standards are met and maintained. Activities creating noise related disturbances

shall be restricted from inappropriate locations or required to provide more stringent attenuation measures.

Policy 3.2.4.5: The City shall encourage mass transit in residential neighborhoods, where appropriate, through the coordination of public transit routes and land use activity.

Policy 3.2.4.6: The City shall support neighborhood serving retail uses appropriately located.

Policy 3.2.4.7: The City shall continue inspection of residential rental properties periodically to protect the health, safety, and welfare of the tenants. The City will continue to initiate inspections of properties in conjunction with appropriate state agencies in situations where: 1) a complaint has been filed with codes enforcement, 2) there exists an obvious code violation, or 3) when the owner applies for a building permit to expand his or her property. All inspectors shall be qualified and licensed to interpret the Florida Building Code and/or the ICC International Property Maintenance Code.

Policy 3.2.4.8: The City shall consider the potential impact of proposed projects on achieving reductions in the concentration of affordable multifamily housing when evaluating applications, awarding discretionary funds, and making recommendations concerning certified affordable housing projects, tax credits, and bond projects.

Policy 3.2.4.9: The City will preserve residential neighborhoods containing affordable housing through appropriate zoning classifications and housing rehabilitation programs which protect their residential integrity and character. The City will give great weight to preserving the residential integrity and character of such neighborhoods in considering petitions by property owners for zoning changes.

Policy 3.2.4.10: The City will support programs and partnerships with the private and non-profit sectors to improve coordination among participants in housing production to preserve, improve, and produce affordable housing through means such as providing grants for land acquisition for production of affordable housing; waiving or subsidizing impact, hook-up, or permitting fees; providing technical assistance; streamlining the permitting and inspection process; providing landscaping or infrastructure improvements to support residential development and rehabilitation; providing density bonuses; or providing funding for capacity building.

GOAL 3.3: The City shall ensure the provision and distribution of adequate sites for affordable housing for present and future populations of the City.

Objective 3.3.1: Incentives for Affordable Housing. The City shall maintain land development regulations and procedures which assist the private and non-profit sector in providing identified housing needs of various types, sizes and costs.

Policy 3.3.1.1: The City shall continue and promote its density bonus program to encourage the private sector to provide affordable housing. The following guidelines shall be utilized in the implementation of the density bonus program.

A. AMOUNT OF BONUS.

For each newly constructed unit of qualifying affordable housing as defined below, the developer shall be entitled to an increase of ten thousand (10,000) square feet of floor area bonus for new construction within the CBD. For a substantial rehabilitation of qualifying affordable housing defined below, the developer shall be entitled to an increase of five thousand (5,000) square feet of floor area bonus for new construction within the CBD. Such bonus is transferable.

B. QUALIFYING AFFORDABLE HOUSING.

1. Qualifying affordable housing shall be newly constructed single-family housing or substantial rehabilitation of housing, made available for purchase by a qualifying low income household, and subject to the following restrictions:

(a) Housing units must be available for purchase and must actually be purchased by a low income household (as defined in Section 420.0004(11), F.S.) at a monthly cost including property taxes, utilities, and insurance not exceeding thirty percent (30%) of the purchasing household's median gross annual income.

(b) The purchaser of such affordable housing unit must, at the time of purchase, grant to the administering corporation a note and second mortgage interest in the housing unit, payable upon resale, in the amount of fifteen thousand dollars ($15,000.00) (i) which note shall not bear interest and may be forgiven at the rate of one thousand five hundred dollars ($1,500.00) per year and retired after ten (10) years and (ii) which second mortgage shall (a) provide for a twenty-year term; (b) contain a right of first refusal at a price equal to a bona fide written offer of a third-party to purchase

the unit; and (c) contain an agreement to pay to the administering corporation one-half of any profit upon resale of the unit, including a sale upon exercise of said right of first refusal. In the event the purchaser secures a purchase mortgage loan under the Florida Homeownership Assistance Program pursuant to section 420.5088, Florida Statutes (1989), as may be amended, or should the administering corporation be selected as a sponsor under the aforesaid program, the second mortgage interest set forth in this subsection may be denoted as a third mortgage interest in the housing unit.

(c) It shall be the obligation of the administering corporation to exercise the right of first refusal and second mortgage interest to ensure that upon resale of the housing unit, the resale purchaser is also a low income household, or, if unable to exercise the right of first refusal, to apply funds received upon satisfaction of such second mortgage interest to the development or preservation of other affordable housing units within a designated redevelopment area. Any such funds not so applied within five (5) years of receipt by the administering corporation shall be remitted to the City of Cocoa.

Policy 3.3.1.2: The City shall provide information and incentives, such as minimum lot sizes, minimum floor areas, setbacks, and residential land uses to the private sector to ensure that sufficient housing of various types, designs sizes, and costs are constructed.

Policy 3.3.1.3: The City may allow single family dwellings on non-conforming infill lots for affordable and workforce housing development projects.

Policy 3.3.1.4: The City shall continue to provide incentives to developments with affordable housing and workforce housing units. These incentives could include, but are not limited to, increased densities; a streamlined permitting processes to prevent delays; flexible development regulations; and deferment, subsidy and/or waiver of building permit fees, impact fees and inspection fees.

Objective 3.3.2: Adequate Sites for Housing. The City shall provide adequate sites ensuring housing availability for the very low-income, low-income, and moderate-income

households, as well as sites for mobile and manufactured homes for the present and future population of the City.

Policy 3.3.2.1: The City shall affirmatively support proposals for affordable housing that are consistent with the use and density provisions of the Comprehensive Plan.

Policy 3.3.2.2: The City shall support amendments to the Comprehensive Plan and associated land development regulations that permit affordable housing proposals provided such locations; avoid concentrations of low and very low income households; provide full urban services and facilities; are environmentally sensitive; and would create a livable and supportive environment.

Policy 3.3.2.3: The City shall discourage concentrations of affordable multi-family housing in economically and socially distressed areas.

Policy 3.3.2.4: The City shall continue to require that sites for affordable housing have access to the following facilities, services and/or activity centers:

- Potable water and central wastewater systems;
- Employment centers, including shopping centers which accommodate stores offering household goods and services needed on a frequent and recurring basis;
- A collector roadway or higher; and
- Public parks, recreation areas, and/or open space systems.

Policy 3.3.2.5: The City shall encourage the provision of affordable housing in infill/redevelopment areas by providing incentives. The City shall also encourage the development of affordable housing in the Community Redevelopment Areas.

Policy 3.3.2.6: The City shall ensure, to the greatest extent possible, that regulatory techniques and review procedures do not create barriers to infill and affordable housing, when updating its land development regulations.

Policy 3.3.2.7: The City may, through the land development regulations, encourage the development/redevelopment of housing that will integrate a variety of housing types and styles in all neighborhoods.

Objective 3.3.3: Housing Programs. The City shall seek to utilize, leverage and maximize federal, state, and local programs for the present and future population of the City.

Policy 3.3.3.1: The City will continue to support and seek new funding from appropriate federal, state and local sources for rehabilitation of rental units and rental assistance for low income families.

Policy 3.3.3.2: The City will continue to provide housing assistance to income eligible residents by allocating resources received through federal and state housing grants.

Policy 3.3.3.3: The City will continue to explore and consider alternative sources of money and initiatives to improve housing stock and availability. In addition, the City will coordinate with the County to advertise the availability of any funds to the public. These funds will ensure the availability of decent, safe, sanitary, and affordable units to low income residents.

Policy 3.3.3.4: The City shall leverage available funds with federal, state and local subsidy programs to assist the largest number of units possible.

Policy 3.3.3.5: The City shall annually monitor affordable housing projects receiving financial grant assistance or incentives to ensure units are in compliance with affordability requirements.

Policy 3.3.3.6: The City shall partner with the Brevard County Finance Authority in the use of tax exempt financing to provide mortgages at below market interest rates to first time homebuyers.

Policy 3.3.3.7: The City shall promote awareness among the elderly and low-income rental families regarding housing programs which are available to assist them in Cocoa.

Policy 3.3.3.8: The City may participate in and support the activities of private not-for-profit Community Development Corporations (CDC's) and Community Housing Development Organizations (CHDO's) to provide technical assistance and housing information to City and County constituents. Such support may include, but not limited to, financial and/or technical assistance and alternative development standards and code requirements.

Policy 3.3.3.9: The City shall continue to support affordable housing programs and maintain communication with non-profit organizations to promote neighborhood pride, identity, organization, and communication between citizens and City government.

Policy 3.3.3.10: The City shall continue to provide assistance to outside agencies offering counseling referral services for families and individuals seeking affordable housing opportunities.

Policy 3.3.3.11: The City shall participate in and support activities that discourage the use of predatory lending practices. Such support may include, but not be limited to, the provision of financial and or technical assistance to community groups that specialize in education and outreach against predatory lending.

Policy 3.3.3.12: The City shall prioritize projects that utilize public/private partnerships to produce housing and provide support of services to low income families. These programs could include, but not limited to, financial counseling, day care, health care, and transportation.

Policy 3.3.3.13: The City shall participate in Regional Planning Council initiatives directed toward educating local governments about new techniques, especially those programs which promote affordable housing.

GOAL 3.4: The City shall continue encouraging and assisting in the conversion of undue concentrations of public rental housing in the City of Cocoa to affordable home ownership. Where public housing remains, the City shall seek to ensure it's decent, safe, and sanitary for the present and future residents of the City.

Objective 3.4.1: Cooperative Relationship. The City shall establish an ongoing cooperative working relationship with the Housing Authority of the City of Cocoa to provide for and preserve public housing and assist in the conversion of undue concentrations of public housing to affordable home ownership.

Policy 3.4.1.1: The City shall promote educational opportunities and provide training and technical assistance to lower income public housing tenants in preparation for home ownership.

Policy 3.4.1.2: The City shall assist the Housing Authority of the City of Cocoa and/or public housing tenants in seeking financial incentives to facilitate the purchase of owner-occupied housing and/or, to support the cost associated with converting public housing units to owner-occupied or mixed-income units.

Policy 3.4.1.3: The City shall pursue housing resources for low income residents other than public housing or Section 8 tenant-based assistance.

Policy 3.4.1.4: The City shall leverage affordable housing resources in the community through the creation of mixed-finance housing, and encourage and facilitate the conversion of public housing units to owner occupancy.

Policy 3.4.1.5: The City shall pursue financial resources to assist in the rehabilitation of public housing units, or when beyond repair, the demolition and replacement of dilapidated units to new owner-occupied units.

GOAL 3.5: The City shall promote non-discrimination and ensure fair and equal housing opportunities for residents of the City of Cocoa.

Objective 3.5.1: Fair Housing. The City shall remain committed to affirmatively further fair housing.

Policy 3.5.1.1: The City will fully comply with and require the private sector to comply with the Fair Housing Act of 1968 and the local Fair Housing Ordinance. All housing development and redevelopment activities

shall be compatible with and further the purpose of the Fair Housing Act of 1968.

Policy 3.5.1.2: The City shall conduct periodic reviews and amend as necessary all land and housing development regulations to ensure compliance with Federal and State laws on accessibility.

Policy 3.5.1.3: The City shall continue to periodically review the local Fair Housing Ordinance and update as necessary.

Policy 3.5.1.4: The City shall continue to support local fair housing enforcement organizations such as the Fair Housing Continuum.

Policy 3.5.1.5: The City shall encourage public housing agencies to start a counseling program to help housing choice voucher recipients to locate housing outside of poverty concentrated areas.

Policy 3.5.1.6: The City's housing programs shall encourage banks and other lending organizations to operate in areas that are underserved and to provide services to underserved populations.

GOAL 3.6: The City shall encourage the provision of housing opportunities for people with special needs such as the homeless, the elderly, and the physically and/or mentally disabled.

Objective 3.6.1: Group Homes and Foster Care Facilities. The City shall assist the private sector to ensure adequate sites are available in residential areas, or areas of residential character, for group homes and foster care facilities licensed or funded by the Florida Department of Children and Family Services to satisfy the current and future residents of the City.

Policy 3.6.1.1: The City shall continue to review, and revise where necessary, land development regulations to ensure adequate sites in residential areas are provided for special needs populations by means of group homes and foster care facilities licensed or funded by the State of Florida or other such means as shall be deemed appropriate by the Community Development Director.

Policy 3.6.1.2: The City shall continue to provide, in the Land Development Code, adequate location standards for sites in residential areas or areas of residential character for community residential homes, including group homes, retirement homes, and foster care facilities, in accordance with applicable Florida Statutes. These facilities should be located in a variety of urban and rural locations, as appropriate.

Objective 3.6.2: Special Needs Housing. The City shall assist the private sector to create additional units and preserve existing units for households with special needs to satisfy the projected demand of dwelling units of various types, sizes, and costs.

Policy 3.6.2.1: The City shall continue to support a variety of public and private housing initiatives for affordable housing for special needs populations in areas in close proximity to shopping, public transportation, health services, schools, infrastructure availability, and employment opportunities.

Policy 3.6.2.2: The City shall continue to support organizations which provide shelter and related services to the special needs and homeless population. Such support may include but not be limited to financial and/or technical assistance and alternative design standards and code requirements.

Policy 3.6.2.3: The City shall continue to support organizations, which assist special needs, elderly and handicapped citizens in finding decent, accessible, and affordable housing. Such support may include but not be limited to financial and/or technical assistance and alternative design standards and code requirements.

Policy 3.6.2.4: In an effort to address problems of housing for lower income elderly residents and other households with special housing needs, the City shall allow for the placement of retirement communities and elderly care facilities in areas of residential character as long as they are designed in a manner that is compatible with the character of the neighborhood.

Objective 3.6.3: Homeless. The City shall continue to seek supportive housing opportunities for the homeless and those at risk for homelessness, and ensure that Cocoa and other governments and agencies are working jointly to address these needs.

Policy 3.6.3.1: The City shall remain an active participant in the Brevard County Continuum of Care Coalition to address homelessness in the City.

Policy 3.6.3.2: The City shall designate appropriate areas for providing services for the homeless.

GOAL 3.7: The City shall promote opportunities for the creation of housing and infill development within the City.

Objective 3.7.1: Infill Development. The City shall continue to promote infill housing development by supporting alternative development standards where appropriate and feasible.

Policy 3.7.1.1: The City shall provide and retain residential land uses at varying densities and locations through comprehensive land use planning and land development regulations for affordable housing to satisfy the projected demand of dwelling units of various types, sizes, and costs by 2020, which will be needed to house the City's anticipated population through the planning horizon.

Policy 3.7.1.2: The City shall ensure adequate sites are correctly planned and zoned to accommodate the projected housing growth, including low and very low income housing, and mobile homes.

Objective 3.7.2: Vacant Land Inventory. The City shall continue to monitor and inventory vacant and underused residential land and provide this information to housing developers to stimulate the development of infill housing.

Policy 3.7.2.1: The City shall survey vacant and underutilized land within the Heart of Cocoa and Diamond Square Redevelopment Area to determine which land can be declared surplus and/or publicly acquired to be made available with conditions sufficient to stimulate the development of affordable and infill housing.

Objective 3.7.3: Land Development Regulations. To the greatest extent possible, the City's land development regulations shall not contribute to increased housing costs.

Policy 3.7.3.1: The City shall conduct periodic reviews of existing land development regulations and consider before adoption, policies, procedures, ordinances, regulations, or plan provisions that may have an impact on the cost of housing.

Policy 3.7.3.2: The City shall continue to review and assess the structuring of impact fees in relation to City housing goals and shall make recommendations for amendments to the appropriate codes if necessary.

Objective 3.7.4: Permitting Reviews. The City, where appropriate, may provide priority consideration and permitting review for affordable and infill housing projects in an effort to reduce costs and delays in the permitting review process.

Policy 3.7.4.1: The development review and permitting process for affordable and infill housing shall be streamlined through an ongoing review of the process and the adoption of a more efficient regulatory and permitting process.

Policy 3.7.4.2: The City shall continue to reduce building permit and inspection fees for City-sponsored projects that preserve or produce affordable housing.

Objective 3.7.5: Community Revitalization. The City shall continue to support the revitalization of its Florida Enterprise Zone, its designated Florida Brownfield Area, the Diamond Square Redevelopment Area and the Heart of Cocoa Area concentrating on issues such as crime, economic development, and affordable housing.

Policy 3.7.5.1: The City shall support reasonable efforts to make these areas economically diversified neighborhoods with housing, shopping, public transportation, health services, schools, and employment opportunities for all.

Policy 3.7.5.2: The City shall encourage new construction of single family homes for moderate and upper income households.

Policy 3.7.5.3: The City shall encourage neighborhood revitalization, affordable housing, and homeownership in these areas by implementing programs and regulations that promote a wide variety of housing types, sizes, and prices.

Policy 3.7.5.4: The City shall continue to pursue environmentally-related grants, such as Brownfields Assessment and Cleanup Grants, to advance the cleanup, restoration and redevelopment of City designated Brownfields areas and sites.

Policy 3.7.5.5: The City shall encourage an overall mixture of housing tenure by actively encouraging owner-occupancy within these areas.

Policy 3.7.5.6: The City shall promote design standards that encourage image improvement opportunities in the neighborhood.

Objective 3.7.6: Economic Development. The City shall seek economic solutions to address affordable housing.

Policy 3.7.6.1: To address the needs of the residents of affordable housing, the City shall explore and seek partnerships with the private and public sectors for the creation of employment and training opportunities.

IV - SANITARY SEWER ELEMENT

Serving the Community

GOAL 4.1: The City of Cocoa will provide cost effective and environmentally sound wastewater treatment service to meet existing and projected demands identified in this Plan.

Objective 4.1.1: Maintain Level of Service. Based upon adopted level of service standards, the City shall annually adopt programs and activities to facilitate implementation of a wastewater utility to serve existing and new development as well as areas where septic systems are failing.

Policy 4.1.1.1: Projected flow rates will be updated periodically based on best available data.

Policy 4.1.1.2: The City adopts the following levels of service for wastewater generation:

Development Type	Wastewater Generation
Industrial	0.02 gallons per sq. ft. per day
Office Space	15 gpd per capita
Residential	319 gallons per day per household
Schools	15 gpd per capita
Hotel/Motel	100 gpd per room
Restaurant	50 gpd per seat
Bar Lounge	20 gpd per seat

Policy 4.1.1.3: All land use plan amendments shall require an analysis of the impact of such amendment on the adopted level of service standard and existing sanitary sewer facilities.

Policy 4.1.1.4: All expansions and other improvements of residential, institutional, office, commercial and industrial uses that increase the demand on public infrastructure and require permitting shall comply with the adopted levels of service.

Policy 4.1.1.5: When evaluating collection force main and lift station capacity, the City shall use a peak factor of 3.0 times the average daily flows (ADF).

Policy 4.1.1.6: The City shall encourage continuing education of operating staff to ensure proficiency with respect to optimization of sanitary sewer maintenance and operation processes.

Policy 4.1.1.7: The City shall comply with bond covenants, if any, to ensure the maintenance and operations of facilities, and to provide recommendations for system maintenance and improvements.

Policy 4.1.1.8: Sanitary sewer facilities shall be replaced and existing deficiencies shall be corrected based upon the following priorities:

A. Any project correcting an immediate threat to the health, safety, or welfare of the City's residents will receive priority over the expansion of a facility or the correction or replacement of a non-threatening facility.

B. Any project that will correct an existing deficiency will receive priority over a project to expand the system.

C. Projects that will result in the system exceeding the adopted level of service will be denied.

Objective 4.1.2: Future Sanitary Sewer System. The City shall ensure that the sanitary sewer system is adequate to service the incorporated limits of the City, where the City has an existing legal commitment to provide services, and additional areas outside the incorporated limits as deemed feasible and practical by the City.

Policy 4.1.2.1: When feasible the City will enter into agreements with other government agencies related to the provision of treated wastewater effluent outside of the City's corporate limits. Such agreements will include all necessary legal requirements, rates, financing, specifications, and relevant information pertinent to the provision of treated wastewater effluent to and from the City.

Policy 4.1.2.2: The City will continue to coordinate with Brevard County to encourage support of all wastewater objectives and policies that are relevant to the enclaves or areas identified through an urban reserve agreement. The City will inform the County of all changes in its service area for utilities and will request that the County inform the City of all proposed development within this service area.

Policy 4.1.2.3: The wastewater system will operate as an enterprise fund, on a revenue-supported basis with user fees covering all operational costs. Revenue bonds and grant funds will provide additional financing for system improvements and expansion.

Policy 4.1.2.4: The City will maintain a plan for extending the wastewater collection system and necessary pumping facilities to developing parts of the City and to areas for potential annexation outside the City.

Policy 4.1.2.5: Following a determination of concurrency for sanitary sewer, and adequate sanitary sewer facilities are in place prior to the impact of development, the City shall require payment of applicable sewer impact fees upon development approval prior to issuance of a certificate of occupancy.

Policy 4.1.2.6: By ordinance, the City shall mandate connection to the City's central sewerage system when available.

Objective 4.1.3: Treatment and Disposal. The existing treatment system will operate at the tertiary treatment level including all appropriate tests and procedures as

required by FDEP and any other relevant governmental agency. System modification and expansion shall include consideration of appropriate changes in treatment level.

Policy 4.1.3.1: The City's sanitary sewer system will be operated in compliance with all local, state and federal regulations and standards.

Policy 4.1.3.2: The City will participate in intergovernmental strategies and programs related to the provision of wastewater service and disposal of treated wastewater effluent within Brevard County, including the coordination of consolidation of wastewater treatment service when it is in the best interest of the citizens of Cocoa.

Policy 4.1.3.3: The City shall coordinate its utility and transportation planning efforts to take advantage of the most economical construction and maintenance costs possible when installing, repairing and/or replacing utility lines, roads and sewers.

Policy 4.1.3.4: The City shall continue the implementation of the reclaimed water system as deemed feasible.

Policy 4.1.3.5: Sludge disposal agreements will be maintained with the Brevard County Landfill (dry) and at least one private contractor (wet).

Policy 4.1.3.6: Wastewater reuse for irrigation and other non-potable uses will be expanded into areas throughout the City where customer use is anticipated to be 25% or greater within five years of installation.

Objective 4.1.4: On-site Wastewater Disposal. The permitting and installation of additional septic tanks or package plants within the incorporated city limits will be discouraged or prohibited, except where on-site disposal represents the most efficient cost effective and environmentally compatible alternative. That decision will be based on availability of central sanitary sewer facilities and on available technical information regarding soils, groundwater table elevations, subsurface hydrology, percolation rates and other factors.

Policy 4.1.4.1: The City will coordinate with health officials to assure sewer availability to developed properties with failing septic systems.

Policy 4.1.4.2: The City will coordinate with Brevard County Consumer Health Services to evaluate each permit for a septic tank system located within the incorporated City limits.

Policy 4.1.4.3: The City will coordinate with Brevard County Consumer Health Services to establish procedures for the monitoring of all septic tanks within the incorporated City limits.

Policy 4.1.4.4: The City will develop a plan to phase-out septic tank use wherever feasible and cost effective.

Policy 4.1.4.5: The City will coordinate with Brevard County to support this objective with regard to the enclaves and any areas identified through an urban reserve agreement.

Policy 4.1.4.6: Wastewater package plants will only be allowed in the event that sewer capacity is not scheduled to be available or to satisfy on-site pretreatment required by the City.

Policy 4.1.4.7: The City will adopt an ordinance prohibiting package plants within the incorporated City limits and will coordinate with Brevard County to encourage support of all objectives and policies that are relevant to the enclaves or areas identified through an urban reserve agreement.

Objective 4.1.5: Land Development Regulations. The land development regulations shall be evaluated periodically to ensure that future development within the incorporated limits of the City is coordinated with City wastewater plans.

Policy 4.1.5.1: Approval of new development will be based in part, upon an evaluation of the impact of the development on the City's wastewater treatment system.

Policy 4.1.5.2: The City will require all new collection lines and lift stations constructed by public and private developers to be constructed according to City standards, and, at the City's option, to be dedicated to the City.

Policy 4.1.5.3: The City will require the total costs (extension of lines, alterations to lift stations and the cost of plant capacity) for providing new wastewater service to be borne by the specific users of the new service. Reduction in costs to the new users may be made if deemed necessary or beneficial by the City to accomplish specific goals (e.g. environmental concerns, economic growth, and customer base growth).

V - SOLID WASTE ELEMENT

Serving the Community

GOAL 5.1: The City will provide efficient solid waste collection service to the residents of Cocoa while protecting the environment and public health.

Objective 5.1.1: Solid Waste Collection. The City shall continue to provide for solid waste collection services to City residents and commercial establishments throughout the planning horizon.

Policy 5.1.1.1: The collection service will be operated with revenues from monthly service fees.

Policy 5.1.1.2: The City will maintain land development regulations that require development review procedures to evaluate the impact of proposed land development projects on the collection system through concurrency review procedures.

Policy 5.1.1.3: The City shall ensure adequate equipment to maintain the following level of service standard for solid waste collection:

Solid Waste	Disposal (Brevard County Landfill) Cocoa Distribution Rate: 1.2 tons per capita per year
	Collection Residential: 1 to 2 times per week as needed, each household Non-residential: 2 to 6 times per week as needed, each location Green Waste and Recyclable: Once per week

Policy 5.1.1.4: The City will maintain and enforce the litter ordinance, including the removal of litter from drainage ditches.

Objective 5.1.2: Solid Waste Disposal. The City shall continue to coordinate with Brevard County for the processing and disposal of solid waste at the county facility in a safe and efficient manner.

Policy 5.1.2.1: The City will deliver its solid waste to the Central Brevard Solid Waste Processing facility in accordance with Brevard County requirements.

Policy 5.1.2.2: City participation in any activities related to the expansion of the solid waste processing facility to meet future needs will be based on annual summaries of proportional use data from Brevard County for solid waste service.

Policy 5.1.2.3: The City shall coordinate with Brevard County and the East Central Florida Regional Planning Council to monitor and control the disposal of hazardous wastes in accordance with state law.

Policy 5.1.2.4: The City shall require that all hazardous waste generators within the City properly manage their hazardous wastes in conformance with mandates of the Federal Resource Conservation and Recovery Act and other applicable laws.

Policy 5.1.2.5: The City shall continue to cooperate with and promote Brevard County's public information program to increase public awareness of the nature, harmful effects and proper disposal methods of hazardous waste.

Policy 5.1.2.6: The City shall continue to develop educational programs for the general public and solid waste professionals to encourage hazardous waste source reduction and recycling.

Policy 5.1.2.7: The City shall continue to provide applicable employee training for inspection, identification and disposal of hazardous waste materials.

Objective 5.1.3: Recycling. The City shall encourage the reduction in the volume of solid waste collected through resource recovery, recycling, and conservation programs.

Policy 5.1.3.1: The City shall continue to develop educational programs for the general public and solid waste professionals to encourage waste reduction.

Policy 5.1.3.2: To the fullest extent feasible, the City will encourage public and private sector participation in solid waste recovery, recycling, and conservation programs.

Policy 5.1.3.3: The City shall coordinate with Brevard County with respect to solid waste management and waste recycling programs.

Policy 5.1.3.4: The City will assist the efforts of Brevard County in promoting the reduction of the solid waste stream.

VI - STORMWATER MANAGEMENT ELEMENT

Serving the Community

GOAL 6.1: The City shall ensure the provision of a stormwater management system of appropriate capacity and functionality to protect public health and safety, fulfill requirements of the National Pollutant Discharge Elimination System (NPDES) and Total Maximum Daily Loads (TMDL's).

Objective 6.1.1: Protect Groundwater Recharge, Natural Drainage Features and Water Quality. The City shall continue to require, through the enforcement of development standards, the protection of groundwater recharge, natural drainage features and surface water quality from the impacts of development.

Policy 6.1.1.1: The City's land development regulations shall contain standards that require post-development groundwater recharge rates equal to or greater than pre-development rates.

Policy 6.1.1.2: The City shall include stormwater treatment measures and associated "best management practices" such as earthen berms, swales, settling basins, retention/detention facilities, filtration facilities, natural vegetation and vegetative buffers, oil/grease baffles and skimmers, porous pavement materials, street sweeping and similar devices and practices intended to improve overall water quality in any adopted design standards and land development regulations.

Policy 6.1.1.3: The City will continue to reduce the quantity and improve the quality of stormwater discharge into receiving water bodies and wetlands by continuing to maintain and operate the following stormwater storage/treatment systems:

A. The Rockpond Project treats stormwater runoff from 170+ acres of developed land in Cocoa that discharges into the St. Johns River. This project is a cooperative effort with the City of Rockledge and Brevard County.

B. Bracco Pond treats 1800 acres of untreated stormwater in the City that currently drain directly into the Indian River Lagoon, and continues to be utilized, as permitted, as a supplemental water supply to the City's Reclaimed Water System. Water quality will be monitored in accordance with its Florida Department of Environmental Protection (FDEP) requirements.

C. The Riverfront Park Project stormwater treatment system treats urban stormwater runoff from 20+ acres and will continue to be monitored for its performance in accordance with its St. Johns River Water Management District. permit

D. North Fiske Stormwater Pond treats stormwater runoff from Florida Department of Transportation's widening of US 1.

E. Continue to seek additional projects for retrofitting stormwater systems utilizing best management practices and seeking grants as available.

Policy 6.1.1.4: The City shall require that proposed new development does not alter natural drainage patterns and water storage capabilities so that increased volumes of water are discharged onto surrounding properties or that surface drainage flow are not impeded or retarded so as to create or contribute to flooding or diminished land usage, unless such lands have been purchased or designated by the City for stormwater storage purposes.

Policy 6.1.1.5: The City shall inspect businesses as needed to protect against illegal dumping or drainage of hazardous, toxic or deleterious substances into the City's stormwater management system for conveyance into receiving water bodies.

Policy 6.1.1.6: The City, as required by NPDES permit and the Basin Management Action Plan (BMAP) process, shall collect, compile and evaluate water quantity and quality data for conveyance systems and water bodies that transport and receive flow from stormwater runoff originating from within City Limits. The City will use the surface water quality monitoring program for the purposes of assisting in:

A. Establishing baseline or ambient water quality conditions where none presently exist, and updating existing data on present conditions;

B. Determining the quality of discharges from particular stormwater outfalls suspected of being significant sources of pollutant discharge;

C. Identifying further capital improvements or performance standards for development which are needed to protect aquatic grass beds, wetlands, and water bodies.

Policy 6.1.1.7: The City shall maintain a comprehensive inventory of all components of the City's surface water management system as part of the City's Surface Water Management Plan, which will be updated in 2012 and every five years thereafter, to include the determination and identification of:

A. Water flow patterns, hydro periods and the boundaries of all drainage basins within the City that receive stormwater from within the City, and those basins that receive stormwater from within and outside of the City;

B. Current land uses within each of the identified drainage basins;

C. All point source discharges;

D. Surface water that does not meet Florida Department of Environmental Protection (FDEP) standards;

E. 100-year flood-prone areas, including all floodplains;

F. Extent of existing excess (uncommitted) water flow and storage capacity;

G. Extent of existing deficiencies, including flow and storage capacities;

H. Improvements necessary for the proper operation and management of the Surface Water Management System; and

I. Engineering, biological, and other studies needed to develop the prioritized needs, types and locations of public capital improvement projects and additional performance standards for development.

Objective 6.1.2: Maintenance and Operation of Public Stormwater Facilities. The City shall ensure that all stormwater management systems under the City's authority receive the proper levels of operation and maintenance necessary for the effective accomplishment of their intended water management functions.

Policy 6.1.2.1: Surface water management projects will be implemented in accordance with the adopted Surface Water Management Plan, as updated, and the Capital Improvements Element.

Policy 6.1.2.2: The City shall inspect public stormwater management system components and undertake required maintenance on at least an annual basis.

Policy 6.1.2.3: The City shall coordinate with various public entities such as the SJRWMD, FDEP, Brevard County, and with various civic organizations, in the preparation and dissemination of information to the public regarding litter control, fertilizers, pesticides and herbicides usage and proper application procedures, and the proper disposal of pollution-causing substances and materials.

Policy 6.1.2.4: The City shall continue to implement and update the Surface Water Management Plan. Specifically, the plan will contain such elements as the following as they are developed by the City or other agencies acting to protect and enhance the waters outlined in the plan:

A. Determine the boundaries of all drainage basins within the City limits to which stormwater within the City drains and the boundaries of all drainage basins, within and outside of the City limits, from which the City receives drainage;

B. Identify, quantify, and prioritized flooding situations by magnitude, frequency and severity of impact, including the ability of existing wetlands and water bodies to assimilate stormwater, based on an analysis of plant communities,

without degrading the vitality of the natural wetland communities;

C. Develop a plan for solving or avoiding flooding situations including a preferred alternative and at least one alternative solution for each flooding situation that will accomplish significant reduction or elimination of pollutants in both stormwater and point source discharge from reaching receiving water bodies and wetlands for each drainage basin. Solutions shall make use of non-structural methods, including performance standards for development, wherever possible;

D. Assess the general vitality and distribution of grass beds in water bodies as well as natural wetland plant communities in wetlands for those water bodies which currently receive, or can reasonably be expected to receive in the future, stormwater or point source discharges from within the City limits. Where grass beds for wetland plant communities have been or may be adversely affected by stormwater or point source discharges, develop specific strategies and an implementation schedule for eliminating these adverse impacts;

E. Design and implement a surface water monitoring protocol, including:

1. Identification of the entity charged with the responsibility of carrying out this work;
2. The type, location, and frequency of monitoring; and
3. Where the monitoring program indicates permit violations or degradation of the receiving waters or wetlands or their grass beds or plant communities, requires that retrofitting, replacement, or redesign of stormwater systems or point source discharges must be done.

F. Identify prioritized actions regarding flood control and abatement, stormwater management, environmental and resource protection and water pollution control problems, needs, issues and opportunities;

G. Identify performance standards needed to assure protection of water quality and water flow regimes and native plant communities in wetlands and water bodies; and

H. Identify the entity assigned the responsibility of undertaking or overseeing each recommended action.

Objective 6.1.3: Intergovernmental Coordination. The City shall maintain effective levels of intergovernmental coordination and cooperation with affected units of federal, state, and local government having responsibility for, or being involved in the planning,

design, construction and operation of stormwater management systems under the jurisdiction of multiple governmental agencies.

Policy 6.1.3.1: Interagency staff coordination through formal and informal means (e.g. interlocal agreements, jointly sponsored projects, watershed working groups and staff-to-staff liaison) will be maintained with Brevard County and other governmental agencies regarding downstream drainage canal capacities to ensure that flooding problems are not created by insufficient downstream flow capacity.

Policy 6.1.3.2: Information about the City's surface water management system will be provided to other agencies as requested for use in the planning, design and implementation of surface water management systems operated by other agencies.

Policy 6.1.3.3: The City shall actively participate in the preparation and implementation of applicable Surface Water Improvement and Management (SWIM) plans being undertaken by the SJRWMD that will involve or include land areas in the City or water bodies affected by drainage from the City. The City shall review and provide input to the SJRWMD in its update of the applicable SWIM plans for the Indian River Lagoon and St. Johns River. As part of the implementation of the SWIM Plan, the City shall develop and adopt specific strategies to protect and restore grass beds or wetland plant communities that have been or may be adversely affected by stormwater or point source discharge from the City, to include performance standards for development and prioritized actions to be taken by the City.

Policy 6.1.3.4: The City shall seek the advice and assistance of appropriate agencies in the design, establishment and implementation of the surface water monitoring program as required in the Joint Stipulation Agreement and Amended Final Order of the Florida Administration Commission, to include but not limited to Brevard County, the City of Rockledge, the SJRWMD, the FDEP and the U. S. Environmental Protection Agency.

Policy 6.1.3.5: Except as provided in Future Land Use Element Policy 1.1.2.7 (H), the City will require non-structural methods for flood control, wherever possible, that are designed to maintain natural flow rates and quantities of water.

Policy 6.1.3.6: Except as provided in Future Land Use Element Policy 1.1.2.7 (H), flood control for new development will be accomplished through the limitation of fill in the 100-year floodplain when economically feasible. In cases where there is no practical alternative to fill in the 100-year floodplain, compensatory storage shall be provided through excavation of a volume equivalent to the loss of storage within the

100-year floodplain resulting from the placement of fill in adjacent upland areas (above the 100-year floodplain) where such compensatory storage can be accomplished in an environmentally sound and economically feasible manner.

Objective 6.1.4: Stormwater Facilities Capacity. The City shall maximize the use of existing stormwater management facilities and require new development to construct facilities to achieve and maintain adopted stormwater management level of service standards that fulfill NPDES and TMDL mandates for stormwater quality and quantity.

Policy 6.1.4.1: The City, as part of the Surface Water Management Plan updates, shall identify and perform a comparative analysis of all capital, operational and maintenance costs associated with the identified preferred and secondary alternatives intended to address flooding, pollution control and environmental degradation problems and needs, including the following:

A. The estimated costs of undertaking individual actions involving public construction projects or major manpower commitments and an economically feasible funding source for each;

B. The proposed prioritized plan of implementation;

C. The recommended time schedule for undertaking the prioritized actions, based on levels of degradation suffered by or anticipated for wetlands and water bodies, financial capabilities and time requirements to undertake the individual actions; and

D. The list of necessary revisions to the Capital Improvements Element, including the Five-year Schedule of Capital Improvements, to reflect the prioritized actions which involve funding commitments.

Policy 6.1.4.2: Every five years, the City shall publish reports describing data obtained and progress made toward accomplishing the goals of the Surface Water Management Plan.

Policy 6.1.4.3: The City shall utilize funds from the stormwater assessment fee for correcting deficiencies in the public stormwater management system and funds from the stormwater utility service fee to provide funding for financing proposed improvements related to new development.

Policy 6.1.4.4: New development shall design stormwater management systems to meet the rules and criteria established by the City of Cocoa, the SJRWMD and the Florida Department of Environmental Protection, as applicable.

Policy 6.1.4.5: At a minimum, the existing stormwater management systems and current levels of service shall be maintained. The City shall achieve and maintain the following adopted stormwater management level of service (LOS) standards for new development and redevelopment:

STORMWATER MANAGEMENT	DESIGN STORM EVENT 25-year frequency/24-hour duration event
	ON-SITE STORMWATER MANAGEMENT Retention of the first one inch of rainfall runoff for areas of one acre or more; or retention of first one-half inch of rainfall runoff for drainage areas of less than one acre.
	STORMWATER QUANTITY Post development stormwater runoff flow rates, quantities, peaks, and velocities shall be equal to or less than levels that existed prior to development.
	STORMWATER QUALITY No significant degradation of water quality in receiving water bodies

Policy 6.1.4.6: The City shall inspect individual on-site stormwater treatment facilities following their construction and periodically to ensure proper operation and maintenance.

Objective 6.1.5: Sustainable Stormwater Management Strategies. The City shall encourage the use of sustainable, low impact development (LID) strategies to address stormwater management for developments ranging from individual building sites, to subdivisions, to large planned developments.

Policy 6.1.5.1: The City shall coordinate with local, regional, state and federal agencies to provide educational materials and forums to the public and the development community on the value and benefits of sustainable stormwater management facilities design.

Policy 6.1.5.2: For new construction or redevelopment of City buildings and facilities, the City shall utilize LID principles to the extent practicable to address stormwater management needs and to model innovative techniques:

- Manage stormwater as close to its origin as possible by using many small-scale LID techniques.
- Create a site design that slows surface flows, increases the amount of time stormwater flows over the site and implements/retains pervious surfaces (areas maintained in their natural conditions or materials that permit the infiltration or percolation of water into the ground) where appropriate.
- Increase the reliability of the stormwater system by using multiple, redundant stormwater controls.
- Integrate stormwater controls into the design of the site and use the controls as site amenities.
- Reduce the reliance on traditional collection and conveyance stormwater practices.

Policy 6.1.5.3: The City shall consider updating land development regulations to permit innovative LID techniques in the design of stormwater management facilities for development and redevelopment sites including, but not limited to the following:

- Bioretention cells or swales (also known as rain gardens);
- Cisterns and rooftop rainwater harvesting;
- Permeable concrete pavers or pavement.

Policy 6.1.5.4: The stormwater master plan shall incorporate an increase in green engineering/infrastructure solutions to reduce run off into the lagoon either directly or indirectly and provide additional opportunities for water capture and filtration. These solutions shall include but not be limited to bioswales, water detention/retention ponds, seasonal stormwater parks, trees and other native vegetation, rain gardens and other water flow diversion and capture solutions.

Policy 6.1.5.5: The City shall consider the acquisition of properties in the 100-year flood plain that can be used for public open space and function as part of a hybrid stormwater master plan that utilizes green engineering techniques such as stormwater parks, bioswales, rain gardens and others that will result the capture of water and provide natural filtration prior to entering the lagoon and will result in the removal of coastal real property from flood zone designations established by the Federal Emergency Management Agency (FEMA). These projects shall be designed in a manner that will allow for continued functionality when considering future effects from sea level rise.

Policy 6.1.5.6: The City shall administer land development regulations that promote a "natural runoff" or "net-zero discharge" for all site plans in the 100-year floodplain.

VII - POTABLE WATER ELEMENT



Serving the Community

GOAL 7.1: The City shall plan for and assure an adequate supply of potable water to the citizens of Cocoa, municipalities and unincorporated areas within the franchise area granted by the State, Federal installations within the franchise area, and other customers in accordance with City of Cocoa agreements.

Objective 7.1.1: Maintain Level of Service. Based upon the adopted level of service (LOS) standards, the City shall adopt programs and activities as needed to correct existing deficiencies and maintain the public water system.

Policy 7.1.1.1: LOS standards are as follows:

AVERAGE FLOW: 122 gallons per capita per day (gpcpd) per Equivalent Residential Connection (ERC), or 340 gallons per day per ERC
PEAK DAILY FLOW: 510 gallons per day per ERC
PEAK FLOW COEFFICIENT: 1.5
PRESSURE: Normal: 55-65 psi. Peak Hour: 40-50 psi. During Fire: 20 psi.

Policy 7.1.1.2: The City shall update its LOS based on changes to the Regional and State Plans and the St. Johns River Water Management District (SJRWMD) Water Supply Facility Management Plan.

Policy 7.1.1.3: The City shall issue no development orders or permits without first determining whether adequate water supplies to serve the development will be available no later than the anticipated date of issuance by the City of a certificate of occupancy or its functional equivalent. The City will also ensure that adequate water supplies and facilities are available and in place prior to issuing a certificate of occupancy or its functional equivalent.

Objective 7.1.2: Plant Capacity. The City's Water Treatment Plant will continue to maintain sufficient design capacity to meet existing and projected flow rates based on annual summaries of capacity and demand information prepared by the City's Utilities Department.

Policy 7.1.2.1: Projected flow rates will be updated annually based on best available data.

Policy 7.1.2.2: Expansion of the design capacity of the Water Treatment Plants will be consistent with the goals, objectives and policies of the Plan and multi-jurisdictional water planning efforts in central Brevard County.

Objective 7.1.3: Service Area Development. The City will continue to provide potable water to its franchise area.

Policy 7.1.3.1: Potable water contractual agreements will include all necessary legal requirements, rates, service area specifications and relevant information pertinent to the provision of potable water service.

Policy 7.1.3.2: Development within the franchise area will be coordinated with the City specifications and requirements for provision of potable water service.

Policy 7.1.3.3: Expansion of the distribution system will continue to be funded by user fees and connection charges and supplemented with grant funds when appropriate.

Objective 7.1.4: Water Conservation. Water conservation will be ensured through standards established in the City's Consumptive Use Permit issued by the St. John's River Water Management District. All goals, objectives, and policies of the Conservation Element pertaining to use of potable water shall apply.

Policy 7.1.4.1: The City's land development regulations will include water conservation strategies. Conservation strategies may include, but are not limited to:

A. Installation of water conserving plumbing fixtures in new or renovated building construction that is, at a minimum, consistent with the requirements of the State Water Conservation Act and the Brevard County Water Conservation Plan.

B. Water reuse and/or reclamation, for irrigation, industrial use and other appropriate non-potable water use applications.

C. Requesting new development to use natural vegetation and/or drought resistant plants.

D. Continued utilization of escalating block rate water pricing for potable water use.

E. The City shall require all new development and substantial redevelopment to connect to the reclaimed water system, if available. If not available, but availability is planned within five years, require installation of dry lines for future connection to the reclaim system.

F. Continue requiring the installation of meters for reclaim service.

G. Where feasible, the City shall require reuse water or some other non-potable source of water, such as stormwater, for irrigation of all public areas owned by the City.

H. The City shall continue to implement best management practices for water conservation, including any new technology not yet developed.

I. The City shall adopt a water conservation ordinance for the incorporated City requiring use of such water conservation methods as use of "Florida Friendly Landscape Techniques", conduct landscape irrigation audits, conduct irrigation conservation presentations for local schools and organizations, and research and adopt low impact development techniques such as Florida's Water Star program.

J. The City shall evaluate offering incentives for increased water efficiency by giving a corresponding reduction in the standard water, sewer, and reuse water fees for new developments with proven water efficiency.

K. Encourage the use of third party, sustainable building rating and certification systems, such as the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system on all new developments as well as renovation projects including both private and public buildings.

Policy 7.1.4.2: The City will support water conservation through participation in existing county, state and federal programs, and by establishing its own programs, including but not limited to, developing a program to encourage retrofitting existing high volume flush toilets with low flow toilets.

Objective 7.1.5: Water Supply Facilities Work Plan (Work Plan). The City shall maintain a Water Supply Facilities Work Plan that covers a minimum ten-year planning period addressing water supply facilities necessary to serve existing and future development within the City's water service area.

Policy 7.1.5.1: The City hereby adopts into the Comprehensive Plan by reference, its Water Supply Facilities Work Plan. To ensure ongoing consistency and compliance with the SJRWMD Water Supply Management Plan as it may be amended from time-to-time, this plan will be updated through amendments to the Comprehensive Plan.

Policy 7.1.5.2: On an annual basis, the City shall update the Capital Improvements Statement attached to the Water Supply Facilities Work Plan as an appendix to update the listing of projects needed to support the Work Plan.

Policy 7.1.5.3: Within 18 months of the SJRWMD updating its Water Supply Management Plan, the City shall adopt changes to its Water Supply Facilities Work Plan as needed to keep said plan current and

consistent with the SJRWMD's plan, including population and capacity projections.

Policy 7.1.5.4: In conjunction with the SJRWMD, the City shall develop a plan to increase its use of alternative water sources. The City shall continue to participate in the Cocoa / Rockledge Interconnect and the St Johns River / Taylor Creek Reservoir alternative water supply projects.

Policy 7.1.5.5: As required by State Statute and law, the City shall maintain an annually updated Capital Improvements Plan in conjunction with updates to the Capital Improvements Element of the City of Cocoa Comprehensive Plan.

Policy 7.1.5.6: The Water Supply Facilities Work Plan will be consistent with the potable water level of service standards established in Policy 7.1.1.1.

Policy 7.1.5.7: The Water Supply Facilities Work Plan will be updated within 18 months of the District Water Supply Plan SJRWMD 2005 updates that affect the City.

Policy 7.1.5.8: When updating the Water Supply Facilities Work Plan the City will seek alternative sources of water in order to meet projected demand increases.

Policy 7.1.5.9: The Water Supply Facilities Work Plan will be used to prioritize and coordinate the expansion and upgrade of facilities used to withdraw, transmit, treat, store and distribute potable water to meet future needs.

Policy 7.1.5.10: The City will establish and maintain at a minimum a current five year schedule of capital improvements for the improvement, extension, and / or increase in capacity of water facilities.

Policy 7.1.5.11: The City will compare the CIP with the CIE of the Comprehensive Plan annually to ensure compatibility and consistency between the two documents.

Policy 7.1.5.12: The City shall develop and maintain a water quality calibrated hydraulic model and accurate GIS maps for the potable water system.

Policy 7.1.5.13: The City shall develop and maintain a 20-year master plan for the potable water system with comprehensive updates conducted not less frequently than once every five years.

Objective 7.1.6: Alternative Water Supply. The City shall identify and use water supply sources that are consistent with the Water Supply Facilities Work Plan and the SJRWMD Water Supply Management Plan.

Policy 7.1.6.1: The City shall develop feasible alternative sources of water, while avoiding adverse impacts on the natural environment.

Policy 7.1.6.2: The City shall maximize the use of alternative water supplies and implement management techniques in order to sustain water resources, and enhance existing supplies.

Objective 7.1.7: Water Supply Sources. The City will identify and utilize sources of water that can be used to meet existing and future needs when maintaining and updating the Water Supply Facilities Work Plan.

Policy 7.1.7.1: In conjunction with the SJRWMD and other local governments the City will seek the development of efficient cost effective and technically feasible water sources that will supplement future demands without causing adverse impacts to water quality wetlands and aquatic systems. These sources may include but are not limited to brackish groundwater, surface water, and seawater.

Policy 7.1.7.2: The City will maximize the use of existing potable water facilities through the implementation of management techniques that can enhance a source of supply, sustain water resources, and related natural systems and/or optimize water supply. These techniques may include but are not limited to aquifer storage recovery; reclaimed water system interconnects, and water conservation.

Policy 7.1.7.3: The City's annual water consumption will be equal to or less than the amount allocated under the District issued consumptive use permit.

Policy 7.1.7.4: The City will participate in updates of the SJRWMD's water supply assessments and updates of the District Water Supply Plan to enable the City to effectively update design and implementation aspects of the City's water supply plan.

Objective 7.1.8: Provision of Potable Water on a Wholesale Basis. When feasible, the City will enter into agreements to provide potable water on a wholesale basis to other potable water suppliers in need of potable water outside of the City's franchise area.

Policy 7.1.8.1: Any wholesale water agreements will include all necessary legal requirements, rates, financing specifications, and relevant information pertinent to the provision of potable water on a wholesale basis.

Policy 7.1.8.2: All wholesale water agreements will be consistent with the standards and requirements established in the City's Consumptive Use Permit(s) issued by the St. Johns River Water Management District.

VIII - NATURAL GROUNDWATER AQUIFER RECHARGE ELEMENT

CITY OF COCOA

Serving the Community

GOAL 8.1: The City shall protect and preserve the function of the surficial fresh-water aquifer and recharge areas within the City of Cocoa to ensure an adequate source of quality and quantity of potable water.

Objective 8.1.1: Intergovernmental Coordination. The City shall coordinate with other agencies and continue to enforce measures in the City Code that will ensure preservation of natural recharge to the City's groundwater resource and conservation of its potable water sources.

Policy 8.1.1.1: The City shall coordinate with Brevard County, the SJRWMD and other state and federal agencies in the education of residents and business owners on water conservation and the protection of groundwater.

Policy 8.1.1.2: The City shall continue to coordinate with Brevard County, Orange County, the SJRWMD and state and federal agencies to achieve regional aquifer recharge protection objectives.

Policy 8.1.1.3: In order to reduce the potential for saltwater intrusion and to protect existing groundwater supplies, the City shall continue to require the expansion of the alternative water supply and distribution system.

Objective 8.1.2: Best Management Practices. The City shall recognize best management practices and include these in the land development regulations to protect and preserve the quality and quantity of groundwater occurring in the City of Cocoa.

Policy 8.1.2.1: The City shall continue to enforce land development regulations that establish standards for development to protect recharge areas through the requirement for landscaping and open space.

Policy 8.1.2.2: The City shall continue enforcement of its land development regulations to ensure that land uses requiring the routine application of pesticides or herbicides or requiring underground storage of hazardous materials maintain a groundwater monitoring program designed to detect contamination of the surficial aquifer.

Policy 8.1.2.3: The City shall require that development within high aquifer recharge areas maintain pre-development net recharge in the post-development condition to protect ground and surface water quality.

Policy 8.1.2.4: The City shall identify critical high aquifer recharge areas that are vital to the protection of natural systems and/or current or future sources of potable water and require a higher level of protection for these areas than required elsewhere in the City, including, but not limited to, lower impervious surface ratios, higher open space requirements and enhanced stormwater runoff protection measures.

Policy 8.1.2.5: Pervious surface shall be defined as land that is not built upon with any structure or pavement nor has any feature that prevents surface

water from percolating into the ground and recharging the aquifer. Wet stormwater ponds, wetlands and lakes shall be excluded from meeting the pervious surface requirement.

IX - COASTAL MANAGEMENT ELEMENT

CITY OF COCOA

Serving the Community

GOAL 9.1: The natural resources of the City's coastal planning area shall be preserved, protected or enhanced, as physically, fiscally, and practically feasible in light of impacts from sea level rise, to provide the highest possible water quality, habitat for fish and wildlife and use for public recreation while safeguarding human life, property and public expenditures.

Objective 9.1.1: Coastal Planning Area: The Coastal Planning Area (CPA) shall be defined as the hazard area as delineated in Figure CM-1 which includes:

(1) The Coastal High Hazard Area (CHHA);
(2) Areas of the City vulnerable to a Category 3 storm surge as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model;
(3) Areas of the City vulnerable to sea level rise by 2070 based on the 2013 USACE High sea-level-rise curve;
(4) Other areas of the City identified by the City Council as being subject to, or in the immediate vicinity of areas subject to, coastal erosion, flooding or sea level rise.

Policy 9.1.1.1: If 20% or more of a parcel is located within the CPA, then the entire parcel shall be considered within the CPA.

Policy 9.1.1.2: The CPA shall also serve as the Adaptation Action Area in accordance with Sections 163.3164(1) and 163.3177(6)(g)10 Florida Statutes with the purpose of increasing funding opportunities (such as grants) and identifying creative solutions for increasing the resiliency of the Adaption Action Area against natural hazards, flooding and sea level rise, so that the City may:

(1) Protect the health, safety and welfare of residents
(2) Prevent damage to public and private property
(3) Reduce National Flood Insurance Program premiums to property owners
(4) Prioritize policies, projects and funding that implement flood alleviation improvements and mitigation projects

Policy 9.1.1.3: Every 7 years, the City shall use public input, subject matter experts and best available science/data to refine the identification of the Coastal Planning Area.

Objective 9.1.2: Protection of Marine Resources. The City shall protect and restore, where possible, the following natural resources and environmental attributes within its control: endangered species and their habitat, native vegetation and wildlife, fisheries and estuarine habitat, water quality, wetlands, and floodplains.

Policy 9.1.2.1: The City shall continue to coordinate coastal planning area environmental protection and restoration efforts with adjacent local governments, and shall institute procedures to ensure that

development and restoration activities are consistent with existing resource protection plans.

Policy 9.1.2.2: The City shall, with the assistance of the Marine Resources Council of East Florida, identify all resource protection plans for the Indian River and Cocoa coastal planning area which exist or are in development.

Policy 9.1.2.3: The City shall ensure that its plans, procedures, and development criteria conform to the guidelines provided by resource protection plans for the Cocoa coastal planning area.

Policy 9.1.2.4: The City shall minimize the disturbance of natural shorelines to improve and continue the stabilization, protection and habitat benefits natural shorelines provide through the prioritization of the use of living shorelines over new or replacement armoring in the coastal planning area. The City shall review and update related City Ordinance(s), to require evidence as to whether a project is eligible for permitting by the US Army Corps of Engineers under "Nationwide Permit (54) Living Shorelines" and evidence as to whether a living shoreline offers sufficient protection to the property. If "evidence" as described in the updated ordinance demonstrates that a living shoreline is not sufficient to protect property and life, additional structural elements may be added but must be accompanied by living shoreline elements to the extent practical and feasible.

Policy 9.1.2.5: The City shall maintain shoreline protection and erosion control by working with property owners and Brevard County to facilitate the installation and maintenance of native shoreline vegetation, oyster matts and other natural techniques along appropriate areas.

Policy 9.1.2.6: Public expenditures in the coastal planning area, when available, will consider including programming improvements that restore and enhance natural resources.

Objective 9.1.3: Estuarine Environmental Quality. The City shall preserve and protect the environmental quality of estuarine environments by limiting specific impacts and cumulative impacts of development or redevelopment while considering future impacts of sea level rise and flooding.

Policy 9.1.3.1: The City shall actively participate in the Surface Water Improvement and Management (SWIM) Plan administered by the St. Johns River Water Management District (SJRWMD) for the Indian River Lagoon.

Policy 9.1.3.2: The City shall participate in future updates to the Indian River Lagoon Comprehensive Conservation and Management Plan, most

recently updated in 2008, and will continue to support and implement the action plan items applicable to the City.

Policy 9.1.3.3: The City shall coordinate with the SJRWMD, the Florida Department of Environmental Protection (FDEP), the U.S. Army Corps of Engineers, and/or any other relevant regulatory agency, to conserve, enhance, and protect coastal wetlands.

Policy 9.1.3.4: The City shall, through its land development regulations, protect coastal natural resources from the impacts of development.

Policy 9.1.3.5: The City shall continue to work with Brevard County to implement the recommendations of the Brevard County Manatee Protection Plan as well as Save Our Indian River Lagoon Projects.

Policy 9.1.3.6: The City shall continue to implement National Pollution Discharge Elimination System (NPDES) nonpoint source permitting program.

Policy 9.1.3.7: The City shall coordinate estuarine water quality with the Brevard County Natural Resource Management Office. Corrective actions shall be coordinated with the SJRWMD and FDEP.

Policy 9.1.3.8: The City shall continue to use alternative methods of effluent disposal such as re-use and land spreading/spray irrigation to reduce nutrient loadings in the rivers and estuaries.

Policy 9.1.3.9: The City shall work with property owners to encourage and implement minimum buffer, where feasible, of native vegetation between the shoreline and turf.

Objective 9.1.4: Priority of Lagoon Shoreline Land Uses. The City shall continue to promote appropriate land uses along the Lagoon consistent with the public need, while protecting natural resources.

Policy 9.1.4.1: The City shall give priority in coastal development to those land uses that are dependent on or related to water access.

Policy 9.1.4.2: The approval of shoreline development proposals by the City shall be based upon the following shoreline use priorities:

A. Water dependent uses such as recreation, marinas and water dependent industry and utilities and uses approved as part of the City's Redevelopment Plan.

B. Water-related or enhanced uses such as certain utilities, water-related commerce and water enhanced recreation.

Policy 9.1.4.3: Industrial uses along the Indian River Lagoon in the City shall be prohibited.

Policy 9.1.4.4: The City shall require that new marinas, mooring fields and substantial improvements or additions to existing marinas demonstrate compliance with the following criteria:

A. Economic need and feasibility;

B. Land use compatibility with surrounding land uses;

C. Availability of upland support services;

D. Availability for public use;

E. A plan to ensure that water quality will not be degraded below existing FDEP water classification standards. The plan shall address the maintenance and containment of stormwater runoff and wash-down water for dry storage areas and sanitary sewer disposal;

F. Minimize shoreline hardening structures

G. Hurricane contingency planning;

H. Designation by the Clean Marina Program;

I. A plan for mitigation activities in the event that the environment is adversely affected;

J. An educational plan for users regarding impacts on the Lagoon is in place; and

K. A plan for adaptation or mitigation strategies for sea level rise through 2070 and flood impacts to vulnerable infrastructure or facilities on the property in order to minimize damage and impacts to the property and lagoon.

Policy 9.1.4.5: The City shall promote strategies and site development techniques with existing and new marinas to reduce impacts from sea level rise, flooding and storm surge such as, but not limited to, natural shorelines, dry or wet flood proofing, elevation of structures and infrastructure, and floating docks.

Objective 9.1.5: Public Expenditures in the Coastal Planning Area. The use of public funds for infrastructure improvements which subsidizes increased development in the Coastal Planning Area (CPA) will prioritize projects which restore or enhance natural resources, are part of the City's Redevelopment Plan and/or serve to reduce risk of existing development and property hazards such as sea level rise, flooding and storm surge.

Policy 9.1.5.1: Public expenditures for capital improvements that promote public access, hazard mitigation and use of coastal areas shall be reviewed through the annual budget process to minimize loss potential and account for future impacts from sea level rise and flooding.

Policy 9.1.5.2: Local funds used to subsidize new development through new or improved infrastructure shall be limited within the CPA. New or

improved infrastructure in the CPA shall not be used to justify new development in the CPA where the new or improved infrastructure removes previous capacity/safety impediments to additional development.

Objective 9.1.6: Public Access to the Lagoon. The City shall continue to promote public access to the Lagoon consistent with the public need and to promote scenic views, while protecting natural resources and mitigating risk from natural hazards.

Policy 9.1.6.1: The City shall, where appropriate and to the extent physically and financially feasible while considering impacts from sea level rise and flooding, maintain and preserve all public access and water-related recreational facilities and shall inventory existing public access to the lagoon and water-related recreational facilities to identify deficiencies and opportunities.

Policy 9.1.6.2: The City shall encourage the preservation of recreational and commercial working waterfronts as defined in section 342.07, F.S.

Policy 9.1.6.3: The City shall adopt Brevard County's marina siting criteria by 2022.

Policy 9.1.6.4: The City shall continue to consider the purchase of frontage areas along the Indian River Lagoon, as needed, to ensure adequate public access, improve the estuarine area and serve as areas to mitigate impacts from storm surge, sea level rise and flooding.

Policy 9.1.6.5: The City shall continue to seek County, state and federal programs to provide funding for purchase of riverfront property.

Policy 9.1.6.6: The City shall coordinate with the County to ensure bikeway linkages to waterfront parks and public water access.

Policy 9.1.6.7: The City shall continue to coordinate with other coastal cities and Brevard County to investigate and implement equitable measures to promote the provision or funding of public access ways to the Indian River Lagoon by new development.

Policy 9.1.6.8: The City shall encourage, through the development review and approval process, the voluntary dedication of access to public waterways including designated scenic areas, conservation easements and other green space or natural areas with infrastructure strictly limited to that necessary for safe public access.

GOAL 9.2: The City shall, as practically and financially feasible, establish and implement strategies for new development, redevelopment and investment in public facilities, utilities and infrastructure to protect and mitigate losses to human life and property in areas subject to natural disasters, flooding, and sea level rise.

Objective 9.2.1: **Coastal High Hazard Area (CHHA).** The City shall continue to direct population concentrations away from the CHHA through implementation of the future land use map, land development code and through the development review and approval process.

Policy 9.2.1.1: The Coastal High Hazard Area is delineated as the area below the elevation of the Category 1 storm surge line as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model.

Policy 9.2.1.2: The City shall continue to evaluate non-conforming land uses within the CHHA.

Policy 9.2.1.3: In order to continue to direct population away from the CHHA, any increase of density for properties within the CHHA shall generally be discouraged from the time of this plan's adoption.

Objective 9.2.2: Development, redevelopment, rebuilds, retrofits and additions in the City shall be planned and managed through strategies and design principles that are consistent with sound planning practices that protect life and property from the effects of flooding, storm surge and related impacts of sea level rise and that protect the long-term financial viability of the City.

Policy 9.2.2.1: All new development and redevelopment shall be consistent with, or more stringent than, the flood resistant construction requirements in the Florida Building Code and applicable flood plain management regulations set forth in 44 C.F.R. part 60.

Policy 9.2.2.2: The City shall require site development techniques that encourage more efficient and climate resilient development practices that include, but are not limited to:

- Low impact development techniques on private and public property that provide for site design, engineering and stormwater management to reduce stormwater runoff, encourage greater onsite storage, reuse or absorption and mitigate flood impacts such as pervious pavement, native vegetation, rain gardens or barrels, etc.
- Prioritization of living shoreline installation and maintenance.
- Allowance of specialized fortification techniques as recommended by the Florida Green Building Council.

Additionally, the City shall continue to further explore standards that increase the City's coastal resiliency, such as requiring development to build at least three feet above the area's Base Flood Elevation or reducing the development's total amount of required parking while increasing the facility's potential for water absorption and retention.

Policy 9.2.2.3: The City shall utilize, but not be limited to, the following tools, site development techniques and strategies for use within the coastal planning area and areas within the 100-year floodplain to implement and integrate in order to mitigate flooding and effects of sea level rise and storm surge in order to protect property, to the greatest physical and financial extent possible:

(1) Green street techniques to divert, capture or absorb water in a way to reduce flood impacts on private property, including, but not limited to street trees, landscaped areas and vegetative curb extensions, bioswales, vernacular streetscapes, and roadway re-design.
(2) Hybrid stormwater masterplan to integrate a combination of green and gray infrastructure, including but not limited to bioretention, increasing pipe capacity, stormwater parks, rain gardens/bioswales, pumps, and water flow diversion strategies.
(3) Underground utilities in vulnerable and feasible areas;
(4) Establish new parking standards and parking lot site plan design with greater water capture techniques;
(5) Increase of set-back lines for properties in the CPA
(6) Natural dune restoration
(7) Permeable pavement
(8) Dry and Wet flood proofing of structures
(9) Green/Open space

Policy 9.2.2.4: The City shall not allow nursing homes, assisted living facilities, hospitals, or other group homes to be located in the Coastal Planning Area.

Objective 9.2.3: Plan and Process Consistency. The City will work to institute the practice of adapting and mitigating the built environment to address natural hazards, flooding, and impacts from sea level rise across all plans, policies, procedures and coordination with partner agencies.

Policy 9.2.3.1: The City shall audit and update all plans, policies, processes and other related documents to be consistent with the peril of flood goals, objectives and policies set forth in the comprehensive plan.

Policy 9.2.3.2: The City will work with City staff and the public to integrate and implement the 2019 City of Cocoa Resilience Action Plan.

Policy 9.2.3.3: The City, as per its adoption of the East Central Florida Regional Resilience Action Plan, will continue to collaborate regionally with other entities and stakeholders to advance resilience across the region.

Policy 9.2.3.4: The City, as per adoption of the East Central Florida Regional Resilience Action Plan will integrate the regional approach to sea level rise planning with its plans, procedures and policies. The City will consider a range of rise based upon the vulnerability, allowable risk, and project service life and the forecast project "in-service" date of a facility or development. The range will include a minimum rise of 5.15 feet by 2100 (2013 USACE High) with an upper range of 8.48 feet by 2100 (2017 NOAA High). Short-term planning should consider impacts out to 2040, 1.22 -1.85 feet (20-year planning horizon), medium-term planning should consider impacts out to 2070 (2.85-4.47 feet) (50-year planning horizon), and long-term planning should extend out to 2100 (80-year planning horizon).

Policy 9.2.3.5: The City shall assess current policies, ordinances and codes to increase mixed-use development in areas outside the 100-year flood plain, sea level rise, and flooding.

Objective 9.2.4: Evacuation Times. The City shall cooperate with Brevard County to ensure evacuation times are maintained or reduced and to ensure efficient evacuation of threatened residents to areas of safety in the event of a natural disaster.

Policy 9.2.4.1: In the event of a hurricane emergency the City will respond to the direction of the Brevard County Office of Emergency Management in the implementation of emergency plans. Coordinated emergency activities will include, but are not limited to warning, public information, communications, evacuation, public shelters and related welfare services.

Policy 9.2.4.2: The City will continue to require that development and redevelopment activities minimize the risks to life and property from natural disasters by evaluating the effects on evacuation times within the hurricane vulnerability zones.

Policy 9.2.4.3: The City shall generally discourage any increase in density within the Coastal High Hazard Area.

Objective 9.2.5: Post-Disaster Redevelopment Plan. The City shall develop a post-disaster redevelopment plan (PDRP) to establish, at minimum, long-term policies regarding redevelopment, infrastructure, densities, nonconforming uses, and future land use patterns.

Policy 9.2.5.1: The City shall develop a City specific post-disaster redevelopment plan by 2024.

Policy 9.2.5.2: Appropriate redevelopment activities in the Coastal Planning Area will be conducted through means which will institute appropriate resilience planning for private property in coordination with goals, objectives and policies consistent with the comprehensive plan,

mitigate conditions hazardous to life and property; identify, preserve, and improve historic resources and significant historic structures, sites, neighborhoods, and districts; preserve and improve natural resources; encourage recreational opportunities; and encourage appropriate commercial uses as physically and financially feasible when considering increasing levels of flooding, storm surge and the effects of sea level rise.

Policy 9.2.5.3: Guidelines for post-disaster redevelopment and hazard mitigation will continue to be developed and included in the City's land development regulations. These guidelines will be designed to reduce or eliminate the exposure of human life and limit repeat damage to public and private property due to hurricane hazards, account for the future impacts of sea level rise, and to promote the long-term economic and fiscal viability of the City. The guidelines will incorporate Brevard County's Local Mitigation Strategies into recommendations on hazard mitigation and other applicable interagency reports, as well as applicable chapters of the City Code or articles thereof.

Policy 9.2.5.4: Post-disaster redevelopment will be coordinated jointly by the Community Development, Public Works, and Code Enforcement departments and, if applicable, with the Federal Emergency Management Agency. Priority will be given to those post-disaster tasks needed to protect the health and safety of the public, restore public services and repair damaged infrastructure.

Policy 9.2.5.5: The City shall prepare inventories of properties for acquisition and removal, including repetitive loss properties and establish clear priorities for the use of acquisition resources.

Policy 9.2.5.6: The City shall continue to participate in the National Flood Insurance Program Community Rating System administered by the Federal Emergency Management Agency to achieve flood insurance premium discounts for their residents.

Policy 9.2.5.7: Procedures for post-disaster action shall include a system for distinguishing between immediate repair and clean-up actions needed to protect the public health and safety, versus long-term repair and redevelopment activities.

Policy 9.2.5.8: The City requires that any structure, including those abandoned, sustaining damage in excess of 50% of the building's assessed value comply with all City ordinances and current standards.

Policy 9.2.5.9: Recommendations provided by local agencies and in interagency hazard mitigation reports will be reviewed as available and will be implemented as feasible.

Policy 9.2.5.10: Temporary-building moratoriums may be declared in the coastal planning area when 50% or more of the structures have been damaged by 50% or greater to assess the impacts and feasibility of redevelopment.

Objective 9.2.6: Disaster Preparedness for Entities Critical to Redevelopment. The City shall develop and implement pre-and-post disaster preparedness measures critical for redevelopment.

Policy 9.2.6.1: The City shall work with local businesses and organizations to aid in disaster planning and recovery through the development of Continuity of Operations Plans and other preparedness strategies including employee coordination.

Policy 9.2.6.2: The City shall work with local merchant associations to provide an information program about hurricane preparedness for local businesses.

Policy 9.2.6.3: As part of outreach, education and other preparedness activities, the City shall assess the development of a program to work with local businesses to certify them as hurricane prepared which will help the community recover more quickly following a storm.

Objective 9.2.7: Historically and Archaeologically Significant Resources. The City shall protect and preserve architecturally, historically and archaeologically significant resources in the City's coastal planning area through the adoption of the land development regulations, zoning code provisions, a program for public and private site acquisition, within the City's funding capabilities and with the owner's consent, and sensitive reuse of historic resources.

Policy 9.2.7.1: The City shall protect historical and archaeological resources in the CPA, as physically and financially feasible, while considering future impacts, long-term strategies, and cost-benefit of the protection or adaptation measures.

Policy 9.2.7.2: The City shall compile a list of all properties which have been designated as historically, architecturally or archaeologically significant on a local, state or national basis within the coastal planning area.

Policy 9.2.7.3: The City shall discourage development activities that have the potential of endangering historic resources located within the coastal planning area.

Policy 9.2.7.4: The City will encourage the retention of all historic properties in the City, with sensitive, adaptive reuse being examined as an alternative to demolition. Rehabilitation, restoration, relocation, mitigation, and reuse plans and designs will be guided by the recommended approaches identified in objective criteria published by governmental

agencies, preservation organizations and which the City may adopt from time to time.

Policy 9.2.7.5: The City will encourage individuals, groups and organizations to submit reliable information about the history or architectural historical significance of individual properties in the City as an aid in the documentation of their significance.

Policy 9.2.7.6: The City will prepare an information document containing an identification of historic resources in the City, to include address, map location, brief notation of historical significance, landmark status, ownership (Public/Private), vulnerabilities and other relevant information for public information purposes. The City will seek state funds for the preparation of the document.

Policy 9.2.7.7: The City will participate, within its financial resources, with other governmental agencies, civic organizations, business groups and interested persons to purchase historic resources with the owner's consent and to accept responsibility for restoration in support with the property owner, in an "adopt-a-house" or similar program for the purpose of maintaining historic properties in good repair, form and appearance, and for functional uses.

Objective 9.2.8: Infrastructure in the Coastal Planning Area. Level of service standards and service areas for the City as a whole, as adopted in the Capital Improvements Element, may apply to the infrastructure within the coastal planning area but with the need to consider long-term implications of increased hazards due to sea level rise and flooding and balances design considerations for the current and future impacts of sea level rise and flooding with the benefits and challenges of incorporating the impacts and maintenance during the service-life utility of infrastructure.

Policy 9.2.8.1: Phasing of infrastructure will occur according to the Capital Improvements Element and in accordance with development regulations adopted subsequent to this plan with specific consideration given to protection of coastal resources.

Policy 9.2.8.2: The level of service standards adopted in other elements of this Comprehensive Plan may apply within the coastal planning area depending on evaluation of factors such as cost-benefit analysis that considers, among other factors, number of times infrastructure has been damaged, upgraded, or rebuilt; number of people served by the infrastructure; whether alternatives for the services provided by the infrastructure are present; criticality of the infrastructure for protection of safety; potential increased hazards to first responders; etc.

Policy 9.2.8.3: Consideration shall be given to alternative locations of infrastructure, hardening, elevating or other strategies if located in the coastal planning area to reduce potential public losses.

Policy 9.2.8.4: Infrastructure and roadway improvements within already developed public rights-of-way will be maintained as determined feasible and reasonable by City policy in good-faith attempts.

Policy 9.2.8.5: When constructing or reconstructing utilities or infrastructure, the City shall assess vulnerabilities and resilience to sea level rise, flooding and storm surge, and identify cost-effective strategies to minimize exposure and reduce impacts.

Policy 9.2.8.6: The City shall prioritize the use of Green Street techniques (reference Policy 9.2.2.2 (1)) within the Stormwater Master Plan, on public rights-of-way, to the extent financially and physically possible, to alleviate flood impacts to streets and buildings and maintain its level of service standards.

X - RECREATION AND OPEN SPACE ELEMENT

Serving the Community

GOAL 10.1: Recreational Provisions. To ensure that Cocoa residents have access to a full range of recreational opportunities.

Objective 10.1.1: The City will coordinate resources with Brevard County Parks and Recreation, the Brevard County School Board, and private resources, to meet the projected demand for parks, recreational facility and open space needs for the residents of Cocoa.

Policy 10.1.1.1: Continue the inter-governmental coordination involved in the established Brevard County Parks and Recreation District 4.

Policy 10.1.1.2: Continue to work with the School Board through the District 4 Parks and Recreation Office to expand the use and availability of School facilities to the citizens of Cocoa.

Policy 10.1.1.3: The City shall adopt the following Level of Service (LOS) for recreation needs:

Neighborhood Parks, Community Parks, and Urban District Parks	1.25 acres per 1000 population

Policy 10.1.1.4: The City shall periodically update its inventory of all recreational facilities in order to compare the level of maintenance and quality of those facilities with surrounding communities.

Policy 10.1.1.5: The City shall ensure the provision of a range of different types of facilities for passive outdoor recreational activities including nature trails or boardwalks, waterway trails, interpretive displays, educational programs, and/or wildlife observation areas.

Policy 10.1.1.6: The City will continue to coordinate with local service organizations annually to encourage participation in landscaping, supporting, and establishing recreational facility development.

Policy 10.1.1.7: The City will continue to work with Brevard County Parks and Recreation District 4 to achieve multiple community benefits during the development of parks and recreational areas.

Policy 10.1.1.8: The City will ensure that all recreational facilities are well maintained and redeveloped as needed.

Policy 10.1.1.9: The City will consider the creation of a Recreation Zoning District in the land development code.

Objective 10.1.2: The City shall provide accessibility to the recreational facilities and natural resources of the City for the enjoyment of all users.

Policy 10.1.2.1: The City will continue to work with the Brevard County Parks and Recreation District 4 to ensure the accessibility of recreational facilities for the handicapped, elderly and economically disadvantaged.

Policy 10.1.2.2: All new development of recreational facilities in the City shall be required to meet the Florida Accessibility Code.

Policy 10.1.2.3: The City will continue to work with the Brevard County Parks and Recreation Department to bring all existing recreation facilities into compliance with the Florida Accessibility Code.

Policy 10.1.2.4: The City will consider the siting of future Neighborhood Parks based on a walkable distance from residential dwellings to ensure an adequate dispersal of parks throughout the City.

Objective 10.1.3: The City shall provide interconnectivity between recreational facilities and the surrounding community.

Policy 10.1.3.1: New residential development providing recreational facilities shall be required to provide bicycle and pedestrian connections (such as sidewalks and bike paths), between all forms of recreation and the surrounding community.

Policy 10.1.3.2: Bicycle parking facilities shall be required at all new parks.

Policy 10.1.3.3: The City will work with the Brevard County Parks and Recreation Department to ensure that bicycle parking facilities are provided at all existing recreation facilities.

Policy 10.1.3.4: The City will follow the adopted WaterFront Master Plan as a supplemental plan which supports the connectivity objectives of the Comprehensive Plan.

Policy 10.1.3.5: The City will work to incorporate connectivity wherever feasible between recreational facilities in the City and the existing Brevard County Greenways and Trails Master Plan system.

Policy 10.1.3.6: The City will consider developing and adopting its own Parks and Recreation Master Plan, as well as a Pedestrian Routes and Bike Trails Master Plan.

GOAL 10.2: Open Space Provisions. Ensure the conservation of open space areas in the city to provide aesthetically pleasing buffer areas and visual open space, to serve as wildlife habitats, to act as groundwater recharge areas, to give definition to the urban area, and to enhance and preserve natural resources.

Objective 10.2.1: The land development regulations will include provisions for addressing the open space needs of the City.

Policy 10.2.1.1: The City will develop an ordinance which will define open space and set standards for open space preservation in local land development regulations.

Policy 10.2.1.2: The City will approve locating environmentally sound public access to conservation areas, nature trails, parks and passive recreational uses within dedicated upland buffers to wetlands in accordance with the policies in the Conservation Element, and only when the City determines that such uses will not adversely affect the buffers' primary functions of wetland buffering, provision of transition zone wildlife habitat, noise buffering, filtration/storage of overland stormwater runoff, visual screening and other applicable benefits. The City will not approve other uses for the buffer zone.

Policy 10.2.1.3: The City will coordinate with pertinent state and wildlife agencies and other agencies necessary to identify natural area greenways and wildlife corridors and to link existing public parks, and provide similar areas for conservation purposes.

Policy 10.2.1.4: The City shall provide efforts to coordinate the resources of other public and private natural resource preservation agencies, and will enhance efforts to fiscally support and encourage a program of public land acquisition in conjunction with current land use planning and development regulations and to create a system of natural area greenways and wildlife corridors.

Policy 10.2.1.5: The City will pursue acquisition of appropriate parcels of land through the Florida Forever Program or other appropriate City/State partnerships for the protection of environmentally sensitive lands, which protect unique, rare and/or endangered habitat, assure survival of listed wildlife species, protect scenic highway and water corridors and their shoreline ecosystems and provide public access and open space.

Policy 10.2.1.6: Uses allowed in open space and conservation areas within the City shall be limited to those compatible with and which preserve the natural character of the area, such as passive recreation, observation areas, hiking/biking and nature trails, canoeing/kayaking, primitive camping and environmental education facilities.

Policy 10.2.1.7: The City of Cocoa shall pursue a program to identify, ensure preservation of, and provide appropriate public access to areas of natural beauty and scenic importance.

Policy 10.2.1.8: The City will consider adopting the Department of Environmental Protection's definitions for "Conservation Open Space" and "Urban Open Space" as separate uses from recreation, which will be used to conserve potentially environmentally sensitive lands as well as wetlands and floodways; and will establish appropriate safeguards to ensure the future preservation of such lands in a natural state with minimal man-made impact.

Policy 10.2.1.9: The City will consider the creation of a Conservation Zoning District in the land development code.

XI - PUBLIC SCHOOLS FACILITIES ELEMENT



Serving the Community

GOAL 11.1: The City of Cocoa will ensure, through effective planning and coordination with the School District, that adequate school capacity is available to accommodate enrollment demand for City residents.

Objective 11.1.1: The City shall ensure adequate public school facilities are available in the City of Cocoa by adopting and implementing a school concurrency management system to address both short and long term planning needs.

Policy 11.1.1.1: The City adopts and shall utilize the following Level of Service (LOS) standards for public schools adopted by the School District. The permanent capacity of a school shall be that number contained in the Florida Inventory of School Houses (FISH) maintained by the Florida Department of Education (FDOE). Currently, the LOS for the School District is 100%.

Policy 11.1.1.2: When necessary, the School Board shall initiate appropriate program changes, boundary adjustments, and/or additional capacity to prevent the tiered LOS standards from being exceeded.

Policy 11.1.1.3: Concurrency shall be measured and applied using a geographic area known as a Concurrency Service Area (CSA) which shall coincide with the school attendance boundaries adopted by the School District. Either the City or the School District may propose a change to the CSA boundaries. The following procedures shall be used for modifying the CSA map:

A. The School District will transmit proposed CSA map modifications, with supporting data and analysis, to the City, other local governments, and the Capital Outlay Committee (COC). Any proposed change to a CSA shall require a demonstration by the School District that the change complies with the public school LOS standard and that utilization of school capacity is maximized to the greatest extent possible, taking into account transportation costs, court approved desegregation plans and other relevant factors. Adjustment measures to achieve the LOS standard shall include school boundary adjustments, shifts to contiguous CSA's with available capacity, proportionate share mitigation (land donation or payment), or construction of a traditional or charter school or permanent expansions.

B. The City and the COC will review the proposed modification of the CSA and send their comments to the School District within 45 days of receipt of the proposed change.

C. The modification of a CSA shall be effective upon adoption by the School Board.

Policy 11.1.1.4: For purposes of determining a proposed development's impact, the total number of students expected to be generated by the development, the projected number and type of residential units of

the proposed development shall be multiplied by the School District Student Generation Multiplier (SGM). The SGM shall be reviewed annually and amended as necessary to reflect the most recent district-wide generation rates.

Policy 11.1.1.5: The City shall participate with the School District, utilizing the following process, in considering and processing changes in the use of schools:

A. Following a determination by the School District that a school change is appropriate, considering the appropriate use of the school and utilization requirements, the School District shall transmit the proposed school use change and the associated data and analysis in support of the requested change to the Capital Outlay Committee and Staff Working Group.

B. The Capital Outlay Committee and Staff Working Group shall review the proposed changes to the school use, along with the supporting data and analysis, and send their comments to the School District within forty five (45) days of receipt.

C. The change in school use shall become effective upon final approval by the School Board.

Objective 11.1.2: The City shall ensure adequate public school capacity exists to accommodate new students generated by residential development. The City shall forward all applications for a residential development permit to the School District for a school concurrency evaluation and determination.

Policy 11.1.2.1: The City shall adopt necessary and appropriate provisions into its Land Development Regulations (LDR) to implement school concurrency management as contemplated in the Interlocal Agreement with the Brevard County School District and consistent with the objectives and policies of its Public Schools Facilities Element.

Policy 11.1.2.2: The City shall not approve any non-exempt residential development application for a new residential preliminary subdivision, site plan or functional equivalent until the School District School has issued a School Capacity Availability Determination Letter (SCADL) verifying available capacity.

Policy 11.1.2.3: The City shall consider the following criteria to exempt residential uses from the requirements of school concurrency:

A. Single family lots of record existing prior to the commencement date of the School Concurrency Program.

B. Any new residential development that has preliminary subdivision or site plan approval or the functional equivalent

for a site specific development order prior to the commencement date of the School Concurrency Program.

C. Any amendment to any previously approved residential development that does not increase the number of dwelling units or change the type of dwelling units (single-family to multi-family, etc.).

D. Age restricted communities with no permanent residents under the age of 18. Exemption of an age restricted community will be subject to a restrictive covenant limiting the age of permanent residents to 18 years and older.

E. The replacement of an existing residential dwelling unit, including those partially or entirely damaged, destroyed or demolished, with a new unit of the same type and use provided that the existing unit has been occupied at some time during the five-year period immediately preceding the construction of the new unit.

Policy 11.1.2.4: The City, through its land development regulations, and in conjunction with the School District, shall establish a school concurrency review process for all residential projects that are not exempt under Policy 11.1.2.3.

The minimum process requirements shall be as follows:

A. A residential development application including a School Impact Analysis (SIA) is submitted to the City for review.

B. The City determines application is sufficient and complete and transmits the SIA application to the School District for review.

C. The School District reviews the SIA application for available capacity and issues a School Capacity Availability Determination Letter (SCADL) to the City consistent with the following:

1. Where capacity is available within the affected CSA, the School District shall issue a SCADL verifying available capacity.

2. Where capacity is not available within the affected CSA, capacity availability in one or more contiguous CSAs shall be reviewed.

3. If capacity is available in one or more of the contiguous CSAs, the School District shall issue a SCADL verifying available capacity in the adjacent CSAs.

4. If capacity is not available in the contiguous CSAs, the School District shall issue a SCADL indicating the development is not in compliance with the adopted LOS and offers the developer a 90-day timeframe in

which to negotiate with the City and the School District regarding mitigation options or alternatives.

Policy 11.1.2.5: New school capacity within a CSA which is in place or under actual construction within three (3) years after the issuance of final subdivision or site plan approval, or the functional equivalent, shall be counted as available capacity for the residential development under review.

Policy 11.1.2.6: The City, in conjunction with the School District, shall review applications for proportionate share mitigation projects to add school capacity necessary to accommodate the impacts of a proposed residential development. Mitigation options may include, but are not limited to:

A. Contribution of land or payment for land acquisition in conjunction with the provision of additional school capacity; or

B. Mitigation banking based on the construction of a public school facility in exchange for the right to sell capacity credits; or

C. Donation of buildings for use as a primary or alternative learning facility; or

D. Renovation of existing buildings for use as learning facilities; or

E. Construction or expansion of permanent student stations or core capacity; or

F. Construction of a public school facility in advance of the time set forth in the School District's Five-Year District Facilities Work Program.

Policy 11.1.2.7: The estimated cost to construct the mitigating improvement(s), consistent with the mitigation options listed in Policy 11.1.2.4, shall be calculated to reflect, and consider, the estimated future construction costs at the time of the anticipated construction.

A. Improvements contributed by the developer shall receive school impact fee credit.

B. The cost difference between the developer's mitigation costs and the impact fee credit, if greater, shall be the responsibility of the developer.

Policy 11.1.2.8: Consistent with Policy 11.1.2.4.C.4, the City and the School District shall provide a 90-day negotiation period to allow for the review and negotiation of proportionate share mitigation proposals offered by a developer.

A. Where mitigation is approved, the City and the School District shall enter into a binding and enforceable agreement with the developer, the improvement(s) will be included in the School District's annually adopted Five-Year District Facilities Work Program, and the improvement(s) will be reflected in the next update to the Capital Improvements Element.

B. Where mitigation is denied, the City must deny the application for residential based upon insufficient school capacity being available.

C. The City shall not issue any permit(s) for a residential development until receiving confirmation of available school capacity in the form of a SCADL from the School District.

Policy 11.1.2.9: The City shall notify the School District when an approved residential development has paid impact fees and when the development order for the residential development expires.

Policy 11.1.2.10: The City may allow a landowner to proceed with development of a specific parcel of land notwithstanding a failure of the development to satisfy school concurrency, if all the following factors are shown to exist:

A. The proposed development would be consistent with the future land use designation for the specific property and with pertinent portions of the City of Cocoa Comprehensive Plan.

B. The CIE and the Brevard School Board's Work Plan provide for school facilities adequate to serve the proposed development or the project includes a plan that demonstrates that the capital facilities needed as a result of the project can be reasonably provided.

C. The landowner is assessed a proportionate share of the cost of providing the school facilities necessary to serve the proposed development.

Objective 11.1.3: Beginning with an effective date of 2009 and no later than December 1st of each year thereafter, the City will include in its Capital Improvements Element (CIE), the School District's annually updated five-year schedule of capital improvements as adopted by the School Board, which identifies school facility capacity projects necessary to address existing deficiencies and meet future needs based upon achieving and maintaining the adopted level of service standard for schools.

Policy 11.1.3.1: The City of Cocoa hereby adopts by reference the School District's Five-Year District Facilities Work Program for the planning period 2018-2019 through 2022-2023, approved on October 23, 2018.

Policy 11.1.3.2: The City shall annually update the Capital Improvements Element to incorporate the School District's annually adopted Five-Year District

Facilities Work Program's "Summary of Capital Improvements Program" and "Summary of Estimated Revenue" Tables which shall identify school facility capacity projects which are necessary to address existing deficiencies and meet future needs and demonstrate the School District can maintain the adopted LOS standard for the five-year planning period, as supported by data and analysis.

Policy 11.1.3.3: The City shall, in conjunction with the School District, other local governments and through the Capital Outlay Committee, review school enrollment projections and provide an annual update of the process, including the Public School Facilities Element and maintain a public school facilities map series which are coordinated with the City's Future Land Use Map or Map Series, including the planned general location of schools and ancillary facilities for the five-year planning period and the long-range planning period. At a minimum, the Map Series shall include:

A. Concurrency Service Area Map;
B. Existing Public School Facilities Map - type and location of ancillary plants;
C. Five-Year Planning Period Map - generally planned public school facilities and ancillary plants; and
D. Long Range Planning Period Map – generally planned areas of future public school facility needs.

Objective 11.1.4: The City shall participate with the School District, through its membership on the Capital Outlay Committee (COC), to monitor the implementation and administration of school concurrency as well as to further coordinate planning and school concurrency issues.

GOAL 11.2: The City, working cooperatively with the School District, shall ensure new public schools are appropriately located and integrated into the community where they provide the greatest maximum benefit to the residents of the City and are valued as a vital community resource and amenity.

Objective 11.2.1: New public schools built within the City will be coordinated with the School District to ensure consistency and conformity with the City's adopted Comprehensive Plan and its implementing land development regulations except where exempted by statutory authority, such as local landscape ordinance requirements.

Policy 11.2.1.1: The School District shall avoid locating new public schools on the periphery of the City's boundaries or in areas that would encourage urban sprawl.

Policy 11.2.1.2: The City shall review construction and/or site plans in a timely manner and provide comments to the School District as to the consistency with the City's adopted comprehensive plan and implementing land development regulations.

Objective 11.2.2: New public schools built within the City will be coordinated with the School District to ensure that proposed school facilities are located proximate to existing and proposed residentially developing areas, within appropriate existing and future land uses; serve as community focal points; are co-located with other appropriate public facilities; will have needed supporting public facilities and services; and be compatible with surrounding land uses.

Policy 11.2.2.1: The City, in conjunction with the School District, shall jointly determine the need for, and timing of, on-site and off-site improvements necessary to support a new school.

Policy 11.2.2.2: The City shall enter into an agreement with the School Board identifying the timing, location, and the party or parties responsible for the planning, constructing, operating, and maintaining off-site improvements necessary to support a new school or school improvement to ensure that the necessary infrastructure is in place prior to or concurrent with construction.

Policy 11.2.2.3: The City shall encourage the location of schools near residential areas by:

A. Assisting the School District in the identification of funding and/or construction opportunities (including developer participation or City capital budget expenditures) for sidewalks, traffic signalization, access, water, sewer, drainage and other infrastructure improvements.

B. Reviewing and providing comments on all new school sites including the compatibility and integration of new schools with surrounding land uses.

C. Allowing schools within all residential land use categories.

Policy 11.2.2.4: The City, in conjunction with the School District, shall seek opportunities to co-locate schools with public facilities, such as parks, libraries, and community centers, as the need for these facilities is identified.

Policy 11.2.2.5: The City, in conjunction with the School District, shall identify issues relating to public school emergency preparedness, such as:

A. The determination of evacuation zones, evacuation routes, and shelter locations.

B. The design and use of public schools as emergency shelters.

C. The designation of sites other than public schools as long-term shelters, to allow schools to resume normal operations following emergency events.

XII - CONSERVATION ELEMENT

Serving the Community

GOAL 12.1: Conserve, protect and appropriately manage the natural resources and environmentally sensitive areas of the City of Cocoa to ensure the highest environmental quality possible.

Objective 12.1.1: Environmentally Sensitive Areas. At a minimum, Environmentally Sensitive Areas shall contain one or more of the following natural resources:

A. Rare, threatened or endangered wildlife and/or vegetation, e.g., wildlife (scrub jay, osprey, manatee); vegetation (American chaffseed). A complete list is defined by the U.S. Fish and Wildlife Service, Florida Fish and Wildlife Conservation Commission and the East Central Florida Regional Planning Council;

B. Rare and unique upland habitat or Florida Natural Areas Inventory (FNAI) "imperiled" or "critically imperiled" communities, e.g., sand pine scrub;

C. Wetlands or deepwater habitats;

D. Special geologic formations;

E. Artifacts of archaeological or historic significance;

F. Within floodways and areas subject to flooding.

Policy 12.1.1.1: The City shall coordinate with appropriate governmental entities to protect environmentally sensitive lands which extend into adjacent municipalities. This coordination shall include the Florida Natural Areas Inventory, East Central Florida Regional Planning Council (ECFRPC), the Florida Fish and Wildlife Conservation Commission, St. John's River Water Management District (SJRWMD) and based on the information generated from the data.

Objective 12.1.2: Air Quality. Air quality in the City of Cocoa shall meet or exceed the minimum criteria set by the Florida Department of Environmental Protection (FDEP).

Policy 12.1.2.1: Roadway segments and intersections under the city's jurisdiction which are predicted to approach or exceed FDEP allowable maximum concentrations for air pollutants shall be given priority in the planning of transportation improvements.

Policy 12.1.2.2: The City shall coordinate with the County, adjacent municipalities and the Florida Department of Transportation in the monitoring of transportation related air quality impacts, and the planning of improvements needed on regionally significant roadways to rectify observed or predicted air quality problems on those roads.

Policy 12.1.2.3: New development, whether public or private, shall be designed to accommodate and encourage alternative modes of transportation to

the maximum extent practical. Appropriate measures may include, but are not limited to construction of bicycle facilities along new roadways; construction of pedestrian sidewalks along roads and within developments; provision of passenger shelters for users of mass transit.

Policy 12.1.2.4: The City shall encourage the establishment and use of mass transit transportation alternatives wherever such alternatives cannot be shown to be infeasible or impractical.

Policy 12.1.2.5: In order to reduce peak traffic loads on roadways that contribute to air quality degradation, the City shall encourage government and private sector businesses to adopt alternative work schedules where they are practical.

Policy 12.1.2.6: The City shall ensure, through the development approval and monitoring process, that new facilities which are subject to permitting as major air pollution sources by the FDEP are designed to use and maintain the best available emission control technology in order to reduce adverse impacts from such facilities on the environment.

Policy 12.1.2.7: The City shall promote planned unit development and mixed-use development to reduce the potential for mobile source emissions.

Objective 12.1.3: Groundwater. The City shall continue to reduce per capita consumption of fresh groundwater by its residents through conservation and reuse of existing water supplies, and through the establishment and use of non-potable supplies.

Policy 12.1.3.1: The City shall regulate the design, installation and operation of air/water heat pumps in a manner consistent with County policy, in order to reduce the wasteful use of groundwater by such systems.

Policy 12.1.3.2: The City shall require the use of reclaimed wastewater for irrigation or other non-potable uses wherever such water is reasonably available to water users.

Policy 12.1.3.3: In order to reduce the amount of water used in the irrigation of landscaping, the City shall encourage the use of native or drought resistant plants in the landscaping of new development or redevelopment.

Policy 12.1.3.4: The City shall continue to encourage conservation of water by supporting the retrofit of low-volume plumbing fixtures in existing development, and by requiring the use of such fixtures in new development and re-development.

Policy 12.1.3.5: New development shall not be approved unless a demonstrably secure source of potable and/or non-potable water is available to meet the projected water use demands of the development.

Policy 12.1.3.6: The City shall assist the St. Johns River Water Management District (SJRWMD) in the enforcement of the provisions of emergency water shortage plans at those times when an official emergency water shortage declaration is made by the SJRWMD Governing Board.

Policy 12.1.3.7: The City shall encourage, and to the extent possible, require use of *Florida friendly yard or landscape* (as provided for in Section 373.185, F.S.) that incorporates the Best Management Practices and philosophies described in "A Guide to Florida-Friendly Landscaping", Third Edition, 2006, as may subsequently be amended.

Policy 12.1.3.8: The City Code will require all new development and substantial redevelopment to connect to the reclaimed water system, if available. If not available, but availability is planned within five years, require installation of dry lines for future connection to the reclaim system.

Policy 12.1.3.9: The City shall disseminate water conservation information to the public consistent with the adopted City of Cocoa Water Supply Facilities Work Plan.

Policy 12.1.3.10: The City shall implement water conservation practices consistent with the adopted City of Cocoa Water Supply Facilities Work Plan.

Policy 12.1.3.11: The City shall continue to coordinate with water supply recipients concerning the sharing of information to meet the on-going water supply needs.

Objective 12.1.4: Water Quality Protection. Surface and groundwater quality in the City of Cocoa shall meet or exceed the minimum criteria set by the Florida Department of Environmental Protection.

Policy 12.1.4.1: The City shall establish site design standards and regulations for the control of stormwater runoff to ensure the adequate treatment of stormwater from all new development or re-development prior to its discharge to surface waters, consistent with the policies contained in the Stormwater Management Element and the Surface Water Management Plan.

Policy 12.1.4.2: The City shall identify means for reducing the volume of untreated stormwater discharged to surface waters, as part of the Surface Water Management Plan, with emphasis also being placed on the treatment of stormwater being discharged from lands and storm sewer systems in the City. The Surface Water Management Plan will identify priorities among drainage areas for providing treatment for stormwater.

Policy 12.1.4.3: The City shall ensure that land uses which require the routine application of pesticides or herbicides (e.g., agriculture, golf courses)

maintain a groundwater monitoring program designed to detect and eliminate contamination of the surficial aquifer by those substances. Upon detection of contamination, the City shall require the contaminator to discontinue the contamination and to take corrective action where feasible.

Policy 12.1.4.4: In order to protect the groundwater from contamination by hazardous wastes or materials, the City shall require that industrial parks which include tenants who use hazardous materials or generate hazardous wastes: (a) prepare hazardous materials spill containment and clean-up plans; (b) design drainage and sewer facilities to prevent contamination of soils, groundwater or surface waters from hazardous materials spills; and (c) provide interim storage facilities for hazardous materials generated on-site.

Policy 12.1.4.5: In order to reduce the potential for salt-water intrusion, the City shall require the use of native or drought-resistant plants, as appropriate, in the landscaping of new development or re-development.

Policy 12.1.4.6: The City shall monitor and restrict, if necessary, activities and land uses known to adversely affect the quality of identified water resources.

Objective 12.1.5: Endangered & Threatened Species. The distribution and abundance of endangered and threatened species within the City will be identified, and the habitat of viable populations of any such species shall be protected and managed, or the impacts to such habitat shall be adequately mitigated, so as to ensure their continued existence.

Policy 12.1.5.1: The City shall sponsor a biological survey of natural habitats within municipal limits to identify areas of suitable habitat for listed species, and to estimate population size and viability for those species which do occur.

Policy 12.1.5.2: Areas known to support a viable population of a listed species, or which provide habitat of a size and character that is suitable for long term protection of a listed species, shall be given priority in the acquisition of public parks or preserves. Any such park shall be managed in a manner consistent with preservation of the listed species and its habitat.

Policy 12.1.5.3: The City shall seek the cooperation of government and private conservation agencies in the preservation of lands which harbor a viable population of one or more listed species and their habitat.

Policy 12.1.5.4: Development approval in areas which have been identified as providing habitat of a size and character that is suitable for long term protection of a viable population of one or more listed species shall

be contingent upon the formulation of a management plan which would to the greatest extent possible eliminate adverse effects to any listed species which occur or are discovered on the development site.

Policy 12.1.5.5: The City shall consult with the FGFWFC and/or the FDEP in the review of listed species management plans prepared by private developers, and shall implement the recommendations of those agencies in the issuance of development orders.

Policy 12.1.5.6: The City shall discourage development within a habitat area dedicated to the public through a conservation easement.

Policy 12.1.5.7: With the exception of areas designated as handicap parking, any area identified for parking shall be stabilized using some type of pervious stabilizer, such as grass pavers, and the area shall be finished to look natural.

Policy 12.1.5.8: The City shall protect listed animal species and/or native habitat listed species in accordance with the Florida Fish and Wildlife Conservation Commission.

Objective 12.1.6: Hydrology, Vegetation, and Wildlife. Protect and conserve soils and native vegetation communities, and maintain the natural functions of the City's ecological zones in a manner consistent with the Goals, Objectives and Policies of the Future Land Use Element.

Policy 12.1.6.1: The City shall sponsor a biological survey of native vegetative communities within municipal limits to inventory the listed wildlife species that occur as permanent residents.

Policy 12.1.6.2: The City shall preserve natural communities in the siting, design, development and maintenance of public parks. Wherever possible, existing natural plant communities should be maintained undisturbed as a part of new parks developments except for relatively minor alterations, such as nature trails or boardwalks, which do not alter the wildlife habitat values of the system.

Policy 12.1.6.3: Areas of natural habitat within the 100-year floodplain shall be given priority consideration in the identification of lands that address passive recreational demand and open space objectives, except in those instances where a proposed development is determined by the City to be consistent with the Goals, Objectives and Policies of the Future Land Use Element.

Policy 12.1.6.4: In order to reduce the adverse consequences of floodplain development and simultaneously encourage the conservation of natural habitat, the City's Flood Damage Prevention ordinance shall be amended to discourage construction in the floodplain, unless the

proposed construction is expressly authorized by this Comprehensive Plan. Development plans shall preserve the natural functions of floodplains when practical. Compensatory storage for fill placed within the floodplain shall be allowed only when the applicant demonstrated the absence of adverse consequences of compensatory storage and demonstrates compliance with other applicable provisions of this Comprehensive Plan.

Policy 12.1.6.5: The City shall encourage the protection of critical natural vegetative communities and wildlife habitat by public purchase programs and by private property owners through donations, transfers of development rights, purchase of development rights, conservation easements or other appropriate mechanisms.

Policy 12.1.6.6: The City shall protect species which are listed as Endangered, Threatened or a Species of Special Concern by the Florida Fish and Wildlife Conservation Commission, the U.S. Fish and Wildlife Service or the Florida Committee on Rare and Endangered Plants and Animals (FCREPA) and shall not approve any development which proposes to destroy natural vegetative communities known to provide habitat to listed species except where the developer has submitted a management plan which minimizes adverse affects on the species to the greatest extent possible. The management plan shall be approved by St. John's River Water Management District.

Policy 12.1.6.7: The City shall not approve any development except as provided in the Goals, Objectives and Policies of the Future Land Use Element that would adversely alter the ecological functions of freshwater wetlands or deepwater habitat. Ecological functions include: (a) provision of wildlife and fisheries habitat; (b) maintenance of in-stream flows and lake levels during periods of high and/or low rainfall; (c) erosion control; (d) water quality enhancement; and (e) natural vegetative communities.

Policy 12.1.6.8: The City shall require that the following non-native plant species be removed from the limits of construction and required buffer areas from all sites which are developed or re-developed: Causarina cunninghamiana (beefwood), Causarina qlauca (scaly-bark beefwood), Causarina equisetifolia (Australian pine), Dioscorea blulbifera (air potato), Malateuca quinquenervia (punk tree), Rincinus communis (castor bean), Sansevieria hyacinthoides (African bowstring), Schinus terebinthifolius (Brazilian pepper)~~,~~ Broussonetia papyrifera (male mulberry), Enterolobium contortisiliquum (ear tree), Eucalyptus spp. (eucalyptus tree), Melaleuca quinquenervia (punk tree), Melia azedarach (chinaberry), Prunus caroliniana (cherry laurel), Auracaria wrightii (monkey puzzle), Grevillea robusta (silk oak tree), Albizia spp. (mimosa, woman's tongue), Prunus serotina (wild cherry), Sapium sebiferum (Chinese tallow), Leucaena leucocephala (lead

tree), Dalbergia sissoo (rosewood), Acacia auriculiformis (earleaf acacia), Eugenia uniflora (Surinam cherry), Cupaniopsis anacardiodes (carrotwood), and Koelreuteria paniculata (golden rain tree). No listed exotic species shall be used for planting purposes adjacent to protected lands.

Policy 12.1.6.9: The City shall not approve any development that is inconsistent with the requirements of applicable natural resource Goals, Objectives and Policies contained elsewhere in this Plan.

Policy 12.1.6.10: The City shall promote the use of native vegetation as specified in its ordinance for all development.

Policy 12.1.6.11: The City shall protect rare, unique, or significant-natural habitats within the City.

Policy 12.1.6.12: The City shall protect the habitat of gopher tortoises, gopher frogs, eastern indigo snakes, eagles, ospreys, alligators, pileated woodpeckers, manatees and river otters.

Policy 12.1.6.13: The City shall consider the abundance, status, and distribution of endangered ecosystems and other environmentally sensitive lands when reviewing land use proposals and acquisitions such as:

A. Management plans which protect endangered wildlife which utilize critical habitats;

B. Mitigation plans for critical habitat which is unavoidably altered; and,

C. Restrictions of the use of critical habitats to those which are found to be compatible with the requirements of wildlife species which are threatened, endangered, or of special concern.

Policy 12.1.6.14: The City shall participate with the St. John's River Water Management District, the county, and other appropriate agencies to re-establish the historic hydrologic connections at the Cocoa Conservation Area and borrow pits within the county.

Policy 12.1.6.15: Wetlands and wetland functions shall be protected and conserved by restricting direct and indirect development impacts.

A. *General.*

1. The City shall avoid, or when unavoidable, minimize development impacts on wetlands; direct incompatible land uses away from wetlands; require wetland buffers; allow wetland losses only where all reasonable measures have been applied to avoid such losses; and allow for effective mitigation.

2. Land use planning and site design shall support development patterns that minimize the impact of development on wetlands.
3. The City shall maintain a Generalized Wetlands Map as part of the Comprehensive Plan. This map shall be based on the U.S. Fish and Wildlife Service, National Wetlands Inventory.

B. *Existing development.* Existing uses in wetlands may continue, but shall not expand unless they are allowed, permitted, or exempted by the SJRWMD and this policy.

C. *New development and redevelopment with no significant impact.* New development and redevelopment having no significant impact on the net wetland functions shall be permitted. They include only the following:

1. *Water dependent uses.* An activity which can only be conducted on, in, over, or adjacent to water areas because the activity requires direct access to the water body or sovereign submerged lands for transportation, recreation, energy production or transmission, or source of water, and where the use of the water or sovereign submerged lands is an integral part of the activity.
2. *Passive recreation.* Walking nature trails or elevated wooden boardwalks designed to minimize wetland system disturbance and to provide limited access for passive recreation or access to other portions of the site or adjacent waters, which are otherwise inaccessible.
3. *Insect control structures.*
4. *Utilities installation.* Temporary impacts associated with the installation of cables, conduits, and pipelines that transmit electricity, communication signals, potable water, raw water, reclaimed water, domestic wastewater, propane gas, natural gas, or similar infrastructure.
5. *Rights-of-way and easements.* Minor activities by FDOT, the City, and Brevard County within existing rights-of-way or easements.
6. *F.A.C. exemptions.* Exemptions listed in the rules of the SJRWMD.
7. *Environmental restoration, enhancement, and research uses.*
8. *Dredging and filling.* Uses that require the dredging and filling of less than one-hundred (100) square feet of wetlands.

D. *New development and redevelopment with impact.* New development and redevelopment having impact on the net wetland functions shall be permitted only if the activity conforms to City's mitigation requirements listed in this policy and meets at least one of the following criteria:

1. *Road crossings.* Road crossings which impact wetlands shall be allowed if shown to be in the public interest (e.g. the construction of local, collector or arterial road linkages). When allowed, road crossings shall occur at the narrowest practical point constrained by safe roadway design and shall provide for hydrologic connectivity and aquatic species movement.

2. *Access to uplands across wetlands.* Access to uplands property may cross wetland areas, provided that:

   (a) No other access to such property is practical.

   (b) Such limited access will not adversely affect any of the primary functions of the wetlands to be preserved on-site.

   (c) The location of and construction methods employed for such access would result in minimal environmental impact of the wetlands to be preserved on-site.

3. *Low quality wetlands.* If the SJRWMD determines a wetland (or portion thereof) is low quality and has minimal restoration potential, and beneficial restoration or enhancement mitigation of another wetland would be achieved as a result of mitigation permitting development in this low quality wetland (or portion thereof), then the future land use category shall apply.

4. *Isolated wetlands for stormwater management systems.* As determined by the City, development may incorporate isolated wetlands into storm water management systems, provided the storm water runoff is pre-treated before entering the wetland, so that the wetland is used for nutrient and volume attenuation. The City shall encourage designs, which maintain existing natural wetlands community, except where permitting agencies impose conditions favoring a different plant community as more desirable for the purpose of providing habitat, improving water quality, or enhancing other wetland values.

5. *Isolated wetlands less than 5 acres with no significant and sustainable wildlife values.* The City shall request the

comment and opinion of the SJRWMD or a professional biologist as to whether the wetland of less than 5 acres has significant wildlife values, based on the following factors:

(a) The extent the isolated wetland acts in concert with the broader regional landscape to provide both food support and habitat for wildlife;

(b) The potential cumulative impacts to isolated wetland wildlife functions at a regional level;

(c) Individual wetland features that are important to wildlife;

(d) Whether the isolated wetland is used by endangered or threatened species or species of special concern; and

(e) The degree to which adjacent existing or planned development will affect the use of the wetland by wildlife.

If the biological evaluation determines the isolated wetland of less than 5 acres has significant and sustainable wildlife values, the wetland shall be afforded the same level of protection as all other similar wetlands. However, if the evaluation determines no significant and sustainable wildlife values, then the future land use category of the adjacent uplands of the site shall apply. This does not preclude the application of any regulatory requirements of federal, state, or regional agencies.

6. *Non-residential uses.* Non-residential uses shall be permitted within wetlands, subject to the following minimum requirements:

(a) Clearing or removal of native vegetation shall not exceed ten (10) percent of the wetlands on the site. Exotic vegetation may be removed without regard to this limitation provided, however if the area cleared of exotic vegetation exceeds the applicable ten (10) percent maximum, it is replanted with native wetland vegetation.

(b) A restrictive or conservation easement to preserve open space shall be required.

(c) Allowable non-residential land uses within the Conservation future land use category shall be

limited to those uses allowed in the future land use category of the adjacent uplands of the site.

(d) If areas annexed into the City from Brevard County have been designated with a Brevard County commercial or industrial future land use category prior to February 23, 1996, then those properties shall be subject to the wetlands protection policies of the Brevard County Comprehensive Plan Conservation Element as of the effective date of the annexation, and only if all other requirements of Policy 12.1.6.15.D.6 cannot be satisfied.

E. *Upland buffers.*

1. *General.* Upland buffers are considered an integral component of a functioning wetland and shall be afforded the same types and levels of protection as the wetland itself. Upland buffers shall not be developed, cleared, or landscaped that would decrease their effectiveness in supporting wetland functions, and shall not include turfed, landscaped, or impervious surfaces.

2. *Minimum width.* Where wetlands exist, upland buffers shall be provided at a minimum width of fifteen (15) feet and an average width of twenty-five (25) feet beyond the perimeter of the wetland.

3. *Encroachment.* Encroachment into upland buffers for the purpose of hydrologic connection of drainage systems and creation of mitigation areas shall be permitted and shall not require additional buffering compensation.

4. *Additional requirement.* The City may require the extension of upland buffers beyond twenty-five (25) feet if necessary to connect isolated wetlands with other protected wetlands existing within one-hundred (100) feet depending on the existence of listed species and habitat valuation.

5. *Average width exception.* Uplands buffer widths may be adjusted downward below the required minimum average on a case-by-case basis if the developable portion of existing lots of record as of December 1, 2003 does not have sufficient size or dimensions to allow for a reasonable use of the property based on the designated future land use category. In this

instance, the remaining upland buffers shall be enhanced with native species to minimize development impacts and enhance the functioning value of the wetlands buffer area.

6. *Passive recreation.* The City may approve, as appropriate, minimal use in clearing for nature trails and other passive recreational uses compatible with the purpose of the buffer zone.

F. Implementation and mitigation.

1. *Future land use category assignment.* The Conservation Future Land Use category shall be assigned to all wetland areas subject to a Future Land Use Map amendment adopted after December 1, 2003. For the purposes of initially determining appropriate wetland areas the City shall utilize the National Wetlands Inventory.

2. *Delineation.* In order to properly identify and delineate wetlands prior to development, the City shall rely on the delineation of wetlands and surface waters certified by the SJRWMD. The delineation shall be reproduced on development plans which are submitted for review by the City. For other review purposes which do not specifically permit development (e.g. plan amendments, rezonings, etc.), the extent of on-site wetlands shall be estimated and no delineation is required unless otherwise required by the City.

3. *Site and development review.* Wetlands existing on a proposed development parcel shall be shown as a part of the development plans submitted to the City for review. Additionally, the development plans shall show the delineation of the upland buffer for portion of a development parcel which does not require a SJRWMD permit. For projects requiring a SJRWMD permit, the City shall require as a condition of development approval that wetland buffers shall be protected and encumbered by a perpetual conservation easement.

4. *Onsite transfer of density.* Development densities/intensities may be transferred out of the undeveloped wetland areas on a one-for-one (1:1) basis to upland portions of a development site. Offsite transfer of density is prohibited.

5. *Creation of new lots.* New lots shall not be created and/or platted that do not contain sufficient buildable upland areas in order to provide a reasonable use for the lot under the requirements of the Comprehensive Plan.

6. *Mitigation.*

   (a) *General.* The purpose of mitigation is to offset environmental impacts. Mitigation activities approved by a federal, state, or regional agency are supported by the City. However, the issuance of a permit by any other agency, with or without mitigation, shall conform to the requirements the Comprehensive Plan.

   (b) *Location.* Mitigation shall be permitted by both City Council and the SJRWMD within the appropriate SJRWMD watershed basin, as determined by SJRWMD and in the following manner:

      (1) First priority - On-site.

      (2) Second priority - Within the City limits.

      (3) Third priority - Within five (5) miles of the City limits.

      (4) Fourth priority - Within ten (10) miles of the City limits.

      (5) Fifth priority - Within Brevard County.

      (6) Sixth priority – Outside of Brevard County.

Policy 12.1.6.16: The City shall protect existing natural reservations identified in the Recreation and Open Space Element.

Objective 12.1.7: Fisheries and Estuarine Habitat. The city shall cooperate with and assist St. John's River Water Management District (SJRWMD) and the Department of Environmental Protection (DEP) to continue to protect or restore the aquatic vegetation including, but not limited to, aquatic weed control, restoration or creation of aquatic grass beds or shoreline restoration. In addition, the City will protect the diversity of submerged and emergent aquatic vegetation and fish species as well as the quality of fresh water (estuarine), found in the City's lakes and tributaries associated with St. John's River, and in the Indian River within the zone between the Cocoa shoreline and the Intracoastal Waterway. The protection shall be as great, or greater, than they were in 1988, as determined by SJRWMD and the DEP, using DEP established standards.

Policy 12.1.7.1: The City shall continue to implement alternative means of wastewater effluent discharge (such as effluent reuse) which will reduce the volume of wastewater discharged to the Indian River Lagoon.

Policy 12.1.7.2: The City shall establish site design standards and regulations for the control of stormwater runoff to ensure the reduction of, and the adequate treatment of stormwater runoff from all new development or re-development prior to its discharge to surface waters.

Policy 12.1.7.3: The City through the Surface Water Management Plan shall reduce the volume of untreated stormwater discharged to surface waters, and shall develop a program to take corrective action.

Policy 12.1.7.4: The City shall not permit shoreline development activities that would destroy or degrade the function of estuarine shoreline or deepwater habitat. The applicant shall demonstrate how any potential adverse impact shall be reduced or avoided.

Policy 12.1.7.5: Areas within the Indian River Lagoon and the tributaries to St. John's River basin, lands acquired by City for passive recreation with littoral zones shall be designated as conservation.

Policy 12.1.7.6: The City supports the objectives of the Indian River Lagoon Comprehensive Conservation and Management Plan 2008 update.

Objective 12.1.8: Hazardous Waste and Materials. The City shall coordinate with Brevard County to establish procedures and regulations which support State and County hazardous material management objectives, and which will reduce the number of sites at which improper use, storage or disposal of hazardous materials occurs.

Policy 12.1.8.1: The City shall coordinate with the FDEP and Brevard County in the establishment of Amnesty Days for the collection of hazardous domestic wastes.

Policy 12.1.8.2: The City shall ensure that businesses which store, generate, or transport hazardous wastes or materials do so in accordance with Federal and State guidelines and regulations.

Policy 12.1.8.3: Industrial parks which include tenants who use hazardous materials or generate hazardous wastes shall be required to: (a) prepare hazardous materials spill containment and clean-up plans; (b) design drainage and sewer facilities to prevent the contamination of soils, groundwater or surface waters from hazardous materials spills; and (c) provide interim storage facilities for hazardous wastes generated on-site.

Policy 12.1.8.4: The City shall provide the greatest support practical to Federal, State and County hazardous waste and materials management programs.

Objective 12.1.9: Floodplain Management. The City shall protect the flood storage and conveyance functions of the 100-year floodplain.

Policy 12.1.9.1: In order to reduce the adverse consequences of floodplain development and simultaneously encourage the conservation of natural habitat, the City's Flood Damage Prevention ordinance shall be updated as needed to maintain compliance with the National Flood Insurance Program and to discourage construction in the floodplain, unless the proposed construction is expressly authorized by this Comprehensive Plan. Developmental plans shall preserve the natural functions of floodplains when practical. The provision of compensatory storage for fill placed within the floodplain shall be allowed only when the applicant demonstrates the absence of adverse consequences of compensatory storage and demonstrates compliance with other applicable provisions of this Comprehensive Plan.

Policy 12.1.9.2: Developers shall be encouraged to incorporate those portions of sites that are within the 100-year floodplain as open space preservation.

Policy 12.1.9.3: The City shall promote wetlands preservation and non-structural floodplain management by encouraging the use of isolated wetlands as detention areas, where such use is consistent with good engineering practice and does not significantly degrade the ecological value of wetlands. Pre-treatment of stormwater run off by diversion of the "first flush" shall be required prior to discharge to wetland detention areas.

Policy 12.1.9.4: The City shall encourage public and private agencies, including but not limited to the Florida Department of Environmental Protection, the Florida Game and Freshwater Fish Commission, the St. Johns River Water Management District, The Nature Conservancy, The Trust for Public Lands and Brevard County, in acquiring wetlands and floodplains.

Objective 12.1.10: Soil Conservation and Mineral Resources. Land development and mineral extraction activities shall be regulated so as to conserve mineral resources and limit the adverse effects of soil erosion and sediment transport on air and water quality.

Policy 12.1.10.1: The City shall continue to regulate resource extraction activities so as to both protect and conserve mineral resources and protect the environment.

Policy 12.1.10.2: The City shall require that all land clearing for agriculture, excavation or development activities be conducted in compliance with soil erosion Best Management Practices published by the SCS, FDOT, FDEP, FDACS or IFAS. Land clearing for resource extraction or development shall be limited to the minimum amount necessary.

Policy 12.1.10.3: Land developers and excavators shall prepare and implement reclamation plans that establish a biologically productive landscape comprised of native plants. The City shall require land developers and excavators to demonstrate financial responsibility for future reclamation activities prior to approval of development.

Policy 12.1.10.4: The City shall employ Best Management Practices for control of erosion and sedimentation for road and other City projects.

Objective 12.1.11: Energy Reduction and Conservation. The City will take steps to reduce the consumption of energy through promoting more efficient land use development patterns and uses which provide alternatives to commuting to and from employment.

Policy 12.1.11.1: The City will promote the use of infill development along its existing commercial corridors to increase the diversity of uses located in close proximity to one another to reduce the need for multiple trips or to travel cross town.

Policy 12.1.11.2: Where feasible and compatible with adjacent land uses, the City will support requests for higher densities and intensities.

Policy 12.1.11.3: The City will promote mixed-use development patterns in new projects to provide greater diversity of use in close proximity of one another to promote reduced dependence on automobiles, and increased use of pedestrian and bicycle travel.

Policy 12.1.11.4: To the greatest extent possible, the City should work with providers of multimodal transportation systems, such as SCAT, to encourage them to expand, or establish service in and around the City to reduce resident's dependence on use of automobiles.

Policy 12.1.11.5: The City will develop a bicycle/pedestrian master plan to provide a blueprint for the development of a City-wide trail plan to provide interconnectivity of residential and commercial areas to promote bicycle and pedestrian travel as an alternative to the automobile.

Policy 12.1.11.6: The City will continue to promote itself as a desirable place for new clean business and industry to move to with the intention of increasing employment opportunities for Cocoa residents to reduce or eliminate the need to commute to and from work.

Policy 12.1.11.7: Continue working to improve citizens awareness of the need to conserve energy through continued participation of Florida Power and Lights Household Energy Makeover Initiative (HEMI) to educate residents, especially those with older less energy efficient homes, of the savings in not only the natural resources used to create energy, but also the expenses associated with inefficient heat and air conditioning units and appliances.

Policy 12.1.11.8: The City supports Federal and State incentives to promote use of energy efficient technology, including but not limited to solar heating, photovoltaic cells, more efficient insulation systems, and other clean energy sources.

Policy 12.1.11.9: The City shall review, and where feasible, adopt conservation oriented building methods and materials, such as those promoted through the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system.

Policy 12.1.11.10: To the greatest extent possible, any new structures constructed by the City shall meet, at a minimum, the Silver rating of the LEED rating system.

XIII - INTERGOVERNMENTAL COORDINATION ELEMENT



Serving the Community

GOAL 13.1: The City shall maintain an ongoing commitment to Intergovernmental Coordination to ensure that the growth management goals of the comprehensive plan will be effectively implemented.

Objective 13.1.1: Coordinate Comprehensive Plan. The City shall continue to coordinate comprehensive planning and intergovernmental issues with Brevard County, adjacent municipalities and the East Central Florida Regional Planning Council (ECFRPC).

Policy 13.1.1.1: The City shall exchange intergovernmental information and services with appropriate local governments through scheduled meetings and as requested.

Policy 13.1.1.2: The City shall engage in mutual discussion with Brevard County and adjacent municipalities to establish an annexation policy to direct an orderly and timely process of annexing unincorporated lands adjacent to Cocoa's municipal boundaries.

Policy 13.1.1.3: In the event of a conflict with the comprehensive plan of another local government that cannot be successfully resolved within a reasonable period of time, the City will appeal to the ECFRPC's informal mediation process. Wherever possible, the appeal will be submitted as a joint request by the local governments. The City shall work with Brevard County to adopt a Joint Planning Agreement (JPA) to address long-term planning and decision making for the region, including the issue of future annexations.

Policy 13.1.1.4: The City shall review and update all interlocal agreements to ensure consistency with the requirements of Florida Statutes.

Objective 13.1.2: Impacts of Development. The City of Cocoa shall ensure that the impacts resulting from the implementation of the comprehensive plan upon development in adjacent municipalities, unincorporated areas, regions and the State are evaluated and addressed with such jurisdictions.

Policy 13.1.2.1: The City staff will evaluate development projects in Cocoa to include an assessment of impacts on the comprehensive plans of adjacent jurisdictions.

Policy 13.1.2.2: The City staff will assess future amendments to its comprehensive plan, including the Future Land Use and Capital Improvements elements, for impact on the comprehensive plans of adjacent jurisdictions.

Policy 13.1.2.3: The City shall coordinate with the City of Rockledge to institute joint planning activities in areas of joint concern and influence. The activities shall include land use, landscaping, urban design and urban form of new development in the area.

Policy 13.1.2.4: The City shall coordinate transportation planning activities with the Florida Department of Transportation (FDOT), ECFRPC, the Space Coast TPO, Brevard County and the adjacent municipalities to protect and preserve necessary future rights-of-way and to adopt corridor roadway systems in and around the City of Cocoa.

Objective 13.1.3: Coordinate Level of Service Standards. The City shall continue to coordinate with responsible local, regional, and State authorities, as appropriate, to ensure consistency of adopted level of service (LOS) standards across jurisdictions.

Policy 13.1.3.1: The City shall continue to contract with a private service provider for solid waste collection service and disposal at the Brevard County landfill and will coordinate adopted LOS standards with the County.

Policy 13.1.3.2: The City shall continue to function as the primary provider for potable water service within its franchise area in central Brevard County and will coordinate with adjacent jurisdictions using potable water services regarding LOS standards and the extension of water and wastewater services to the new users of the Cocoa water system.

Policy 13.1.3.3: The City shall continue to coordinate with FDOT, the Space Coast TPO and Brevard County to establish concurrency management mechanisms that will provide consistent LOS standards to be maintained on major roadways in and around the City of Cocoa.

Objective 13.1.4: Housing and Recreational Facilities. The City shall provide appropriate mechanisms to coordinate information and programs for the provision of housing and recreational facilities.

Policy 13.1.4.1: The City shall solicit recommendations and assistance from various public agencies and quasi-public organizations such as the Florida Department of State, Division of Historic Resources, the state land planning agency, Florida Department of Children & Families, Brevard County Housing Authority and local Chambers of Commerce to assist in program funding, identification of structures and areas to be preserved for historical purposes.

Policy 13.1.4.2: The City shall continue both formal and informal communication with appropriate State and regional agencies, such as the state land planning agency and the ECFRPC, to ensure availability of information on specific programs, projects, and legislation pertinent to affordable housing and to provide technical assistance for potential grants.

Policy 13.1.4.3: The City shall engage in efforts with Brevard County and the Brevard County School Board for procurement, operation and maintenance of parks and recreation facilities.

Policy 13.1.4.4: The City shall continue to cooperate with state agencies as well as non-profit environmental organizations in identifying programs and funding sources to promote further development of community parks, open space and recreation facilities and to coordinate with them in effectively managing existing natural areas and open space.

Objective 13.1.5: Natural Resources. The City will continue to strengthen existing, and establish new, intergovernmental relationships to ensure natural resource management and protection.

Policy 13.1.5.1: The City shall coordinate with existing resource protection plans of other government agencies and entities including the FDEP, SJRWMD, as well as with nonprofit environmental organizations to appropriately conserve and manage natural areas, water supply sources and open space.

Policy 13.1.5.2: The City shall coordinate with Brevard County and adjoining municipalities to ensure that natural resources occurring in, or affecting more than one governmental jurisdiction, are effectively managed to preserve, protect and enhance natural systems, wildlife, fisheries and habitat. This includes ensuring the City's stormwater management, aquifer recharge and reuse water policies and projects are consistent with the goals of the SJRWMD's water supply plan and the Upper St. Johns River Surface Water Improvement and Management (SWIM) Plan to protect or enhance water quality and natural systems.

Objective 13.1.6: Coordinate with Brevard County School Board. The City shall continue to coordinate with the Brevard County School Board with regard to school site selection and the implementation of school concurrency consistent with the adopted Interlocal Agreement.

Policy 13.1.6.1: The City and the Brevard County School Board shall discuss and coordinate development plans for expansion of existing schools or development of new education facilities within the City to assure such activities are consistent with growth management directives established within the City's comprehensive plan. Issues shall include the impacts of facilities on adopted LOS standards established for public school facilities, transportation, potable water, wastewater, drainage and solid waste services.

Policy 13.1.6.2: The City shall provide the Brevard County School Board with information regarding proposed new developments to assist its efforts in planning new schools and to solicit its review comments.

Policy 13.1.6.3: In cooperation with the Brevard County School Board, Brevard County, and other local jurisdictions the City will implement the Interlocal Agreement which includes procedures for the coordination

of land use and school capacity, and the sharing of information, including population and student enrollment projections.

Objective 13.1.7: St. Johns River Water Management District. The City shall continuously monitor the St. Johns River Water Management District (SJRWMD) Water Supply Plan for revisions and amendments on an annual basis to determine whether revisions to the City's Water Supply Management Plan are needed.

Policy 13.1.7.1: The City shall maintain a Water Supply Facilities Work Plan consistent with the SJRWMD's Water Supply Plan.

Policy 13.1.7.2: Within 18 months of any changes to the above referenced plan by SJRWMD, the City shall evaluate its adopted Water Supply Facilities Work Plan for updates necessary to keep it consistent with the SJRWMD's plan.

Policy 13.1.7.3: Supply and demand projections will be consistent with the above-mentioned plans, assessments and processes.

Policy 13.1.7.4: The City will continue to actively participate in water supply planning work groups and meetings on an as-needed basis.

Policy 13.1.7.5: The City shall participate in the updates to the SJRWMD's water supply assessment and District Water Supply Plan and other water supply development-related initiatives facilitated by the SJRWMD that affect the City.

XIV - CAPITAL IMPROVEMENTS ELEMENT

Serving the Community

GOAL 14.1: Through the use of sound fiscal policies, the City of Cocoa shall provide adequate public facilities to all residents within its jurisdiction in a timely and efficient manner that promotes orderly compact urban growth and discourages urban sprawl.

Objective 14.1.1: Level of Service Standards. The City shall adopt levels of service (LOS) standards for public facilities and capital improvement projects within its jurisdictional responsibility.

Policy 14.1.1.1: The following LOS standards are hereby adopted and shall be used as the basis for determining the availability of public facilities for new development and redevelopment in the City.

PUBLIC FACILITIES		
WASTEWATER Source: Chapter 64E 6.008, Florida Administrative Code; Standard for Onsite Sewage Treatment and Disposal Systems, Revisions Effective July 16, 2013	DEVELOPMENT TYPE	
	Industrial	0.02 gallons per sq. ft. per day
	Office Space	15 gallons per capita per day
	Hotel/Motel	100 gallons per day per room
	Residential	319 gallons per day per household
	Restaurant	50 gallons per capita per day
	Bar/Lounge	20 gallons per day per seat
STORMWATER MANAGEMENT	DESIGN STORM EVENT 25-year frequency/24-hour duration event	
	ON-SITE STORMWATER MANAGEMENT Retention of the first one inch of rainfall runoff for areas of one acre or more; or retention of first one-half inch of rainfall runoff for drainage areas of less than one acre.	
	STORMWATER QUANTITY Post development stormwater runoff flow rates, quantities, peaks, and velocities shall be equal to or less than levels that existed prior to development.	
	STORMWATER QUALITY No significant degradation of water quality in receiving water bodies	
POTABLE WATER	AVERAGE FLOW 122 gallons per capita per day (gpcd) per household, or 340 gallons per day per equivalent residential connection (ERC)	
	PEAK FLOW - 510 gallons per day per ERC	
	PEAK FLOW COEFFICIENT - 1.5	
	PRESSURE Normal: 55-65 psi Peak Hour: 40-50 psi During Fire: 20 psi	
SOLID WASTE	DISPOSAL (BREVARD COUNTY LANDFILL) Cocoa Contribution Rate – 1.2 tons per capita per year	

	COLLECTION Residential: 2 times per week, each household Non-residential: 2 to 6 times per week As needed, each location Green Waste and Recyclables: Once per week

ROADWAYS		
CITY OF COCOA JURISDICTION		MINIMUM LOS
Forrest Avenue		E
Cox Road (within city limits)		E
Fiske Boulevard (from SR 520 to Dixon Boulevard)		E
Indian River Drive (CR 515)		E
Peachtree Street (from Clearlake Road to US 1/SR 5)		E
Florida Avenue (within city limits)		E
OTHER OR MULTI-JURISDICTIONAL	JURISDICTION	MINIMUM LOS
Pineda Street (from Lake Drive to SR 501)	City/County	E
Michigan Boulevard	County	E
Dixon Boulevard	County	E
Range Road	County	E
Rosetine Street	County	E
Adamson Road (SR 524 to Pine)	County	D
Friday Road (SR 524 to SR 520)	County	E
Grissom Parkway (Industry to Canaveral Groves)	County	E
Industry Road (SR 524 to Grissom Pkwy)	County	E
SR 528 (Beachline Expressway)	State	D
SR 520 (from Clearlake Road to US 1/SR 5)	State	D
SR 520 (from SR 524 to Burnett Rd)	State	D
SR 519 (Fiske Boulevard south of SR 520)	State	D
US 1/SR 5 (from SR 528 to south of SR 520)	State	D
SR 524 (from SR 520 to SR 528)	State	D
SR 501 (Clearlake Road)	State	D
Interstate Highway 95 (I-95) (SR 519/Fiske Blvd to SR 520)	State	E
Interstate Highway 95 (I-95) (SR 520 to SR 524)	State	E
Interstate Highway 95 (I-95) (SR 524 to SR 528)	State	E
RECREATION		
1.25 acres of developed recreational area per 1000 population		

The uniform LOS standards for public schools shall be those established in the Public Schools Facilities Element. Currently, the LOS for the School District is 100%.

Policy 14.1.1.2: By December 1st of each year the City shall adopt as part of its Capital Improvements Element the Brevard County School District Five Year Work Program approved by the School as part of the School District budget. The City of Cocoa hereby adopts by reference the Five-Year District Facilities Work Program (2018-2019 through 2022-2023) as approved by the School Board on October 23, 2018. Included therein shall be planned facilities and funding sources to ensure the level of service standards will be achieved by the end of the five-year period.

Objective 14.1.2: Concurrency Management System. The City shall implement the Concurrency Management System (CMS) adopted in the City Code, which is consistent with sections 163.3177 and 163.3180, F.S. to manage the land development process so that public facility needs created by previously issued development orders or future development do not exceed the City's ability to fund and provide needed capital improvements.

Policy 14.1.2.1: The concurrency evaluation system shall measure the potential impact of any development proposal on the established minimum acceptable LOS standards for sanitary sewer, solid waste, stormwater, potable water, parks and recreation and transportation facilities, unless the development is exempt from the review requirements of the CMS.

Policy 14.1.2.2: No development permit or order shall be issued unless adequate public facilities are available to serve the proposed development as determined by the concurrency evaluation in the adopted CMS.

Policy 14.1.2.3: The City shall require all public and private capital facilities to provide service at the LOS standards adopted in this comprehensive plan for previously vested, existing and future permitted development. These capital facilities shall be provided concurrently with the impacts of development based on the minimum requirements in the City's adopted CMS.

Objective 14.1.3: Evaluation of Capital Projects. The City's capital projects shall be evaluated to determine if they meet prioritization criteria and consistency with adopted LOS standards and/or public need.

Policy 14.1.3.1: Requests for capital projects shall generally be evaluated on their impact to the City budget based on the following factors:

- Meet existing deficiencies;
- Provide repair or replacement of existing facilities;

- Accommodate desired future growth; and
- Consistency with the City's Budget Prioritization list.

Policy 14.1.3.2: The Finance Director shall determine if the capital project can be funded from existing cash, future revenues or through borrowing. In addition, the finance director shall assign revenue sources to fund the project.

Policy 14.1.3.3: The Finance Director shall prepare a report evaluating the funding options, the effect of the improvement on future revenues and the effect of the improvement on operation and maintenance costs.

Policy 14.1.3.4: The City shall adopt the following policy statements as guides for capital programming:

A. The City shall make all capital improvements in accordance with an adopted Capital Improvements Program (CIP).

B. The City shall develop a multi-year plan for capital improvements and update it annually.

C. The City shall enact an annual capital budget based on the multi-year CIP. Future capital expenditures necessitated by changes in population, changes in real estate development or changes in economic base will be calculated and included in capital budget projections.

D. The City shall coordinate development of the capital improvement budget with development of the operating budget. Future operating costs associated with new capital improvement will be projected and included in operating budget forecasts.

E. The City shall use intergovernmental assistance to finance only those capital improvements that are consistent with the CIP and city priorities, and whose operating and maintenance costs have been included in operating budget forecast.

F. The City shall maintain all its assets at a level adequate to protect its capital investment and to minimize future maintenance and replacement costs.

G. The City shall project its equipment replacement and maintenance needs for the next several years and will update this projection each year. From this projection, a maintenance and replacement schedule will be developed and followed.

H. The City shall identify the estimated costs and potential funding sources for each capital project proposal before it is submitted to Council for approval.

I. The City shall determine the least costly financing method for all new projects.

Policy 14.1.3.5: Capital improvements planning will include evaluations of the costs and benefits of upgrading, expanding or modifying regionally significant public facilities versus the cost of constructing new facilities.

Policy 14.1.3.6: Projects of the five-year Capital Improvements Schedule shall be prioritized based on the following:

CRITERIA FOR PRIORITY RANKING OF CAPITAL IMPROVEMENT PROJECTS:

PRIORITY ONE

1) The project addresses a condition dangerous to public health, safety and welfare.
2) The project achieves compliance with a mandate or other legal obligation (contract/development order).
3) The project alleviates an emergency service disruption or deficiency.
4) The project prevents irreparable damage to a critical public facility.

PRIORITY TWO

1) The project is identified in the 2016-2021 Strategic Plan and will stimulate economic growth and induces opportunity to attract private capital investment.
2) The project's deferment would result in severe degradation of public facilities and/or reduction in level of service.
3) The project leverages available federal, state or county funding or public-private partnerships (grant awarded or public-private partnership, matching requirement considerations).
4) The project reduces demand on natural resources and/or promotes sustainability.
5) The project increases efficient use of existing facilities.
6) The project reduces future operating and maintenance costs and advances fiscal sustainability.
7) The project provides service to developed areas lacking full service.
8) The project promotes in-fill development.

PRIORITY THREE

1) The project rehabilitates or replaces an obsolescent public facility.
2) The project provides a new or expanded level of service to City of Cocoa residents and/or business owners.

3) The project leverages available federal, state or county funding (grant opportunities/joint funding).
4) The project enhances natural or cultural resources.
5) The project represents a logical extension of facilities.

PRIORITY FOUR

1) The project promotes and enhances the City of Cocoa's image, physically or emotionally.
2) The project enhances and expands recreational or community amenities.
3) The project presents an opportunity to enhance and strengthen community identification within the Space Coast region.

Objective 14.1.4: Public Facility Improvements for New Growth. Public facility improvements that are needed to support new growth will maintain adopted levels of service. Improvements to public facilities that result from the impact of new development will require equitable cost participation by the developer.

Policy 14.1.4.1: All development order applications shall be evaluated as to the impact of the development on capital facilities and the operation and maintenance of those facilities. The evaluation shall include, but not be limited to, the following:

A. Expected capital costs, including the installation of required new facilities that are related to the development.
B. Expected operation and maintenance costs associated with the new facilities required by the development.
C. Anticipated revenues from the development, including impact fees, user fees and future taxes.

Policy 14.1.4.2: New development shall be responsible for installing all internal water and sewer systems, traffic circulation systems and internal recreation/open space facilities within the development. In addition, connections of internal systems to the City's designated water and sewer systems and traffic circulation network shall be the financial responsibility of the developer. Nothing herein shall preclude the City from adopting a development agreement for the purposes of entering into a public-private partnership to participate in funding improvements.

Policy 14.1.4.3: The City will not approve development that requires public facility improvements that exceed the City's ability to provide these in accordance with the adopted LOS standards.

Policy 14.1.4.4: Service areas designated for public facilities, as defined in the comprehensive plan, will be utilized to guide the availability of public facilities for future development.

Policy 14.1.4.5: The City, through adoption and implementation of land development regulations, comprehensive plan goals, objectives and policies, impact fees, other impact exactions, implementation of the annual budget and five-year capital improvements schedule, shall ensure the availability of public facilities and services concurrent with the impacts of development. Development shall not be approved unless the necessary infrastructure items and services are available subsequent to plan adoption.

Policy 14.1.4.6: Public expenditures which fund infrastructure improvements within the Coastal Planning Area shall abide by the limitations expressed in the Coastal Management Element (Objective 9.1.5. and Policies 9.1.5.1-2).

Objective 14.1.5: Coastal High Hazard Expenditures. Public expenditures for capital improvements in the coastal high hazard area (as hurricane vulnerability area) will be limited to repair and replacement of existing facilities, correcting existing deficiencies and hazards, and improvements to the potable water system unless the improvements are included in the plans of the City's community redevelopment areas.

Policy 14.1.5.1: The City will comply with appropriate regulatory requirements regarding development in the coastal high hazard area.

Objective 14.1.6: Multi-Jurisdictional Coordination. The City will continue coordination that provides for multi-jurisdictional approaches to the provision of needed public facilities.

Policy 14.1.6.1: The City will appoint representatives to participate in intergovernmental activities pertaining to public facility issues and comprehensive plan implementation in Brevard County.

Policy 14.1.6.2: The City Manager and the Planning and Zoning Board will work closely to address multi-jurisdictional issues concerning the funding of public services.

Policy 14.1.6.3: Additional City services to the two county enclaves will be predicated on annexation.

Policy 14.1.6.4: All capital projects shall be reviewed as to their compatibility and timing in relation to capital projects being implemented or planned by Brevard County, the Florida Department of Transportation, the St. Johns River Water Management District, the Brevard County School Board, the Florida Department of Environmental Protection, and/or any other applicable government agency.

Policy 14.1.6.5: Consistent with other applicable elements of this Plan, the City will provide for the provision of potable water, wastewater, surface water management, solid waste services, and other public services where the City has a legal commitment to provide such services.

Objective 14.1.7: Schedule of Capital Improvements. An annual review of the Capital Improvements Element (CIE) will be included in the City's budget process.

Policy 14.1.7.1: As part of the annual review of the CIE, the Finance Department shall be responsible for addressing the fiscal impact of capital improvement projects on revenue and expenditures and updating the fiscal assessment section of the CIE.

Policy 14.1.7.2: The fiscal assessment review and update will be carried out by the Finance Office and will include, at minimum, the following:

A. Forecasted summary of revenues and expenditures

B. Projected debt service capacity including:

1. Projected revenue bond debt service as a percentage of total debt;
2. Ratio of total debt to total revenue;
3. Projected ad valorem tax base, assessment ratio and millage rate;
4. Projection of operating cost considerations.

C. Verify financial feasibility of the CIE

Policy 14.1.7.3: The City shall adopt a Capital Improvement Program (CIP) as part of the annual budgeting process. The CIP will be derived from and coordinated with the annual review of the Capital Improvements Element.

Policy 14.1.7.4: The City hereby adopts the Five-Year Schedule of Capital Improvements included in this element and shall update the projects annually via resolution to reflect any changes to the CIE and CIP.

Policy 14.1.7.5: The City shall, on an annual basis, amend its CIE to reflect any changes to its water treatment and distribution system needed to maintain the adopted level of service for all residents and customers.

Policy 14.1.7.6: The Water and Sewer Enterprise Fund will provide capital improvement revenue and bonding capacity for the expansion of the water and sewer system as identified in the Public Facilities Element and the Capital Improvements Element. The City shall seek supplemental grant funds whenever possible.

Policy 14.1.7.7: The City shall continue to utilize "user pays" financing strategies in land development regulations including, but not limited to, impact

fees, user charges, special assessments and contribution in lieu of payment.

Policy 14.1.7.8: In providing capital improvements, the City shall limit the maximum ratio of outstanding indebtedness to no greater than 15% of the property tax base.

CAPITAL IMPROVEMENTS ELEMENT IMPLEMENTATION

- Five Year Schedule of Capital Improvements
- Location of Projects
- Programs to Ensure the Implementation of the Capital Improvements Element, Goals, Objectives and Policies.
- Monitoring and Evaluation

PROGRAMS TO ENSURE THE IMPLEMENTATION OF THE CAPITAL IMPROVEMENTS ELEMENT, GOALS, OBJECTIVES AND POLICIES

1) The Capital Improvements Element will be updated annually as part of the City's budget cycle.
2) The Department of Community Development will monitor land use decisions for consistency with the Capital Improvements Element and Future Land Use Element.
3) Maintaining the adopted LOS will function as primary criteria for assessing the impact of new development on public facilities.
4) The Public Works and Engineering Departments will continue to tract facility demand and capacity information as site plans and subdivision plats are approved.
5) Financial operations of the City will include maintaining enterprise and special funds, connection fees, and general fund balance as revenue sources for capital improvement projects.

MONITORING AND EVALUATION

The role of monitoring and evaluation is vital to the effectiveness of any planning program and particularly for the Capital Improvements Element. This is largely because the City's revenue and expenditure streams are subject to fluctuations in the market and economy. It is the behavior of these streams that will be used to predict fiscal trends in order to maintain the City's adopted level of service standards for public facilities. Therefore, the Capital Improvements Element requires a continuous program for monitoring and evaluation, and pursuant to Chapter 163, F.S., this element will be reviewed on an annual basis to ensure that required fiscal resources are available to provide public facilities needed to support adopted LOS standards. The annual review will be the responsibility of the City Council, City Manager, Department(s) of Community Services, Finance, Public Works, and Utilities, and the Planning and Zoning Board. The review may include the following considerations as appropriate:

1) Any corrections, updates, and modifications concerning costs; revenue sources; acceptance of facilities pursuant to dedications which are consistent with the element; or the date of construction of any facility enumerated in the element;

2) The Capital Improvement Element's consistency with the other elements and is support of the Future Land Use Element;

3) The City's ability to provide public facilities and services within the urban service area in order to determine any need for boundary modification or adjustment;

4) The priority assignment of existing public facility deficiencies;

5) The City's progress in meeting those needs determined to be existing deficiencies;

6) The criteria used to evaluate capital improvement projects in order to ensure that projects are being ranked in their appropriate order of priority;

7) The City's effectiveness in maintaining the adopted LOS standards;

8) The City's effectiveness in reviewing the impacts of plans and programs of state agencies and water management districts that provide public facilities within the county's jurisdiction;

9) The effectiveness of potential impact fees, and mandatory dedications or fees in lieu of, for assessing new development a pro rata share of the improvement costs which they generate;

10) The impacts of special districts and any regional facility and service provision upon the City's ability to maintain its adopted LOS standards;

11) The ratio of outstanding indebtedness to city revenue;

12) Efforts made to secure grants or private funds, whenever available, to finance the provision of capital improvements;

13) The transfer of any unexpended account balances;

14) The criteria used to evaluate proposed plan amendments and requests for new development or redevelopment; and

15) Capital improvements needed for the latter part of the planning period, for inclusion in the 5-Year Schedule of Improvements.

City of Cocoa Five-Year Schedule of Capital Improvements
FY 2018-2019 through FY 2022-2023



Capital Improvement Program
FY 2018 through FY 2022

Adopted



Capital Improvement Program
FY 2018 – 2022

Capital Improvement Program

FY 2018 through FY 2022

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CIP Summary List Period FY 2018 - FY 2022

Fund	Dept/Div			2018	2019	2020	2021	2022	Total Capital Costs
001	1103								
CP-IT-17-AE		52-00	Operating	$95,600	$0	$0	$0	$0	$95,600
Aegis 11 Enterprise Upgrade									
CP-IT-18-FR		63-00	Infrastructure	$0	$89,956	$0	$0	$0	$89,956
Complete City Fiber Ring									
1103 Division TOTAL				$95,600	$89,956	$0	$0	$0	$185,556

Fund	Dept/Div			2018	2019	2020	2021	2022	Total Capital Costs
001	2100								
CP-PD-18-L1	PD16IT	64-15	IT Machinery & Equipmen	$52,000	$52,000	$52,000	$52,000	$52,000	$260,000
Laptops for Officers/Patrol Vehicles									
CP-PD-13-VA		64-00	Machinery & Equipment	$0	$100,000	$0	$0	$0	$100,000
Refabricate SWAT Vehicle									
CP-PD-14-V0		64-00	Machinery & Equipment	$0	$0	$0	$35,200	$0	$35,200
Replacement Patrol Vehicle									
CP-PD-14-V9		64-00	Machinery & Equipment	$0	$0	$0	$35,200	$0	$35,200
Replacement Patrol Vehicle									
CP-PD-15-V3		64-00	Machinery & Equipment	$0	$0	$0	$35,200	$0	$35,200
Replacement Patrol Vehicle									
CP-PD-15-V4		64-00	Machinery & Equipment	$0	$0	$0	$0	$35,200	$35,200
Replacement Patrol Vehicle									
CP-PD-15-V5		64-00	Machinery & Equipment	$0	$0	$0	$0	$35,200	$35,200
Replacement Patrol Vehicle									
CP-PD-16-V5		64-00	Machinery & Equipment	$0	$0	$0	$0	$35,200	$35,200
Replacement Patrol Vehicle									
CP-PD-13-VT		64-00	Machinery & Equipment	$0	$0	$0	$35,200	$0	$35,200
Replacement Patrol Vehicle									

Fund	Dept/Div									
001	2100			2018	2019	2020	2021	2022	Total Capital Costs
CP-PD-13-VB		64-00	Machinery & Equipment	$0	$0	$34,500	$0	$0	$34,500
Replacement Patrol Vehicle									
CP-PD-16-V7		64-00	Machinery & Equipment	$0	$0	$0	$0	$35,200	$35,200
Replacement Patrol Vehicle									
CP-PD-13-V8		64-00	Machinery & Equipment	$0	$0	$34,500	$0	$0	$34,500
Replacement Patrol Vehicle									
CP-PD-13-V2		64-00	Machinery & Equipment	$0	$0	$34,500	$0	$0	$34,500
Replacement Patrol Vehicle									
CP-PD-13-V0		64-00	Machinery & Equipment	$0	$0	$33,818	$0	$0	$33,818
Replacement Patrol Vehicle									
CP-PD-13-CP		64-00	Machinery & Equipment	$0	$33,818	$0	$0	$0	$33,818
Replacement Patrol Vehicle									
CP-PD-13-8V		64-00	Machinery & Equipment	$0	$32,818	$0	$0	$0	$32,818
Replacement Patrol Vehicle									
CP-PD-13-4V		64-00	Machinery & Equipment	$0	$33,818	$0	$0	$0	$33,818
Replacement Patrol Vehicle									
CP-PD-13-2V		64-00	Machinery & Equipment	$0	$33,818	$0	$0	$0	$33,818
Replacement Patrol Vehicle									
CP-PD-13-V9		64-00	Machinery & Equipment	$0	$0	$32,818	$0	$0	$32,818
Replacement Patrol Vehicle									
2100 Division TOTAL				$52,000	$286,272	$222,136	$192,800	$192,800	$946,008

Fund	Dept/Div									
001	2101			2018	2019	2020	2021	2022	Total Capital Costs
CP-PD-18-R1	RC2014	64-00	Machinery & Equipment	$0	$0	$0	$52,771	$52,771	$105,542
P25 Radio Replacement									
2101 Division TOTAL				$0	$0	$0	$52,771	$52,771	$105,542

Fund	Dept/Div									
001	2201			2018	2019	2020	2021	2022	Total Capital Costs

Fund	Dept/Div			2018	2019	2020	2021	2022	Total Capital Costs
001	2201								
CP-FD-18-LP		64-00	Machinery & Equipment	$43,019	$0	$0	$0	$0	$43,019
LifePak 15 V4 Monitor/Defibrillator									
CP-FD-17-BA		64-00	Machinery & Equipment	$0	$0	$236,816	$0	$0	$236,816
Replace 27 Self-Contained Breathing Apparatus (SCBA) 45 Masks and 72 air cylinders									
CP-FD-17-EP		64-00	Machinery & Equipment	$0	$0	$0	$526,179	$0	$526,179
Replace E30 a 2006 Pierce Enforcer pumper									
CP-FD-17-PE		64-00	Machinery & Equipment	$0	$497,277	$0	$0	$0	$497,277
Replace E31 a 2002 Pierce Enforcer Pumper									
2201 Division TOTAL				$43,019	$497,277	$236,816	$526,179	$0	$1,303,291

Fund	Dept/Div			2018	2019	2020	2021	2022	Total Capital Costs
001	3200								
CP-CS-17-ES		68-10	Software	$0	$0	$52,720	$0	$0	$52,720
Electronic Plan Review - Software									
3200 Division TOTAL				$0	$0	$52,720	$0	$0	$52,720

Fund	Dept/Div			2018	2019	2020	2021	2022	Total Capital Costs
001	3510								
CP-PW-18-SM		63-00	Infrastructure	$50,000	$50,000	$50,000	$50,000	$50,000	$250,000
Annual Sidewalk Maintenance/Replacement Program									
CP-PW-11-PP	PW08SP	63-00	Infrastructure	$300,000	$300,000	$300,000	$300,000	$300,000	$1,500,000
Annual Street Paving Program									
CP-PW-15-BM		63-00	Infrastructure	$0	$120,000	$0	$0	$0	$120,000
Broadview Manor Street Lighting									
CP-PW-17-FS	PW17SI	63-00	Infrastructure	$1,750,000	$0	$0	$0	$0	$1,750,000
Fiske Blvd Complete Streets Roadway, and Sidewalk Improvements Phase 3 (General Fund)									
CP-PW-17-PS		63-00	Infrastructure	$0	$675,000	$0	$0	$0	$675,000
Pineda Street Roadway and Sidwalk Reconstruction									
CP-PW-18-SI		63-00	Infrastructure	$100,000	$0	$0	$0	$0	$100,000
SR 520 Interim Safety Improvements									

Fund	Dept/Div			2018	2019	2020	2021	2022	Total Capital Costs
001	3510								
CP-PW-18-SB		64-00	Machinery & Equipment	$0	$48,000	$48,000	$48,000	$48,000	$192,000
Steel bench replacement program									
CP-CD-11-SS	CD1205	63-00	Infrastructure	$580,552	$60,552	$0	$0	$0	$641,104
Stone Street Corridor Streetscaping (General Funds portion)									
			3510 Division TOTAL	$2,780,552	$1,253,552	$398,000	$398,000	$398,000	$5,228,104
Fund	**Dept/Div**			2018	2019	2020	2021	2022	Total Capital Costs
001	3540								
CP-PW-18-FW	3540-001	52-00	Operating	$0	$26,725	$0	$0	$0	$26,725
FLEET FASTER ASSET UPGRADE TO FASTER WEB									
CP-PW-18-FB	3540-001	68-10	Software	$0	$20,000	$0	$0	$0	$20,000
FLEET FASTER ASSET UPGRADE TO FASTER WEB									
			3540 Division TOTAL	$0	$46,725	$0	$0	$0	$46,725
Fund	**Dept/Div**			2018	2019	2020	2021	2022	Total Capital Costs
001	3560								
CP-PW-18-HV		64-00	Machinery & Equipment	$0	$40,000	$50,000	$0	$0	$90,000
City Hall HVAC replacement									
CP-PW-13-CR		62-00	Building	$0	$35,000	$830,000	$0	$0	$865,000
Cocoa Civic Center Rehabilitation									
CP-PW-18-WR		46-00	Repair & Maintenance	$0	$0	$63,000	$0	$0	$63,000
Cocoa PD Wall Rehab									
CP-PW-18-F2		46-02	R&M Building	$36,000	$0	$0	$0	$0	$36,000
Fire #2 Rehab									
CP-PW-18-PB		46-02	R&M Building	$0	$76,000	$0	$0	$0	$76,000
Public Works Pole Barn Rehab									
CP-PW-17-S3		46-02	R&M Building	$0	$75,000	$0	$0	$0	$75,000
Roof replacement Fire station #3									
CP-PW-18-SP		46-02	R&M Building	$32,000	$0	$0	$0	$0	$32,000
Seal/Paint Police department									

Fund	Dept/Div									
001	3560			2018	2019	2020	2021	2022	Total Capital Costs
		3560 Division TOTAL		$68,000	$226,000	$943,000	$0	$0	$1,237,000
Fund	**Dept/Div**								
001	3580			2018	2019	2020	2021	2022	Total Capital Costs
CP-PW-17-DM		64-00	Machinery & Equipment	$50,000	$50,000	$0	$0	$0	$100,000
2 Digital message boards									
CP-PW-17-JS	CP1504	62-00	Building	$175,000	$4,385,000	$0	$0	$0	$4,560,000
New Joe L. Smith Center for Justice									
CP-PW-16-FS		63-00	Infrastructure	$0	$95,000	$0	$0	$0	$95,000
Total Fitness system									
CP-PW-18-TC		64-00	Machinery & Equipment	$0	$25,025	$25,025	$0	$0	$50,050
Trash Can replacement									
		3580 Division TOTAL		$225,000	$4,555,025	$25,025	$0	$0	$4,805,050
		001 Fund Total		$3,264,171	$6,954,807	$1,877,697	$1,169,750	$643,571	$13,909,996
Fund	**Dept/Div**								
110	3230			2018	2019	2020	2021	2022	Total Capital Costs
CP-CD-18-FA	CP1502	63-00	Infrastructure	$260,000	$0	$0	$0	$0	$260,000
6 Forrest Avenue Gateway Entry Feature									
CP-PW-18-BA		63-00	Infrastructure	$0	$0	$500,000	$3,500,000	$0	$4,000,000
Brevard Ave Streetscape Project									
CP-CD-14-TD	CS14LW	63-00	Infrastructure	$414,000	$0	$0	$0	$0	$414,000
Cocoa Riverfront T-Dock Expansion (Phase 2 - Construction)									
CP-CD-13-SP	CD1401	63-00	Infrastructure	$0	$0	$0	$0	$433,000	$433,000
Cocoa Village Wayfinding and Signage Program									
CP-CS-16-DG		62-00	Building	$0	$5,500,000	$0	$0	$0	$5,500,000
Downtown Parking Garage									
CP-CS-16-HS	CS15HS	63-00	Infrastructure	$0	$396,994	$0	$0	$0	$396,994
Harrison Street Streetscaping & Stormwater Drainage Improvements (Cocoa CRA portion)									

Fund	Dept/Div									
110	3230			2018	2019	2020	2021	2022	Total Capital Costs
CP-PW-17-PP		63-00	Infrastructure	$0	$0	$125,000	$0	$0	$125,000
Lee Wenner Park Paving and Striping									
CP-CS-16-RP	PW16RP	63-00	Infrastructure	$45,000	$0	$0	$0	$0	$45,000
Riverfront Park Day Slips									
CP-CS-15-MF	CD1501	63-00	Infrastructure	$0	$0	$245,354	$0	$0	$245,354
Riverfront Park Mooring Field									
CP-CS-17-TC		63-00	Infrastructure	$0	$0	$0	$0	$1,685,721	$1,685,721
Southern Gateway Traffic Circle									
		3230 Division TOTAL		$719,000	$5,896,994	$870,354	$3,500,000	$2,118,721	$13,105,069
		110 Fund Total		$719,000	$5,896,994	$870,354	$3,500,000	$2,118,721	$13,105,069
Fund	**Dept/Div**								
301	3580			2018	2019	2020	2021	2022	Total Capital Costs
CP-FD-11-NS		62-00	Building	$4,851,699	$1,648,301	$0	$0	$0	$6,500,000
***New Fire Stations Construction - Subject to funding availability									
CP-CP-15-01	CP1501	62-00	Building	$160,000	$0	$0	$0	$0	$160,000
HEART OF COCOA MEETING ROOM									
		3580 Division TOTAL		$5,011,699	$1,648,301	$0	$0	$0	$6,660,000
		301 Fund Total		$5,011,699	$1,648,301	$0	$0	$0	$6,660,000
Fund	**Dept/Div**								
421	1515			2018	2019	2020	2021	2022	Total Capital Costs
CP-FN-17-MR		64-15	IT Machinery & Equipmen	$91,090	$10,396	$0	$0	$0	$101,486
Meter reading Hand Held Utility Usage Reading Capture Devices									
		1515 Division TOTAL		$91,090	$10,396	$0	$0	$0	$101,486
Fund	**Dept/Div**								
421	4010			2018	2019	2020	2021	2022	Total Capital Costs
CP-PW-18-FE	3540-001	52-00	Operating	$0	$26,725	$0	$0	$0	$26,725
FLEET FASTER ASSET UPGRADE TO FASTER WEB									

Fund	Dept/Div									
421	4010			2018	2019	2020	2021	2022	Total Capital Costs
CP-PW-18-FA	3540-001	68-10	Software	$0	$20,000	$0	$0	$0	$20,000
FLEET FASTER ASSET UPGRADE TO FASTER WEB									
CP-WS-18-AF	WS16UP	31-00	Professional Services	$1,398,790	$0	$0	$0	$0	$1,398,790
Utility Privatization Services									
4010 Division TOTAL				$1,398,790	$46,725	$0	$0	$0	$1,445,515

Fund	Dept/Div									
421	4020			2018	2019	2020	2021	2022	Total Capital Costs
CP-WS-18-AT	WS18AS	63-00	Infrastructure	$200,000	$0	$0	$0	$0	$200,000
Automatic Transfer Switch (ATS) Replacement at the TCR Pump Station									
CP-WS-18-CI	WS1117	63-00	Infrastructure	$200,000	$0	$0	$0	$0	$200,000
Computerized Maintenance Management System (CMMS) Implementation									
CP-WS-18-AI	WS18DW	63-00	Infrastructure	$250,000	$250,000	$250,000	$250,000	$250,000	$1,250,000
Drinking Water System E&IC Reliability and Automation Improvements									
CP-WS-18-GC	WS18DG	63-00	Infrastructure	$170,000	$0	$0	$0	$0	$170,000
Dyal Groundwater Clearwell Transfer Pump Control System Upgrade									
CP-WS-18-RC	WS18DP	63-00	Infrastructure	$330,000	$0	$0	$0	$0	$330,000
Dyal Groundwater WTP Reactor Clarifier No. 1 Pipeline Replacement - Construction									
CP-WS-17-DG	WS17LC	63-00	Infrastructure	$90,000	$0	$0	$0	$0	$90,000
Dyal WTP Package System PLC Upgrade - Cal Flow									
CP-WS-17-OZ	WS17FC	63-00	Infrastructure	$160,000	$0	$0	$0	$0	$160,000
Dyal WTP Package System Programmable Logic Controller Upgrade - Belt Filter Press									
CP-WS-18-SU	WS18SC	63-00	Infrastructure	$170,000	$0	$0	$0	$170,000	$340,000
Dyal WTP SCADA server, OS and Server Software Upgrade									
CP-WS-17-WC		68-10	Software	$0	$0	$120,000	$0	$0	$120,000
FY2020 SCADA Design Programming (Water Capital Project)									
CP-WS-17-CA		63-00	Infrastructure	$0	$0	$0	$60,000	$0	$60,000
FY2021 SCADA Design Programming (Water Capital Project)									

Fund	Dept/Div			2018	2019	2020	2021	2022	Total Capital Costs
421	4020								
CP-WS-18-SD		68-10	Software	$0	$0	$0	$0	$120,000	$120,000
FY2022 SCADA Design Programming (Water Capital Project)									
CP-WS-17-V6		64-00	Machinery & Equipment	$32,900	$0	$0	$0	$0	$32,900
Replacement of vehicle #03 (2008 Ford F250)									
CP-WS-17-V7		64-00	Machinery & Equipment	$34,500	$0	$0	$0	$0	$34,500
Replacement of vehicle #121 (2007 Ford F250 UTILITY)									
CP-WS-17-V11		64-00	Machinery & Equipment	$0	$34,975	$0	$0	$0	$34,975
Replacement of vehicle #130 (2010 Ford F250 UTILITY)									
CP-WS-17-V10		64-00	Machinery & Equipment	$0	$34,975	$0	$0	$0	$34,975
Replacement of vehicle #23 (2009 Ford F250 UTILITY)									
CP-WS-15-LN		64-00	Machinery & Equipment	$0	$0	$250,000	$0	$0	$250,000
Replacement of vehicle #47 (1996 Ford LNT8000)									
CP-WS-17-V8		64-00	Machinery & Equipment	$34,500	$0	$0	$0	$0	$34,500
Replacement of vehicle #78 (2004 Ford F250 UTILITY)									
CP-WS-17-V9		64-00	Machinery & Equipment	$34,500	$0	$0	$0	$0	$34,500
Replacement of vehicle #94 (2005 Ford F250 UTILITY)									
CP-WS-16-WR	WS1106	63-00	Infrastructure	$250,000	$250,000	$250,000	$250,000	$250,000	$1,250,000
WS-19 Raw Water Well Rehabilitation									
CP-WS-16-FC	WS18SW	63-00	Infrastructure	$418,000	$32,000	$0	$0	$0	$450,000
WT-56 Dyal Surface Water Filters Canopy and Enclosure									
CP-WS-16-DE	WS18DE	63-00	Infrastructure	$98,000	$872,000	$0	$0	$0	$970,000
WT-57 Dyal HSP #4 Tier 4 Diesel Engine Replacement									
CP-WS-18-DL		63-00	Infrastructure	$0	$290,000	$0	$0	$0	$290,000
WT59 Dyal Dewatered Lime Sludge Storage Structure - Design and Construction									
CP-WS-18-LS	WS18CB	63-00	Infrastructure	$0	$0	$0	$0	$420,000	$420,000
WT69 Dyal Groundwater WTP Chemical Building New Lime Silo Stairway - Construction									
CP-WS-18-DB		64-00	Machinery & Equipment	$0	$0	$0	$0	$160,000	$160,000
WT70 Dyal WTP Surface Water Dewatering Building - Polymer System Upgrade-Construction									

Fund	Dept/Div									
421	4020			2018	2019	2020	2021	2022	Total Capital Costs
CP-WS-18-DF	WS18CP	63-00	Infrastructure	$300,000	$0	$0	$0	$0	$300,000
WT71 Dyal Groundwater WTP Chemical Building - Two Disc Flow Pumps for Lime Feed System - Const.									
CP-WS-18-PS	WS18UP	63-00	Infrastructure	$50,000	$0	$0	$0	$0	$50,000
WT72 Dyal WTP server Uninterrupted Power Supply (UPS) Upgrade									
CP-WS-18-PC		63-00	Infrastructure	$0	$0	$0	$0	$140,000	$140,000
WT73 Dyal High Service Pump Control System Upgrade									
4020 Division TOTAL				$2,822,400	$1,763,950	$870,000	$560,000	$1,510,000	$7,526,350

Fund	Dept/Div									
421	4025			2018	2019	2020	2021	2022	Total Capital Costs
CP-WS-17-V17		64-00	Machinery & Equipment	$0	$0	$38,100	$0	$0	$38,100
Replacement of vehicle #15 (2009 Ford F250 UTILITY)									
CP-WS-15-71		64-00	Machinery & Equipment	$49,241	$0	$0	$0	$0	$49,241
Replacement of vehicle #171 (2001 Ford F450 Dump)									
CP-WS-16-V6		64-00	Machinery & Equipment	$0	$0	$38,100	$0	$0	$38,100
Replacement of vehicle #174 (2009 Ford F250 Utility)									
CP-WS-15-29		64-00	Machinery & Equipment	$0	$0	$70,900	$0	$0	$70,900
Replacement of vehicle #29 (2002 Ford F450 Dump)									
CP-WS-15-32		64-00	Machinery & Equipment	$0	$0	$71,900	$0	$0	$71,900
Replacement of vehicle #32 (2002 Ford F450 Dump)									
CP-WS-18-V1		64-00	Machinery & Equipment	$53,939	$0	$0	$0	$0	$53,939
Replacement of vehicle #79 (2002 Ford F450 Utility)									
CP-WS-15-92		64-00	Machinery & Equipment	$0	$76,900	$0	$0	$0	$76,900
Replacement of vehicle #92 (2008 Ford F350 Utility)									
4025 Division TOTAL				$103,180	$76,900	$219,000	$0	$0	$399,080

Fund	Dept/Div									
421	4055			2018	2019	2020	2021	2022	Total Capital Costs
CP-WS-17-WP	WS0501	63-00	Infrastructure	$2,420,000	$0	$0	$0	$0	$2,420,000
14"/18" AC Raw Water Pipeline Upgrade and Well 17 Area Isolation Valves - Phase I Construction									

Fund	Dept/Div									
421	4055			2018	2019	2020	2021	2022	Total Capital Costs
CP-WS-17-CP	WS1210	68-10	Infrastructure	$500,000	$0	$0	$0	$0	$500,000
Capital Plan Update									
CP-WS-14-39	WS18MI	63-00	Infrastructure	$150,000	$1,290,000	$0	$0	$0	$1,440,000
DS-39 Merritt Island In-line Booster Pump Station									
CP-WS-18-FL		63-00	Infrastructure	$0	$0	$0	$0	$610,000	$610,000
DS40 Ivy Dr. and Fenner Rd. Looping									
CP-WS-18-PB		63-00	Infrastructure	$0	$0	$0	$0	$880,000	$880,000
DS43 Pluckebaum Rd and A Ln Looping									
CP-WS-18-BR		63-00	Infrastructure	$0	$0	$0	$0	$200,000	$200,000
DS55 Banana River Drive Canal Crossing									
CP-WS-17-BR	WS18BR	63-00	Infrastructure	$370,000	$1,169,634	$2,792,502	$0	$0	$4,332,136
DS-56 Banana River Tank Improvements									
CP-WS-16-PS	DSCO	63-00	Infrastructure	$0	$0	$87,616	$1,092,384	$0	$1,180,000
DS-60 Banana River and Viera Pump Station Chloramination Improvements									
CP-WS-18-PL		63-00	Infrastructure	$0	$0	$0	$0	$310,000	$310,000
DS62 Imperial to Central Pipe Loop/Brown Circle									
CP-WS-16-MM	WS16MM	63-00	Infrastructure	$2,100,000	$0	$0	$0	$0	$2,100,000
DS-63 Marlin Manor Pipeline Improvements - Construction									
CP-WS-12-DP	WS1404	63-00	Infrastructure	$4,456,476	$13,902,001	$3,297,999	$0	$0	$21,656,476
Dyal Chemical Conversion & Reliability Improvement Project - Construction									
CP-WS-17-WE	WS18WF	63-00	Infrastructure	$1,150,000	$0	$0	$0	$0	$1,150,000
Fiber Optic Cable from Dyal WTP to Wewa WTP									
CP-WS-17-FO	WS17FO	63-00	Infrastructure	$690,000	$0	$0	$0	$0	$690,000
Fiber Optic Cable from Police Department to Dyal WTP									
CP-WS-18-FB	WS18FB	63-00	Infrastructure	$1,000,000	$0	$0	$0	$0	$1,000,000
Fiske Boulevard Pipeline Improvements - Peachtree to Highland									
CP-UT-18-HS	WS18HS	63-00	Infrastructure	$0	$98,720	$0	$0	$0	$98,720
Harrison Street Streetscape (Utility portion)									

Fund	Dept/Div									
421	4055			2018	2019	2020	2021	2022	Total Capital Costs
CP-WS-18-MA	WS17MI	63-00	Infrastructure	$740,000	$0	$0	$0	$0	$740,000
Michigan Avenue Force Main (Carry Forward)									
CP-WS-18-SS	WS18SS	63-00	Infrastructure	$659,356	$0	$0	$0	$0	$659,356
Stone Street Corridor Streetscaping (Utility portion)									
CP-WS-13-PM	WS1221	63-00	Infrastructure	$1,500,000	$1,400,000	$1,200,000	$1,100,000	$1,000,000	$6,200,000
Utilities Program Management									
CP-WS-18-TS	WS1210	68-10	Software	$30,000	$300,000	$30,000	$30,000	$30,000	$420,000
Wastewater Capital Plan									
CP-WS-14-03	WS0501	63-00	Infrastructure	$0	$0	$0	$0	$240,000	$240,000
WS-03 Pigging and Flushing Improvements for Raw Water Pipelines									
CP-WS-14-05	WS-05	63-00	Infrastructure	$0	$0	$0	$1,100,955	$2,319,045	$3,420,000
WS-05 54 inch Redundant Pipe to Dyal									
CP-WS-05-01	WS0501	63-00	Infrastructure	$0	$0	$99,892	$5,428,703	$2,767,574	$8,296,169
WS-09 42 inch New Pipeline West of Well 7A to Dallas Wewa									
CP-WS-18-RP		63-00	Infrastructure	$0	$0	$0	$0	$390,000	$390,000
WS11 Redundant Pipeline Well 20 to 23 - Design									
CP-WS-12-PL	WS1201	63-00	Infrastructure	$2,770,786	$2,142,744	$3,000,000	$3,424,610	$5,000,000	$16,338,140
WS1201 Pipe Infrastructure Assessment and Replacement									
CP-WS-18-NW		63-00	Infrastructure	$0	$820,000	$0	$0	$0	$820,000
WS20 Install New Well No. 17									
CP-WS-18-SI		63-00	Infrastructure	$0	$0	$0	$0	$2,300,000	$2,300,000
WS22 Wellfield Security Improvements									
CP-WS-14-02	WS1402	63-00	Infrastructure	$3,995,629	$0	$0	$0	$0	$3,995,629
WT-02 Separation of Groundwater and Surface Water Clear Well									
CP-WS-18-LF		63-00	Infrastructure	$0	$0	$0	$0	$840,000	$840,000
WT37 Lime Feed and Storage System Improvements									
CP-WS-18-BE		63-00	Infrastructure	$0	$0	$0	$0	$1,540,000	$1,540,000
WT48 Recarbonation Basin Expansion-Reactor Clarifiers #1/#2 - Design and Construction									

Fund	Dept/Div									
421	4055			2018	2019	2020	2021	2022	Total Capital Costs
CP-WS-15-SU	WS1508	63-00	Infrastructure	$0	$310,000	$3,250,000	$0	$0	$3,560,000
WT-51 Sulfuraetor									
CP-WS-16-GI	WT-54	63-00	Infrastructure	$0	$0	$430,000	$3,860,000	$0	$4,290,000
WT-54 Tier 4 Generator Improvements									
CP-WS-18-SB		62-00	Building	$0	$0	$0	$0	$220,000	$220,000
WT58 Dyal WTP Storage Building									
CP-WS-18-BP		63-00	Infrastructure	$0	$90,000	$950,000	$0	$0	$1,040,000
WT61 Dyal CO2 Bulk Package System									
CP-WS-17-TT	WS18DT	64-00	Machinery & Equipment	$110,000	$0	$0	$0	$0	$110,000
WT-62 Dyal TTHM Prevention and/or Reduction									
CP-WS-17-DF	WS18RD	63-00	Infrastructure	$0	$640,000	$6,840,000	$0	$0	$7,480,000
WT-63 Replacement of Dyal Finished Water Steel GST									
CP-WS-15-OI	WT-CO	64-00	Machinery & Equipment	$0	$0	$1,513,504	$3,036,496	$0	$4,550,000
WT-CO Ozone Improvements (Generator Replacement, Chiller Replacement, Contactor Improvements)									
4055 Division TOTAL				$22,642,247	$22,163,099	$23,491,513	$19,073,148	$18,646,619	$106,016,626

Fund	Dept/Div									
421	4120			2018	2019	2020	2021	2022	Total Capital Costs
CP-WS-18-BS		63-00	Infrastructure	$0	$0	$200,000	$200,000	$1,800,000	$2,200,000
Biosolids Improvements Project									
CP-WS-17-PA	WW-32	63-00	Infrastructure	$0	$115,000	$0	$0	$0	$115,000
Bracco Pond Aeration									
CP-WS-18-BI	WW-32	63-00	Infrastructure	$0	$90,000	$0	$0	$0	$90,000
Bracco Pond Interconnect									
CP-WS-18-CS		63-00	Infrastructure	$0	$100,000	$600,000	$0	$0	$700,000
Chemical Storage Relocation									
CP-WS-18-UP	WS17CM	63-00	Infrastructure	$50,000	$0	$0	$0	$0	$50,000
CMMS Update Phase II									

Fund	Dept/Div			2018	2019	2020	2021	2022	Total Capital Costs
421	4120								
CP-WS-18-GR		63-00	Infrastructure	$0	$0	$0	$0	$200,000	$200,000
Generator Replacement									
CP-WS-18-IP		63-00	Infrastructure	$0	$0	$0	$0	$205,000	$205,000
Internal Recycle Pump Replacement									
CP-WS-18-FI	WS16SF	63-00	Infrastructure	$2,115,000	$2,115,000	$0	$0	$0	$4,230,000
Jerry Sellers Flow Improvements									
CP-WS-18-LE	WS18SE	62-00	Building	$65,000	$0	$0	$0	$0	$65,000
Jerry Sellers WRF Laboratory Expansion									
CP-WS-18-OP	WS18PR	31-00	Professional Services	$65,000	$0	$0	$0	$0	$65,000
Jerry Sellers WRF Operating Permit Renewal									
CP-WS-18-LP		63-00	Infrastructure	$0	$0	$0	$200,000	$0	$200,000
LCP No. 1 Rehabilitation									
CP-WS-18-CR	WS1222	63-00	Infrastructure	$780,000	$0	$0	$0	$0	$780,000
MCC and Conduit Replacement Project (Carry Forward)									
CP-WS-18-MP		63-00	Infrastructure	$0	$65,000	$650,000	$0	$0	$715,000
Michigan Pond Supplemental Reuse									
CP-WS-17-ML	WS1510	63-00	Infrastructure	$40,000	$400,000	$750,000	$0	$0	$1,190,000
Mud Lake Wetlands									
CP-WS-18-FR		64-00	Machinery & Equipment	$21,200	$0	$0	$0	$0	$21,200
New F150 Ref Cab									
CP-WS-18-WP		63-00	Infrastructure	$0	$0	$0	$600,000	$0	$600,000
Reclaimed Water Pump Replacement									
CP-WS-18-RM		64-00	Machinery & Equipment	$0	$0	$0	$550,000	$0	$550,000
Replacement of MCCs 7 and 8									
CP-WS-17-V16		64-00	Machinery & Equipment	$0	$30,237	$0	$0	$0	$30,237
Replacement of vehicle #42 (2006 Ford E250 VAN)									
CP-WS-17-RT	WS17RT	63-00	Infrastructure	$150,000	$150,000	$150,000	$150,000	$150,000	$750,000
RTU Replacement									

Fund	Dept/Div			2018	2019	2020	2021	2022	Total Capital Costs
421	4120								
CP-WS-18-TR		63-00	Infrastructure	$0	$0	$0	$0	$250,000	$250,000
Tank recoating project									
CP-WS-18-TP		63-00	Infrastructure	$0	$0	$0	$430,000	$0	$430,000
Transfer pump replacement									
CP-WS-18-DC		63-00	Infrastructure	$0	$0	$0	$0	$2,530,000	$2,530,000
UV Disinfection Conversion									
CP-WS-17-VI	WS17VA	63-00	Infrastructure	$60,000	$0	$0	$0	$0	$60,000
Valve Identification Project									
CP-WS-17-V2		64-00	Machinery & Equipment	$56,000	$0	$0	$0	$0	$56,000
Water Reclamation E250 Van									
			4120 Division TOTAL	$3,402,200	$3,065,237	$2,350,000	$2,130,000	$5,135,000	$16,082,437
Fund	**Dept/Div**			2018	2019	2020	2021	2022	Total Capital Costs
421	4125								
CP-WS-17-R3	WS0904	63-00	Infrastructure	$400,000	$400,000	$400,000	$400,000	$0	$1,600,000
CIPP Rehabilitation Phases 3 - 6									
CP-WS-18-SR		63-00	Infrastructure	$0	$0	$0	$700,000	$0	$700,000
Lift Station No. 1 Replacement									
CP-WS-17-V18		63-00	Infrastructure	$0	$0	$0	$38,100	$0	$38,100
Replacement of vehicle #53 (2009 Ford F250 UTILITY)									
CP-WS-17-V1	WW-33	64-00	Machinery & Equipment	$0	$0	$30,237	$0	$0	$30,237
Water Reclamation Fleet E250 Van									
CP-WS-17-V3	WW-36	64-00	Machinery & Equipment	$0	$0	$0	$38,100	$0	$38,100
WFO Sewer F250 Utility Ford									
CP-WS-17-V4	WW-37	64-00	Machinery & Equipment	$0	$0	$0	$75,900	$0	$75,900
WFO Sewer F450 Dump Ford									
			4125 Division TOTAL	$400,000	$400,000	$430,237	$1,252,100	$0	$2,482,337
			421 Fund Total	$30,859,907	$27,526,307	$27,360,750	$23,015,248	$25,291,619	$134,053,831

Fund	Dept/Div			2018	2019	2020	2021	2022	Total Capital Costs
423	3570								
CP-SW-11-Cra	PW08CG	63-00	Infrastructure	$50,000	$50,000	$50,000	$50,000	$50,000	$250,000
Annual Curb & Gutter R&M Program									
CP-SW-11-CR	SW08PL	63-00	Infrastructure	$200,000	$200,000	$200,000	$200,000	$200,000	$1,000,000
Annual Cured in Place Pipe Lining									
CP-PW-17-FY	PW17SI	63-00	Infrastructure	$140,000	$0	$0	$0	$0	$140,000
Fiske Blvd Complete Streets Roadway, and Sidewalk Improvements Phase 3 (General Fund)									
CP-PW-17-HS	SW17HS	63-00	Infrastructure	$0	$95,867	$0	$0	$0	$95,867
Harrison Street Streetscape (Stormwater portion)									
CP-SW-12-IR	SW1503	63-00	Infrastructure	$0	$80,000	$80,000	$80,000	$80,000	$320,000
Indian River Drive Baffle Box									
CP-SW-17-MB		64-00	Machinery & Equipment	$0	$310,000	$0	$0	$0	$310,000
Mechanical Broom Sweeper									
CP-SW-12-RR	SW1301	63-00	Infrastructure	$0	$0	$250,000	$0	$0	$250,000
Pipe Range Road Drainage Ditch									
CP-PW-18-SS		63-00	Infrastructure	$120,414	$0	$0	$0	$0	$120,414
Stone street Corridor Streetscaping (Stormwater portion)									
CP-SW-18-AM		31-00	Professional Services	$80,000	$50,000	$0	$0	$0	$130,000
Stormwater GIS Asset Mapping									
CP-SW-17-FA		63-00	Infrastructure	$250,000	$135,000	$0	$0	$0	$385,000
US1 and Forrest Ave Stormwater Facility									
CP-PW-18-YI		64-00	Machinery & Equipment	$32,000	$0	$0	$0	$0	$32,000
Yale Industrial Forklift									
		3570 Division TOTAL		$872,414	$920,867	$580,000	$330,000	$330,000	$3,033,281
		423 Fund Total		$872,414	$920,867	$580,000	$330,000	$330,000	$3,033,281
			Total Requests	**$40,727,191**	**$42,947,276**	**$30,688,801**	**$28,014,998**	**$28,383,911**	**$170,762,177**

City of Cocoa Capital Improvement Plan
FY 2018 through FY 2022

General Fund Projects

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 1103

CIP #: CP-IT-17-AE Project #: Account #: 52-00 CIP Classification: Operating District: City

Project Name: Aegis 11 Enterprise Upgrade FY Start 2018 Quarter Q2

Project Location: City FY End 2018 Quarter Q1

Project Description

Updrade from Aegis 10.3 MSP to Aegis 11.0 Enterprise. This project includes implementation services and travel related expenses required by Tyler to upgrade the existing public safety sofeware.

Project Justification

Aegis Enterprise includes several next generation features such as enhanced 911, advanced GIS integration and data sharing with several other agencies throughout Brevard County.

Strategic Connection: Operational

The Aegis Public Safety software suite is an essential tool used by Cocoa Police and Fire Departments.

Total Cost of Project	Total Cost to Date
$95,600	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$95,600

Recurring Annual Costs

Operating	$0
Maintenance	$1,360
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,360

Capital Costs and Proposed Financing by Fiscal Year

2018	$95,600	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$95,600	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 1103

CIP #: CP-IT-18-FR Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Complete City Fiber Ring FY Start 2018 Quarter Q2

Project Location: Police Department to City Hall FY End 2018 Quarter Q1

Project Description

Construction of the last section of City fiber from the Police Department to City Hall, completing the fiber ring.

Project Justification

The existing fiber infrastructure consists of a collapsed ring that loops back on itself to provide redundancy. Construction of additional fiber would complete the ring, making the system more redundant. The proposed fiber would cross three major roads (520, Fiske, & US1), railroad tracks, and ten minor roads. Completion of the fiber ring would provide for high availablity of network services and reduced downtime in the event of a fiber cut.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$89,956	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	Revenue
2019	$89,956	Revenue
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$89,956	

Financing Comments

CIE_Designation ☐

Robert Beach

From: Jason McCuen
Sent: Friday, March 31, 2017 4:03 PM
To: Robert Beach
Subject: 2016 FEC Permits (Voided)

IT16FR - PD to City Hall Return Fiber FEC Permit - Application ($5k) & ROE ($1.5k)		——6,500.00
VOIDED - 09/20/2016		
IT16FR - PD to City Hall Return Fiber FEC Permit - Engineering Review		——1,500.00
VOIDED - 09/20/2016		

COCOA FLORIDA
Serving our Community with PRIDE!

Jason McCuen
Help Desk Technician
Information Technology
City of Cocoa
65 Stone St
Cocoa, FL 32922-7982

To initiate a tech support request, view or add notes of an existing ticket, or to provide feedback, please utilize the Help Desk Web Portal located at: http://mainv-app02.cocoafl.org/helpdesk/Forms/LoginPage.aspx

Access email on any internet platform:
Office Exchange Email: https://webmail.cocoafl.org
Office 365 Email: https://outlook.office365.com

Danella Construction Corporation of Florida Quote for:

City of Cocoa- Return path PD to City Hall

3/31/2017

Item #	Police Department to City Hall return Path - Construction	Qty	Unit	Amount	Ext.
1	Design new reroute	2150	Ft	$0.75	$1,612.50
2	permit new reroute	2150	Ft	$0.25	$537.50
3	adder- railroad crossing design - minimum charge	1500	Ft	$0.75	$1,125.00
4	adder- railroad crossing permit - minimum charge (not including permit fee)	1500	Ft	$0.25	$375.00
5	PE Stamp (if required)	1	Ea	$500.00	$500.00
6	Furnish & Directional Bore (1) 2" Duct	3160	Ft	$12.00	$37,920.00
7	Furnish & Install 24"x36"x18" handholes with 20k lids	5	Ea	$600.00	$3,000.00
8	Core bores	4	Ea	$100.00	$400.00
9	saw cut	200	sqft	$1.00	$200.00
10	Conc remo	150	Sqft	$3.50	$525.00
11	Conc replace	150	Sqft	$7.00	$1,050.00
12	Material - Conc	150	Sqft	$5.00	$750.00
13	asphalt remo	50	sqft	$2.50	$125.00
14	asphalt replace	50	sqft	$5.25	$262.50
15	material - asphalt	50	sqft	$5.00	$250.00
16	Install muletape - New	3160	Ft	$0.25	$790.00
17	Furnish & Install #12 tracer wire	3160	Ft	$0.35	$1,106.00
18	Furnish Install 144 Fiber optic cable to existing vaults in front of city hall & police - (collapsed into bldgs)	9075	Ft	$2.50	$22,687.50
19	Furnish & install 24 foc	715	Ft	$1.44	$1,029.60
20	Install splice case	2	Ea	$250.00	$500.00
21	Splice case 8.5x22	2	Ea	$706.20	$1,412.40
22	Install Splice trays	2	Ea	$55.00	$110.00
23	Fusion Splice fibers (24 per location)	96	Ea	$30.00	$2,880.00
24	Marker posts	10	Ea	$65.00	$650.00
25	Marker posts with test stations	2	Ea	$85.00	$170.00
26	Material - loaded 24 count fiber panel (existing rack)	1	Ea	$1,029.00	$1,029.00
27	12 port bulkhead for existing panel	2	Ea	$110.00	$220.00
28	24 pigtails for existing panel	24	Ea	$21.00	$504.00
29	splice tray for existing panel	1	Ea	$55.00	$55.00
30	Material - ground rods	5	Ea	$36.00	$180.00
		Construction Total			**$81,956.00**

NOTE:

Pricing is only vaild if direct awarded as a whole under palm coast contract piggyback

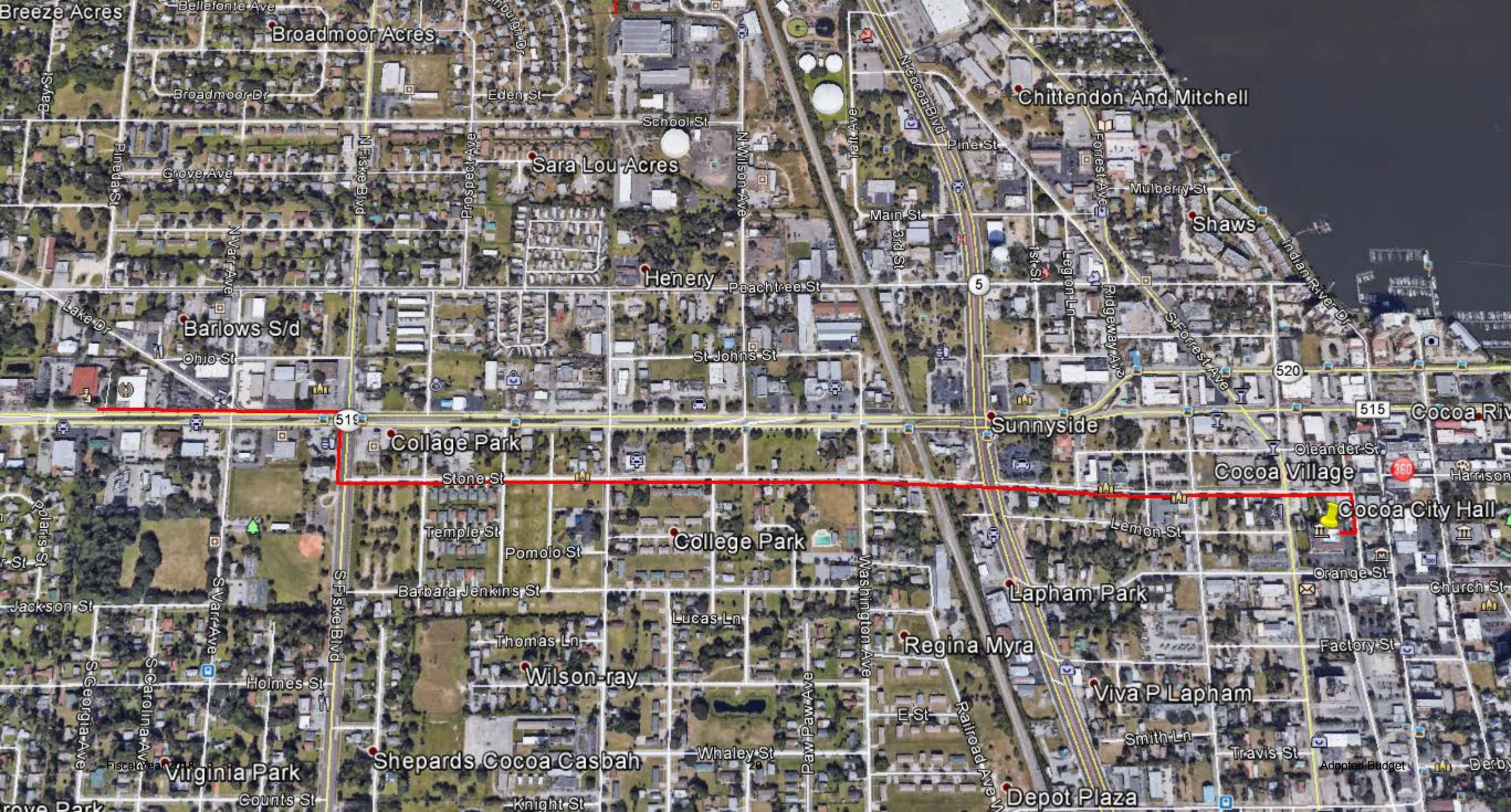
If project is bid out this propsal becomes null & void. A new proposal will be supplied with pricing specific to project and not palm coast contract rates.

Does not include city county or railroad permit fees. All permit fees to be paid by city directly.
includes terminating & splicing 24 of 144 fiber

Assumes existing conduit is usable & not damaged - starting at Fl & Orange st into city hall

Price does not include any rock adders in the event that rock is encountered in the process of boring.
Rates based on City of Palm Coast Contract

Dan Howick
Manager
Danella Construction Corporation of Florida, Inc
581 Washburn Road Melbourne, Fl. 32934
321-259-6124
dhowick@danella.com


Breeze Acres
Bellefonte Ave
Broadmoor Acres
Broadmoor Dr
Eden St
School St
Sara Lou Acres
Grove Ave
Pineda St
N Fiske Blvd
Prospect Ave
N Wilson Ave
Taft Ave
N Cocoa Blvd
Pine St
Chittendon And Mitchell
Forest Ave
Mulberry St
Shaws
Indian River Dr
Main St
3rd St
1st St
Legion Ln
Ridgeway Ave
S Forest Ave
5
Henery
Peachtree St
N Varr Ave
Lake Dr
Barlows S/d
Ohio St
St Johns St
520
515
519
Collage Park
Sunnyside
Cocoa Riv
Oleander St
Cocoa Village
360
Harrison
Stone St
Cocoa City Hall
Lemon St
Temple St
College Park
Pomolo St
Orange St
Church St
Polaris St
Barbara Jenkins St
Lapham Park
Jackson St
S Varr Ave
S Fiske Blvd
Lucas Ln
Washington Ave
Thomas Ln
Regina Myra
Factory St
Wilson-ray
Holmes St
S Georgia Ave
S Carolina Ave
Viva P Lapham
E St
Railroad Ave
Smith Ln
Travis St
Whaley St
Shepards Cocoa Casbah
Virginia Park
Counts St
Knight St
Depot Plaza

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2100

CIP #: CP-PD-18-L1 Project #: PD16IT Account #: 64-15 CIP Classification: IT Machinery & Equipment District: City

Project Name: Laptops for Officers/Patrol Vehicles FY Start 2018 Quarter Q4

Project Location: Police Department FY End 2018 Quarter Q1

Project Description

Ten new laptops will be purchased each year for patrol officers to replace laptops that are worn and have fulfilled their life span. Additionally, this would equip the vehicles with the proper laptop mounts for the new vehicles and laptops.

Project Justification

This is necessary to keep up with the technology of the times and to update old worn out equipment. Additionally, this project will assist the police department in having the proper mounting systems for the laptops in the vehicles. The total recurring operating costs, ($12,300) we are currently already paying.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$260,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$52,000

Recurring Annual Costs

Operating	$12,300
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$12,300

Capital Costs and Proposed Financing by Fiscal Year

2018	$52,000	Revenue
2019	$52,000	Revenue
2020	$52,000	Revenue
2021	$52,000	Revenue
2022	$52,000	Revenue
Total Capital Costs	$260,000	

Financing Comments

Once the project is approved, a specific vehicle type is necessary in order to properly quote the kit (make, model, year, etc.). DV grant applied for and is anticipated to cover a portion of the acquisition.

CIE_Designation ☐

QUOTE CONFIRMATION

CDW•G PEOPLE WHO GET IT

DEAR CITY OF COCOA,

Thank you for considering CDW•G for your computing needs. The details of your quote are below. Click here to convert your quote to an order.

QUOTE #	QUOTE DATE	QUOTE REFERENCE	CUSTOMER #	GRAND TOTAL
HTCX898	3/8/2017	PANASONIC CF54	5938989	$35,264.25

QUOTE DETAILS

ITEM	QTY	CDW#	UNIT PRICE	EXT. PRICE
Panasonic Toughbook 54 Premium Public Sector Service Package - 14" - Core i Mfg. Part#: CF-54F9-00KM UNSPSC: 43211503 Contract: NJPA 100614#CDW Technology Catalog (100614#CDW)	7	4379459	$3,800.00	$26,600.00
Havis PKG-PSM-203 - mounting kit Mfg. Part#: PKG-PSM-203 UNSPSC: 31162313 Contract: NJPA 100614#CDW Technology Catalog (100614#CDW)	7	2144721	$412.75	$2,889.25
Havis CF-H-PAN-422-2-P - port replicator Mfg. Part#: CF-H-PAN-422-2-P UNSPSC: 43211603 Contract: NJPA 100614#CDW Technology Catalog (100614#CDW)	7	3723657	$825.00	$5,775.00

PURCHASER BILLING INFO		
Billing Address: CITY OF COCOA CITY OF COCOA 65 STONE ST RM 209 COCOA, FL 32922-7807 **Phone:** (321) 433-8558 **Payment Terms:** Request Terms	SUBTOTAL	$35,264.25
	SHIPPING	$0.00
	GRAND TOTAL	$35,264.25
DELIVER TO	**Please remit payments to:**	
Shipping Address: CITY OF COCOA 65 STONE ST COCOA, FL 32922-7982 **Shipping Method:** DROP SHIP-GROUND	CDW Government 75 Remittance Drive Suite 1515 Chicago, IL 60675-1515	

Need Assistance? CDW•G SALES CONTACT INFORMATION

John Vrablik | (877) 466-6333 | johnvra@cdwg.com

This quote is subject to CDW's Terms and Conditions of Sales and Service Projects at http://www.cdwg.com/content/terms-conditions/product-sales.aspx
For more information, contact a CDW account manager

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QUOTE CONFIRMATION

DEAR CITY OF COCOA,

Thank you for considering CDW•G for your computing needs. The details of your quote are below. Click here to convert your quote to an order.

QUOTE #	QUOTE DATE	QUOTE REFERENCE	CUSTOMER #	GRAND TOTAL
HTCX869	3/8/2017	PANASONIC CF54	5938989	$125,943.75

QUOTE DETAILS

ITEM	QTY	CDW#	UNIT PRICE	EXT. PRICE
Panasonic Toughbook 54 Premium Public Sector Service Package - 14" - Core i Mfg. Part#: CF-54F9-00KM UNSPSC: 43211503 Contract: NJPA 100614#CDW Technology Catalog (100614#CDW)	25	4379459	$3,800.00	$95,000.00
Havis PKG-PSM-203 - mounting kit Mfg. Part#: PKG-PSM-203 UNSPSC: 31162313 Contract: NJPA 100614#CDW Technology Catalog (100614#CDW)	25	2144721	$412.75	$10,318.75
Havis CF-H-PAN-422-2-P - port replicator Mfg. Part#: CF-H-PAN-422-2-P UNSPSC: 43211603 Contract: NJPA 100614#CDW Technology Catalog (100614#CDW)	25	3723657	$825.00	$20,625.00

PURCHASER BILLING INFO		
Billing Address: CITY OF COCOA CITY OF COCOA 65 STONE ST RM 209 COCOA, FL 32922-7807 **Phone:** (321) 433-8558 **Payment Terms:** Request Terms	**SUBTOTAL**	$125,943.75
	SHIPPING	$0.00
	GRAND TOTAL	**$125,943.75**
DELIVER TO	**Please remit payments to:**	
Shipping Address: CITY OF COCOA 65 STONE ST COCOA, FL 32922-7982 **Shipping Method:** DROP SHIP-GROUND	CDW Government 75 Remittance Drive Suite 1515 Chicago, IL 60675-1515	

Need Assistance? CDW•G SALES CONTACT INFORMATION

John Vrablik | (877) 466-6333 | johnvra@cdwg.com

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CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2100

CIP #: CP-PD-13-VA Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Refabricate SWAT Vehicle FY Start 2019 Quarter Q4

Project Location: City of Cocoa FY End 2019 Quarter Q1

Project Description

Refabricate the gray SWAT Van

Project Justification

Enables the Police Department to sustain services to citizens. This vehicle will refabricate current vehicle #267 which is the SWAT van. It is in need of refabrication due to the fact that it is a 1990 Ford P30 Van and has over 100,000 miles on it.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$100,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$100,000	Reserves
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$100,000	

Financing Comments

We were unable to obtain a quote with the vendor - this is an estimate only.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2100

CIP #: CP-PD-13-2V Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement Patrol Vehicle FY Start 2019 Quarter Q4

Project Location: City of Cocoa FY End 2019 Quarter Q1

Project Description

Replace vehicle #245, patrol vehicle

Project Justification

Enables the Police Department to sustain services to Citizens

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$33,818	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$700
Maintenance	$675
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,375

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$33,818	Reserves
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$33,818	

Financing Comments

Due to the purchase of so many new vehicles in FY16; we are pushing vehicles back one FY.

CIE_Designation ☐

COMPANY: 001 - City of Cocoa Active Fleet FY-2017 CIP
DEPARTMENT: 2100 - Cocoa Police

VEH#	YR	MAKE	MODEL	VIN		TYPE	AGE	MTR	MNT	COND	TOTAL	REPLACE	REP-COST	ANY CAPITALIZATIONS
225	2005	CHEVY	IMPALA	2G1WF52KX59378627	A	SUPPORT SER	5.0	5.0	8.4	0.0	18.4	02/21/2017	$22,900	
213	2006	CHEVY	IMPALA	2G1WS551169377253	A	CIV - ADMIN	5.0	3.0	5.6	0.0	13.6	02/21/2018	$23,500	
269	2007	CHEVY	IMPALA	2G1WS55R179197648	A	CPD DET	5.0	3.6	4.7	0.0	13.3	03/21/2018	$23,900	
245	2008	CHEVY	IMPALA	2G1WS553989247774	A	SGT MARKED	4.5	2.9	5.7	0.0	13.1	05/21/2018	$33,818	
238	2008	CHEVY	IMPALA	2G1WS553X89247962	A	SGT MARKED	4.5	2.8	5.2	0.0	12.5	09/21/2018	$33,818	
265	2007	CHEVY	IMPALA	2G1WS55R379192998	A	CPD DET	5.0	3.1	4.5	0.0	12.6	09/21/2018	$27,324	
286	2010	CHEVY	IMPALA	2G1WD5EM9A1146452	A	CPD PATROL	3.2	3.4	7.4	-1.0	13.0	10/21/2018	$32,818	TRANSMISSION
203	2007	CHEVY	IMPALA	2G1WS55R779196150	A	CPD ADMIN	4.1	2.8	5.9	0.0	12.8	11/21/2018	$27,460	
287	2008	CHEVY	IMPALA	2G1WS553781198122	A	SGT MARKED	4.5	2.6	5.2	0.0	12.3	11/21/2018	$33,818	REPAINTED - BLACK
219	2008	FORD	TAURUS	1FAHP24W58G161851	A	LT - ADMIN	4.2	3.9	4.2	0.0	12.3	01/21/2019	$25,900	
236	2008	CHEVY	IMPALA	2G1WS553789250902	A	CPD PATROL	4.5	3.2	4.0	0.0	11.7	02/21/2019	$33,818	REPAINTED - BLACK
299	2010	CHEVY	IMPALA	2G1WD5EM4A1147542	A	CPD PATROL	3.5	4.0	4.5	0.0	12.0	02/21/2019	$34,500	
212	2004	CHEVY	IMPALA	2G1WF52K949332706	A	CIV - ADMIN	5.0	2.8	4.0	0.0	11.8	03/21/2019	$23,900	
298	2010	CHEVY	IMPALA	2G1WD5EM2A1146034	A	CPD PATROL	3.5	3.2	5.1	0.0	11.8	03/21/2019	$34,500	
288	2009	CHEVY	IMPALA	2G1WS57M191295856	A	CPD PATROL	3.9	3.1	4.7	0.0	11.7	04/21/2019	$34,500	
228	2007	CHEVY	IMPALA	2G1WS55R879192589	A	SGT MARKED	4.7	3.5	6.4	-2.0	12.6	05/21/2019	$32,818	REPAINTED - BLACK
297	2010	CHEVY	IMPALA	2G1WD5EM7A1147664	A	CPD PATROL	3.5	2.8	5.0	0.0	11.3	07/21/2019	$34,500	
229	2008	CHEVY	IMPALA	2G1WS553581269592	A	CIV - ADMIN	4.1	3.6	3.3	0.0	11.0	12/21/2019	$25,900	
262	2009	CHEVY	IMPALA	2G1WB57K091250762	A	CPD DET	4.1	3.0	3.5	0.0	10.6	01/21/2020	$25,900	
206	2010	CHEVY	IMPALA	2G1WD5EMXA1252974	A	SGT MARKED	2.9	2.3	5.4	0.0	10.6	04/21/2020	$35,200	REPAINTED - BLACK
257	2010	CHEVY	IMPALA	2G1WD5EM0A1146551	A	CPD PATROL	2.8	3.3	4.9	0.0	11.0	05/21/2020	$35,200	
276	2009	CHEVY	IMPALA	2G1WB57K491248030	A	CPD DET	4.1	3.1	2.9	0.0	10.1	05/21/2020	$25,900	
294	2010	CHEVY	IMPALA	2G1WD5EM3A1146575	A	CPD PATROL	3.5	2.4	3.6	0.0	9.5	09/21/2020	$35,200	
230	2009	CHEVY	IMPALA	2G1WS57M191261156	A	CPD PATROL	3.7	2.4	3.6	0.0	9.7	11/21/2020	$35,200	
252	2011	CHEVY	IMPALA	2G1WD5EM1B1184047	A	CPD PATROL	3.1	3.0	3.1	0.0	9.2	12/21/2020	$35,200	
274	2010	CHEVY	IMPALA	2G1WD5EM4A1181240	A	SGT MARKED	3.3	2.1	3.2	0.0	8.6	05/21/2021	$35,200	REPAINTED - BLACK
256	2013	FORD	POLICE INTERCEP	1FAHP2L82DG201851	A	CPD PATROL	2.0	2.5	3.4	0.0	7.9	10/21/2021	$35,200	
244	2013	FORD	POLICE INTERCEP	1FAHP2L84DG201849	A	CPD PATROL	2.0	2.5	2.7	0.0	7.2	04/21/2022	$35,200	
VEHICLE COUNT: 28													$873,092	

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2100

CIP #: CP-PD-13-4V | Project #: | Account #: 64-00 | CIP Classification: Machinery & Equipment | District: City

Project Name: Replacement Patrol Vehicle | FY Start 2019 Quarter Q4

Project Location: City of Cocoa | FY End 2019 Quarter Q1

Project Description

Replace Vehicle #238, patrol vehicle

Project Justification

Enables the Police Department to sustain services to citizens

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$33,818	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$700
Maintenance	$675
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,375

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$33,818	Reserves
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$33,818	

Financing Comments

Due to the purchase of so many new vehicles in FY16; we are pushing vehicles back one FY.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2100

CIP #: CP-PD-13-8V Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement Patrol Vehicle FY Start 2019 Quarter Q4

Project Location: City of Cocoa FY End 2019 Quarter Q1

Project Description

Replace vehicle #286, patrol vehicle

Project Justification

Enables the Police Department to sustain services to citizens

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$32,818	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$700
Maintenance	$675
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,375

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$32,818	Reserves
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$32,818	

Financing Comments

Due to the purchase of so many new vehicles in FY16; we are pushing vehicles back one FY.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2100

CIP #: CP-PD-13-CP | Project #: | Account #: 64-00 | CIP Classification: Machinery & Equipment | District: City

Project Name: Replacement Patrol Vehicle | FY Start 2019 Quarter Q4

Project Location: City of Cocoa | FY End 2019 Quarter Q1

Project Description

Replace vehicle #287, patrol vehicle

Project Justification

Enables the Police Department to sustain services to Citizens

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$33,818	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$700
Maintenance	$675
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,375

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$33,818	Reserves
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$33,818	

Financing Comments

Due to the purchase of so many new vehicles in FY16; we are pushing vehicles back one FY.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2100

CIP #: CP-PD-13-V0 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement Patrol Vehicle FY Start 2020 Quarter Q4

Project Location: City of Cocoa FY End 2020 Quarter Q1

Project Description

Replace vehicle #236, patrol vehicle

Project Justification

Enables the Police Department to sustain services to citizens

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$33,818	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$700
Maintenance	$675
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,375

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$33,818	Reserves
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$33,818	

Financing Comments

Due to the purchase of so many new vehicles in FY16; we are pushing vehicles back one FY.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2100

CIP #: CP-PD-13-V2 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement Patrol Vehicle FY Start 2020 Quarter Q4

Project Location: City of Cocoa FY End 2020 Quarter Q1

Project Description

Replace vehicle #299, patrol vehicle

Project Justification

Enables the Police Department to sustain services to citizens

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$34,500	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$700
Maintenance	$675
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,375

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$34,500	Reserves
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$34,500	

Financing Comments

Due to the purchase of so many new vehicles in FY16; we are pushing vehicles back one FY.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2100

CIP #: CP-PD-13-V8 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement Patrol Vehicle FY Start 2020 Quarter Q4

Project Location: City of Cocoa FY End 2020 Quarter Q1

Project Description

Replace vehicle #288, patrol vehicle

Project Justification

Enables the Police Department to sustain services to citizens

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$34,500	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$700
Maintenance	$675
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,375

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$34,500	Reserves
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$34,500	

Financing Comments

Due to the purchase of so many new vehicles in FY16; we are pushing vehicles back one FY.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2100

CIP #: CP-PD-13-V9 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement Patrol Vehicle FY Start 2020 Quarter Q4

Project Location: City of Cocoa FY End 2020 Quarter Q1

Project Description

Replace vehicle #228, patrol vehicle

Project Justification

Enables the Police Department to sustain services to citizens

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$32,818	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$700
Maintenance	$675
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,375

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$32,818	Reserves
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$32,818	

Financing Comments

Due to the purchase of so many new vehicles in FY16; we are pushing vehicles back one FY.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2100

CIP #: CP-PD-13-VB Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement Patrol Vehicle FY Start 2020 Quarter Q4

Project Location: City of Cocoa FY End 2020 Quarter Q1

Project Description

Replace vehicle #297, patrol vehicle

Project Justification

Enables the Police Department to sustain services to citizens

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$34,500	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$700
Maintenance	$675
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,375

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$34,500	Reserves
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$34,500	

Financing Comments

Due to the purchase of so many new vehicles in FY16; we are pushing vehicles back one FY.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2100

CIP #: CP-PD-13-VT | Project #: | Account #: 64-00 | CIP Classification: Machinery & Equipment | District: City

Project Name: Replacement Patrol Vehicle | FY Start 2021 Quarter Q4

Project Location: City of Cocoa | FY End 2021 Quarter Q1

Project Description

Replace vehicle #206, patrol vehicle

Project Justification

Enables the Police Department to sustain services to citizens

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$35,200	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$700
Maintenance	$675
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,375

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$35,200	Reserves
2022	$0	$0 this FY
Total Capital Costs	$35,200	

Financing Comments

Due to the purchase of so many new vehicles in FY16; we are pushing vehicles back one FY.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2100

CIP #: CP-PD-14-V0 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement Patrol Vehicle FY Start 2021 Quarter Q4

Project Location: City of Cocoa FY End 2021 Quarter Q1

Project Description

Replace vehicle # 257, patrol vehicle

Project Justification

Enables the Police Department to sustain services to citizens

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$35,200	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$700
Maintenance	$675
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,375

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$35,200	Reserves
2022	$0	$0 this FY
Total Capital Costs	$35,200	

Financing Comments

Due to purchasing so many vehicles in FY16 we are reqesting that the purchase of this vehicle be moved back a year.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2100

CIP #: CP-PD-14-V9 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement Patrol Vehicle FY Start 2021 Quarter Q4

Project Location: City of Cocoa FY End 2021 Quarter Q1

Project Description

Replace vehicle # 294, patrol vehicle

Project Justification

Enables the Police Department to sustain services to citizens

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$35,200	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$700
Maintenance	$675
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,375

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$35,200	Reserves
2022	$0	$0 this FY
Total Capital Costs	$35,200	

Financing Comments

Due to a large acquisition of vehicles in FY16 we are requesting that the purchase of this vehicle be moved back a FY.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2100

CIP #: CP-PD-15-V3 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement Patrol Vehicle FY Start 2021 Quarter Q4

Project Location: City of Cocoa FY End 2021 Quarter Q1

Project Description

Replace vehicle #230, patrol vehicle

Project Justification

Enables the Police Department to sustain services to the citizens

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$35,200	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$700
Maintenance	$675
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,375

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$35,200	Reserves
2022	$0	$0 this FY
Total Capital Costs	$35,200	

Financing Comments

Due to the large acquisition of vehicles in FY16 we are requesting that this purchase be moved back a FY.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2100

CIP #: CP-PD-15-V4 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement Patrol Vehicle FY Start 2022 Quarter Q4

Project Location: City of Cocoa FY End 2022 Quarter Q1

Project Description

Replace vehicle #252, patrol vehicle

Project Justification

Enables the Police Department to sustain services to the citizens.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$35,200	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$700
Maintenance	$675
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,375

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$35,200	Reserves
Total Capital Costs	$35,200	

Financing Comments

Due to the large acquisition of vehicles in FY16, we are requesting that this purchase be moved back a FY.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2100

CIP #: CP-PD-15-V5 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement Patrol Vehicle FY Start 2022 Quarter Q4

Project Location: City of Cocoa FY End 2022 Quarter Q1

Project Description

Replace vehicle #274, patrol vehicle

Project Justification

Enables the Police Department to sustain services to the citizens

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$35,200	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$700
Maintenance	$675
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,375

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$35,200	Reserves
Total Capital Costs	$35,200	

Financing Comments

Due to the large acquisition of vehicles in FY16 we are requesting that this purchase be moved back a FY.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2100

CIP #: CP-PD-16-V5 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement Patrol Vehicle FY Start 2022 Quarter Q4

Project Location: City of Cocoa FY End 2022 Quarter Q1

Project Description

Replace vehicle #256, patrol vehicle

Project Justification

Enables the Police Department to sustain services to the citizens

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$35,200	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$700
Maintenance	$675
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,375

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$35,200	Reserves
Total Capital Costs	$35,200	

Financing Comments

Due to the large acquisiton of vehicles in FY 16 we are requesting that this purchase be moved back a FY.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2100

CIP #: CP-PD-16-V7 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement Patrol Vehicle FY Start 2022 Quarter Q4

Project Location: City of Cocoa FY End 2022 Quarter Q1

Project Description

Replace vehicle #244, patrol vehicle

Project Justification

Enables the Police Department to sustain services to the citizens

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$35,200	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$700
Maintenance	$675
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,375

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$35,200	Reserves
Total Capital Costs	$35,200	

Financing Comments

Due to the large acquisition of vehicles in FY16, we are requesting that this purchase be moved back a FY.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2101

CIP #: CP-PD-18-R1 Project #: RC2014 Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: P25 Radio Replacement FY Start 2020 Quarter Q4

Project Location: City of Cocoa Police Department FY End 2020 Quarter Q1

Project Description

Project 25 Radio replacement

Project Justification

This CIP is for radio replacement for the original 2014 portable radios that were purchased. The State of Florida recommends replacement of a portable radio every 6 years. We purchased 26 portables in 2014 and the quote is for 15 replacement radios.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$105,542	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$1,800
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,800

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$52,771	Revenue
2022	$52,771	Revenue
Total Capital Costs	$105,542	

Financing Comments

CIE_Designation ☐

COMMUNICATIONS INTERNATIONAL

4045 Pines Industrial Avenue
Rockledge, FL 32955
Voice: 321.636.9885 Fax: 321.636.7720

QUOTATION

Page	1/2
Date	2/17/2017
Quote Number	QTE1700296

Bill To
Cocoa Police Department
Susan Austin
65 Stone St
Cocoa, FL, 32922
USA

Site
Cocoa Police Department
65 Stone Street
Cocoa, FL, 32922 USA

Contact
Voice:
Fax:

Site Number	Description	Salesperson	Reference
COC130MAIN	XG75P Portable	Grayson, Garin L.	Budgetary FY 2020

Description	Qty	Unit	Sale Price	Total
XG75P Scan Portable Package				
EVXGPB78B - Portable XG-75, 764-870 MHz, Scan, Black - The below zero dollar items are included in the package purchase.	15	Each	3,330.41	49,956.15
MAEVNPL3R - Feature, Maximum (1024+) Systems/Groups	15	Each	0.00	0.00
EVP25ED - FEATURE PACKAGE,P25 TRUNKING & EDACS	15	Each	0.00	0.00
EVPRO - Feature, Provoice	15	Each	0.00	0.00
EVXGNPL4F - Feature Package, P25 PHASE 2 TDMA	15	Each	0.00	0.00
MAEVNPL7G - Feature,ESK/P25 Personality Lock	15	Each	0.00	0.00
MAEVPKG8F - Feature, Encryption (includes 256-B AES Encryption for P25 T	15	Each	0.00	0.00
MAEVNPL5K - Feature, Profile OTAP Over the Air Programming	15	Each	0.00	0.00
EVPA3R - Battery,Li-Ion,2400mAH	15	Each	0.00	0.00
MAEVNNC5X - Antenna, 764-870 MHz, 1/4 Wave Whip (KRE10115062)	15	Each	0.00	0.00
MAEVNHC2G - Belt Clip, Standard (CC23894)	15	Each	0.00	0.00
FM014712 - Cover, UDC Weather Proof, P5300/P5400	15	Each	0.00	0.00
MAEVNCH9T - Charger, Single, Tri-Chemistry (CH104560 007)	15	Each	0.00	0.00

COMMUNICATIONS INTERNATIONAL

4045 Pines Industrial Avenue
Rockledge, FL 32955
Voice: 321.636.9885 Fax: 321.636.7720

QUOTATION

Page	2/2
Date	2/17/2017
Quote Number	QTE1700296

Description	Qty	Unit	Sale Price	Total
V210438 - Evolution Speaker Mic, Coil Cord, E-Button, 2.5mm,P5400/7300	15	Each	108.12	1,621.80
E110009 - EARPHONE KIT 2.5, R/A 30" COILED CORD	15	Each	40.32	604.80
Program, Portable Scan	15	Each	32.50	487.50
Shipping and Handling - Shipping and handling is based upon quantity ordered and subject to change. - Allow 8 - 10 weeks delivery after order. - BUDGETARY ONLY	1	Each	100.00	100.00
			Subtotal:	52,770.25

Prices quoted are valid for (30) Days from Document Date.
Orders may be subject to shipping & handling charges.
All warranties are manufacture's warranties.

Plus Tax	0.00
Total Due (USD)	52,770.25

By signing this Quotation and/or submitting a purchase order pursuant to this Quotation you acknowledge that you have read and agree to be bound by Communications Int'l. Inc.'s Terms and Conditions of Sale Service and Technical Support.

Communications Control Centers (dispatch rooms) will be sized from actual floor plan drawings, showing all required consoles with chair space and all other required furniture and equipment. In the event this information is not available, there should be an allowance for a range of 100 to 120 square feet for each position. Allocation includes room for chair movement and access to the console electronics.

The Department recommends that new radio communications equipment or facilities be purchased with additional capacity and/or features in order to minimize obsolescence. With the universal utilization of computers, CRT consoles with modular furniture are recommended for their potential to save space and add to the overall efficiency of the dispatch environment.

I. Communications Equipment Life Cycle

Communications equipment should be in an environmental controlled facility unless the equipment is rated for outside operations.

3.0 RADIO EQUIPMENT REPLACEMENT POLICY

The Department of Management Services (the Department) has established guidelines for the replacement of communications equipment. Specific situations that warrant equipment replacement (with proper maintenance) are listed below:

1. Equipment has reached the age listed below although it may not have been in continuous use:

Type of Equipment	**Age (Years)**
Mobile Radios	8
Portable Radios	6
Base and Control Station Radios	10
Transmitter combiners	10
Antennas and Transmission Lines	
Within 10 miles of bodies of salt water	10
Other locations	12
Antenna Towers	
Within 10 miles of bodies of salt water	15
Other locations	20
Antenna Tower Lighting Systems	10

Type of Equipment	**Age (Years)**
Control consoles	10
Logging Recorders	10
Instant Recall Recorders	6
Prefabricated Equipment Shelters	15
Standby Emergency Power Generators	
Within 10 miles of bodies of salt water	8
Other locations	12
Microwave Equipment	15

2. Based on an investigation by the Department or a written statement of need from an agency, the Department may recommend an earlier than normal replacement schedule in situations where equipment is damaged, abnormally worn, or technically obsolete.

3. The Department recognizes that adequate preventative maintenance programs will extend the usable life of equipment beyond the times schedules above and therefore encourages agencies to develop and implement such programs. In such cases longer replacement schedules will be considered.

4. For large systems, phased replacement schedules may be necessary for economic reasons. Thus, the Department will consider earlier replacement schedules for a portion of the system equipment such that the last equipment to be replaced will not be older than three years beyond the normal replacement schedule.

4.0 RADIO FREQUENCY *BUY OUT* POLICY

When an agency needs to implement a new radio system or to expand an existing one in certain situations, the shortage of available radio channels may preclude a straightforward implementation or expansion. In such cases, the most economical alternative may be the relocation of an existing radio user from one channel to another, in order to free up a channel for the agency planning to implement or expand. When feasible, The Department of Management Services will support such an arrangement and may recommend that the agency purchase new radio equipment for the user being relocated, in exchange for the user's current radio channels and radio equipment.

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2201

CIP #: CP-FD-18-LP Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: LifePak 15 V4 Monitor/Defibrillator FY Start 2018 Quarter Q3

Project Location: Fire Department FY End 2018 Quarter Q1

Project Description

Purchase a LifePak 15 V4

Project Justification

The purchase of the Life Pak 15 will give us a backup unit when one of our LifePaks units is down for repair. The only unit we have for a back up is past its useful life. We can also use the new unit for training paramedics as it matches the capabilities of our current units.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$43,019	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$43,019

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$43,019	Reserves
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$43,019	

Financing Comments

CIE_Designation ☐

Physio-Control, Inc
11811 Willows Road NE
P.O. Box 97006
Redmond, WA 98073-9706 U.S.A.
www.physio-control.com
tel 800.442.1142
Sales Order fax 800.732.0956
Service Plan fax 800.772.3340

To	CITY OF COCOA FD Attn: Brad Hall, District Chief 114 1ST ST COCOA,FL 32922 (321) 639-7605 bhall@cocoafl.org	Quote Number	00070710
		Revision #	1
		Created Date	2/17/2017
		Sales Consultant	Susan Cote (407) 497-2636
		FOB	Destination
		Terms	All quotes subject to credit approval and the following terms and conditions
		NET Terms	NET 30
Contract	NASPO #SW300 v2	Expiration Date	5/18/2017

Product	Product Description	Quantity	List Price	Unit Discount	Unit Sales Price	Total Price
99577-001588	LIFEPAK 15 V4 Monitor/Defib, Adaptive Biphasic, Manual & AED, Color LCD, 100mm Printer, Noninvasive Pacing, Metronome, Trending, SpO2, NIBP, 12-Lead ECG, EtCO2, Carbon Monoxide, MetHemoglobin, Bluetooth INCLUDED AT NO CHARGE: 2 PAIR QUIK-COMBO ELECTRODES PER UNIT - 11996-000091, TEST LOAD - 21330-001365, IN-SERVICE DVD - 21330-001486 (one per order) , SERVICE MANUAL CD- 26500-003612 (one per order) and SHIP KIT (RC Cable) 41577-000288 INCLUDED. HARD PADDLES, BATTERIES AND CARRYING CASE NOT INCLUDED.	1.00	38,425.00	-5,424.91	33,000.09	33,000.09
11140-000015	AC power cord	1.00	81.00	-16.03	64.97	64.97
11140-000052	LP15 REDI-CHARGE Adapter Tray	1.00	206.00	-39.94	166.06	166.06
11141-000115	REDI-CHARGE Base (power cord not included)	1.00	1,520.00	-294.42	1,225.58	1,225.58
21330-001176	LP 15 Lithium-ion Battery 5.7 amp hrs	4.00	469.00	-99.58	369.42	1,477.68
11160-000013	NIBP CUFF-REUSEABLE,CHILD, BAYONET	1.00	24.00	-3.60	20.40	20.40
11160-000017	NIBP CUFF-REUSEABLE, LARGE ADULT, BAYONET	1.00	33.00	-4.95	28.05	28.05
11171-000046	M-LNCS DCI, Adult Reusable Sensor, 1/box	1.00	301.00	-45.15	255.85	255.85
11171-000049	Rainbow DCI Adt Reusable Sensor, 1/box	1.00	640.00	-98.55	541.45	541.45
11577-000002	LIFEPAK 15 Basic carry case w/ right & left pouches. INCLUDED AT NO CHARGE WHEN ORDERED WITH DEVICE: 11577-000001 Shoulder Strap	1.00	320.00	-57.18	262.82	262.82
11220-000028	Carry case top pouch for use w/LIFEPAK 12 or LIFEPAK 15	1.00	57.00	-10.59	46.41	46.41
11260-000039	LIFEPAK 15 Carry case back pouch	1.00	82.00	-14.68	67.32	67.32
LP15-OSCOMP-4-POS	LIFEPAK 15 Service - 4 YEAR. On-site Comprehensive Coverage. Annual Payments.	1.00	6,896.00	-1,034.40	5,861.60	5,861.60

Subtotal	USD 43,018.28
Estimated Tax	USD 0.00
Estimated Shipping & Handling	USD 0.00
Grand Total	USD 43,018.28

Pricing Summary Totals

List Price Total	USD 50,461.00
Total Contract Discounts Amount	USD -7,442.72
Total Discount	USD 0.00
Trade In Discounts	USD 0.00
Tax + S&H	USD 0.00

GRAND TOTAL FOR THIS QUOTE

USD 43,018.28

PHYSIO-CONTROL, INC. REQUIRES WRITTEN VERIFICATION OF THIS ORDER. A PURCHASE ORDER IS REQUIRED ON ALL ORDERS $5,000 OR GREATER BEFORE APPLICABLE FREIGHT AND TAXES. THE UNDERSIGNED IS AUTHORIZED TO ACCEPT THIS ORDER IN ACCORDANCE WITH THE TERMS AND PRICES DENOTED HEREIN.

_____
CUSTOMER APPROVAL (AUTHORIZED SIGNATURE)

_____
NAME

_____
TITLE

_____
DATE

Reference Number SC/14366702/125499

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Compliance with Law. The parties agree to comply with any and all laws, rules, regulations, licensing requirements or standards that are now or hereafter promulgated by any local, state, and federal governmental authority/agency or accrediting/administrative body that governs or applies to their respective duties and obligations hereunder.
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In addition to the General Terms above, the following terms apply to all purchases of products from Physio:
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Inspections and Returns. Within 30 days of receipt of a shipment, Buyer shall notify Physio of any claim for product damage or nonconformity. Physio, at its sole option and discretion, may repair or replace a product to bring it into conformity. Return of any product shall be governed by the Returned Product Policy located at http://www.physio-control.com/Documents/. Payment of Physio's invoice is not contingent on immediate correction of nonconformities.
No Resale. Buyer agrees that products purchased hereunder will not be resold to third parties and will not be reshipped to any persons or places prohibited by the laws of the United States of America.

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In addition to the General Terms above, the following terms apply to all Physio Service Plans.
Service Plans. Physio shall provide services according to the applicable Service Plan purchased by Buyer and described at http://www.physio-control.com/ServicePrograms.aspx for the length of the subscription purchased and for the devices specified as covered by the Service Plan ("Covered Equipment").
Pricing. If the number or configuration of Covered Equipment changes during the Service Plan subscription, pricing shall be pro-rated accordingly. For Preventative Maintenance, Inspection Only, Comprehensive, and Repair & Inspect Service Plans, Buyer is responsible to pay for preventative maintenance and inspections that have been performed since the last anniversary of the subscription start date and such services shall not be pro-rated.
Device Inspection Before Acceptance. All devices that are not covered under Physio's Limited Warranty or a current Service Plan must be inspected and repaired (if necessary) to meet specifications at then-current list prices prior to being covered under a Service Plan.
Unavailability of Covered Equipment. If Covered Equipment is not made available at a scheduled service visit, Buyer is responsible to reschedule with the Physio Service Technician, or ship-in the Equipment to a Physio service depot. Physio reserves the right to charge Buyer a surcharge for a return visit. Surcharges will be based on then-current Physio list price of desired services, less 10% for labor and 15% for parts, plus applicable travel costs. The return visit surcharge will be in addition to the subscription price of the Service Plan. To avoid the surcharge, Buyer may ship devices to a Physio service depot. Buyer shall be responsible for round-trip freight for ship-in service.
Unscheduled or Uncovered Services. If Buyer requests services to be performed on Covered Equipment which are not covered by a Service Plan, or are outside of designated Services frequency or hours, Physio-Control will charge Buyer for such services at 10% off Physio-Control's standard rates (including overtime, if appropriate) and applicable travel charges. Repair parts required for such repairs will be made available at 15% off the then-current list price.
Loaners. If Covered Equipment must be removed from service to complete repairs, Physio will provide Buyer with a loaner device, if one is available. Buyer assumes complete responsibility for the loaner and shall return the loaner to Physio in the same condition as received, normal wear and tear exempted, upon the earlier of the return of the removed Covered Equipment or Physio's request.
Cancellation. Buyer may cancel a Service Plan upon sixty (60) days' written notice to Physio. In the event of such cancellation, Buyer shall be responsible for the portion of the designated price which corresponds to the portion of the Service Plan subscription prior to the effective date of termination and the list-price cost of any preventative maintenance, inspections, or repairs rendered after the last anniversary date of the subscription start date.
No Solicitation. During the Service Plan subscription and for one (1) year following its expiration Buyer agrees to not to actively and intentionally solicit anyone who is employed by Physio to provide services such as those described in the Service Plan.

PHYSIO CONTROL

PRODUCT BROCHURE

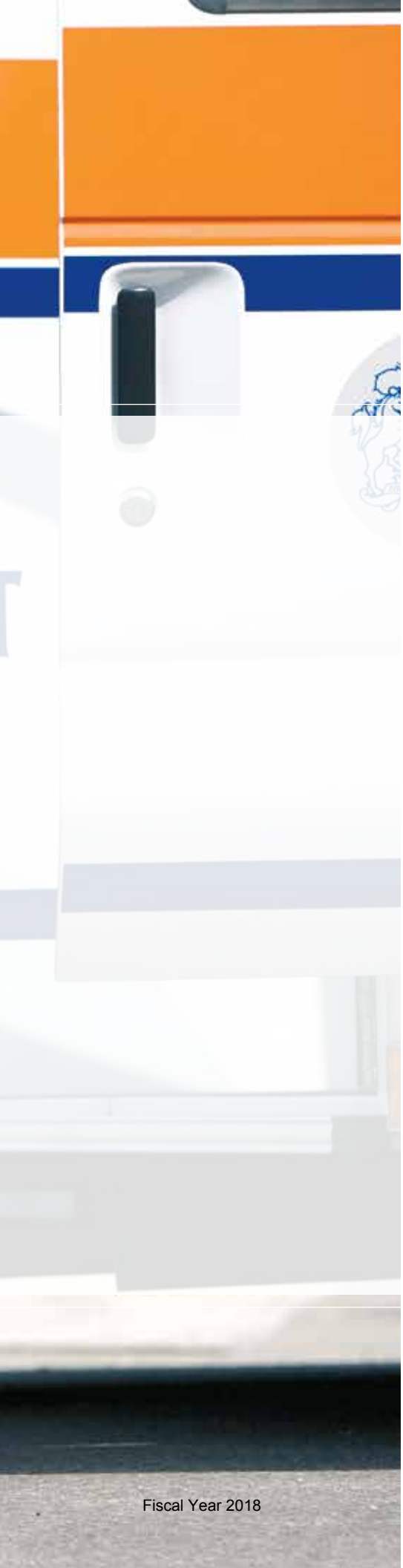


LIFEPAK® 15 MONITOR/DEFIBRILLATOR

For Emergency Medical Services



When you respond to emergencies, you need the most advanced monitor/ defibrillator that sets the standard in innovation, operations and toughness.



The LIFEPAK 15 monitor/defibrillator delivers.

Physio-Control defibrillators have set the standard for six decades, and the latest version of the LIFEPAK® 15 monitor/defibrillator raises the bar. As our most advanced emergency response monitor/defibrillator, the LIFEPAK 15 device balances sophisticated clinical technologies and supreme ease of use in a device that's tough enough to stand up to your most challenging environments. Evolving from its original platform, the *15* features temperature monitoring and external power to complement 360J of energy and 12-lead ECG transmission capability. And that means your team can be even more effective.

A LIFEPAK device never stands on its own—and the LIFEPAK 15 monitor is no different. Physio-Control is committed to providing innovative solutions for emergency response care, from first responders to throughout the hospital.

Our products have helped save tens of thousands of lives. We're proud to continue this work with the features in the LIFEPAK 15 monitor/defibrillator.

The standard in clinical innovation.

The pioneer in portable defibrillation and monitoring technology, Physio-Control is committed to creating technologies and devices that change the way you provide emergency care. You can see the results in the latest version of the LIFEPAK 15 monitor/defibrillator, which sets the standard in innovation—yet again.







Advanced monitoring parameters

With more monitoring capabilities than any other monitor/defibrillator, the *15* gives you $EtCO_2$ with continuous waveform capture. Masimo® Rainbow® technology helps you detect hard-to-diagnose conditions and improve patient care with noninvasive monitoring of carbon monoxide, SpO_2 and methemoglobin. In addition, the *15* offers temperature monitoring—and like other data, you can transmit it to other systems, trend it, or display for post-event review in CODE-STAT™ data review software.

Advanced support for treating cardiac patients

The *15* continuously monitors all 12 leads in the background and alerts you to changes using the ST-Segment trend monitoring feature, after acquiring the initial 12-lead. Additionally, STJ values are included on the 12-lead printout to help you identify changes. The *15* also works seamlessly with the web-based LIFENET System 5.0, so you can automatically share critical patient data with multiple patient care teams.

Full energy up to 360 joules, for every patient who needs it

The LIFEPAK 15 monitor/defibrillator features 360J biphasic technology, which gives you the option of escalating your energy dose up to 360J for difficult-to-defibrillate patients. Why is this necessary? Recent studies have shown that refibrillation is common among VF cardiac arrest patients and that defibrillation of recurring episodes of VF is increasingly difficult. A randomized controlled clinical trial shows the rate of VF termination was higher with an escalating higher energy regimen of 200J and over.[1]

Proven CPR guidance and post event review

The CPR Metronome in the LIFEPAK 15 monitor uses audible prompts to guide you without distracting vocal critique. A metronome has been a feature that has been demonstrated to help professionals perform compressions and ventilations within the recommended range of the 2015 AHA Guidelines. Post-event review of CPR data and delivering feedback to the team has been shown to be effective in improving CPR quality in both hospital and out-of-hospital.[2,3,4] And by transmitting code data directly to CODE-STAT Data Review software, EMS personnel can review CPR statistics and provide training and feedback where it is most needed.

Post-event review of CPR data and delivering feedback to the team has been shown to be effective in improving CPR quality in both hospital and out-of-hospital.[2,3,4]




LIFEPAK® 15 MONITOR/DEFIBRILLATOR
LIFEPAK 15 MONITOR/DEFIBRILLATOR
12:13:00
87
98
107
70
85
SpO2
12-LEAD
TRANSMIT


ON
CPR
ENERGY SELECT
CHARGE
LEAD
PACER
RATE
SpO2


FERNO | 93H PROfleet

The standard in operational effectiveness.

Flexible, connected and easy to use, the LIFEPAK 15 monitor/defibrillator was designed based on the feedback and needs specific to working in the field.

Dual-mode LCD screen with SunVue™ display

Switch from full-color to high-contrast SunVue mode with a single touch for the best full-glare view in the industry. A large screen (8.4 inches diagonally) and full-color display provide maximum viewability from all angles.

Flexible power options

Choose between external worldwide AC or DC power, or use the latest Lithium-ion dual battery technology for up to six hours of power. The LIFEPAK 15 monitor's two-battery system requires no maintenance or conditioning, and allows you to charge batteries in the device. In addition, you can track the status and service life of your batteries using LIFENET® Asset, part of the LIFENET System data network.

Data connectivity

The *15* collects code summaries and equipment status data along with critical clinical information as you treat patients. Using LIFENET Connect, part of the LIFENET System data network, the code summaries can be sent directly to your quality improvement team for review with CODE-STAT Data Review Software. Your equipment manager can also view equipment status on the LIFENET System 5.0 using LIFENET Asset and alert you to any potential issues.

Code summaries can be sent directly to your quality improvement team for review with CODE-STAT Data Review Software.

Upgradable platform

The *15* platform is flexible enough to adapt to evolving protocols and new guidelines, and can be upgraded as you're ready to deliver new capabilities. With more processing power and speed, the *15* is designed to grow as your needs change, helping you avoid costly premature replacements.

Attention to detail

The LIFEPAK 15 monitor is designed based on field feedback to make it a more effective tool. The *15* has a larger handle for easier handoffs, an easy to clean keypad, and a common interface to the LIFEPAK 12 defibrillator/monitor that helps reduce training.

The standard in toughness.

We believe LIFEPAK equipment should live up to the highest expectations of those working in the harshest settings. The *15* is LIFEPAK TOUGH, with improved ruggedness and durability you can rely on.

Works when dropped, kicked, soaked or dirty

The LIFEPAK 15 monitor/defibrillator passes 30-inch drop tests, which is equal to falling off a cot or dropping it in transit. And with an IP44 rating, it doesn't matter how wet or dirty it gets, so you can keep working in steady wind, rain and other harsh environments.

Toughened inside and out

We heard from emergency response teams that they wanted a tougher device—so we added a shock-absorbing handle, a double-layer screen that can take a beating from doorknobs and cot handles, and redesigned cable connections for confident monitoring and therapy delivery.

Unmatched field service

The unit's self-checking feature alerts our service team if the device needs attention. Our on site maintenance and repair, access to original manufacturer parts, and highly trained, experienced service representatives give you the peace of mind that your LIFEPAK 15 monitor will be ready when you need it.*



Data connectivity


LIFEPAK TOUGH™


Dual-mode LCD screen with SunVue display

** A variety of customized service options are available.*

LIFEPAK® 15 MONITOR/DEFIBRILLATOR

The latest Lithium-ion battery technology and dual battery system allows for nearly six hour run time, automatic switching between external power and batteries, and an approximate two-year replacement cycle.

Easy one-touch Bluetooth® data transmission.

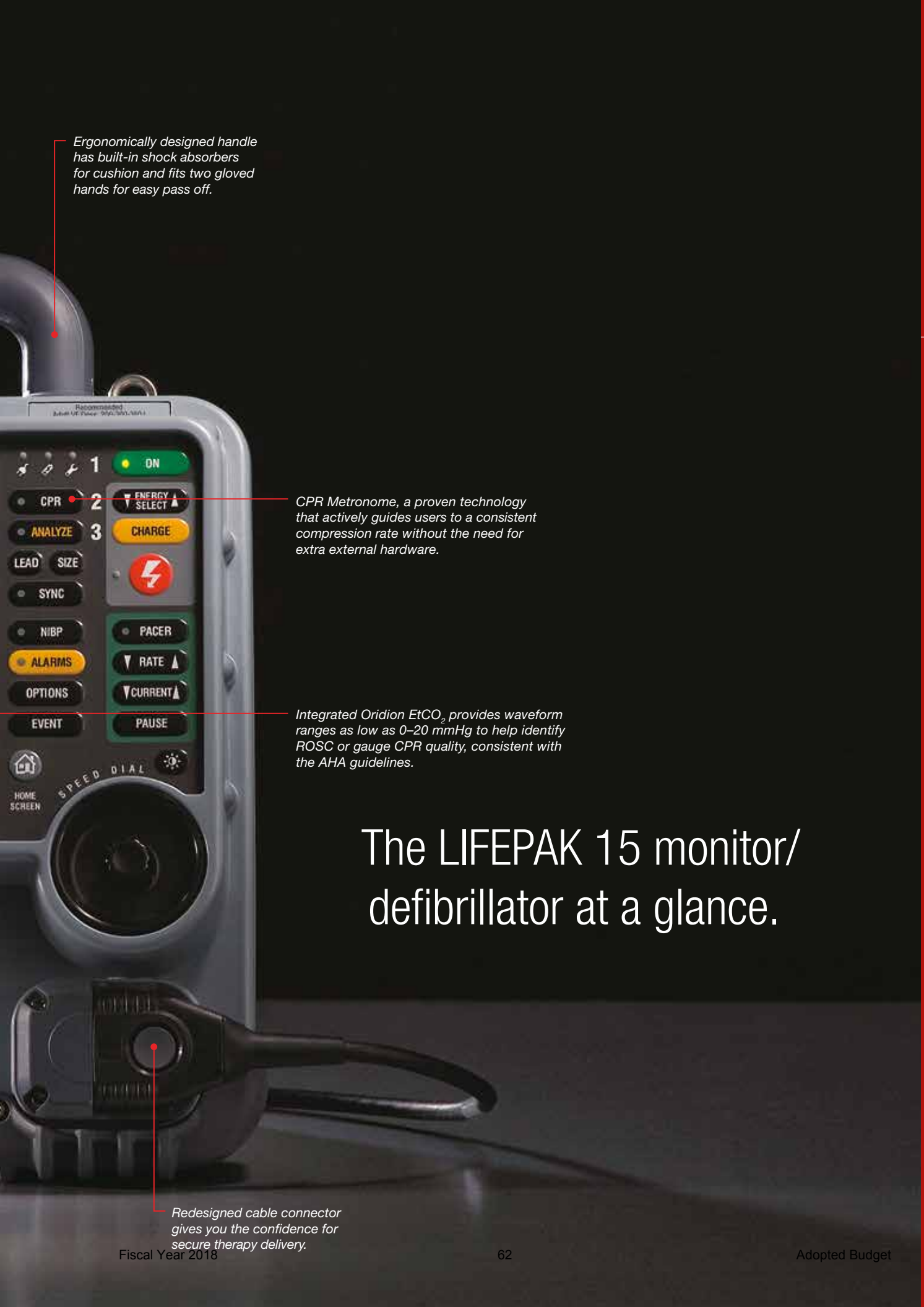
12-lead ECG transmissions via the LIFENET System and ST segment trend monitoring make the LIFEPAK 15 device a vital part of decreasing EMS-to-Balloon (E2B) response times.

Integrated Carbon Monoxide and Methemoglobin monitoring.



On-screen temperature display in either Celsius or Fahrenheit.

Large screen for better visibility and easy monitoring and one touch to switch from LCD color view to SunVue mode for best viewing in sunlight.



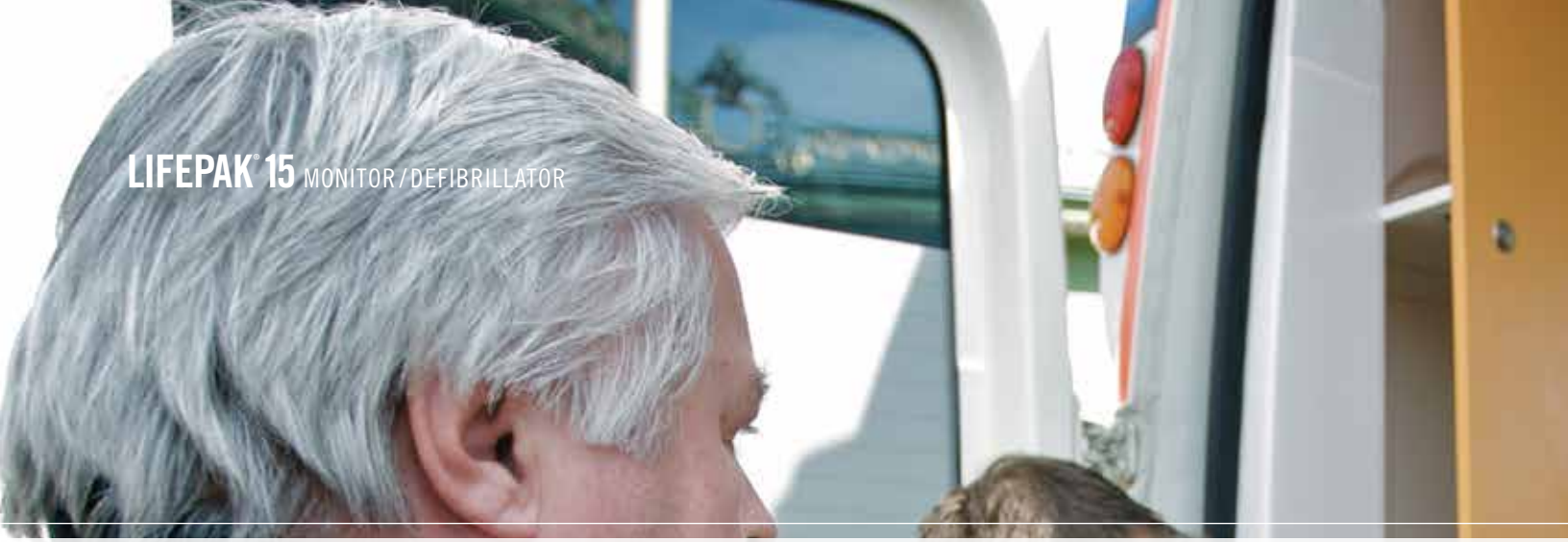
Ergonomically designed handle has built-in shock absorbers for cushion and fits two gloved hands for easy pass off.

CPR Metronome, a proven technology that actively guides users to a consistent compression rate without the need for extra external hardware.

Integrated Oridion $EtCO_2$ provides waveform ranges as low as 0–20 mmHg to help identify ROSC or gauge CPR quality, consistent with the AHA guidelines.

The LIFEPAK 15 monitor/ defibrillator at a glance.

Redesigned cable connector gives you the confidence for secure therapy delivery.



For six decades, Physio-Control has been developing technologies and designing devices that are legendary among first response professionals, clinical care providers, and the community.









A legacy of trust.

Since we were founded in 1955, Physio-Control has been giving medical professionals around the world legendary quality and constant innovation. Our LIFEPAK devices have been carried to the top of Mount Everest. They've been launched into orbit on the International Space Station. And you'll find more than half a million units in use today on fire rescue rigs, ambulances, and hospital crash carts worldwide.

We are inspired and informed by the rescuers who choose our products to save lives. The knowledge gained from working with some of the world's largest EMS organizations helps us constantly improve clinical standards and durability.

Today, we continue our legacy of innovation with leading technologies that improve patient care. Our 360J biphasic technology gives patients the best chance at survival. Our secure, web-based flow of ECG data helps improve STEMI patient outcomes. And our carbon monoxide monitoring helps catch the number one cause of poisoning deaths.

From the streets to the emergency room to the administrative office, we offer a powerful suite of solutions that range from code response to quality control analysis. And even as we bring ground-breaking products to the market, some things don't change. As always, when you choose our products, you don't just get a device. You also get the most comprehensive warranty in the business, industry-leading technical service, and a partner with six decades of experience in emergency care.

For more information about the LIFEPAK 15 monitor/defibrillator—and how it can help you do what you do best—please contact your local Physio-Control representative or visit ***www.physio-control.com****.*

Physio-Control Family of Products and Services

Defibrillators/Monitors



LIFEPAK CR® Plus Automated External Defibrillator (AED)

Featuring the same advanced technology trusted by emergency medical professionals—yet simple to use—the fully automatic LIFEPAK CR Plus AED is designed specifically for the first person to respond to a victim of sudden cardiac arrest (SCA).



LIFEPAK® 1000 Defibrillator

The LIFEPAK 1000 Defibrillator is a powerful and compact device designed to treat cardiac arrest patients and provide continuous cardiac monitoring capabilities. Built-in flexibility allows the *1000* to be programmed for use by first responders or professionals and enables care providers to change protocols as standards of care evolve.



LIFEPAK® 15 Monitor/Defibrillator

The LIFEPAK 15 monitor/defibrillator is the standard in emergency care for ALS teams who want the most clinically innovative, operationally effective and LIFEPAK TOUGH™ device available today. The *15* offers sophisticated clinical technologies with a rich array of features—like the most powerful escalating energy available (up to 360J), advanced monitoring parameters and a completely upgradable platform.



LIFEPAK® 20e Defibrillator/Monitor with CodeManagement Module™

Clinically advanced and packed with power, the LIFEPAK 20e defibrillator/monitor is highly intuitive for first responders, and also skillfully combines AED function with manual capability so that ACLS-trained clinicians can quickly and easily deliver advanced therapeutic care. The CodeManagement Module adds waveform capnography and wireless connectivity to enhance your hospital's ability to effectively manage resuscitations from preparedness through review.

CPR Assistance



LUCAS® 2 Chest Compression System

Designed to provide effective, consistent and uninterrupted compressions according to AHA Guidelines, LUCAS can be used on adult patients in out-of-hospital and hospital settings.



TrueCPR™ Coaching Device

TrueCPR helps your team optimize their manual CPR performance using simple real-time and post-event feedback on the most critical resuscitation parameters. It accurately measures compression depth through proprietary Triaxial Field Induction technology.

Data Solutions



LIFENET® System

The LIFENET System provides EMS and hospital care teams with reliable, quick access to clinical information through a secure, web-based platform, helping to improve patient care, flow and operational efficiency.

CODE-STAT™ Data Review Software

CODE-STAT data review software is a retrospective analysis tool that provides easy access to data, reports and post-event review.

HealthEMS®

HealthEMS is a remote-hosted field data collection, management and reporting software solution which is proven to help Fire and EMS providers improve patient care and financial performance. HealthEMS creates a two-way information flow which dramatically improves the accuracy and timeliness of information needed to support billing and clinical decision-making.

PulsePoint

PulsePoint Respond alerts CPR-trained bystanders about nearby sudden cardiac arrests in a public area. The app guides the responder to the public location of the incident using a map while also identifying nearby AEDs. Because the PulsePoint solution is integrated into the local dispatch center, alerts are only sent after 911 has been notified.

PulsePoint AED is an app designed to build a comprehensive registry of AEDs available for use during cardiac emergencies. AED submissions are verified by the local agency and then become available within the Respond app.

Support



Physio-Control Service

With a service plan from Physio-Control, you are free to focus on your mission while relying on us to help to ensure the integrity of your lifesaving tools. From emergency repairs to software updates to preventive maintenance, we respond to every service call with speed and expertise so you have the peace of mind to do your job with confidence.


LIFEPAK® 15 MONITOR/DEFIBRILLATOR
LIFEPAK
FERNO | 93H PROFlex




3

GENERAL

The LIFEPAK 15 monitor/defibrillator has six main operating modes:

AED Mode: for automated ECG analysis and a prompted treatment protocol for patients in cardiac arrest.

Manual Mode: for performing manual defibrillation, synchronized cardioversion, noninvasive pacing, and ECG and vital sign monitoring.

Archive Mode: for accessing stored patient information.

Setup Mode: for changing default settings of the operating functions.

Service Mode: for authorized personnel to perform diagnostic tests and calibrations.

Demo Mode: for simulated waveforms and trend graphs for demonstration purposes.

PHYSICAL CHARACTERISTICS

Weight:

Basic monitor/defibrillator with new roll paper and two batteries installed: 7.9 kg (17.5 lb)

Fully featured monitor/defibrillator with new roll paper and two batteries installed: 8.4 kg (18.5 lb)

Lithium-ion battery: ≤0.6kg (1.3lb)

Accessory Bags and Shoulder Strap: 1.77 kg (3.9 lb)

Standard (hard) Paddles: 0.95 kg (2.1 lb)

Height: 31.7 cm (12.5 in)

Width: 40.1 cm (15.8 in)

Depth: 23.1 cm (9.1 in)

DISPLAY

Size (active viewing area): 212 mm (8.4 in) diagonal; 171 mm (6.7 in) wide x 128 mm (5.0 in) high

Resolution: display type 640 dot x 480 dot color backlit LCD

User Selectable Display Mode: full color or SunVue™ display high contrast

Display: a minimum of 5 seconds of ECG and alphanumerics for values, device instructions, or prompts

Display: up to three waveforms

Waveform Display Sweep Speed: 25 mm/sec for ECG, SpO_2, IP, and 12.5 mm/sec for CO_2

DATA MANAGEMENT

The device captures and stores patient data, events (including waveforms and annotations), and continuous waveform and patient impedance records in internal memory.

The user can select and print reports, and transfer the stored information via supported communication methods.

Report Types:

- Three format types of CODE SUMMARY™ critical event record: short, medium, and long
- 12-lead ECG with STEMI statements
- Continuous Waveform (transfer only)
- Trend Summary
- Vital Sign Summary
- Snapshot

Memory Capacity: Total capacity is 360 minutes of continuous ECG, 90 minutes of continuous data from all channels, or 400 single waveform events.

Maximum memory capacity for a single patient includes up to 200 single waveform reports and 90 minutes of continuous ECG.

COMMUNICATIONS

The device is capable of transferring data records by wired or wireless connection. This device complies with Part 15 of the FCC rules, and its operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Serial Port RS232 communication + 12V available

Limited to devices drawing maximum 0.5 A current

Bluetooth® technology provides short-range wireless communication with other Bluetooth-enabled devices

MONITOR

ECG

ECG is monitored via several cable arrangements:

A 3-wire cable is used for 3-lead ECG monitoring.

A 5-wire cable is used for 7-lead ECG monitoring.

A 10-wire cable is used for 12-lead ECG acquisition. When the chest electrodes are removed, the 10-wire cable functions as a 4-wire cable.

Standard paddles or QUIK-COMBO pacing/defibrillation/ECG electrodes are used for paddles lead monitoring.

Frequency Response:

Monitor: 0.5 to 40 Hz or 1 to 30 Hz

Paddles: 2.5 to 30 Hz

12-lead ECG diagnostic: 0.05 to 150 Hz

Lead Selection:

Leads I, II, III, (3-wire ECG cable)

Leads I, II, III, AVR, AVL, and AVF acquired simultaneously (4-wire ECG cable)

Leads I, II, III, AVR, AVL, AVF, and C lead acquired simultaneously (5-wire ECG cable)

Leads I, II, III, AVR, AVL, AVF, V1,V2,V3,V4,V5, and V6 acquired simultaneously (10-wire ECG cable)

ECG size: 4, 3, 2.5, 2, 1.5, 1, 0.5, 0.25 cm/mV (fixed at 1 cm/mV for 12-lead)

Heart Rate Display:

20–300 bpm digital display

Accuracy: ±4% or ±3 bpm, whichever is greater

QRS Detection Range Duration: 40 to 120 msec

Amplitude: 0.5 to 5.0 m

Common Mode Rejection (CMRR): ECG Leads: 90 dB at 50/60 Hz

SpO_2/SpCO/SpMet

Sensors:

MASIMO® sensors including RAINBOW® sensors

NELLCOR® sensors when used with the MASIMO RED™ MNC adapter

SpO_2

Displayed Saturation Range: "<50" for levels below 50%; 50 to 100%

Saturation Accuracy: 70–100% (0–69% unspecified)

Adults/Pediatrics:
±2 digits (during no motion conditions)
±3 digits (during motion conditions)

Dynamic signal strength bar graph

Pulse tone as SpO_2 pulsations are detected

SpO_2 Update Averaging Rate User selectable: 4, 8, 12 or 16 seconds

SpO_2 Sensitivity User selectable: Normal, High

SpO_2 Measurement: Functional SpO_2 values are displayed and stored

Pulse Rate Range: 25 to 240 bpm

Pulse Rate Accuracy (Adults/Pediatrics):
±3 digits (during no motion conditions)
±5 digits (during motion conditions)

Optional SpO_2 waveform display with autogain control

SpCO®

SpCO Concentration Display Range: 0 to 40%

SpCO Accuracy: ±3 digits

SpMET®

SpMet Saturation Range: 0 to 15.0%

SpMet Display Resolution: 0.1% up to 10%

SpMet Accuracy: ±1 digit

NIBP

Blood Pressure Systolic Pressure Range: 30 to 255 mmHg

Diastolic Pressure Range: 15 to 220 mmHg

Mean Arterial Pressure Range: 20 to 235 mmHg

Units: mmHg

Blood Pressure Accuracy: ±5 mmHg

Blood Pressure Measurement Time: 20 seconds, typical (excluding cuff inflation time)

Pulse Rate Range: 30 to 240 pulses per minute

Pulse Rate Accuracy: ±2 pulses per minute or ±2%, whichever is greater

Operation Features Initial Cuff Pressure: User selectable, 80 to 180 mmHg

Automatic Measurement Time Interval: User selectable, from 2 min to 60 min

Automatic Cuff Deflation Excessive Pressure: If cuff pressure exceeds 290 mmHg

Excessive Time: If measurement time exceeds 120 seconds

CO_2

CO_2 Range: 0 to 99 mmHg (0 to 13.2 kPa)

Units: mmHg, %, or kPa

Respiration Rate Accuracy:
0 to 70 bpm: ±1 bpm
71 to 99 bpm: ±2 bpm

Respiration Rate Range: 0 to 99 breaths/minute

Rise Time: 190 msec

Response Time: 3.3 seconds (includes delay time and rise time)

Initialization Time: 30 seconds (typical), 10-180 seconds

Ambient Pressure: automatically compensated internally

Optional Display: CO_2 pressure waveform

Scale factors: Autoscale, 0–20 mmHg (0–4 Vol%), 0–50 mmHg (0–7 Vol%), 0–100 mmHg (0–14 Vol%)

Invasive Pressure

Transducer Type: Strain-gauge resistive bridge

Transducer Sensitivity: 5µV/V/mmHg

Excitation Voltage: 5 Vdc

Connector: Electro Shield: CXS 3102A 14S-6S

Bandwidth: Digital filtered, DC to 30 Hz (< -3db)

Zero Drift: 1 mmHg/hr without transducer drift

Zero Adjustment: ±150 mmHg including transducer offset

Numeric Accuracy: ±1 mmHg or 2% of reading, whichever is greater, plus transducer error

Pressure Range: -30 to 300 mmHg, in six user selectable ranges

Invasive Pressure Display

Display: IP waveform and numerics

Units: mmHg

Labels: P1 or P2, ART, PA, CVP, ICP, LAP (user selectable)

Temperature

Range: 24.8° to 45.2°C (76.6° to 113.4°F)

Resolution: 0.1°C

Accuracy: ±0.2°C including sensor

Reusable Temperature Cable: 5 foot or 10 foot

Disposable Sensor Types: Surface–Skin; Esophageal/Rectal

Trend

Time Scale: Auto, 30 minutes, 1, 2, 4, or 8 hours

Duration: Up to 8 hours

ST Segment: After initial 12-lead ECG analysis, automatically selects and trends ECG lead with the greatest ST displacement

Display Choice of: HR, PR (SpO_2), PR (NIBP), SpO_2 (%), SpCO (%), SpMet (%), CO_2 ($EtCO_2$/$FiCO_2$), RR (CO_2), NIBP, IP1, IP2, ST

ALARMS

Quick Set: Activates alarms for all active vital signs

VF/VT Alarm: Activates continuous (CPSS) monitoring in Manual mode

Apnea Alarm: Occurs when 30 seconds has elapsed since last detected respiration

Heart Rate Alarm Limit Range: Upper, 100–250 bpm; lower, 30–150 bpm

INTERPRETIVE ALGORITHM

12-Lead Interpretive Algorithm: University of Glasgow 12-Lead ECG Analysis Program, includes AMI and STEMI statements

PRINTER

Prints continuous strip of the displayed patient information and reports

Paper Size: 100 mm (3.9 in)

Print Speed: 25 mm/sec or 12.5 mm/sec

Optional: 50 mm/sec time base for 12-lead ECG reports

Delay: 8 seconds

Autoprint: Waveform events print automatically

Frequency Response:

Diagnostic: 0.05 to 150 Hz or 0.05 to 40 Hz

Monitor: 0.67 to 40 Hz or 1 to 30 Hz

DEFIBRILLATOR

Biphasic Waveform: Biphasic Truncated Exponential

The following specifications apply from 25 to 200 ohms, unless otherwise specified:

Energy Accuracy: ±1 joule or 10% of setting, whichever is greater, into 50 ohms, ±2 joules or 15% of setting, whichever is greater, into 25-175 ohms.

Voltage Compensation: Active when disposable therapy electrodes are attached. Energy output within ±5% or ±1 joule, whichever is greater, of 50 ohms value, limited to the available energy which results in the delivery of 360 joules into 50 ohms.

Paddle Options: QUIK-COMBO® pacing/defibrillation/ECG electrodes (standard). Cable Length 8 foot long (2.4 m) QUIK-COMBO cable (not including electrode assembly).

Standard paddles (optional)

Manual Mode

Energy Select: 2, 3, 4, 5, 6, 7, 8, 9, 10, 15, 20, 30, 50, 70, 100, 125, 150, 175, 200, 225, 250, 275, 300, 325, and 360 joules

Charge Time: Charge time to 360 joules in less than 10 seconds, typical

Synchronous Cardioversion: Energy transfer begins within 60 msec of the QRS peak

Paddles Leads OFF Sensing: When using QUIK-COMBO electrodes, the device indicates Paddles Leads OFF if the resistive part of the patient impedance is greater than 300 ±15% ohms, or if the magnitude of the patient impedance is greater than 440 ±15% ohms.

AED Mode

Shock Advisory System™ (SAS): an ECG analysis system that advises the operator if the algorithm detects a shockable or non-shockable ECG rhythm. SAS acquires ECG via therapy electrodes only.

Shock Ready Time: Using a fully charged battery at normal room temperature, the device is ready to shock within 20 seconds if the initial rhythm finding is "SHOCK ADVISED"

Biphasic Output: Energy Shock levels ranging from 150–360 joules with same or greater energy level for each successive shock

cprMAX™ Technology: In AED mode, cprMAX™ technology provides a method of maximizing the CPR time that a patient receives, with the overall goal of improving the rate of survival of patients treated with AEDs.

Setup Options:

- Auto Analyze: Allows for auto analysis. Options are OFF, AFTER 1ST SHOCK
- Initial CPR: Allows the user to be prompted for CPR for a period of time prior to other activity. Options are OFF, ANALYZE FIRST, CPR FIRST
- Initial CPR Time: Time interval for Initial CPR. Options are 15, 30, 45, 60, 90, 120, and 180 seconds.
- Pre-Shock CPR: Allows the user to be prompted for CPR while the device is charging. Options are OFF, 15, 30 seconds.
- Pulse Check: Allows the user to be prompted for a pulse check at various times. Options are ALWAYS, AFTER EVERY SECOND NSA, AFTER EVERY NSA, NEVER
- Stacked Shocks: Allows for CPR after 3 consecutive shocks or after a single shock. Options are OFF, ON
- CPR Time: 1 or 2 User selectable times for CPR. Options are 15, 30, 45, 60, 90, 120, 180 seconds and 30 minutes.

PACER

Pacing Mode: Demand or non-demand rate and current defaults

Pacing Rate: 40 to 170 PPM

Rate Accuracy: ±1.5% over entire range

Output Waveform: Monophasic, truncated exponential current pulse (20 ± 1 ms)

Output Current: 0 to 200 mA

Pause: Pacing pulse frequency reduced by a factor of 4 when activated

Refractory Period: 180 to 280 msec (function of rate)

ENVIRONMENTAL

Unit meets functional requirements during exposure to the following environments unless otherwise stated.

Operating Temperature: 0° to 45°C (32° to 113°F); -20°C (-4°F) for 1 hour after storage at room temperature; 60°C (140°F) for 1 hour after storage at room temperature

Storage Temperature: -20° to 65°C (-4° to 149°F) except therapy electrodes and batteries

Relative Humidity, Operating: 5 to 95%, non-condensing. NIBP: 15 to 95%, non-condensing

Relative Humidity, Storage: 10 to 95%, non-condensing

Atmospheric Pressure, Operating: -382 to 4,572 m (-1,253 to 15,000 ft). NIBP: -152 to 3,048 m (-500 to 10,000 ft)

Water Resistance, Operating: IP44 (dust and splash resistance) per IEC 529 and EN 1789 (without accessories except for 12-lead ECG cable, hard paddles, and battery pack)

Vibration: MIL-STD-810E Method 514.4, Propeller Aircraft - category 4 (figure 514.4-7 spectrum a), Helicopter - category 6 (3.75 Grms), Ground Mobile - category 8 (3.14 Grms), EN 1789: Sinusoidal Sweep, 1 octave/min, 10-150 Hz, ±0.15 mm/2 g

Shock (drop): 5 drops on each side from 18 inches onto a steel surface EN 1789: 30-inch drop onto each of 6 surfaces

Shock (functional): Meets IEC 60068-2-27 and MIL-STD-810E shock requirements 3 shocks per face at 40 g, 6 ms half-sine pulses

Bump: 1000 bumps at 15 g with pulse duration of 6 msec

Impact, Non-operating: EN 60601-1 0.5 + 0.05 joule impact UL 60601-1 6.78 Nm impact with 2-inch diameter steel ball. Meets IEC62262 protection level IK 04.

EMC: EN 60601-1-2:2006 Medical Equipment -General Requirements for Safety - Collateral Standard: Electromagnetic Compatibility - Requirements and Tests EN 60601-2-4:2003: (Clause 36) Particular Requirements for the Safety of Cardiac Defibrillators and Cardiac Defibrillator-Monitors

Cleaning: Cleaning 20 times with the following: Quaternary ammonium, isopropyl alcohol, hydrogen peroxide

Chemical Resistance: 60 hour exposure to specified chemicals: Betadine (10% Povidone-Iodine solution), Coffee, Cola, Dextrose (5% Glucose solution), Electrode Gel/Paste (98% water, 2% Carbopol 940), HCL (0.5% solution, pH=1), Isopropyl Alcohol, NaCl solution (0.9% solution), Cosmetic discoloration of the paddle well shorting bar shall be allowed following exposure to HCL (0.5% solution).

POWER

Power Adapters: AC or DC

Power Adapters provide operation and battery charging from external AC or DC power

- Full functionality with or without batteries when connected to external AC/DC
- Typical battery charge time while installed in LIFEPAK 15 device is 190 minutes
- Indicators: external power indicator, battery charging indicator

Dual battery: Capability with automatic switching

Low battery indication and message: Low battery fuel gauge indication and low battery message in status area for each battery

Replace battery indication and message: Replace battery fuel gauge indication, audio tones and replace battery message in the status area for each battery. When replace battery is indicated, device auto-switches to second battery. When both batteries reach replace battery condition, a voice prompt instructs user to replace battery.

Battery Capacity For two, new fully-charged batteries, 20°C (68°F)

Operating Mode		Monitoring (minutes)	Pacing (minutes)	Defibrillation (360J discharges)
Total Capacity to Shutdown	Typical	360	340	420
	Minimum	340	320	400
Capacity After Low Battery	Typical	21	20	30
	Minimum	12	10	6

BATTERY

Battery Specifications

Battery Type: Lithium-ion

Weight: ≤0.6kg (1.3lb)

Charge Time (with fully depleted battery): 4 hours and 15 minutes (typical)

Battery indicators: Each battery has a fuel gauge that indicates its approximate charge. A fuel gauge that shows two or fewer LEDs after a charge cycle indicates that the battery should be replaced.

Charging Temperature Range: 5° to 45°C (41° to 113°F)

Operating Temperature Range: 0° to 45°C (32° to 113°F)

Short Term (<1 week) Storage Temperature Range: -20° to 60°C (-4° to 140°F)

Long Term (>1 week) Storage Temperature Range: 20° to 25°C (68° to 77°F)

Operating and Storage Humidity Range: 5 to 95% relative humidity, non-condensing

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3 Olasveengen T, Wik L, Kramer-Johansen J, et al. Is CPR quality improving? A retrospective study of out-of-hospital cardiac arrest. *Resuscitation.* 2007;75:260-266.

4 Fletcher D, Galloway R, Chamberlain D, et al. Basics in advanced life support: A role for download audit and metronome. *Resuscitation.* 2008;78:127-134.

All claims valid as of December 2014.

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GDR 3301019_F

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2201

CIP #: CP-FD-17-BA Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replace 27 Self-Contained Breathing Apparatus (SCBA) 45 Masks and 72 air cylinders FY Start 2019 Quarter Q4

Project Location: Fire Department FY End 2019 Quarter Q1

Project Description

Replaced 27 SCBA Units, 45 masks and 72 air cylinders

Project Justification

The current SCBA units were purchased in 2009 under the 2007 NFPA standard for SCBA. NFPA Standards are revised every three years. In 2019 the current SCBA units will be 10 years old and there will have been four NFPA standard revisions that usually deal with safety and technology improvements. The maintenance costs increase substantially with age with SCBA. The technology improvements since 2009 have already allowed costs to come down with the Heads Up Display by over 50%.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$236,816	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$236,816	Reserves
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$236,816	

Financing Comments

Possible Grant Funding

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2201

CIP #: CP-FD-17-EP Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replace E30 a 2006 Pierce Enforcer pumper FY Start 2021 Quarter Q4

Project Location: Fire Department FY End 2021 Quarter Q1

Project Description

Replace E30 2006 Pierce Enforcer Pumper Vin# 4P1CEO1A96A005715

Project Justification

The pumper is 11 years old and has high operating hours from serving as a front line unit for 10 years and is now a reserve unit. In FY21 this unit will be 15 years old and should be considerd for replacement. It will take approximately 12 months to have the replacement pumper built from the order date.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$526,179	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$2,000
Maintenance	$1,000
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$3,000

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$526,179	Reserves
2022	$0	$0 this FY
Total Capital Costs	$526,179	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 2201

CIP #: CP-FD-17-PE Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replace E31 a 2002 Pierce Enforcer Pumper FY Start 2019 Quarter Q4

Project Location: Fire Department FY End 2019 Quarter Q1

Project Description

Replace E31 2002 Pierce Enforcer Pumper Vin# 4P1CT02A62A002365

Project Justification

The pumper is 15 years old and has high operating hours from serving as a front line unit for 13 years and is now a reserve unit. In FY18 this unit will be 16 years old and should be considerd for replacement. It will take approximately 12 months to have the replacement pumper built from the order date.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$497,277	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$2,000
Maintenance	$1,000
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$3,000

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$497,277	Reserves
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$497,277	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3200

CIP #: CP-CS-17-ES Project #: Account #: 68-10 CIP Classification: Software District: City

Project Name: Electronic Plan Review - Software FY Start 2020 Quarter Q4

Project Location: City Hall FY End 2020 Quarter Q1

Project Description

Installation of electronic plan review software $42,700 and Base Plan Check and Review Business Process $10,000. Annual operating cost for access first year (3% yearly increase) $36,543.24, Building Permit EPR Interface $1,154.28, ASP Hosting Services $15,024.00. 2nd year total operating $54,673.97. 3rd year $56,314.19. 4th year 58,003.62. 5th year $59,743.72.

Project Justification

Allows for the electronic transmission and review of site plans and building plans for the Community Services Department. This is currently being evaluated with ERP study underway.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$52,720	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$53,082
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$53,082

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$52,720	Revenue
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$52,720	

Financing Comments

General Fund

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3510

CIP #: CP-PW-18-SM Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Annual Sidewalk Maintenance/Replacement Program FY Start 2018 Quarter Q4

Project Location: City Wide FY End 2022 Quarter Q1

Project Description

Annual maintenance and repair of sub-standard, deteriorated and broken sidewalks. This funding will allow for the installation of approximately 25000square feet (1 mile - 5 feet wide) of replacement and new sidewalks on a 50% - 50% split

Project Justification

Sidewalks routinely become non-functional through aging, settling,cracking,tree root damage and vehicle damage. By repairing and replacing sidewalks it reduces the liability to the city

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$250,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$50,000	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$50,000	Revenue
2019	$50,000	Other Source
2020	$50,000	Other Source
2021	$50,000	Other Source
2022	$50,000	Other Source
Total Capital Costs	$250,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3510

CIP #: CP-PW-11-PP Project #: PW08SP Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Annual Street Paving Program FY Start 2018 Quarter Q4

Project Location: City Wide FY End 2022 Quarter Q1

Project Description

Annual milling and paving of city streets, boulevards and parking lots

Project Justification

The City has opproximently 79.1 center line miles of roads and various municipal parking lots. An average of 3 to 4 miles per year will allow the City to maintain roadway surfaces, excluding parking lots, at a minimum level. When streets are repaved, all sidewalks must be equipped with ADA compliant ramps. This will add approximately 10% to paving costs

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$1,500,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$300,000	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$300,000	Revenue
2019	$300,000	Revenue
2020	$300,000	Revenue
2021	$300,000	Revenue
2022	$300,000	Revenue
Total Capital Costs	$1,500,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3510

CIP #: CP-PW-15-BM Project #: Account #: 63-00 CIP Classification: Infrastructure District: D2

Project Name: Broadview Manor Street Lighting FY Start 2018 Quarter Q4

Project Location: Broadview Manor FY End 2018 Quarter Q1

Project Description

Replace decorative street lighting in Broadview Manor. 28 lights and 60 Quazite Boxes

Project Justification

The decorative street lighting at Broadview Manor has been in place 30+ years. Many of the bases are corroded and parts are becoming unavailable. Old light bases have been found to be insufficient, so new concrete bases, pull boxes and replacement of missing poles will be needed.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$120,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$120,000	Other Source
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$120,000	

Financing Comments

Funding by Special Assessment.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3510

CIP #: CP-PW-17-FS Project #: PW17SI Account #: 63-00 CIP Classification: Infrastructure District: D1

Project Name: Fiske Blvd Complete Streets Roadway, and Sidewalk Improvements Phase 3 (General Fund) FY Start 2018 Quarter Q4

Project Location: Fiske Blvd FY End 2018 Quarter Q1

Project Description

Construct drainage and sidewalks, replace water main, reconstruct roadway and provide landscaping from Highland Ave to Peachtree Street

Project Justification

Fiske Blvd from Highland Ave to Peachtree St has poor surface drainage, sub-standard sidewalks and the roadway is in poor condition. These improvements will improve drainage and create a safer environment for citizens

Strategic Connection: Operational

Sidewalks, enhanced lighting and improved drainage provides a safe environment

Total Cost of Project	Total Cost to Date
$1,750,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$1,750,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$1,750,000	Combination
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$1,750,000	

Financing Comments

Possible funding through the SCTPO and FDOT
1,750,000 funded by General funds
140,000 funded by Stormwater

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3510

CIP #: CP-PW-17-PS Project #: Account #: 63-00 CIP Classification: Infrastructure District: D2

Project Name: Pineda Street Roadway and Sidwalk Reconstruction FY Start 2019 Quarter Q4

Project Location: Pineda Street from Peachtree St to Dixon Blvd FY End 2019 Quarter Q1

Project Description

Full depth reclaimation of Pineda Street including mixing of existing pavement and base, injecting the material with emulsifier, compacting and grading and adding an asphalt overlay and striping. Also repairing esisting sidewalk and constructing ADA compliant handicap ramps where needed

Project Justification

Pineda Street is a heavly traveled street used by all types of vehicle traffic including school busses. The roadway has deteriorated to the point that the base is failing. The sidewalks are in poor condition and many of the existing handi-cap ramps do not comply with ADA standards

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$675,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$675,000	Combination
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$675,000	

Financing Comments

Possible split with County & School Board
Safe routes to school Grant Funding.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3510

CIP #: CP-PW-18-SI Project #: Account #: 63-00 CIP Classification: Infrastructure District: D1

Project Name: SR 520 Interim Safety Improvements FY Start 2018 Quarter Q4

Project Location: SR 520 from US 1 to the Indian River Bridges FY End 2018 Quarter Q1

Project Description

Traffic Calming for SR 520 Corridor through Cocoa Village

Project Justification

Traffic Calming for SR 520 through Cocoa Village

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$100,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$100,000	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$100,000	Reserves
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$100,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3510

CIP #: CP-PW-18-SB Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Steel bench replacement program FY Start 2018 Quarter Q4

Project Location: City Wide FY End 2020 Quarter Q1

Project Description

Over the next 3 fiscal years the city is in need of replacing the collection of benches in the City. Appox. 120 8 foot Benches through-out the Downtown and Citywide

Project Justification

the current benches and old and weathered

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$192,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$48,000	Revenue
2020	$48,000	Revenue
2021	$48,000	Revenue
2022	$48,000	Revenue
Total Capital Costs	$192,000	

Financing Comments

Appox 40 benches per year

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3510

CIP #: CP-CD-11-SS Project #: CD1205 Account #: 63-00 CIP Classification: Infrastructure District: D1

Project Name: Stone Street Corridor Streetscaping (General Funds portion) FY Start 2018 Quarter Q1

Project Location: Fiske Boulevard to the western side of the F.E.C. Railroad. FY End 2019 Quarter Q2

Project Description

Streetscaping of Stone Street Commercial Corridor. Design and Engineering in FY 2017 and construction could begin in Q4 of FY 2017.

Project Justification

The Diamond Square CRA intends to redevelop this culturally significant commercial corridor.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$641,104	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$580,552	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$580,552	Combination
2019	$60,552	Combination
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$641,104	

Financing Comments

A combination of TIF and other funding sources will be used for this project.
This project is split between the General Fund, Utility Fund and Stormwater Fund.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3540

CIP #: CP-PW-18-FB | Project #: 3540-001 | Account #: 68-10 | CIP Classification: Software | District: City

Project Name: FLEET FASTER ASSET UPGRADE TO FASTER WEB | FY Start 2018 Quarter Q4

Project Location: Cocoa Fleet | FY End 2018 Quarter Q1

Project Description

This is a full software upgrade a full database migration from FASTER WIN to FASTER WEB. This is Faster Asset Solutions upgrade to it latest FLEET MANAGEMENT SOFTWARE SOLUTION. This is Cocoa Fleet next tool for a ever growing Fleet. The system uses our current database and all the data that has been collected over the past 14 years.

Project Justification

Cocoa Fleet has been using Faster Asset Solutions since 2004 this was Fasters client based windows solution the system is 14 years old. The new software architecture is WEB giving greater functionality, greater software integration with a host of other enterprise software solutions with KPI functionality. This is the next tool Cocoa Fleet Management software needs FASTER Web, is the most powerful and technologically advanced fleet management system on the market. While other vendors offer web-enabled solutions that were developed with early stage web technologies, FASTER Web was developed based on current platforms from the ground up for a true web experience that offers better load times, better search capability and a true user experience that does not rely on endless scrolling or screen jumping.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$20,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$13,500
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$13,500

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$20,000	Combination
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$20,000	

Financing Comments

This would be a 50/50 split between general and enterprise funds. Fleet service vehicle and equipment in all three funds

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3540

CIP #: CP-PW-18-FW | Project #: 3540-001 | Account #: 52-00 | CIP Classification: Operating | District: City

Project Name: FLEET FASTER ASSET UPGRADE TO FASTER WEB | FY Start 2018 Quarter Q4

Project Location: Cocoa Fleet | FY End 2018 Quarter Q1

Project Description

This is a full software upgrade a full database migration from FASTER WIN to FASTER WEB. This is Faster Asset Solutions upgrade to it latest FLEET MANAGEMENT SOFTWARE SOLUTION. This is Cocoa Fleet next tool for a ever growing Fleet. The system uses our current database and all the data that has been collected over the past 14 years.

Project Justification

Cocoa Fleet has been using Faster Asset Solutions since 2004 this was Fasters client based windows solution the system is 14 years old. The new software architecture is WEB giving greater functionality, greater software integration with a host of other enterprise software solutions with KPI functionality. This is the next tool Cocoa Fleet Management software needs FASTER Web, is the most powerful and technologically advanced fleet management system on the market. While other vendors offer web-enabled solutions that were developed with early stage web technologies, FASTER Web was developed based on current platforms from the ground up for a true web experience that offers better load times, better search capability and a true user experience that does not rely on endless scrolling or screen jumping.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$26,725	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$13,500
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$13,500

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$26,725	Combination
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$26,725	

Financing Comments

This would be a 50/50 split between general and enterprise funds. Fleet service vehicle and equipment in all three funds

CIE_Designation ☐

Statement of Work (SOW), Pricing, & Payment Terms

***FASTER* Asset Solutions**

100% Employee-Owned

Created For:
City of Cocoa
Date:
March 27, 2017
Senior Software Consultant:
Steve Specht

Pricing in this proposal is valid for 60 days.

Qty	Description	Cost
FMIS Core COTS System		
400	001 – Software Cost: Standard Active Assets: This price includes up to quantity listed standard active assets (which are defined as originally valued at $5000 or greater and active). Each additional asset will be $100.00. This includes one instance of the FASTER Web Application with one database.	$40,000
1	050 – Unlimited Named Accounts: Unlimited user access (named accounts) included.	Included
Add-ons		
1	207nc – Dashboard Add-on: (See Offsetting Discount Below) Provides 20 standard metrics that monitor fleet industry performance measures. The dashboards have powerful configuration capability to enable effective display of data. They are also drillable in that you can click and drill into the data presented by the dashboard. And the Dashboards are role-based so that you can empower users based on their roles.	$10,000
1	208 – Barcoding Software: Barcoding Software for One Storeroom (allows for Label Scanning and Printing). Hardware is not included.	$6,000

1	301 - Single Vendor Fuel Import (New Vendor or New File) - Existing Customer: This is a single vendor fuel import for an existing customer who has been live on a FASTER product for more than 6 months. This pricing is for either: 1. To import a new fuel vendor fuel transaction file. 2. Or, to import a new fuel file from your existing vendor. The Fuel Import (FI) is a COTS add-on. It is a robust yet inexpensive way to import data from a Fuel System Vendor (FSV). It requires significant configuration and testing by FASTER. Below are important items the customer will need to provide for FASTER to configure, test and deploy: 1. FSV Fuel File Layout Definition – This is the layout for the export file you plan on receiving regularly from your FSV. It defines your fuel export file's columns, positions and/or delimiters (if used). 2. Fuel System Export Files - Live production export files from the fuel system, including the complete disbursement transaction data. A minimum of 100 transactions will be needed for proper testing. The export files generated from your fuel system must be flat files, not reports, and not generated in Microsoft Excel. It is important you ensure your FSV does not change this export file as any changes may require additional configuration and testing. 3. Completed FI-Customer Configuration Form -This is a detailed form that assists you in providing all the information required for the FI to be configured and tested properly. (This FI does not import Site & Dispenser information. You can add the importing of Site & Dispenser data to the SFI for an additional ($2,500) cost.)	$3,500
Go-Live Custom Work		
1	333e – Custom Integration: Export: Naviline Export This is an estimate for a one-way export. The actual cost of export can be determined once specifications are identified.	$8,000
Data Services		
1	408 - Migration Data Conversion: The Migration Data Conversion Product is used for migrating data from COTS FASTER Win-5.69 BR2 or higher to FASTER Web. It does not include migrating data that relates or is the result of a use of FASTER Win Add-On unless specifically noted. For example, item 2 of the appendix identifies that if you have the graphics add-on, then all your graphics will be brought over with the migration. A Migration Data Conversion does not migrate data that is uniquely associated with the customization you have. This will need to be addressed separately and potentially as an additional custom migration. The attached appendix "Migration Data Conversion Product" is an outline of the categories of data that will be migrated during the Migration Data Conversion.	$15,000
1	405 – Data Cleanup: If the data in the current system is in need of correction prior to the extraction, the customer will be responsible for data correction that takes place in the legacy system. (However, as part of the implementation process, FASTER Fleet Consultants will provide advice and guidance related to data correction.) For customers who maintain reliable data, there should be no need for data correction. However, if past practices or flawed conversions permitted incorrect data to be entered in the current system, it is advisable that the customer correct this prior to the extraction process beginning.	n/a
Configuration & Training		
1	Migration Implementation and Project Management Services	$9,000

1	511 – System Overview Meetings (SOM): System overview meetings take place via live, remote web-based sessions. They consist of two, 4-hour meetings that will occur on the same day or two consecutive days where the customer will ensure key users are able to participate.	$6,600
1	512 – System Training/Go-Live: This training includes the below training agenda. Because training is hands-on, the maximum class size is 20 attendees and includes a single training location. Additional training sessions and trainers can be added at an additional cost any time up to 4-weeks prior to your go-live.	See below
1	512a – Go-Live Week System Training - Asset Module (4 Hrs): Should include FASTER System Admin and Asset Managers.	$2,200
1	512b – Go-Live Week System Training - Maintenance Module (4 Hrs): Should include FASTER System Admin, Maintenance Supervisor, Service Writers and/or Technician who will create work orders.	$2,200
1	512c – Go-Live Week System Training - Parts Module (4 Hrs): Should include FASTER System Admin, Parts Staff and Parts Managers.	$2,200
1	512d – Go-Live Week System Training - Fuel Module (1 Hr): Should include FASTER System Admin and Fuel Clerk.	$550
1	512e – Go-Live Week System Training - Vendors & Accounting Modules (1.5 Hrs): Should include FASTER System Admin, Accounting Staff and Parts Managers.	$825
2	512f – Go-Live Week System Training - Technician Workstation (2.5 Hrs): Should include FASTER System Admin and Technicians.	$1,375

1	512g – Go-Live Week System Training - Additional Trainers (TBD): The above training costs provide for one trainer the week of go live. One trainer can provide one session of each of the above hands-on, user training sessions with the exception of the Technician Workstation. (Two Technician Workstation sessions can be accommodated by a single trainer.) If you determine your training needs require additional training sessions due to shift work or other needs, an additional FASTER trainer can participate during the week of go live for an added cost. Therefore, it will be important for you to determine the total number of training sessions and trainers you will need in order to then calculate your total training cost. Each of the above training sessions are role-based. So it should be easy to determine how many staff you have for each role. Typically the largest training sessions are the Technician Workstation and Maintenance Module. Please remember that you may want your Technicians to attend more than the Technician Workstation training module. To calculate your additional training costs: -- The cost (including room, board and travel) of the 1st trainer is included in the above costs. -- Travel, room and board will be a flat cost of $1,000 for each additional trainer. -- To calculate session costs, multiply the number of additional training sessions you need of each of the above session options by the cost of the training module as listed above (module session cost times how many instances of that module session you require). -- The above flat fee for travel, room and board of each additional trainer as well as the fees for the above training assume that training sessions will be held consecutively so as to minimize the number of days a trainer would need to be at your location. It also assumes there is no weekend stayover. If training will begin one week and extend into the next week, an additional $1,000 per trainer would apply for travel, room and board ($1,000 flat fee per trainer times the number of business weeks spanned).	TBD
Discounts		
1	900 – Existing WIN Customer Discount Discount for Existing FASTER WIN Customers	-$4,000
1	905ec – Existing FASTER WIN Customer Dashboard Discount	-$10,000
	Software & Services Total	**$93,450**

Upgrades & Support		
1	801 – Upgrades & Support: Annual support after switch date. Annual support services are comprised of Software Cost, Add-Ons and Customizations. Migration annual support fee will require that FASTER Win will no longer be in use. The Initial FASTER Web annual support fee will be due 30 days after switch date. Any months remaining on FASTER Win support will be pro-rated and deducted from the initial year of FASTER Web support. After the initial renewal year, support costs will increase at 3% annually.	**$13,500**
	Upgrades & Support Total	**$13,500**

Payment Schedule By Milestone	
Milestone	**Percent Due**
Upon Purchase Confirmation	**30%**
COTS Software Delivery	**30%**

COTS System Overview	**20%**
Delivery of Converted Data and Go Live	**20%**
Hourly Work: Hourly work is billed monthly.	**TBD**

Migration Data Conversion Product

After you have completed your data cleanup, it is important that you consider additional data preparation tasks and information that will aid you in preparing *FASTER* Win data to migrate effectively to a more robust and more structured *FASTER* Web database (DB) structure. Below is detailed information.

After you deliver your clean *FASTER* Win database, *FASTER* begins the migration process. After this point you will NOT be able to change data in the *FASTER* Win DB (other than daily transactions). Therefore, NO cleanup can be done after this point. So be sure all your data cleanup and prep is done prior to uploading your *FASTER* Win database to *FASTER.*

The migration process begins by *FASTER* creating and testing a test *FASTER* Web DB. This test migration DB is called a soft go-live DB. You will be provided this soft go-live DB for review and approval. Later, one week prior to go-live you will be able to provide to *FASTER* another *FASTER* Win DB so new transaction data can be included in the final go-live DB.

Important Notes:

Once *FASTER* begins the migration work, you cannot do data cleanup or change data in your *FASTER* Win DB in any way other than to add transactions. If you do, you will risk your migration project timeline and could cause corruption or bad data or cause your organization to spend a great deal of time reversing those entries or create added cost.

There is currently a migration path from 5.69BR2 and above to *FASTER* Web. If you have a version of *FASTER* Win that is prior to 5.69BR2, you will need to upgrade to the latest version of *FASTER* in order to migrate to *FASTER* Web.

Data that Will Migrate

The Migration Data Conversion Product is used for migrating data from COTS *FASTER* Win to *FASTER* Web. It does not include migrating data that relates or is the result of a use of *FASTER* Win Add-Ons unless specifically noted. For example, Item 2 below identifies that if you have the graphics add-on, then all your graphics will be brought over with the migration.

A Migration Data Conversion does not migrate data that is uniquely associated with the customizations you have. This will need to be addressed separately and potentially at an additional cost for a custom migration.

Below is a specific list of the categories of data that will be migrated during the Migration Data Conversion:

1. Equipment Inventory

- Birth Certificate
- Acquisition and Disposal
- Vehicle Replacement
- Warranty Records
- Preventative Maintenance
- History (Is regenerated post migration based on successfully migrated data)
- User Reference

2. Graphics (Attachments) and Notes

3. Parts Inventory

- Birth Certificate
- Warranty Records
- Parts History (Is Regenerated Post Migration Based on Successfully Migrated Data)
- Order Receipts
  - Parts Processing: Credits
- Transfers (Including Returns to Vendor)
- Interchangeable Part Numbers - IPN
- Vendors & Purchase Orders
- Parts Lists

4. Repair Types/Codes

5. Work Orders/Independent Parts/Deferred Repairs

- Transactional Detail
- Meter History
- Indirect Labor
  - Deferred Repairs
- Task Lists

6. Operational Cost/Fuel

- Transactional Detail

7. Equipment Templates

8. Billing History

FASTER Web Handles Data Differently

FASTER Web is a separate, distinct product from *FASTER* Win. It was designed to provide the best practices for a fleet's future needs. This means that some of the fields, forms, and processes of *FASTER* Win have been modified or changed. Instead of building *FASTER* Web to be similar to *FASTER* Win, we felt that building the best product (even if it deviated from *FASTER* Win) is what our customers needed. Therefore, please review the *FASTER* Web product and make sure that you are comfortable with the fact that some fields, forms, and processes are different. Below is a summary of some of those differences:

Field Names

Some Field Names have shifted in *FASTER* web. A few examples of this include:

- Company changes to Organization
- Independent Issue changes to Direct Charge

- Equipment changes to Asset
- Table Look Up to Fields

Along these lines, the field names and data elements within are not identical between the two systems.

Applets No Longer Standalone

In *FASTER* Web, Applets have been consolidated into modules that represent roles. For instance:

- Work Order, Independent Parts Issue, Shop Floor Manager, Task Lists, and Indirect Labor Editor. These applets are in the Maintenance Module of *FASTER* Web.
- Part Inventory, Part Processing, Key Change and Parts Lists. These applets are in the Parts Module of *FASTER* Web.
- Equipment Inventory, Equipment Template, Equipment Ownership, Warranty Tracking, and Key Change. These applets are in the Assets Module of *FASTER* Web.

Process Changes

- Budget account codes are required in FASTER Web to process all purchases. If account code usage was turned on in Win these codes are consolidated into a single migration code.
- *FASTER* Web does not support Last Receipt. Your costing method will be converted to Moving Average.
- Table codes are now called Fields and have had their descriptions extended in length.
- *FASTER* Win Table Lookups included two fields, both a field for Code and a field for Description. In *FASTER* Web some Table Look Ups only have a description because a Code and a Description were redundant. Some examples of this would be Color, Make, and Model. In some cases the data migration will append the WIN code and description into the WEB description.
- Field relabeling functionality is limited to specific fields in *FASTER* Web; however, the relabeled fields will carry through to the Reports and other Modules.
- Credits are no longer applied directly to a work order. They are added as a Billing Adjustment that shows on the work order print out.
- Lifetime Warranty cycle type 'L' will be migrated to *FASTER* Web as a warranty with a cycle type of 'Y' for Years and the Cycle Length in *FASTER* Win will be migrated over directly to *FASTER* Web's cycle length.
- Work Order Other Cost no longer requires a Repair Type. Therefore, the Asset History totals in Web do not consider the Repair Reason code from Win. All Work Order Costs are now displayed in the 'Other Cost' column in Web.
- *FASTER* Web does not provide batch entry functionality for work order related data.
- Since *FASTER* Web is a browser-based product you do not need to use a keyboard on a handheld scanner or a PDA. You can use the following to satisfy the need for manual data input while doing receiving, issuing, or inventory:
  1. A notebook computer running a compatible browser or a tablet running a compatible browser with a wireless card.

2. A wireless network in your parts room.
3. If you have the above, you can take your notebook or tablet with you when you do receiving, issuing, or inventory. You can enter directly into the notebook's or tablet's keyboard the quantity in real-time in *FASTER* Web. Therefore, when you buy a barcode scanner you can buy the less expensive scanner that does not have a keyboard.

New Processes Supported in *FASTER* Web

- Ability to have multiple contacts per asset in *FASTER* Web.
- Ability to have multiple standard specification types for the same asset in *FASTER* Web.
- Auto work order notification email for multiple statuses is available in *FASTER* Web.
- Auto Shop Charges for multiple costs is available in *FASTER* Web.
- Ability to plan for acquisition in *FASTER* Web.
- Core tracking & returns functionality is available in *FASTER* Web.
- Two-step part transfer audit trail in *FASTER* Web.
- User required to validate meter readings before processing fuel in *FASTER* Web.
- Close out process for asset inventory counts in *FASTER* Web.
- Ability to use P-card(procurement cards) in *FASTER* Web.
- Ancillary PM, inspections, and renewals are tracked as Scheduled Actions in *FASTER* Web.

Data Not Migrated

A Migration Data Conversion does not migrate data that is uniquely associated with any customization you may have. This will need to be addressed separately and potentially at an additional cost for a custom migration. The data outlined below will NOT be migrated from *FASTER* Win to *FASTER* Web; But Functionality Is Available in *FASTER* Web.

Data Not Migrated But Functionality Is Available in *FASTER* Web

- Title Sets
- Equipment Account (EA Account)
- Billing Account (VBA Codes)
- Flat Rates
- Warranty Claims Tracking
- Backorders (only fully received orders are migrated)
- WRR (E-request repair requests from *FASTER* service center)
- RLS (Repair Labor Standard)
- Vendor Contact Cell Phone field
- F-Audit components: physical count adjustment, deleted orders, adjusted quantity, adjusted cost
- Dashboard KPI views and individual settings

Data Not Migrated And Functionality Is Not Available in *FASTER* Web

The below listed data is not migrated. And *FASTER* Web does not include the below features or functionality. Due to *FASTER* Web's improved design, some of this functionality is not necessary.

- Tank Inventory
- PM Scheduler Templates
- EOM History
- Work order estimates
- Quick buttons
- Work Order User Reference
- Max Issue from Parts
- EOQ, ABC, UCC
- Any customer created custom table codes (existing code will not be migrated & creating new ones is not supported in *FASTER* Web)
  - If you had *FASTER* develop any type of customization, usually financial, part of that development often included custom table codes that were used to identify customer specific data. These custom table codes are not migrated.

Radio Assets Management

If you are using *FASTER* Win to manage radio assets, you are likely managing radio assets as a child asset of the fleet asset. While *FASTER* Web will provide the opportunity to manage radio can do it differently than in *FASTER* Win. Therefore, just as you customized *FASTER* Win to manage radio assets, you will want to customize *FASTER* Web to take advantage of its unique qualities. If you choose to manage radios separately from assets, this will likely require a second database and a second migration. This will be an added cost and is not part of the *FASTER* Win to *FASTER* Web migration. Please discuss your needs with us.

Facilities Management

If you are using *FASTER* Win to manage facilities, there are some fundamental differences in the way you would manage facilities in *FASTER* Web. In general, you will find *FASTER* Web more robust. But in *FASTER* Web you will likely want to maximize your productivity by managing Facilities data in a separate DB from Fleet data. This requires a separate instance of *FASTER* Web (a second install of the *FASTER* Web application and a separate DB). And that does mean there is a higher cost. While you can avoid this added cost of a second Facilitates DB and instance by putting your Facilitates data in the same DB as your Fleet data; you will lose the ability to customize Facilitates separate from Fleet data.

If you want Facilities data migrated from a Company in a *FASTER* Win DB to a *FASTER* Web DB, there will be the extra cost of a custom migration. This is not part of the *FASTER* Win to *FASTER* Web migration. Please discuss your needs with us.

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3560

CIP #: CP-PW-18-HV Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: City Hall HVAC replacement FY Start 2019 Quarter Q4

Project Location: City Hall FY End 2019 Quarter Q1

Project Description

Replacement of 6 -20 ton conderser and 1-Libert conderser

Project Justification

The HVAC units in City Hall are currently 8 years old and will in FY 19 10 years old

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$90,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$40,000	Revenue
2020	$50,000	Revenue
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$90,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3560

CIP #: CP-PW-13-CR Project #: Account #: 62-00 CIP Classification: Building District: City

Project Name: Cocoa Civic Center Rehabilitation FY Start 2019 Quarter Q4

Project Location: Civic Center FY End 2019 Quarter Q1

Project Description

1)The Ballrooms at the Civic Center are in need of some updating. Install new decorative columns and wall coverings in the ballrooms, and lay new carpet squares in the ballroom, foyer and conference rooms. 2) Replace the roof. 3) Update the ballroom, improve the river view, relocate the kitchen, and update all bathrooms. Install storm-rated windows, and new carpet.

Project Justification

1) this is needed to attract wider variety of events, customers and business to the Civic Center. 2) Emergency repairs always cost more than preventative maintenance. The older buildings in the city are in need of roof replacements. If not replaced, the City could incur more cost due to leaks, mold, fungus etc. 3) To increase marketability and bring more events to the downtown area.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$865,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$1,000
Maintenance	$1,000
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$2,000

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$35,000	Revenue
2020	$830,000	Revenue
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$865,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3560

CIP #: CP-PW-18-WR Project #: Account #: 46-00 CIP Classification: Repair & Maintenance District: City

Project Name: Cocoa PD Wall Rehab FY Start 2018 Quarter Q4

Project Location: Police Department FY End 2018 Quarter Q1

Project Description

The pre-cast concrete wall has had mositure intrusion, rusting and spalling of the concrete. The wall is starting to fail in many areas

Project Justification

the Police department compound needs to stay secure

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$63,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$63,000	Revenue
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$63,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3560

CIP #: CP-PW-18-F2 Project #: Account #: 46-02 CIP Classification: R&M Building District: City

Project Name: Fire #2 Rehab FY Start 2018 Quarter Q4

Project Location: Fire #2 FY End 2018 Quarter Q1

Project Description

to repair gutter system, pressure wash and paint exterior, preasure wash and paint the interiors of the Truck bays, replace window with impact windows, repair and replace the bay doors and pave the drive way and employees parking area

Project Justification

to give to the County for use for Public Saftey

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$36,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$36,000	$0

Recurring Annual Costs

Operating	$1,000
Maintenance	$1,000
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$2,000

Capital Costs and Proposed Financing by Fiscal Year

2018	$36,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$36,000	

Financing Comments

Budgeted in FY 17 need to move to FY 18

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3560

CIP #: CP-PW-18-PB Project #: Account #: 46-02 CIP Classification: R&M Building District: City

Project Name: Public Works Pole Barn Rehab FY Start 2019 Quarter Q4

Project Location: Public Works FY End 2019 Quarter Q1

Project Description

Grind all surface rust, clean all metal. Apply rust inhibiting coat to all metal surfaces, apply primer, paint 2 coats of industrial coating.

Project Justification

Building will be in need of sealing and repainting

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$76,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$76,000	Revenue
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$76,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3560

CIP #: CP-PW-17-S3 Project #: Account #: 46-02 CIP Classification: R&M Building District: City

Project Name: Roof replacement Fire station #3 FY Start 2018 Quarter Q4

Project Location: Fire station #3 FY End 2018 Quarter Q1

Project Description

If Fire #3 is going to be kept for a storage building it will need a new roof

Project Justification

Emergency repairs always cost more than preventative maintenance

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$75,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs	
Operating	$1,000
Maintenance	$1,000
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$2,000

Capital Costs and Proposed Financing by Fiscal Year		
2018	$0	$0 this FY
2019	$75,000	Revenue
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$75,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3560

CIP #: CP-PW-18-SP Project #: Account #: 46-02 CIP Classification: R&M Building District: City

Project Name: Seal/Paint Police department FY Start 2018 Quarter Q4

Project Location: Police department FY End 2018 Quarter Q1

Project Description

Pressure wash ,seal and Paint Police department

Project Justification

The PD building was last painted over 10 years ago.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$32,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$32,000	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$32,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$32,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3580

CIP #: CP-PW-17-DM Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: 2 Digital message boards FY Start 2018 Quarter Q4

Project Location: City Wide - TBD FY End 2018 Quarter Q1

Project Description

One new Digital message boards for the new Fire Stations purchased in FY18 and one in FY19.

Project Justification

to better infor our citzens with message boards throughout the City

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$100,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$50,000	$0

Recurring Annual Costs

Operating	$1,000
Maintenance	$1,000
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$2,000

Capital Costs and Proposed Financing by Fiscal Year

2018	$50,000	Revenue
2019	$50,000	Revenue
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$100,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3580

CIP #: CP-PW-17-JS | Project #: CP1504 | Account #: 62-00 | CIP Classification: Building | District: D1

Project Name: New Joe L. Smith Center for Justice | FY Start 2017 Quarter Q4

Project Location: Joe L. Smith | FY End 2019 Quarter Q1

Project Description

To Design and build a new Joe L. Smith center for justice

Project Justification

A multi-use building .

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$4,560,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$60,000	$0	$115,000	$0

Recurring Annual Costs

Operating	$1,000
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,000

Capital Costs and Proposed Financing by Fiscal Year

2018	$175,000	Reserves
2019	$4,385,000	Grant
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$4,560,000	

Financing Comments

Diamond Square CRA TIF, CDBG 108 loan, other possible grant source, Debt proceeds and General Fund contribution.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3580

CIP #: CP-PW-16-FS Project #: Account #: 63-00 CIP Classification: Infrastructure District: D2

Project Name: Total Fitness system FY Start 2018 Quarter Q4

Project Location: Bracco Pond walking path FY End 2018 Quarter Q1

Project Description

Two complete outdoor fitness systems, 1 Jr. Fitness (ages 9-14) with 14 stations with 84 exercises designed for pre-teens and teenagers. 2 Prime fitness(ages 13 and up) with 10 stations with 120 exercises.

Project Justification

To prompt a healthy life style in the City Parks

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$95,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$1,000
Maintenance	$1,000
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$2,000

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$95,000	Combination
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$95,000	

Financing Comments

Possible FRDAP Grant and revenue

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 001 **Dept/Div:** 3580

CIP #: CP-PW-18-TC Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Trash Can replacement FY Start 2018 Quarter Q4

Project Location: City-wide FY End 2018 Quarter Q1

Project Description

To update all the trash cans through-out Downtown and City-wide 35 new Trash cans

Project Justification

To replace old and weathered trash cans and to have one style of trash can through-out the downtown and City wide

Strategic Connection: to

N/A

Total Cost of Project	Total Cost to Date
$50,050	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$25,025	Revenue
2020	$25,025	Revenue
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$50,050	

Financing Comments

35 Trash cans - $ 1,430 per can

CIE_Designation ☐

City of Cocoa Capital Improvement Plan
FY 2018 through FY 2022

Special Revenue Funds Projects

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 110 **Dept/Div:** 3230

CIP #: CP-CD-18-FA | Project #: CP1502 | Account #: 63-00 | CIP Classification: Infrastructure | District: D1

Project Name: 6 Forrest Avenue Gateway Entry Feature | FY Start 2018 Quarter Q4

Project Location: Cocoa CRA | FY End 2018 Quarter Q1

Project Description

Develop and install a gateway entry feature at 6 Forrest Avenue to signify entry into Historic Cocoa Village.

Project Justification

The Cocoa CRA approved the Waterfront Master Plan of which one of the prioritized projects was the Wayfinding/Signage Program.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$260,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$260,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$2,000
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$2,000

Capital Costs and Proposed Financing by Fiscal Year

2018	$260,000	Combination
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$260,000	

Financing Comments

The Cocoa CRA will apply for any grant funding available for signage and use TIF revenues as needed to fund the project.

CIE_Designation ☐

6 Forrest Avenue
Project #: CP1502

Brevard County Property Appraiser



May 16, 2017

1:1,000

0 45 90 180 ft

0 12.5 25 50 m

BCPAO Pictometry 2846850

For illustration only. Not a survey. Map layers may not precisely align.

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CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 110 **Dept/Div:** 3230

CIP #: CP-PW-18-BA Project #: Account #: 63-00 CIP Classification: Infrastructure District: D1

Project Name: Brevard Ave Streetscape Project FY Start 2020 Quarter Q4

Project Location: Downtown Cocoa FY End 2021 Quarter Q1

Project Description

Upgrade water, sewer, stormwater system and landscaping on Brevard Ave. from S.R.520 to Rosa L. Jones. Also re-paving and striping of roadways

Project Justification

Brevard Ave is the main throughfair into Cocoa Village. The existing water and sewer have been in existance since the 1920's and the streetscape portion was done in the 1970's. All of the utilities are in need of a major up-grade.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$4,000,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$500,000	Combination
2021	$3,500,000	Combination
2022	$0	$0 this FY
Total Capital Costs	$4,000,000	

Financing Comments

Joint Project; Funded by; Cocoa CRA / General Fund / Utilities and Stormwater

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 110 **Dept/Div:** 3230

CIP #: CP-CD-14-TD Project #: CS14LW Account #: 63-00 CIP Classification: Infrastructure District: D1

Project Name: Cocoa Riverfront T-Dock Expansion (Phase 2 - Construction) FY Start 2018 Quarter Q4

Project Location: Riverfront Park and Lee Wenner Park FY End 2018 Quarter Q1

Project Description

Extend and reconstruct the T-dock to accommodate larger vessels, such as ICW cruisers.

Project Justification

The Cocoa Redevelopment Plan and the approved Waterfront Master Plan identify this project. The expansion of the T-dock will allow greater boater access to Cocoa Village and allow for larger vessels to bring additional patrons to the Village.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$464,000	$50,000

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$50,000	$0	$0	$364,000

Recurring Annual Costs

Operating	$0
Maintenance	$2,000
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$2,000

Capital Costs and Proposed Financing by Fiscal Year

2018	$414,000	Combination
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$414,000	

Financing Comments

FIND Grant of $25,000 was awarded in FY 2014 for design and engineering. Construction grant of $192,803 will be sought from FIND with Cocoa CRA TIF of $191,803 as 50% match for construction reimbursement.

CIE_Designation ☐

Project #: PW16RP

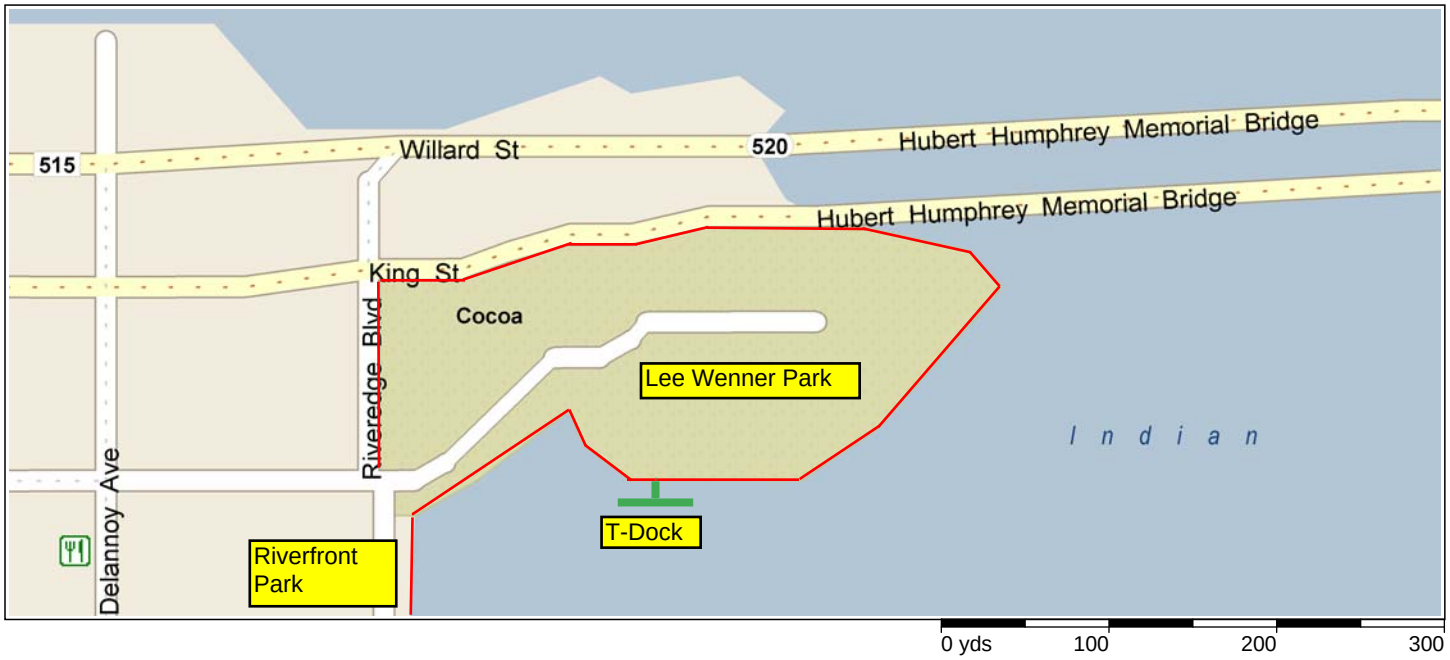
Docking Locations



*No docking at Day Docks between the hours of 12:00 am and 5:00 am
*Day docks are restricted to a maximum 8 hour time limitation
*T-Dock is restricted to a maximum 48 hour time limitation
*No time restriction at Dinghy Dock

Project #: CS14LW

Florida Inland Navigation District - Project Boundary Map



City of Cocoa
Riverfront Park T-Dock Expansion Project

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CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 110 **Dept/Div:** 3230

CIP #: CP-CD-13-SP Project #: CD1401 Account #: 63-00 CIP Classification: Infrastructure District: D1

Project Name: Cocoa Village Wayfinding and Signage Program FY Start 2022 Quarter Q4

Project Location: Cocoa CRA FY End 2022 Quarter Q1

Project Description

Develop and install wayfinding signs at key locations within the City directing traffic to and within Historic Cocoa Village.

Project Justification

The Cocoa CRA approved the Waterfront Master Plan of which one of the prioritized projects was the Wayfinding/Signage Program. The CRA has allocated $100,000 towards the design of the wayfinding project which was completed in FY 2015. Total project costs for the implementation of the program are estimated at $500,000.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$500,000	$67,000

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$2,000
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$2,000

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$433,000	Combination
Total Capital Costs	$433,000	

Financing Comments

The Cocoa CRA will apply for any grant funding available for signage and use TIF revenues as needed to fund the project.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 110 **Dept/Div:** 3230

CIP #: CP-CS-16-DG Project #: Account #: 62-00 CIP Classification: Building District: D1

Project Name: Downtown Parking Garage FY Start 2019 Quarter Q1

Project Location: Stone and Oleander Streets FY End 2021 Quarter Q4

Project Description

Construction of a 3-story public parking structure serving Historic Cocoa Village which will provide approximately 300 public spaces as well as additional commercial/retail space on the 1st floor.

Project Justification

The Parking Study conducted in 2007 will be updated in 2017.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$5,500,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	Combination
2019	$5,500,000	Combination
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$5,500,000	

Financing Comments

The City/CRA is currently seeking a public-private partnership to assist with funding of project.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 110 **Dept/Div:** 3230

CIP #: CP-CS-16-HS Project #: CS15HS Account #: 63-00 CIP Classification: Infrastructure District: D1

Project Name: Harrison Street Streetscaping & Stormwater Drainage Improvements (Cocoa CRA portion) FY Start 2018 Quarter Q3

Project Location: Harrison Street from Delannoy Ave to the entrance to Lee Wenner Park FY End 2018 Quarter Q1

Project Description

Streetscaping of Harrison Street from Delannoy Avenue to the entrance to Lee Wenner Park.

Project Justification

This project will enhance the walkabilty and safety of pedestrian, bicyclists and automobiles as well as much needed stormwater management.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$396,994	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$396,994	Combination
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$396,994	

Financing Comments

The Capital Cost is the portion being funded by the Cocoa CRA TIF.
Split between the Utility Fund, Stormwater Fund and the Cocoa CRA (110) Fund

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 110 **Dept/Div:** 3230

CIP #: CP-PW-17-PP Project #: Account #: 63-00 CIP Classification: Infrastructure District: D1

Project Name: Lee Wenner Park Paving and Striping FY Start 2021 Quarter Q4

Project Location: Lee Wenner Park FY End 2021 Quarter Q1

Project Description

Mill, pave and re-stripe parking and drive lanes in Lee Wenner Park

Project Justification

The asphalt in the park is old and deteriorated. The existing striping for parking has faded. Re-doing both will enhance the overall apperance of the park

Strategic Connection: Operational

Enhanced parking will increase the overall apperance of the park and draw more visitors

Total Cost of Project	Total Cost to Date
$125,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$125,000	Other Source
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$125,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 110 **Dept/Div:** 3230

CIP #: CP-CS-16-RP Project #: PW16RP Account #: 63-00 CIP Classification: Infrastructure District: D1

Project Name: Riverfront Park Day Slips FY Start 2018 Quarter Q4

Project Location: The northeastern most section of Riverfront Park at the boardwalk. FY End 2018 Quarter Q1

Project Description

Construction of additional day 6 to 10 slips at Riverfront Park.

Project Justification

With the increased development/redevelopment of Historic Cocoa Village, it is anticipated additional day slips will be needed for boaters.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$45,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$45,000	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$45,000	Combination
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$45,000	

Financing Comments

The City is applying for FIND grant, where 50% of construction costs will be funded. Cocoa CRA TIF is funding the remaining 50%.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 110 **Dept/Div:** 3230

CIP #: CP-CS-15-MF Project #: CD1501 Account #: 63-00 CIP Classification: Infrastructure District: D1

Project Name: Riverfront Park Mooring Field FY Start 2019 Quarter Q1

Project Location: East of Riverfront Park in Indian River Lagoon. FY End 2020 Quarter Q4

Project Description

Public Mooring Field with up to sixty (60) mooring anchors fronting the bulkhead of Riverfront Park, north of existing FPL right-of-way.

Project Justification

Mooring Field will allow for the safe and sanitary mooring of larger vessels currently dropping anchor east of the Park in the River. Dangerous conditions exist with unstable mooring and sanitation issues, including derelict vessels.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$343,354	$98,000

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$50,000
Maintenance	$25,000
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$75,000

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$245,354	Grant
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$245,354	

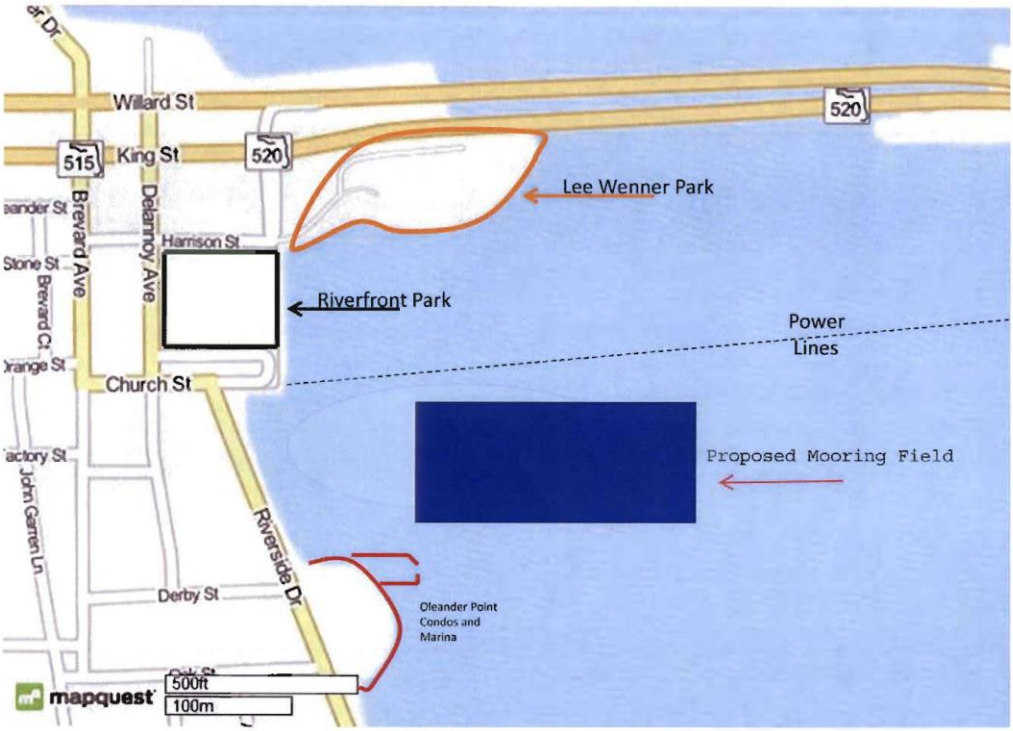
Financing Comments

FIND grant will be sought for construction of just the mooring field, not dockside amenities. A public/private partnership will be sought for construction as well as ongoing operational costs.

CIE_Designation ☐

Project #: CD1501

City of Cocoa – Riverfront Park Mooring Field Project Boundary Map



CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 110 **Dept/Div:** 3230

CIP #: CP-CS-17-TC Project #: Account #: 63-00 CIP Classification: Infrastructure District: D1

Project Name: Southern Gateway Traffic Circle FY Start 2022 Quarter Q4

Project Location: Traffic Circle - Brevard Avenue and Rosa L Jones Drive FY End 2022 Quarter Q1

Project Description

Rebuild the Brevard Avenue/Rosa L Jones Drive traffic circle as a functioning public square and gateway entry feature for the southern entrance to Historic Cocoa Village.

Project Justification

The Traffic Circle is contained in the Cocoa CRA Waterfront Master Plan. The rebuilt square will address vehicle and pedestrian safety concerns as well as add to the inventory of public space. The CRA has completed preliminary engineering and is 50% complete with design and engineering.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$1,849,405	$163,684

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$1,685,721	Combination
Total Capital Costs	$1,685,721	

Financing Comments

TIF revenues as well as grants and other funding sources will be researched.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 301 **Dept/Div:** 3580

CIP #: CP-FD-11-NS Project #: Account #: 62-00 CIP Classification: Building District: City

Project Name: ***New Fire Stations Construction - Subject to funding availability FY Start 2017 Quarter Q4

Project Location: Different City locations FY End 2017 Quarter Q1

Project Description

Construction of 3 new fire stations with 1 containing Admin Offices.

Project Justification

The annexation to the north and west, the City needs to re-align and construct new fire stations to decrease and maintain response times and provide more efficient coverage and to better serve to Cocoa.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$8,000,000	$1,500,000

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$300,000	$0	$4,551,699	$0

Recurring Annual Costs

Operating	$2,000
Maintenance	$1,000
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$3,000

Capital Costs and Proposed Financing by Fiscal Year

2018	$4,851,699	Combination
2019	$1,648,301	Combination
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$6,500,000	

Financing Comments

Fire assessment /Bond

Funds carried forward from FY16

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 301 **Dept/Div:** 3580

CIP #: CP-CP-15-01 Project #: CP1501 Account #: 62-00 CIP Classification: Building District: D1

Project Name: HEART OF COCOA MEETING ROOM FY Start 2017 Quarter Q4

Project Location: 217 Factory street FY End 2017 Quarter Q1

Project Description

To build a City / Community meeting room. The room will be about 36x23 with a bathroom.

Project Justification

The City has purchased the land at 217 Factory Street and is awaiting a tenant

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$160,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$5,000	$0	$155,000	$0

Recurring Annual Costs

Operating	$1,000
Maintenance	$1,000
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$2,000

Capital Costs and Proposed Financing by Fiscal Year

2018	$160,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$160,000	

Financing Comments

CIE_Designation ☐

City of Cocoa Capital Improvement Plan
FY 2018 through FY 2022

Water / Sewer Enterprise Fund Projects

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 1515

CIP #: CP-FN-17-MR Project #: Account #: 64-15 CIP Classification: IT Machinery & Equipment District: City

Project Name: Meter reading Hand Held Utility Usage Reading Capture Devices FY Start 2018 Quarter Q4

Project Location: City FY End 2018 Quarter Q1

Project Description

Replacement of 14 Handheld Meter Reader reading capture devices with the Neptune Trimble Ranger 3Xe Data Collector. The Hardware is estimated at $5,950 each hand held, $485 each charging and communication cradle, $564 each unit per year for annual maintenance after two year warranty expires, and $2,500 in on-site system training.

Project Justification

The current Itron MV-RS has announced the end of new sales to be December 31, 2016 and the support for existing equipment to be December 31, 2021. The current technology was procured in 2011. We currently invest in the Neptune product for RF meter reading data collection using the MRX920 unit and the N_Sight R900 Software. This unit is new to the market and pushing it out to 2018 will allow for valuable feedback from other utility customers. It is also the only unity currently on the market that will read a mixed route of both visually read meters and Neptune RF registers maximizing the efficiency of collecting any given mixed route readings. The annual maintenance is also less on Neptune equipment than Itron by approximately $4,000 per year.

Strategic Connection: Strategic Plan/Utilities Master Plan

Utility Master Plan.

Total Cost of Project	Total Cost to Date
$101,486	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$91,090	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$7,896
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$7,896

Capital Costs and Proposed Financing by Fiscal Year

2018	$91,090	Revenue
2019	$10,396	Revenue
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$101,486	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4010

CIP #: CP-PW-18-FA | Project #: 3540-001 | Account #: 68-10 | CIP Classification: Software | District: City

Project Name: FLEET FASTER ASSET UPGRADE TO FASTER WEB | FY Start 2018 Quarter Q4

Project Location: Cocoa Fleet | FY End 2018 Quarter Q1

Project Description

This is a full software upgrade a full database migration from FASTER WIN to FASTER WEB. This is Faster Asset Solutions upgrade to it latest FLEET MANAGEMENT SOFTWARE SOLUTION. This is Cocoa Fleet next tool for a ever growing Fleet. The system uses our current database and all the data that has been collected over the past 14 years.

Project Justification

Cocoa Fleet has been using Faster Asset Solutions since 2004 this was Fasters client based windows solution the system is 14 years old. The new software architecture is WEB giving greater functionality, greater software integration with a host of other enterprise software solutions with KPI functionality. This is the next tool Cocoa Fleet Management software needs FASTER Web, is the most powerful and technologically advanced fleet management system on the market. While other vendors offer web-enabled solutions that were developed with early stage web technologies, FASTER Web was developed based on current platforms from the ground up for a true web experience that offers better load times, better search capability and a true user experience that does not rely on endless scrolling or screen jumping.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$20,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$13,500
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$13,500

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$20,000	Combination
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$20,000	

Financing Comments

This would be a 50/50 split between general and enterprise funds. Fleet service vehicle and equipment in all three funds

CIE_Designation ☐

Statement of Work (SOW), Pricing, & Payment Terms

***FASTER* Asset Solutions**

100% Employee-Owned

Created For:
City of Cocoa
Date:
March 27, 2017
Senior Software Consultant:
Steve Specht

Pricing in this proposal is valid for 60 days.

Qty	Description	Cost
FMIS Core COTS System		
400	001 – Software Cost: Standard Active Assets: This price includes up to quantity listed standard active assets (which are defined as originally valued at $5000 or greater and active). Each additional asset will be $100.00. This includes one instance of the FASTER Web Application with one database.	$40,000
1	050 – Unlimited Named Accounts: Unlimited user access (named accounts) included.	Included
Add-ons		
1	207nc – Dashboard Add-on: (See Offsetting Discount Below) Provides 20 standard metrics that monitor fleet industry performance measures. The dashboards have powerful configuration capability to enable effective display of data. They are also drillable in that you can click and drill into the data presented by the dashboard. And the Dashboards are role-based so that you can empower users based on their roles.	$10,000
1	208 – Barcoding Software: Barcoding Software for One Storeroom (allows for Label Scanning and Printing). Hardware is not included.	$6,000

1	301 - Single Vendor Fuel Import (New Vendor or New File) - Existing Customer: This is a single vendor fuel import for an existing customer who has been live on a FASTER product for more than 6 months. This pricing is for either: 1. To import a new fuel vendor fuel transaction file. 2. Or, to import a new fuel file from your existing vendor. The Fuel Import (FI) is a COTS add-on. It is a robust yet inexpensive way to import data from a Fuel System Vendor (FSV). It requires significant configuration and testing by FASTER. Below are important items the customer will need to provide for FASTER to configure, test and deploy: 1. FSV Fuel File Layout Definition – This is the layout for the export file you plan on receiving regularly from your FSV. It defines your fuel export file's columns, positions and/or delimiters (if used). 2. Fuel System Export Files - Live production export files from the fuel system, including the complete disbursement transaction data. A minimum of 100 transactions will be needed for proper testing. The export files generated from your fuel system must be flat files, not reports, and not generated in Microsoft Excel. It is important you ensure your FSV does not change this export file as any changes may require additional configuration and testing. 3. Completed FI-Customer Configuration Form -This is a detailed form that assists you in providing all the information required for the FI to be configured and tested properly. (This FI does not import Site & Dispenser information. You can add the importing of Site & Dispenser data to the SFI for an additional ($2,500) cost.)	$3,500
Go-Live Custom Work		
1	333e – Custom Integration: Export: Naviline Export This is an estimate for a one-way export. The actual cost of export can be determined once specifications are identified.	$8,000
Data Services		
1	408 - Migration Data Conversion: The Migration Data Conversion Product is used for migrating data from COTS FASTER Win-5.69 BR2 or higher to FASTER Web. It does not include migrating data that relates or is the result of a use of FASTER Win Add-On unless specifically noted. For example, item 2 of the appendix identifies that if you have the graphics add-on, then all your graphics will be brought over with the migration. A Migration Data Conversion does not migrate data that is uniquely associated with the customization you have. This will need to be addressed separately and potentially as an additional custom migration. The attached appendix "Migration Data Conversion Product" is an outline of the categories of data that will be migrated during the Migration Data Conversion.	$15,000
1	405 – Data Cleanup: If the data in the current system is in need of correction prior to the extraction, the customer will be responsible for data correction that takes place in the legacy system. (However, as part of the implementation process, FASTER Fleet Consultants will provide advice and guidance related to data correction.) For customers who maintain reliable data, there should be no need for data correction. However, if past practices or flawed conversions permitted incorrect data to be entered in the current system, it is advisable that the customer correct this prior to the extraction process beginning.	n/a
Configuration & Training		
1	Migration Implementation and Project Management Services	$9,000

1	511 – System Overview Meetings (SOM): System overview meetings take place via live, remote web-based sessions. They consist of two, 4-hour meetings that will occur on the same day or two consecutive days where the customer will ensure key users are able to participate.	$6,600
1	512 – System Training/Go-Live: This training includes the below training agenda. Because training is hands-on, the maximum class size is 20 attendees and includes a single training location. Additional training sessions and trainers can be added at an additional cost any time up to 4-weeks prior to your go-live.	See below
1	512a – Go-Live Week System Training - Asset Module (4 Hrs): Should include FASTER System Admin and Asset Managers.	$2,200
1	512b – Go-Live Week System Training - Maintenance Module (4 Hrs): Should include FASTER System Admin, Maintenance Supervisor, Service Writers and/or Technician who will create work orders.	$2,200
1	512c – Go-Live Week System Training - Parts Module (4 Hrs): Should include FASTER System Admin, Parts Staff and Parts Managers.	$2,200
1	512d – Go-Live Week System Training - Fuel Module (1 Hr): Should include FASTER System Admin and Fuel Clerk.	$550
1	512e – Go-Live Week System Training - Vendors & Accounting Modules (1.5 Hrs): Should include FASTER System Admin, Accounting Staff and Parts Managers.	$825
2	512f – Go-Live Week System Training - Technician Workstation (2.5 Hrs): Should include FASTER System Admin and Technicians.	$1,375

1	512g – Go-Live Week System Training - Additional Trainers (TBD): The above training costs provide for one trainer the week of go live. One trainer can provide one session of each of the above hands-on, user training sessions with the exception of the Technician Workstation. (Two Technician Workstation sessions can be accommodated by a single trainer.) If you determine your training needs require additional training sessions due to shift work or other needs, an additional FASTER trainer can participate during the week of go live for an added cost. Therefore, it will be important for you to determine the total number of training sessions and trainers you will need in order to then calculate your total training cost. Each of the above training sessions are role-based. So it should be easy to determine how many staff you have for each role. Typically the largest training sessions are the Technician Workstation and Maintenance Module. Please remember that you may want your Technicians to attend more than the Technician Workstation training module. To calculate your additional training costs: -- The cost (including room, board and travel) of the 1st trainer is included in the above costs. -- Travel, room and board will be a flat cost of $1,000 for each additional trainer. -- To calculate session costs, multiply the number of additional training sessions you need of each of the above session options by the cost of the training module as listed above (module session cost times how many instances of that module session you require). -- The above flat fee for travel, room and board of each additional trainer as well as the fees for the above training assume that training sessions will be held consecutively so as to minimize the number of days a trainer would need to be at your location. It also assumes there is no weekend stayover. If training will begin one week and extend into the next week, an additional $1,000 per trainer would apply for travel, room and board ($1,000 flat fee per trainer times the number of business weeks spanned).	TBD
Discounts		
1	900 – Existing WIN Customer Discount Discount for Existing FASTER WIN Customers	-$4,000
1	905ec – Existing FASTER WIN Customer Dashboard Discount	-$10,000
	Software & Services Total	**$93,450**

Upgrades & Support		
1	801 – Upgrades & Support: Annual support after switch date. Annual support services are comprised of Software Cost, Add-Ons and Customizations. Migration annual support fee will require that FASTER Win will no longer be in use. The Initial FASTER Web annual support fee will be due 30 days after switch date. Any months remaining on FASTER Win support will be pro-rated and deducted from the initial year of FASTER Web support. After the initial renewal year, support costs will increase at 3% annually.	**$13,500**
	Upgrades & Support Total	**$13,500**

Payment Schedule By Milestone	
Milestone	**Percent Due**
Upon Purchase Confirmation	**30%**
COTS Software Delivery	**30%**

COTS System Overview	**20%**
Delivery of Converted Data and Go Live	**20%**
Hourly Work: Hourly work is billed monthly.	**TBD**

Migration Data Conversion Product

After you have completed your data cleanup, it is important that you consider additional data preparation tasks and information that will aid you in preparing *FASTER* Win data to migrate effectively to a more robust and more structured *FASTER* Web database (DB) structure. Below is detailed information.

After you deliver your clean *FASTER* Win database, *FASTER* begins the migration process. After this point you will NOT be able to change data in the *FASTER* Win DB (other than daily transactions). Therefore, NO cleanup can be done after this point. So be sure all your data cleanup and prep is done prior to uploading your *FASTER* Win database to *FASTER.*

The migration process begins by *FASTER* creating and testing a test *FASTER* Web DB. This test migration DB is called a soft go-live DB. You will be provided this soft go-live DB for review and approval. Later, one week prior to go-live you will be able to provide to *FASTER* another *FASTER* Win DB so new transaction data can be included in the final go-live DB.

Important Notes:

Once *FASTER* begins the migration work, you cannot do data cleanup or change data in your *FASTER* Win DB in any way other than to add transactions. If you do, you will risk your migration project timeline and could cause corruption or bad data or cause your organization to spend a great deal of time reversing those entries or create added cost.

There is currently a migration path from 5.69BR2 and above to *FASTER* Web. If you have a version of *FASTER* Win that is prior to 5.69BR2, you will need to upgrade to the latest version of *FASTER* in order to migrate to *FASTER* Web.

Data that Will Migrate

The Migration Data Conversion Product is used for migrating data from COTS *FASTER* Win to *FASTER* Web. It does not include migrating data that relates or is the result of a use of *FASTER* Win Add-Ons unless specifically noted. For example, Item 2 below identifies that if you have the graphics add-on, then all your graphics will be brought over with the migration.

A Migration Data Conversion does not migrate data that is uniquely associated with the customizations you have. This will need to be addressed separately and potentially at an additional cost for a custom migration.

Below is a specific list of the categories of data that will be migrated during the Migration Data Conversion:

1. Equipment Inventory

- Birth Certificate
- Acquisition and Disposal
- Vehicle Replacement
- Warranty Records
- Preventative Maintenance
- History (Is regenerated post migration based on successfully migrated data)
- User Reference

2. Graphics (Attachments) and Notes

3. Parts Inventory

- Birth Certificate
- Warranty Records
- Parts History (Is Regenerated Post Migration Based on Successfully Migrated Data)
- Order Receipts
  - Parts Processing: Credits
- Transfers (Including Returns to Vendor)
- Interchangeable Part Numbers - IPN
- Vendors & Purchase Orders
- Parts Lists

4. Repair Types/Codes

5. Work Orders/Independent Parts/Deferred Repairs

- Transactional Detail
- Meter History
- Indirect Labor
  - Deferred Repairs
- Task Lists

6. Operational Cost/Fuel

- Transactional Detail

7. Equipment Templates

8. Billing History

FASTER Web Handles Data Differently

FASTER Web is a separate, distinct product from *FASTER* Win. It was designed to provide the best practices for a fleet's future needs. This means that some of the fields, forms, and processes of *FASTER* Win have been modified or changed. Instead of building *FASTER* Web to be similar to *FASTER* Win, we felt that building the best product (even if it deviated from *FASTER* Win) is what our customers needed. Therefore, please review the *FASTER* Web product and make sure that you are comfortable with the fact that some fields, forms, and processes are different. Below is a summary of some of those differences:

Field Names

Some Field Names have shifted in *FASTER* web. A few examples of this include:

- Company changes to Organization
- Independent Issue changes to Direct Charge

- Equipment changes to Asset
- Table Look Up to Fields

Along these lines, the field names and data elements within are not identical between the two systems.

Applets No Longer Standalone

In *FASTER* Web, Applets have been consolidated into modules that represent roles. For instance:

- Work Order, Independent Parts Issue, Shop Floor Manager, Task Lists, and Indirect Labor Editor. These applets are in the Maintenance Module of *FASTER* Web.
- Part Inventory, Part Processing, Key Change and Parts Lists. These applets are in the Parts Module of *FASTER* Web.
- Equipment Inventory, Equipment Template, Equipment Ownership, Warranty Tracking, and Key Change. These applets are in the Assets Module of *FASTER* Web.

Process Changes

- Budget account codes are required in FASTER Web to process all purchases. If account code usage was turned on in Win these codes are consolidated into a single migration code.
- *FASTER* Web does not support Last Receipt. Your costing method will be converted to Moving Average.
- Table codes are now called Fields and have had their descriptions extended in length.
- *FASTER* Win Table Lookups included two fields, both a field for Code and a field for Description. In *FASTER* Web some Table Look Ups only have a description because a Code and a Description were redundant. Some examples of this would be Color, Make, and Model. In some cases the data migration will append the WIN code and description into the WEB description.
- Field relabeling functionality is limited to specific fields in *FASTER* Web; however, the relabeled fields will carry through to the Reports and other Modules.
- Credits are no longer applied directly to a work order. They are added as a Billing Adjustment that shows on the work order print out.
- Lifetime Warranty cycle type ‘L’ will be migrated to *FASTER* Web as a warranty with a cycle type of ‘Y’ for Years and the Cycle Length in *FASTER* Win will be migrated over directly to *FASTER* Web’s cycle length.
- Work Order Other Cost no longer requires a Repair Type. Therefore, the Asset History totals in Web do not consider the Repair Reason code from Win. All Work Order Costs are now displayed in the ‘Other Cost’ column in Web.
- *FASTER* Web does not provide batch entry functionality for work order related data.
- Since *FASTER* Web is a browser-based product you do not need to use a keyboard on a handheld scanner or a PDA. You can use the following to satisfy the need for manual data input while doing receiving, issuing, or inventory:
  1. A notebook computer running a compatible browser or a tablet running a compatible browser with a wireless card.

2. A wireless network in your parts room.
3. If you have the above, you can take your notebook or tablet with you when you do receiving, issuing, or inventory. You can enter directly into the notebook's or tablet's keyboard the quantity in real-time in *FASTER* Web. Therefore, when you buy a barcode scanner you can buy the less expensive scanner that does not have a keyboard.

New Processes Supported in *FASTER* Web

- Ability to have multiple contacts per asset in *FASTER* Web.
- Ability to have multiple standard specification types for the same asset in *FASTER* Web.
- Auto work order notification email for multiple statuses is available in *FASTER* Web.
- Auto Shop Charges for multiple costs is available in *FASTER* Web.
- Ability to plan for acquisition in *FASTER* Web.
- Core tracking & returns functionality is available in *FASTER* Web.
- Two-step part transfer audit trail in *FASTER* Web.
- User required to validate meter readings before processing fuel in *FASTER* Web.
- Close out process for asset inventory counts in *FASTER* Web.
- Ability to use P-card(procurement cards) in *FASTER* Web.
- Ancillary PM, inspections, and renewals are tracked as Scheduled Actions in *FASTER* Web.

Data Not Migrated

A Migration Data Conversion does not migrate data that is uniquely associated with any customization you may have. This will need to be addressed separately and potentially at an additional cost for a custom migration. The data outlined below will NOT be migrated from *FASTER* Win to *FASTER* Web; But Functionality Is Available in *FASTER* Web.

Data Not Migrated But Functionality Is Available in *FASTER* Web

- Title Sets
- Equipment Account (EA Account)
- Billing Account (VBA Codes)
- Flat Rates
- Warranty Claims Tracking
- Backorders (only fully received orders are migrated)
- WRR (E-request repair requests from *FASTER* service center)
- RLS (Repair Labor Standard)
- Vendor Contact Cell Phone field
- F-Audit components: physical count adjustment, deleted orders, adjusted quantity, adjusted cost
- Dashboard KPI views and individual settings

Data Not Migrated And Functionality Is Not Available in *FASTER* Web

The below listed data is not migrated. And *FASTER* Web does not include the below features or functionality. Due to *FASTER* Web's improved design, some of this functionality is not necessary.

- Tank Inventory
- PM Scheduler Templates
- EOM History
- Work order estimates
- Quick buttons
- Work Order User Reference
- Max Issue from Parts
- EOQ, ABC, UCC
- Any customer created custom table codes (existing code will not be migrated & creating new ones is not supported in *FASTER* Web)
  - If you had *FASTER* develop any type of customization, usually financial, part of that development often included custom table codes that were used to identify customer specific data. These custom table codes are not migrated.

Radio Assets Management

If you are using *FASTER* Win to manage radio assets, you are likely managing radio assets as a child asset of the fleet asset. While *FASTER* Web will provide the opportunity to manage radio can do it differently than in *FASTER* Win. Therefore, just as you customized *FASTER* Win to manage radio assets, you will want to customize *FASTER* Web to take advantage of its unique qualities. If you choose to manage radios separately from assets, this will likely require a second database and a second migration. This will be an added cost and is not part of the *FASTER* Win to *FASTER* Web migration. Please discuss your needs with us.

Facilities Management

If you are using *FASTER* Win to manage facilities, there are some fundamental differences in the way you would manage facilities in *FASTER* Web. In general, you will find *FASTER* Web more robust. But in *FASTER* Web you will likely want to maximize your productivity by managing Facilities data in a separate DB from Fleet data. This requires a separate instance of *FASTER* Web (a second install of the *FASTER* Web application and a separate DB). And that does mean there is a higher cost. While you can avoid this added cost of a second Facilitates DB and instance by putting your Facilitates data in the same DB as your Fleet data; you will lose the ability to customize Facilitates separate from Fleet data.

If you want Facilities data migrated from a Company in a *FASTER* Win DB to a *FASTER* Web DB, there will be the extra cost of a custom migration. This is not part of the *FASTER* Win to *FASTER* Web migration. Please discuss your needs with us.

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4010

CIP #: CP-PW-18-FE | Project #: 3540-001 | Account #: 52-00 | CIP Classification: Operating | District: City

Project Name: FLEET FASTER ASSET UPGRADE TO FASTER WEB | FY Start 2018 Quarter Q4

Project Location: Cocoa Fleet | FY End 2018 Quarter Q1

Project Description

This is a full software upgrade a full database migration from FASTER WIN to FASTER WEB. This is Faster Asset Solutions upgrade to it latest FLEET MANAGEMENT SOFTWARE SOLUTION. This is Cocoa Fleet next tool for a ever growing Fleet. The system uses our current database and all the data that has been collected over the past 14 years.

Project Justification

Cocoa Fleet has been using Faster Asset Solutions since 2004 this was Fasters client based windows solution the system is 14 years old. The new software architecture is WEB giving greater functionality, greater software integration with a host of other enterprise software solutions with KPI functionality. This is the next tool Cocoa Fleet Management software needs FASTER Web, is the most powerful and technologically advanced fleet management system on the market. While other vendors offer web-enabled solutions that were developed with early stage web technologies, FASTER Web was developed based on current platforms from the ground up for a true web experience that offers better load times, better search capability and a true user experience that does not rely on endless scrolling or screen jumping.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$26,725	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$13,500
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$13,500

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$26,725	Combination
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$26,725	

Financing Comments

This would be a 50/50 split between general and enterprise funds. Fleet service vehicle and equipment in all three funds

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4010

CIP #: CP-WS-18-AF Project #: WS16UP Account #: 31-00 CIP Classification: Professional Services District: WS-Outside City

Project Name: Utility Privatization Services FY Start 2018 Quarter Q4

Project Location: Cocoa Beach and Cape Canaveral FY End 2018 Quarter Q1

Project Description

Service assistance for Patrick Air Force Base and Cape Canaveral Air Force Station privatization, which includes a two phase approach. Phase I includes development of RFQ response and Phase II is for contract negotiation.

Project Justification

Project area is with the City's Franchise Area and the City currently provides water to these bases.

Strategic Connection: Strategic Plan/Utilities Master Plan

NA

Total Cost of Project	Total Cost to Date
$1,442,935	$44,145

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$1,398,790	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$1,398,790	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$1,398,790	

Financing Comments

Phase I carry forward from FY17 in the amount of $1,398,790.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-18-AT | Project #: WS18AS | Account #: 63-00 | CIP Classification: Infrastructure | District: WS-Outside City

Project Name: Automatic Transfer Switch (ATS) Replacement at the TCR Pump Station | FY Start 2018 Quarter Q3

Project Location: TCR Pump Station | FY End 2018 Quarter Q1

Project Description

The project includes the replacement of the ATS at the TCR Pump Station which upon a power outage starts the backup power generator and transfers the power feed to the pumps from the main utility to the generator. The ATS failed over a year ago and an assessment was conducted which concluded it was not repairable.

Project Justification

This project is to replace the existing ATS with a new unit.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$200,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$200,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$200
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$200

Capital Costs and Proposed Financing by Fiscal Year

2018	$200,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$200,000	

Financing Comments

30 years or greater useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-18-CI | Project #: WS1117 | Account #: 63-00 | CIP Classification: Infrastructure | District: WS-Outside City

Project Name: Computerized Maintenance Management System (CMMS) Implementation | FY Start 2018 Quarter Q4

Project Location: Dyal | FY End 2018 Quarter Q1

Project Description

This project will provide assistance to the City for the purchase and vendor implementation of a computer maintenance and management system (CMMS) package.

Project Justification

Provide CMMS support to populate the database and provide enhancements.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$200,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$200,000

Recurring Annual Costs

Operating	$6,000
Maintenance	$5,000
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$11,000

Capital Costs and Proposed Financing by Fiscal Year

2018	$200,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$200,000	

Financing Comments

We estimate roughly $5,000/year in maintenance for programming assistance for the first two or three years.
Budgeted in account:
68-10 = 75,000
52-00 = 135,000

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-18-AI Project #: WS18DW Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: Drinking Water System E&IC Reliability and Automation Improvements FY Start 2018 Quarter Q4

Project Location: Various FY End 2022 Quarter Q1

Project Description

Evaluate, design, purchase, build, programming and startup for electrical and I&C improvements at various locations to provide better automation and improved reliability. Improvements may include: power monitoring, report enhancement, redundant instrumentation, automating manual systems, control wiring for final control element feedback, and adding actuators to allow remote operation.

Project Justification

To provide improvements that will better automation and improved reliability.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will improve reliability and better automation.

Total Cost of Project	Total Cost to Date
$1,250,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$250,000

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$250,000	Revenue
2019	$250,000	Revenue
2020	$250,000	Revenue
2021	$250,000	Revenue
2022	$250,000	Revenue
Total Capital Costs	$1,250,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-18-GC Project #: WS18DG Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: Dyal Groundwater Clearwell Transfer Pump Control System Upgrade FY Start 2018 Quarter Q4

Project Location: Dyal WTP FY End 2018 Quarter Q1

Project Description

Specificy equipment, procurement, installation and testing to upgrade the Dyal groundwater clearwell transfer pump control system.

Project Justification

The project has reached the end of its useful life.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$170,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$170,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$100
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$100

Capital Costs and Proposed Financing by Fiscal Year

2018	$170,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$170,000	

Financing Comments

Construction begins 10/17 ends 7/18
$100/year maintenance cost for SCADA "back-up"

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-18-RC Project #: WS18DP Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: Dyal Groundwater WTP Reactor Clarifier No. 1 Pipeline Replacement - Construction FY Start 2018 Quarter Q4

Project Location: Dyal WTP FY End 2018 Quarter Q2

Project Description

This project will replace the existing 48-inch pipe which is a single point of failure. The project improvements were developed based on assessment results.

Project Justification

The existing pipe is severely corroded and at risk of failure.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will replace aging infrastructure.

Total Cost of Project	Total Cost to Date
$330,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$330,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$330,000	Bond
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$330,000	

Financing Comments

Design being completed in FY17.

Construction to start 01/18 and will be completed in 07/18.

30 year or greater useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-17-DG Project #: WS17LC Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: Dyal WTP Package System PLC Upgrade - Cal Flow FY Start 2018 Quarter Q3

Project Location: Dyal WTP FY End 2018 Quarter Q1

Project Description

Design, bid, and construct a complete PLC upgrade to the cal flow system PLCs. Current PLCs are past he product line end of life.

Project Justification

To replace existing aging infrastructure.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$90,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$90,000

Recurring Annual Costs

Operating	$0
Maintenance	$100
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$100

Capital Costs and Proposed Financing by Fiscal Year

2018	$90,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$90,000	

Financing Comments

Start 12/17 end 03/18

Project budget in FY17 but not expended, therefore rebudget for FY18.

$100/year maintenance cost for SCADA "back-ups"

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-17-OZ | Project #: WS17FC | Account #: 63-00 | CIP Classification: Infrastructure | District: WS-Outside City

Project Name: Dyal WTP Package System Programmable Logic Controller Upgrade - Belt Filter Press | FY Start 2018 Quarter Q3

Project Location: Dyal WTP | FY End 2018 Quarter Q1

Project Description

Design, bid, and construct a complete PLC upgrade to the belt filter press system PLCs. Current PLCs have past the product line end of life.

Project Justification

To replace existing aging infrastructure.

Strategic Connection: Strategic Plan/Utilities Master Plan

This project will replace existing aging infrastructure.

Total Cost of Project	Total Cost to Date
$160,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$160,000

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$160,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$160,000	

Financing Comments

Start 11/17 end 04/18Project budget in FY17 but not expended, therefore rebudget for FY18.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-18-SU | Project #: WS18SC | Account #: 63-00 | CIP Classification: Infrastructure | District: WS-Outside City

Project Name: Dyal WTP SCADA server, OS and Server Software Upgrade | FY Start 2018 Quarter Q4

Project Location: Dyal WTP | FY End 2022 Quarter Q1

Project Description

Specify equipment, procurement, installation, and testing of the Dyal SCADA server OS and service software replacement and improve the lack of storage for GIS at Utilities and CCTV for WFO. Re-purpose existing servers into City use in other non-critical applications. Includes the use of a cluster server environment for mission critical SCADA servers.

Project Justification

This will replace three control critical productions servers and repurpose servers into the City to use in other non critical applications.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$340,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$170,000

Recurring Annual Costs

Operating	$0
Maintenance	$1,000
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,000

Capital Costs and Proposed Financing by Fiscal Year

2018	$170,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$170,000	Revenue
Total Capital Costs	$340,000	

Financing Comments

Recurring 4 year life cycle.
Budgeted in accounts:
64-15 = $50,000
52-00 = $120,000
$1000/ year Maintenance cost for back up and Storage.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-17-WC Project #: Account #: 68-10 CIP Classification: Software District: WS-Outside City

Project Name: FY2020 SCADA Design Programming (Water Capital Project) FY Start 2020 Quarter Q4

Project Location: Dyal WTP FY End 2020 Quarter Q1

Project Description

this includes programming support for design projects that are in the construction phase of work.

Project Justification

To provide support for implementation of project instrumentation and controls into the City's SCADA network.

Strategic Connection: Strategic Plan/Utilities Master Plan

This project is necessary to implement project instrumentation and controls into the City's SCADA network.

Total Cost of Project	Total Cost to Date
$120,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$120,000	Revenue
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$120,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-17-CA Project #: Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: FY2021 SCADA Design Programming (Water Capital Project) FY Start 2021 Quarter Q4

Project Location: Dyal WTP FY End 2021 Quarter Q1

Project Description

This includes programming support for design projects that are in the construction phase of work.

Project Justification

To provide support for implementation of project instrumentation and controls into the City's SCADA network.

Strategic Connection: Strategic Plan/Utilities Master Plan

This project is necessary to implement project instrumentation and controls into the City's SCADA network.

Total Cost of Project	Total Cost to Date
$60,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$60,000	Revenue
2022	$0	$0 this FY
Total Capital Costs	$60,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-18-SD Project #: Account #: 68-10 CIP Classification: Software District: WS-Outside City

Project Name: FY2022 SCADA Design Programming (Water Capital Project) FY Start 2022 Quarter Q4

Project Location: Dyal WTP FY End 2022 Quarter Q1

Project Description

this includes programming support for design projects that are in the construction phase of work.

Project Justification

To provide support for implementation of project instrumentation and controls into the City's SCADA network.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$120,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$120,000	Revenue
Total Capital Costs	$120,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-17-V6 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: WS-Outside City

Project Name: Replacement of vehicle #03 (2008 Ford F250) FY Start 2018 Quarter Q4

Project Location: Dyal Water Treatment Plant FY End 2018 Quarter Q4

Project Description

Replacement of vehicle #03 (2008 Ford F250) Serial# 1FTNF21508EA79209

Project Justification

The City of Cocoa Capital Improvement Program implements a systematic replacement of vehicles and equipment to minimize repair & maintenance cost and vehicle equipment down time. The purchase of new vehicles is designed to reduce vehicle obsolescence, safety, parts accessibility and more efficient vehicles.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$32,900	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$32,900

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$32,900	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$32,900	

Financing Comments

Replace date: 08/09/2018

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-17-V7 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: WS-Outside City

Project Name: Replacement of vehicle #121 (2007 Ford F250 UTILITY) FY Start 2018 Quarter Q4

Project Location: Dyal Water Treatment Plant FY End 2018 Quarter Q4

Project Description

Replacement of vehicle #121 (2007 Ford F250 UTILITY) Serial# 1FTNF20578EA79208

Project Justification

The City of Cocoa Capital Improvement Program implements a systematic replacement of vehicles and equipment to minimize repair & maintenance cost and vehicle equipment down time. The purchase of new vehicles is designed to reduce vehicle obsolescence, safety, parts accessibility and more efficient vehicles.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$34,500	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$34,500

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$34,500	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$34,500	

Financing Comments

Replace Date: 09/09/2018

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-17-V11 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: WS-Outside City

Project Name: Replacement of vehicle #130 (2010 Ford F250 UTILITY) FY Start 2019 Quarter Q4

Project Location: Dyal Water Treatment Plant FY End 2019 Quarter Q4

Project Description

Replacement of vehicle #130 (2010 Ford F250 UTILITY) Serial# 1FTNF2A5XAEB36439

Project Justification

The City of Cocoa Capital Improvement Program implements a systematic replacement of vehicles and equipment to minimize repair & maintenance cost and vehicle equipment down time. The purchase of new vehicles is designed to reduce vehicle obsolescence, safety, parts accessibility and more efficient vehicles.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$34,975	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$34,975	Revenue
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$34,975	

Financing Comments

Replace Date: 08/08/2019

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-17-V10 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: WS-Outside City

Project Name: Replacement of vehicle #23 (2009 Ford F250 UTILITY) FY Start 2019 Quarter Q3

Project Location: Dyal Water Treatment Plant FY End 2019 Quarter Q3

Project Description

Replacement of vehicle #23 (2009 Ford F250 UTILITY) Serial# 1FTNF20589EA32027

Project Justification

The City of Cocoa Capital Improvement Program implements a systematic replacement of vehicles and equipment to minimize repair & maintenance cost and vehicle equipment down time. The purchase of new vehicles is designed to reduce vehicle obsolescence, safety, parts accessibility and more efficient vehicles.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$34,975	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$34,975	Revenue
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$34,975	

Financing Comments

Replace Date: 06/09/2019

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-15-LN Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: WS-Outside City

Project Name: Replacement of vehicle #47 (1996 Ford LNT8000) FY Start 2020 Quarter Q2

Project Location: Dyal WTP FY End 2020 Quarter Q2

Project Description

Replacement of vehicle #47 (1996 Ford LNT8000) Serial# 1FDYW82E1TVA27431

Project Justification

The City of Cocoa Capital Improvement Program implements a systematic replacement of vehicles and equipment to minimize repair & maintenance cost and vehicle equipment down time. The purchase of new vehicles is designed to reduce vehicle obsolescence, safety, parts accessibility and more efficient vehicles.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$250,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$250,000	Revenue
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$250,000	

Financing Comments

Replace Date: 01/30/2020

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-17-V8 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: WS-Outside City

Project Name: Replacement of vehicle #78 (2004 Ford F250 UTILITY) FY Start 2018 Quarter Q4

Project Location: Dyal Water Treatment Plant FY End 2018 Quarter Q4

Project Description

Replacement of vehicle #78 (2004 Ford F250 UTILITY) Serial# 1FDNF20L94EB73420

Project Justification

The City of Cocoa Capital Improvement Program implements a systematic replacement of vehicles and equipment to minimize repair & maintenance cost and vehicle equipment down time. The purchase of new vehicles is designed to reduce vehicle obsolescence, safety, parts accessibility and more efficient vehicles.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$34,500	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$34,500

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$34,500	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$34,500	

Financing Comments

Replace Date: 09/09/2018

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-17-V9 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: WS-Outside City

Project Name: Replacement of vehicle #94 (2005 Ford F250 UTILITY) FY Start 2018 Quarter Q4

Project Location: Dyal Water Treatment Plant FY End 2018 Quarter Q4

Project Description

Replacement of vehicle #94 (2005 Ford F250 UTILITY) Serial# 1FTNF20505EC87460

Project Justification

The City of Cocoa Capital Improvement Program implements a systematic replacement of vehicles and equipment to minimize repair & maintenance cost and vehicle equipment down time. The purchase of new vehicles is designed to reduce vehicle obsolescence, safety, parts accessibility and more efficient vehicles.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$34,500	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$34,500

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$34,500	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$34,500	

Financing Comments

Replace Date: 09/09/2018

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-16-WR Project #: WS1106 Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: WS-19 Raw Water Well Rehabilitation FY Start 2018 Quarter Q4

Project Location: Wellfield FY End 2022 Quarter Q1

Project Description

This project is to assess the scope of well rehabilitation on a case by case basis and implement construction modifications to rehabilitate each well. Each well will be brought back to full discharge capacity and produce high raw water quality.

Project Justification

Cocoa currently has 48 raw water wells. Of the 48 wells, 34 wells are Floridian aquifer wells and are in need of rehabilitation. The wells are the very life blood of the utility system and the wells are critical to providing every potable water user the very water they drink. Many of the wells are over twenty years of age. The capacity of the wells has decreased over time due to casing leaks and other issues. The decrease in capacity also increases the wear on the pumps and requires more electrical power, thereby increasing the operational costs. Also, some of the wells have some water quality issues. The cost of rehabilitating the wells can extend the useful life by many years as opposed to drilling a new well.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will rehabilitate groundwater supply wells critical to the meeting water demands of Cocoa Utility customers

Total Cost of Project	Total Cost to Date
$2,838,979	$1,588,979

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$250,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$250,000	Revenue
2019	$250,000	Revenue
2020	$250,000	Revenue
2021	$250,000	Revenue
2022	$250,000	Revenue
Total Capital Costs	$1,250,000	

Financing Comments

Construction; start 10/17, end 9/22

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-16-FC Project #: WS18SW Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: WT-56 Dyal Surface Water Filters Canopy and Enclosure FY Start 2018 Quarter Q1

Project Location: Dyal WTP FY End 2019 Quarter Q1

Project Description

This project iincludes installing a canopy and screened enclosure around the surface water filters to meet FDEP requirements to maintain 4-log virus inactivation provided by the ozone system and filters.

Project Justification

This project is to ensure continued compliance with the FDEP regulatory requirements for FDEP 4-log virus inactivation.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project is required to meet FDEP regulations.

Total Cost of Project	Total Cost to Date
$450,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$39,000	$0	$379,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$500
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$500

Capital Costs and Proposed Financing by Fiscal Year

2018	$418,000	Bond
2019	$32,000	Bond
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$450,000	

Financing Comments

$39,000 Design; start 10/17, end 4/18

$411,000 Construction; start 7/18, end 12/18
30 years or greater useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-16-DE Project #: WS18DE Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: WT-57 Dyal HSP #4 Tier 4 Diesel Engine Replacement FY Start 2018 Quarter Q2

Project Location: Dyal WTP FY End 2019 Quarter Q2

Project Description

This project includes replacement of the existing High Service Pump #4 diesel engine with an EPA Tier 4 diesel engine.

Project Justification

This project will bring the diesel engine up to current code.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project required to meet current code.

Total Cost of Project	Total Cost to Date
$970,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$98,000	$0	$0	$0

Recurring Annual Costs

Operating	$6,760
Maintenance	$2,964
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$9,724

Capital Costs and Proposed Financing by Fiscal Year

2018	$98,000	Bond
2019	$872,000	Bond
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$970,000	

Financing Comments

$98,000 Design;start 01/18, end 07/18

$872,000 Construction; start 10/18, end 02/19
30 years or greater useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-18-DL Project #: Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: WT59 Dyal Dewatered Lime Sludge Storage Structure - Design and Construction FY Start 2019 Quarter Q4

Project Location: Dyal FY End 2019 Quarter Q1

Project Description

The project includes design and construction of a concrete slab with curb and tarp system. This is to store dewatered lime sludge, long term storage until the sludge can be removed from the plant site. The area with tarp system will protect the sludge from rain and contamination from invasive weeds.

Project Justification

The project will provide long term storage for the dewatered sludge.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$290,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$290,000	Revenue
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$290,000	

Financing Comments

30 years or greater useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-18-LS Project #: WS18CB Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: WT69 Dyal Groundwater WTP Chemical Building New Lime Silo Stairway - Construction FY Start 2021 Quarter Q4

Project Location: Dyal WTP FY End 2022 Quarter Q2

Project Description

The project includes a new stairway system to replace the existing ladder access system.

Project Justification

Existing system represents safety hazard.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$420,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$420,000	Revenue
Total Capital Costs	$420,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-18-DB Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: WS-Outside City

Project Name: WT70 Dyal WTP Surface Water Dewatering Building - Polymer System Upgrade-Construction FY Start 2022 Quarter Q4

Project Location: Dyal WTP FY End 2022 Quarter Q2

Project Description

This project includes the update of the SWTP polymer feed system and associated controls. The scope also includes installation of a non-skid floor coating in the polymer room, replacement of failed fans in the first and second floor HVAC systems, replacement of the angle iron stair landing supports due to corrosion, and a control panel for the polymer system upstairs in the belt filter press room.

Project Justification

The new liquid polymer system is to replace a dry product bagged system with liquid system. This will improve safety in the polymer room with non slip flooring. The project includes the update of HVAC system that has reached it's usual life and structural improvements as identified in recent corrosion study at the facility.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$160,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$160,000	Revenue
Total Capital Costs	$160,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-18-DF Project #: WS18CP Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: WT71 Dyal Groundwater WTP Chemical Building - Two Disc Flow Pumps for Lime Feed System - Const. FY Start 2018 Quarter Q4

Project Location: Dyal WTP FY End 2018 Quarter Q1

Project Description

This project includes installation of the third and fourth Disc Flow Pumps for the Lime Feed System including control wiring, speed, run/start/HOA/feedback.

Project Justification

There are two existing lime feed pumps to serve three softening basins. One pump is needed for each basin plus a unit for standby. A total of four pumps is needed.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$300,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$300,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$200
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$200

Capital Costs and Proposed Financing by Fiscal Year

2018	$300,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$300,000	

Financing Comments

Construction to begin 12/17 will end 9/18
30 years or greater useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-18-PS Project #: WS18UP Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: WT72 Dyal WTP server Uninterrupted Power Supply (UPS) Upgrade FY Start 2018 Quarter Q3

Project Location: Dyal WTP FY End 2018 Quarter Q2

Project Description

This project includes sppecifying equipment, and the procurement, installation, and testing of the Dyal server UPS. This is to replace the UPS system with an upsized and more efficient system.

Project Justification

To replace the existing aging UPS system to make it more efficient and update the technology.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$50,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$50,000

Recurring Annual Costs

Operating	$0
Maintenance	$1,500
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$1,500

Capital Costs and Proposed Financing by Fiscal Year

2018	$50,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$50,000	

Financing Comments

start 1/18, end 4/18

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4020

CIP #: CP-WS-18-PC Project #: Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: WT73 Dyal High Service Pump Control System Upgrade FY Start 2022 Quarter Q4

Project Location: Dyal WTP FY End 2022 Quarter Q1

Project Description

This project includes redesigning the control panel wiring to create new local PCP PLC panel for increased reliability for the High Service Pumps.

Project Justification

The project will increase reliability for the high service pumps.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$140,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$140,000	Revenue
Total Capital Costs	$140,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4025

CIP #: CP-WS-17-V17 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement of vehicle #15 (2009 Ford F250 UTILITY) FY Start 2020 Quarter Q3

Project Location: Field Operations - Water FY End 2020 Quarter Q3

Project Description

Replacement of vehicle #15 (2009 Ford F250 UTILITY) Serial# 1FTNF205X9EA32028

Project Justification

The City of Cocoa Capital Improvement Program implements a systematic replacement of vehicles and equipment to minimize repair & maintenance cost and vehicle equipment down time. The purchase of new vehicles is designed to reduce vehicle obsolescence, safety, parts accessibility and more efficient vehicles.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$38,100	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$38,100	Revenue
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$38,100	

Financing Comments

Replace date: 04/09/2020

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4025

CIP #: CP-WS-15-71 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement of vehicle #171 (2001 Ford F450 Dump) FY Start 2018 Quarter Q4

Project Location: Field Operations - Water FY End 2018 Quarter Q4

Project Description

Replacement of vehicle #171 (2001 Ford F450 Dump) Serial# 1FDXF46F61EB81735

Project Justification

The City of Cocoa Capital Improvement Program implements a systematic replacement of vehicles and equipment to minimize repair & maintenance cost and vehicle equipment down time. The purchase of new vehicles is designed to reduce vehicle obsolescence, safety, parts accessibility and more efficient vehicles.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$49,241	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$49,241

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$49,241	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$49,241	

Financing Comments

Replace Date: 09/06/2017-FY17City
requested replacement date: 09/06/2018-FY18

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4025

CIP #: CP-WS-16-V6 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement of vehicle #174 (2009 Ford F250 Utility) FY Start 2020 Quarter Q4

Project Location: Field Operations - Water FY End 2020 Quarter Q4

Project Description

Replacement of vehicle #174 (2009 Ford F250 Utility) Serial# 1FTNF20519EA32029

Project Justification

The City of Cocoa Capital Improvement Program implements a systematic replacement of vehicles and equipment to minimize repair & maintenance cost and vehicle equipment down time. The purchase of new vehicles is designed to reduce vehicle obsolescence, safety, parts accessibility and more efficient vehicles.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$38,100	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$38,100	Revenue
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$38,100	

Financing Comments

Replace Date: 08/09/2020

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4025

CIP #: CP-WS-15-29 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement of vehicle #29 (2002 Ford F450 Dump) FY Start 2020 Quarter Q1

Project Location: Field Operations - Water FY End 2020 Quarter Q1

Project Description

Replacement of vehicle #29 (2002 Ford F450 Dump) Serial# 1FDXF46FX2EB83229

Project Justification

The City of Cocoa Capital Improvement Program implements a systematic replacement of vehicles and equipment to minimize repair & maintenance cost and vehicle equipment down time. The purchase of new vehicles is designed to reduce vehicle obsolescence, safety, parts accessibility and more efficient vehicles.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$70,900	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$70,900	Revenue
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$70,900	

Financing Comments

Replace Date: 11/09/2019

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4025

CIP #: CP-WS-15-32 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement of vehicle #32 (2002 Ford F450 Dump) FY Start 2020 Quarter Q4

Project Location: Field Operations - Water FY End 2020 Quarter Q4

Project Description

Replacement of vehicle #32 (2002 Ford F450 Dump) Serial# 1FDXF46F62EB83230

Project Justification

The City of Cocoa Capital Improvement Program implements a systematic replacement of vehicles and equipment to minimize repair & maintenance cost and vehicle equipment down time. The purchase of new vehicles is designed to reduce vehicle obsolescence, safety, parts accessibility and more efficient vehicles.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$71,900	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$71,900	Revenue
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$71,900	

Financing Comments

Replace Date: 07/09/2020

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4025

CIP #: CP-WS-18-V1 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement of vehicle #79 (2002 Ford F450 Utility) FY Start 2018 Quarter Q1

Project Location: Field Operations - Water FY End 2018 Quarter Q1

Project Description

Replacement of vehicle #79 (2002 Ford F450 Utility) Serial# 1FDXF46F82EB83228

Project Justification

The City of Cocoa Capital Improvement Program implements a systematic replacement of vehicles and equipment to minimize repair & maintenance cost and vehicle equipment down time. The purchase of new vehicles is designed to reduce vehicle obsolescence, safety, parts accessibility and more efficient vehicles.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$53,939	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$53,939

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$53,939	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$53,939	

Financing Comments

Replace Date: 10/06/2017 - FY17City
requested replacement date: 10/06/2018-FY18

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4025

CIP #: CP-WS-15-92 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement of vehicle #92 (2008 Ford F350 Utility) FY Start 2019 Quarter Q3

Project Location: Field Operations - Water FY End 2019 Quarter Q3

Project Description

Replacement of vehicle #92 (2008 Ford F350 Utility) Serial# 1FDWF36538EA18192

Project Justification

The City of Cocoa Capital Improvement Program implements a systematic replacement of vehicles and equipment to minimize repair & maintenance cost and vehicle equipment down time. The purchase of new vehicles is designed to reduce vehicle obsolescence, safety, parts accessibility and more efficient vehicles.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$76,900	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$76,900	Revenue
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$76,900	

Financing Comments

Replace Date: 06/29/2019

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-17-WP Project #: WS0501 Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: 14"/18" AC Raw Water Pipeline Upgrade and Well 17 Area Isolation Valves - Phase I Construction FY Start 2018 Quarter Q4

Project Location: Wellfield FY End 2019 Quarter Q2

Project Description

Replacement of existing 14"& 18" AC Raw Water pipeline from Well 17 to Approx. Well 15, which has a history of pipe failures, with new 16" PVC pipe along the same alignment. Installation of in-line isolation valves on existing 36" pipeline adjacent to new redundant line.

Project Justification

This project will replace existing aging infrastructureand increase reliability in the wellfield.

Strategic Connection: Strategic Plan/Utilities Master Plan

This project will replace existing aging infrastructure.

Total Cost of Project	Total Cost to Date
$2,445,000	$25,000

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$2,420,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$2,420,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$2,420,000	

Financing Comments

Design being done in house by the City in FY17 ($25,000 for survey and geotech). Starting 5/17Construction $2,420,000 in FY18 starting 02/18 ending 09/18
30 Year or greater useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-17-CP | Project #: WS1210 | Account #: 68-10 | CIP Classification: Infrastructure | District: City

Project Name: Capital Plan Update

FY Start 2018 Quarter Q4

Project Location: Cocoa

FY End 2018 Quarter Q1

Project Description

Updating the City's Water FY19-FY40 Capital Plan based on the conditions and prioritization of the City's infrastructure annually for a five year period.

Project Justification

The City's infrastructure is continually aging and should be monitored to reprioritize the City's projects annually. This analysis will allow the Capital Plan to be updated according to the changing conditions of the system. The Capital Plan was completed in 2014 and will have a comprehensive update at a 5-year interval.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project updates to the Wastewater and Reclaimed Water Capital Improvement Plan.

Total Cost of Project	Total Cost to Date
$500,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$500,000

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$500,000	Reserves
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$500,000	

Financing Comments

Per the City, the Capital Plan Update will be encumbered in FY17. It is estimated that Carry forward for FY18 will be $500,000 (reserves).

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-14-39 Project #: WS18MI Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: DS-39 Merritt Island In-line Booster Pump Station FY Start 2018 Quarter Q4

Project Location: Merritt Island FY End 2019 Quarter Q2

Project Description

Installation of an in-line booster pump station with variable frequency drives (VFDs). Includes SCADA Design programming for PLC and HMI systems to support the project. This project is a cost effective alternative to the Pineda Causeway river crossing pipeline. (Reference: Water Capital Plan Project DS39-Alt)

Project Justification

This project will improve fire flow service in the area, and improve the efficiency of the distribution system in the area. This project was identified under the technical evaluations under the Water System Capital Plan project. See Water Distribution Infrastructure Improvements TM and Risk Reduction of Assets TM for more details. The prioritization/sequencing was determined based on the prioritization framework and scoring, also under the Water System Capital Plan project; see Project Prioritization TM for more details.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will improve efficiency and fire flows.

Total Cost of Project	Total Cost to Date
$1,440,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$150,000	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$150,000	Bond
2019	$1,290,000	Bond
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY

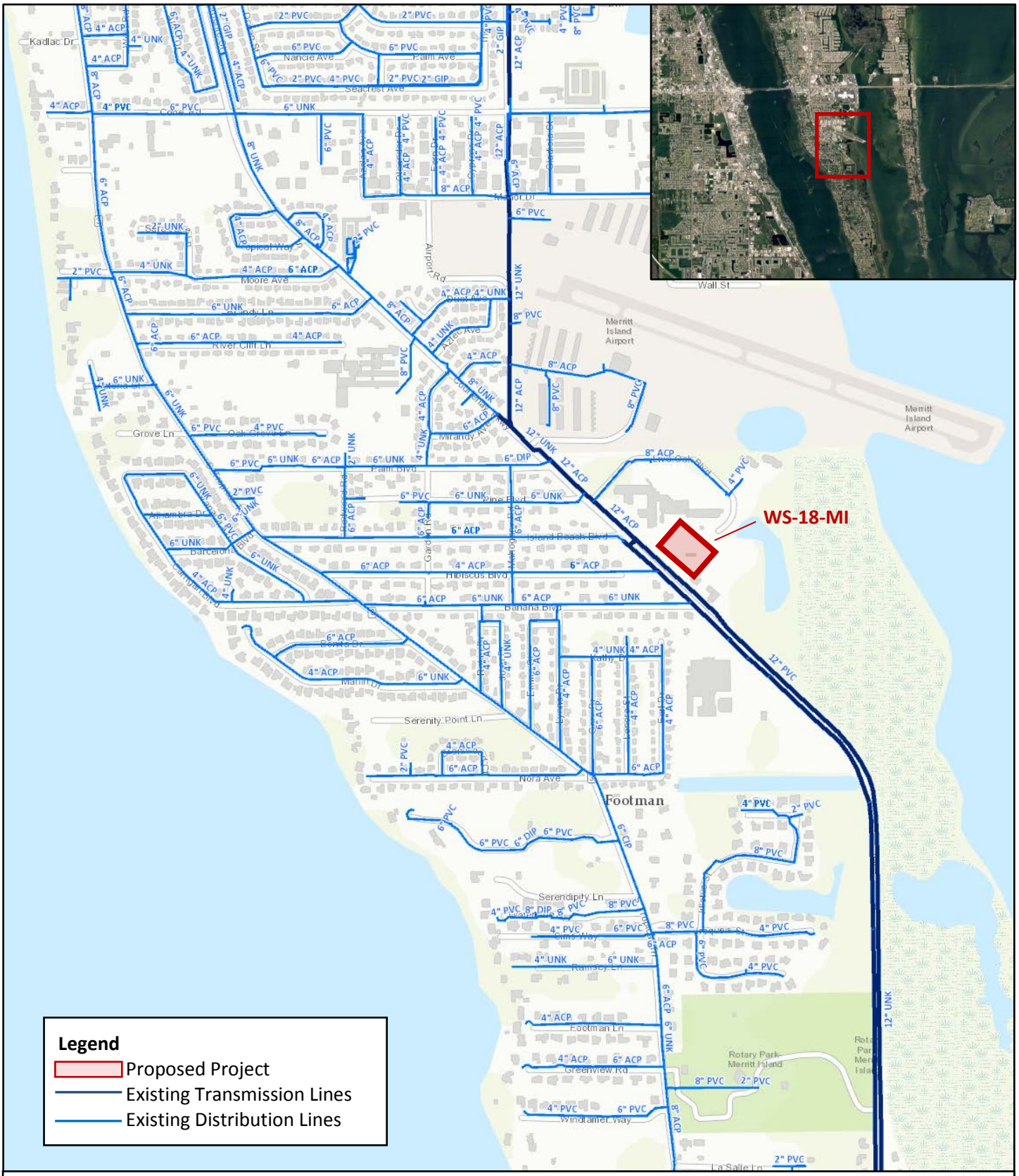
Financing Comments

$150,000 Design; start 02/18, end 08/18
$1,290,000 Construction; strt 11/18, end 08/19
30 Years or greater useful life
Following construction, operating & maintenance cost are estimated at roughly $18,000/year.

Total Capital Costs $1,440,000

CIE_Designation ☐

WS-18-MI – DS39 Merritt Island In-Line Booster Pump



City of Cocoa
FY 18-22 Water Distribution System
CIP Projects

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-18-FL Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: DS40 Ivy Dr. and Fenner Rd. Looping FY Start 2022 Quarter Q4

Project Location: City FY End 2022 Quarter Q2

Project Description

Installation of two looping 8-inch pipe segments at Gray Rd. and Fenner Rd. and Ivy Dr. 7 Range Rd. N (466 LF and 1474 LF respectively), and two looping 6-inch pipe segments at Sunhome St. and Kimberly St. and Sunhome St. and Clear Lake Rd. (275 LF and 641 LF respectively).

Project Justification

The project will help improve efficiency to the system.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$610,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$610,000	Revenue
Total Capital Costs	$610,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-18-PB Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: DS43 Pluckebaum Rd and A Ln Looping FY Start 2022 Quarter Q4

Project Location: City FY End 2022 Quarter Q1

Project Description

this project includes installation of a looping 8-inch pipe segment at Pluckebaum Rd. and Clearlake Rd. (3,366 LF), and a looping 6-inch pipe segment at Robeson Rd. and A Ln. (798 LF).

Project Justification

The project will help improve efficiency to the system.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$880,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$880,000	Revenue
Total Capital Costs	$880,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-18-BR Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: DS55 Banana River Drive Canal Crossing FY Start 2022 Quarter Q3

Project Location: City FY End 2022 Quarter Q2

Project Description

This project will replace 200 feet of 12-inch ductile iron pipe at the canal crossing between Central and Bayside Streets on Banana River Drive.

Project Justification

Project will replace aging infrastructure.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$200,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$200,000	Revenue
Total Capital Costs	$200,000	

Financing Comments

CIE_Designation ☐

WS-17-BR – Banana River Tank Improvements



CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-17-BR Project #: WS18BR Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: DS-56 Banana River Tank Improvements FY Start 2018 Quarter Q3

Project Location: Merritt Island FY End 2020 Quarter Q3

Project Description

This project will replace two existing 2MG tanks in kind.

Project Justification

Improvements of the ammonia feed system are required for improvements of water quality in the distribution system. The existing tanks at Banana River are past their useful service life and are in need of replacement.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will replace aging infrastructure (tanks) and improve water quality.

Total Cost of Project	Total Cost to Date
$4,332,136	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$370,000	$0	$0	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$370,000	Bond
2019	$1,169,634	Bond
2020	$2,792,502	Bond
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$4,332,136	

Financing Comments

$370,000 Design start 6/18 end 12/18 (Bond)

$3,962,136 Construction; start 4/19, end 4/20 (Bond)
30 years or greater useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-16-PS | Project #: DSCO | Account #: 63-00 | CIP Classification: Infrastructure | District: City

Project Name: DS-60 Banana River and Viera Pump Station Chloramination Improvements | FY Start 2020 Quarter Q4

Project Location: Merritt Island | FY End 2020 Quarter Q1

Project Description

The design and construction of the project will change the existing chlorination system to chloramination system at Viera and Banana River Pump Stations. New systems will include 500 gallon tanks, spill containment, chemical injection system, chemical feed pumps, Chemscan system, precast concrete building, and miscellaneous piping and valves.

Project Justification

Improvements of the existing ystem are required for improvements of water quality in the distribution system.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will replace aging infrastructure (tanks) and improve water quality.

Total Cost of Project	Total Cost to Date
$1,180,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$87,616	Revenue
2021	$1,092,384	Revenue
2022	$0	$0 this FY
Total Capital Costs	$1,180,000	

Financing Comments

$87,616 Design; start 10/19, end 6/20

$1,092,384 Construction; start 10/20, end 10/21

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-18-PL Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: DS62 Imperial to Central Pipe Loop/Brown Circle FY Start 2022 Quarter Q4

Project Location: City FY End 2022 Quarter Q1

Project Description

The City of Cocoa Utilities will provide two loops from Imperial to Central along Astronaut and Imperial to Astronaut. The project is intended to provide looping in order to maintain water to customers in the event of a break along Brown or Imperial.

Project Justification

Improvements of the existing system are required for improvements of water quality in the distribution system.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$310,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$310,000	Revenue
Total Capital Costs	$310,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-16-MM Project #: WS16MM Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: DS-63 Marlin Manor Pipeline Improvements - Construction FY Start 2018 Quarter Q3

Project Location: Rockledge FY End 2018 Quarter Q1

Project Description

This project will replace 7,500 feet of 4" and 6" AC pipe with 6" PVC piping in the Marlin Manor neighborhood due to history of catastrophic pipe failures and broken valves.

Project Justification

Replacement of aging pipe due to catastrophic AC pipe failures in this neighborhood.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will replace aging infrastructure.

Total Cost of Project	Total Cost to Date
$2,401,349	$301,349

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$2,100,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

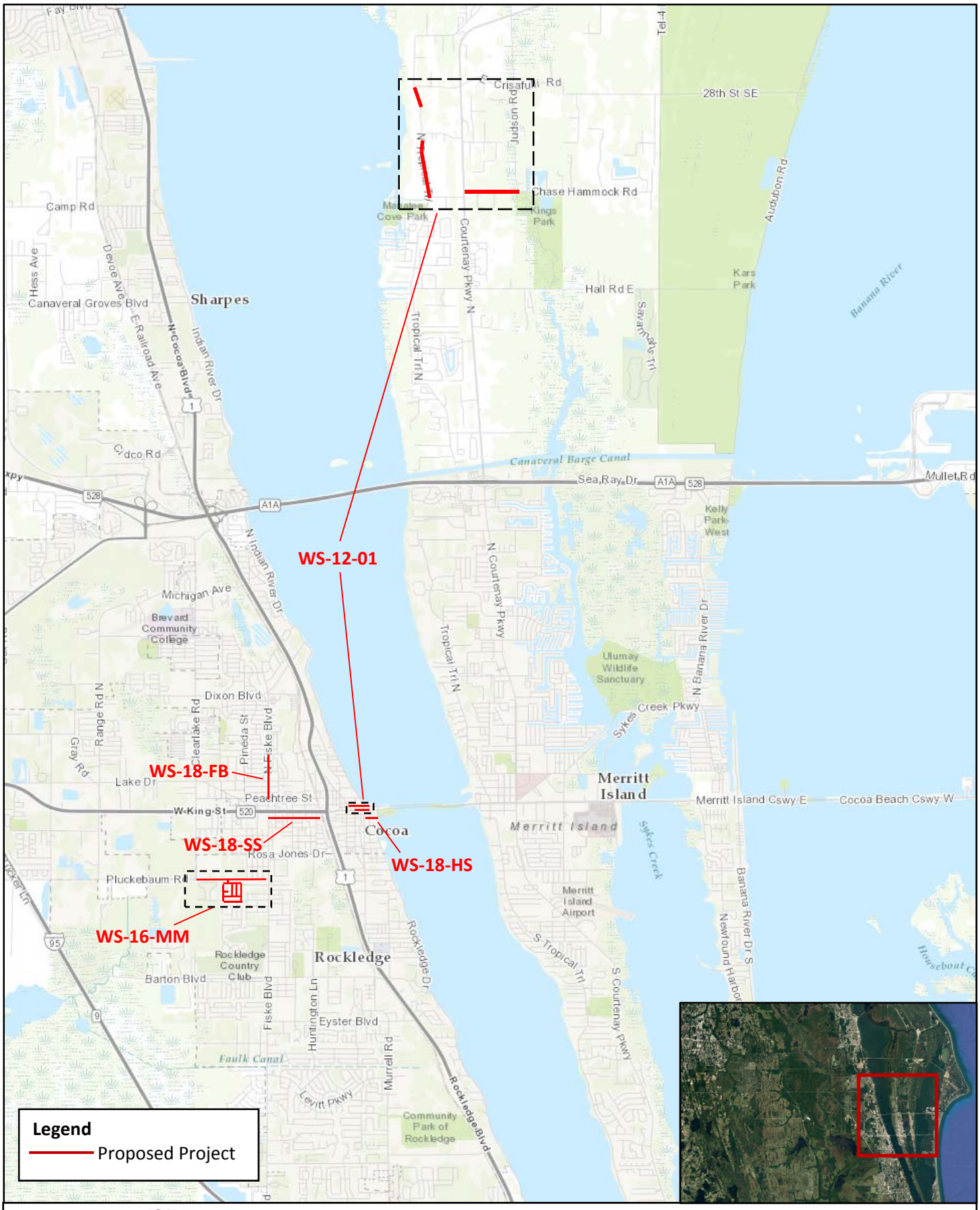
Capital Costs and Proposed Financing by Fiscal Year

2018	$2,100,000	Bond
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$2,100,000	

Financing Comments

The City would like construction in FY18.
$2,100,000 Construction; start 10/17, end 4/18
30 years or greater useful life

CIE_Designation ☐



City of Cocoa
FY 18-22 Water Distribution System
CIP Projects

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-12-DP Project #: WS1404 Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: Dyal Chemical Conversion & Reliability Improvement Project - Construction FY Start 2018 Quarter Q2

Project Location: Dyal Plant FY End 2020 Quarter Q4

Project Description

This project includes chemical system upgrades, a redundant finished flow system and new pump station at the dyal Plant. Replacement of two existing back up power generators with same sized generators at the Dyal WTP. Location will be in a new building; Conversion to NaOCL and Liq NH3; (Reference: 2013 Water Capital Plan Project WT50 Emergency Generator Replacement; WT09 Conversion to NaOCl and Liq NH3; WT25 Redundant Finished Flow Pipe and Pit; New Pump Station). Includes SCADA Design programming for PLC and HMI systems to support the project.

Project Justification

This project was identified under the technical evaluations under the Water System Capital Plan project. See Water Treatment, Storage and High Service Pumping Evaluation TM and Risk Reduction of Assets TM for more details. The prioritization/sequencing was determined based on the prioritization framework and scoring, also under the Water System Capital Plan project; see Project Prioritization TM for more details. The project will bring the backup power system up to current code. This project was identified under the technical evaluations under the 2013 Water System Capital Plan Update project. The prioritization/sequencing was determined based on the prioritization framework and scoring, also under the 2013 Water System Capital Plan Update project; see Project Prioritization TM for more details about the scoring process.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will increase reliability and operational flexibility.

Total Cost of Project	Total Cost to Date
$21,831,954	$175,478

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$4,456,476	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$4,456,476	Bond
2019	$13,902,001	Bond
2020	$3,297,999	Bond
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$21,656,476	

Financing Comments

Design to be encumbered in FY17 - $2.8 M
Design carry forward FY17 - $1.8M (Reserves)
Construction Total; start 8/18, end 1/20
(Bond) $20,000,000. (FY18 $2.8M with estimated carryforward of $1.8M)
30 year or greater useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-17-WE Project #: WS18WF Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: Fiber Optic Cable from Dyal WTP to Wewa WTP FY Start 2018 Quarter Q4

Project Location: Wellfield FY End 2018 Quarter Q1

Project Description

Design, bid, and contract for a new installation of fiber optic cable from the Dyal WTP control room FOPP to the Wewa WTP FOPP to support communications between the two facilities.

Project Justification

To create a hardline fiber optic connection from Dyal to the Wewahootee. This will improve data reliabilitly and data speed and support communications between water treatment infrastructure.

Strategic Connection: Strategic Plan/Utilities Master Plan

This project will support communication between water treatment plants.

Total Cost of Project	Total Cost to Date
$1,150,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$1,150,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$1,150,000	Bond
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$1,150,000	

Financing Comments

City requested funding in FY18.$1,150,000; start 10/17, end 9/18

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-17-FO Project #: WS17FO Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: Fiber Optic Cable from Police Department to Dyal WTP FY Start 2018 Quarter Q4

Project Location: SR 520 FY End 2018 Quarter Q1

Project Description

Design, bid and contract for a new installation of fiber Optic Cable from Police Department to Dyal WTP

Project Justification

To create a hardline fiber optic connection from Dyal to the City network. This will improve data reliabilitly and data speed and support communications between water treatment infrastructure.

Strategic Connection: Strategic Plan/Utilities Master Plan

This project will improve communication between City departments.

Total Cost of Project	Total Cost to Date
$690,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$690,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$690,000	Bond
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$690,000	

Financing Comments

City to encumber in FY17. No funding in FY18.Project not done in FY17.City requested funding in FY18FY18 $690,000; start 10/17, end 9/18

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-18-FB Project #: WS18FB Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Fiske Boulevard Pipeline Improvements - Peachtree to Highland FY Start 2018 Quarter Q4

Project Location: Cocoa FY End 2018 Quarter Q1

Project Description

The project includes the replacement of 8" AC pipe along Fiske Blvd., between Mitchell and Park with 8" PVC pipe and move the pipeline out of the roadway; Replacement of 6" Cast Iron Pipe along Fiske Blvd., between Fern and Peachtree with 6" PVC and move the pipeline out of the roadway; Replacing all hydrants, install new service lines, move all valves out of the intersection and install new cross connection control devices within the project area.

Project Justification

The pipeline improvements will be completed as part of the Public Works road work improvements planned on Fiske Blvd.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$1,000,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$1,000,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$1,000,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$1,000,000	

Financing Comments

City requested construction in FY18. Construction to start 10/17 and be completed 9/18.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-UT-18-HS Project #: WS18HS Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Harrison Street Streetscape (Utility portion) FY Start 2019 Quarter Q4

Project Location: Cocoa Village FY End 2019 Quarter Q1

Project Description

Project to include improve drainage, provide bus parking, improve sidewalks, lighting, as well as landscaping and striping

Project Justification

Harrison Street is a mixed use area with commercial businesses on one side and Riverfront Park on the other. These inprovements will improve the overall appearance of this area.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$98,720	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$98,720	Revenue
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$98,720	

Financing Comments

The Capital Cost is the portion being funded by the Cocoa CRA TIF.
Split between the Utility Fund, Stormwater Fund and the Cocoa CRA (110) Fund

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-18-MA Project #: WS17MI Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Michigan Avenue Force Main (Carry Forward) FY Start 2018 Quarter Q4

Project Location: Michigan Avenue FY End 2018 Quarter Q1

Project Description

Installation of 3000 linear feet of sewer force main along Michian Avenue.

Project Justification

This project provides for redundancy and future growth in the sewer system.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$740,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$40,000	$0	$700,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

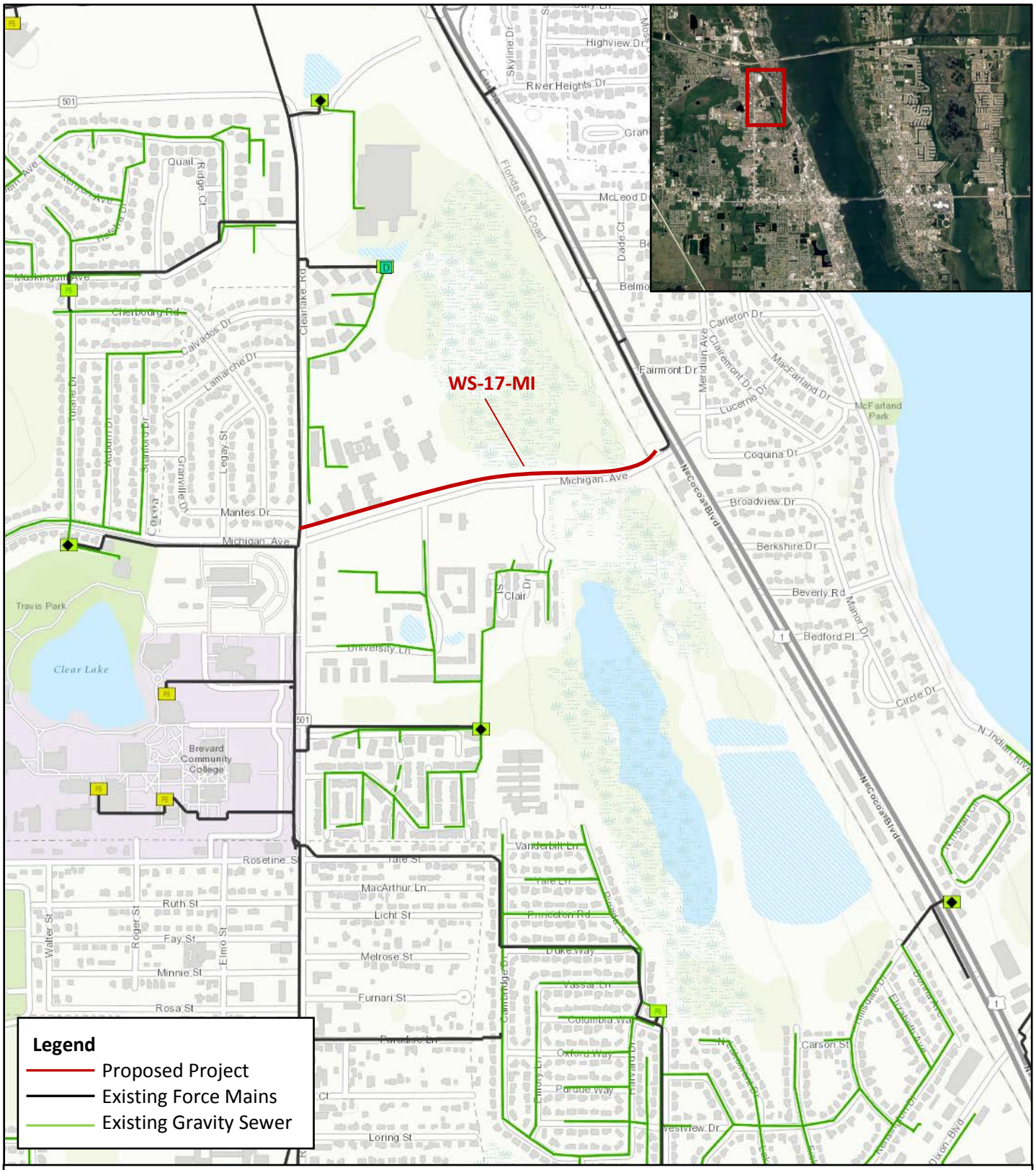
2018	$740,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$740,000	

Financing Comments

Design Carry Forward $40,000. $700,000 for construction.
30 years or greater useful life

CIE_Designation ☐

WS-17-MI – Michigan Avenue Force Main Extension (US 1 to Clearlake Road)



City of Cocoa
FY 18-22 Water Distribution System
CIP Projects

0 300 600ft

N

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-18-SS Project #: WS18SS Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Stone Street Corridor Streetscaping (Utility portion) FY Start 2018 Quarter Q2

Project Location: Fiske Boulevard to the western side of the F.E.C. Railroad. FY End 2019 Quarter Q1

Project Description

Streetscaping of Stone Street Commercial Corridor. Design and Engineering in FY 2017 and construction could begin in Q4 of FY 2017

Project Justification

This project will redevelop this culturally significant commercial corridor

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$659,356	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$659,356	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$659,356	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$659,356	

Financing Comments

A combination of TIF and other funding sources will be used for this project.
This project is split between the General Fund, Utility Fund and Stormwater Fund.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-13-PM Project #: WS1221 Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Utilities Program Management FY Start 2018 Quarter Q4

Project Location: Cocoa Utilities FY End 2022 Quarter Q1

Project Description

The purpose of this project is to provide program management services, including program management/administration, design management, construction project support, asset management and public involvement services in support of funded Cocoa Utilities Capital Improvement Plan (CIP) program projects to be funded under the 2010 series bond and a future bond issue anticipated for the first quarter of 2017. Program Management services for projects funded by operating revenues will be funded separately, out of 2017 and 2018 operating revenue budgets.

Project Justification

In the Fall of 2011, the City of Cocoa initiated a program management approach for its Utilities CIP. This approach, while coupled with the Water Capital Plan (authorized in January 2012), enables a risk-based asset management approach for evaluating and prioritizing capital improvement projects to maximize the benefit to the City of Cocoa's rate payers and citizens. The Program approach allows a large volume of projects to be efficiently managed and implemented (including planning, design, bidding and construction), provides transparent financial management, and enables technical experts to be brought in as needed for short periods of time, all while generating new job opportunities for the local businesses and residents and improving Cocoa's level of service to its customers.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$13,026,092	$6,826,092

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$1,500,000	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$1,500,000	Revenue
2019	$1,400,000	Revenue
2020	$1,200,000	Revenue
2021	$1,100,000	Revenue
2022	$1,000,000	Revenue
Total Capital Costs	$6,200,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-18-TS | Project #: WS1210 | Account #: 68-10 | CIP Classification: Software | District: City

Project Name: Wastewater Capital Plan | FY Start 2018 Quarter Q4

Project Location: Jerry Sellers WRF and Collection / Transmission System | FY End 2022 Quarter Q1

Project Description

Wastewater Capital Plan.

Project Justification

The Wastewater Capital Plan is updated annually to identify projects that need to be completed over the next 5 years for the Wastewater System. The plan requires a major update every 5 years.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$420,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$30,000	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$30,000	Revenue
2019	$300,000	Revenue
2020	$30,000	Revenue
2021	$30,000	Revenue
2022	$30,000	Revenue
Total Capital Costs	$420,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-14-03 Project #: WS0501 Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: WS-03 Pigging and Flushing Improvements for Raw Water Pipelines FY Start 2022 Quarter Q4

Project Location: State Hwy 520 and Wewahootee Plant Road FY End 2022 Quarter Q1

Project Description

Design and construct pipeline improvements to allow for improved capabilities to pig and flush the raw water pipelines between Wewahootee and Dyal Plants. The project will also include changing out butterfly valves to gate valves. The project includes pigging and flushing of 36-inch pre-stressed concrete cylinder pipe (PCCP) and 42-inch reinforced concrete pipe (RCP) raw water pipelines. (Reference: 2013 Water Capital Plan Project WS-03)

Project Justification

Pigging and flushing are maintenance activities to clear debris that has built up in the raw water pipelines over time. This project is intended to improve the water supply system level of service and reliability as a part of the Utility's ongoing capital improvement program. Improved pigging and flushing of raw water pipelines will increase the hydraulic capacity of the lines. This project was identified under the technical evaluations under the Water System Capital Plan project. See Supply System Evaluation TM and Risk Reduction of Assets TM for more details. The prioritization/sequencing was determined based on the prioritization framework and scoring, also under the Water System Capital Plan project; see Project Prioritization TM for more details.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will increase reliability and improve water quality.

Total Cost of Project	Total Cost to Date
$240,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

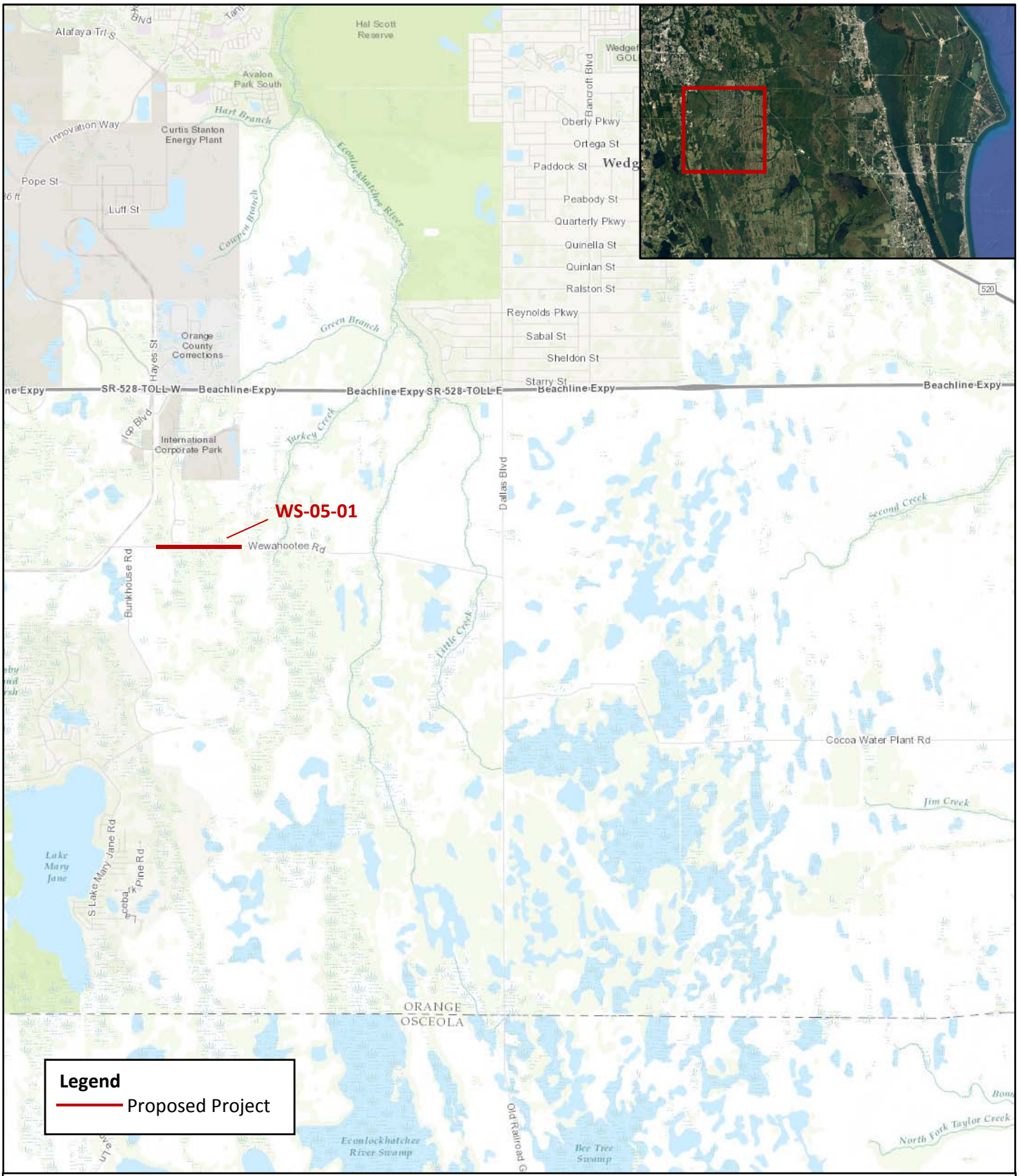
2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$240,000	Revenue
Total Capital Costs	$240,000	

Financing Comments

$240,000 Design; start 10/21, end 6/22
Construction $2,290,000; start 8/22, end 7/23
Total $2,530,000

CIE_Designation ☐

WS-05-01 – 14”/18” AC Raw Water Pipeline Upgrade



City of Cocoa
FY 18-22 Water Distribution System
CIP Projects

0 0.5 1mi

N

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-14-05 Project #: WS-05 Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: WS-05 54 inch Redundant Pipe to Dyal FY Start 2021 Quarter Q3

Project Location: State Hwy 520 near Dyal WTP FY End 2022 Quarter Q1

Project Description

This projec includes installation of 2,950 LF of 54-inch redundant raw water pipeline which would run parallel to the existing 54-inch line. New 54-inch raw water line would terminate at the 48-inch clarifier influent line within the Dyal WTP. (Reference: 2013 Water Capital Plan Project WS-05)

Project Justification

The new redundant raw water pipe would provide greater flexibility by allowing the utility to take one line out of service for maintenance. The existing 54-inch raw water pipe represents a single point of failure for the raw groundwater source and if it were to fail, it would result in a significant impact on water production. This project was identified under the technical evaluations under the Water System Capital Plan project. See Supply System Evaluation TM and Risk Reduction of Assets TM for more details. The prioritization/sequencing was determined based on the prioritization framework and scoring, also under the Water System Capital Plan project; see Project Prioritization TM for more details.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will improve reliability and maintenance of raw water supply system.

Total Cost of Project	Total Cost to Date
$3,420,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$1,100,955	Revenue
2022	$2,319,045	Revenue
Total Capital Costs	$3,420,000	

Financing Comments

$290,000 Design; start 10/20, end 4/21

$3,130,000 Construction; start 7/21, end 5/22 (Bond) Total Project Cost $3,420,000

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-05-01 Project #: WS0501 Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: WS-09 42 inch New Pipeline West of Well 7A to Dallas Wewa FY Start 2020 Quarter Q3

Project Location: Well field FY End 2022 Quarter Q1

Project Description

In East Orange County, the City of Cocoa has 48 raw water wells that deliver water to the Dyal plant for advanced treatment and distribution to customers. As the well field has expanded over the years, the raw water mains have been required to deliver greater quantities of water. The current pipes limit the available flow due to pressure losses and headloss. This project includes the installation of 14,300 LF of large diameter piping downstream of Well 13A continuing along Dallas Rd to the existing 42-inch water supply pipe near the intersection at Dallas Rd and Cocoa Water Plant Rd. Another segment includes approximately 700 feet of large diameter pipe near Well 17. This project will also eliminate the 14-inch asbestos cement (AC) piping. (Reference: 2013 Water Capital Plan Project WS-09)

Project Justification

The projects are intended to improve the water supply system level of service and reliability of the raw water piping. Redundant piping creates flexibility in the system, and reduces O&M costs by alleviating hydraulic constriction which makes pumping more efficient. The project also eliminates some inferior pipe material (AC). This project was identified under the technical evaluations under the Water System Capital Plan project. See Supply System Evaluation TM and Risk Reduction of Assets TM for more details. The prioritization/sequencing was determined based on the prioritization framework and scoring, also under the Water System Capital Plan project; see Project Prioritization TM for more details.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will replace aging infrastructure.

Total Cost of Project	Total Cost to Date
$8,296,169	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$99,892	Revenue
2021	$5,428,703	Revenue
2022	$2,767,574	Revenue
Total Capital Costs	$8,296,169	

Financing Comments

$99,892 Design; start 10/19, end 2/20

$8,196,277 Construction; start 10/20, end 4/22

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-18-RP Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: WS11 Redundant Pipeline Well 20 to 23 - Design FY Start 2022 Quarter Q4

Project Location: Wellfield FY End 2022 Quarter Q3

Project Description

This project includes installation of approximately 8,300 LF of 24 and 30-inch redundant piping starting at Well 20 and terminating at well 23.

Project Justification

The project will provide redundancy in the system.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$390,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$390,000	Revenue
Total Capital Costs	$390,000	

Financing Comments

Design in FY2022 $390,000

Construction in FY2023 $4,200,000

30 years of greater useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-12-PL Project #: WS1201 Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: WS1201 Pipe Infrastructure Assessment and Replacement FY Start 2018 Quarter Q4

Project Location: Utility Service Area FY End 2022 Quarter Q1

Project Description

FY 18 construction projects: DS-31 Chase Hammock Rd Looping - Installation of approximately 5,800 LF of 6" and 8" PVC near the intersections of Chase Hammock Rd. & Judson Rd. and Royal Paddock Way & Stone Lake Dr., and along Forever Young Ln. AND SR-520 Water Distribution System Improvements- Replacement of existing 6" and 8" water mains and associated valves and fire hydrants along King and Willard Streets (State Road 520 eastbound and westbound), from Delannoy Street to Forrest Avenue, in the City of Cocoa. Portions of the approximately 2,500 linear foot alignment will be upsize from 6" to 8". FY 19-FY22:The current utility system consists of approximately 1400 miles of pipe infrastructure of various sizes, ages and materials. As the infrastructure ages, it must be replaced over time. This capital project consists of an assessment program to determine the most critical pipe infrastructure, program management to implement the projects as well as design, permitting and construction to replace aging pipe. This project will consist of engineering, construction, permitting and inspection services.

Project Justification

A systematic approach to plan and predict the replacement of pipe needs to be implemented. The Cocoa Utility pipe system is valued at $900,000,000 per the CH2MHill Asset Assessment report dated January 2010. Assuming a conservative life cycle of 100 years for pipe, the city should be replacing approximately 12 miles of pipe per year in perpetuity.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will assist to determine condition of pipe infrastructure and replace aging infrastructure.

Total Cost of Project	Total Cost to Date
$23,608,964	$7,270,824

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$2,770,786	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

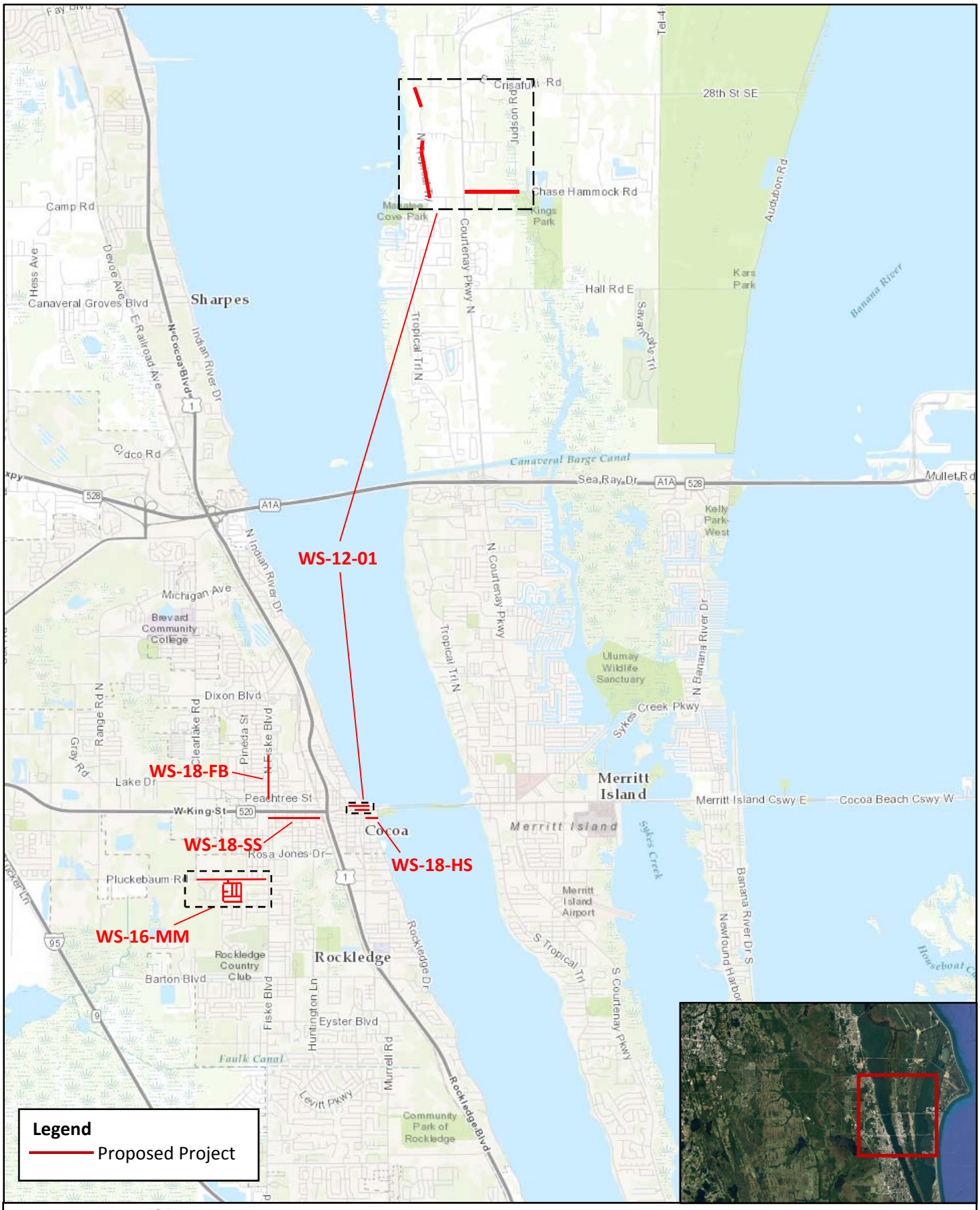
Capital Costs and Proposed Financing by Fiscal Year

2018	$2,770,786	Bond
2019	$2,142,744	Bond
2020	$3,000,000	Bond
2021	$3,424,610	Revenue
2022	$5,000,000	Revenue
Total Capital Costs	$16,338,140	

Financing Comments

FY18 Construction Projects:
Chase Hammock Construction: $960,000 start 10/17 end
SR 520 Construction: $1,501,274 Construction; start 1/18, end 09/18
30 years or greater useful life

CIE_Designation ☐



City of Cocoa
FY 18-22 Water Distribution System
CIP Projects

0 0.5 1mi

N

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-18-NW Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: WS20 Install New Well No. 17 FY Start 2019 Quarter Q4

Project Location: Wellfield FY End 2019 Quarter Q1

Project Description

this project includes construction of new Well No. 17. This includes well site location, permitting and construction of new well.

Project Justification

The project will provide improvements to the system.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$820,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$0	$0 this FY
2019	$820,000	Revenue
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$820,000	

Financing Comments

30 years or greater useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-18-SI Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: WS22 Wellfield Security Improvements FY Start 2022 Quarter Q4

Project Location: Wellfield FY End 2022 Quarter Q1

Project Description

Security Improvement Recommendations: Work includes the increased security on western wells (well 15-25), including 8-foot fencing with barbwire, locks, 1-inch mesh, video (with real time video), lighting or infrared, motion sensors. There is no fiber/band width. New fiber network will be required. Existing telemetry can be used as a backup. Refer to VA (11/2002) work by Bill Phillips/GNV. Consider including fiber optic with 14,000' Little Econ/Dallas Pipeline Project.

Project Justification

The project will provide increased security to the system.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$2,300,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$2,300,000	Revenue
Total Capital Costs	$2,300,000	

Financing Comments

30 years or greater
Fence in 63-00
other items in other accounts

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-14-02 Project #: WS1402 Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: WT-02 Separation of Groundwater and Surface Water Clear Well FY Start 2018 Quarter Q4

Project Location: Dyal Plant FY End 2018 Quarter Q1

Project Description

The project includes construction of new surface water clear well and modifications to the existing clear well below the GW gravity filters to include a bypass following the surface water gravity filters. (Reference: 2013 Water Capital Plan Project WT-02)

Project Justification

Completion of this project will increase storage capacity and operational flexibility by allowing operations to reject flow from either treatment train (groundwater or surface water) without impacting the other. Completion of the project also contributes to effectively meeting future regulatory requirements and increases flexibility by isolating clear wells from each other during operation. Having separate clear wells prevents the need to empty both clear wells if non-compliant water entered one of them. This project was identified under the technical evaluations under the Water System Capital Plan project. See Water Treatment, Storage and High Service Pumping Evaluation TM and Risk Reduction of Assets TM for more details. The prioritization/sequencing was determined based on the prioritization framework and scoring, also under the Water System Capital Plan project; see Project Prioritization TM for more details.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will improve flexibility and meet future regulations.

Total Cost of Project	Total Cost to Date
$11,475,086	$7,479,457

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$3,995,629	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$3,995,629	Reserves
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$3,995,629	

Financing Comments

As of February 17 the project cost to date - $4,670,800It is assumed that $2,808,657 will be spent by 9/17which estimates the carry forward of $2M

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-18-LF Project #: Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: WT37 Lime Feed and Storage System Improvements FY Start 2022 Quarter Q4

Project Location: Dyal FY End 2022 Quarter Q1

Project Description

This project installation of new lime slurry feed pumps with VFDs controlled by flow and pH. The project includes modifing the lime silo bottom, installing new vibratory devices and installing new lime recirculation pumps to recirculate a portion of lime sludge back to feed.

Project Justification

The project will provide improvements to the system.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$840,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$840,000	Revenue
Total Capital Costs	$840,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-18-BE Project #: Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: WT48 Recarbonation Basin Expansion-Reactor Clarifiers #1/#2 - Design and Construction FY Start 2022 Quarter Q4

Project Location: Dyal FY End 2022 Quarter Q1

Project Description

This project includes the addition of a recarbonization basin at Reactor Clarifiers #1/#2 to provide full process train redundancy. Currently, Reactor Clarifiers #1/#2 discharge to a single recarbonization basin. If this recarbonization basin is off-line, then both Reactor Clarifiers #1/#2 are off-line and cannot provide softened water to the filters.

Project Justification

The project will provide redundancy to the system.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$1,540,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$1,540,000	Revenue
Total Capital Costs	$1,540,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-15-SU | Project #: WS1508 | Account #: 63-00 | CIP Classification: Infrastructure | District: City

Project Name: WT-51 Sulfuraetor | FY Start 2019 Quarter Q3

Project Location: Wewahootee | FY End 2020 Quarter Q1

Project Description

This project includes design and construction of a third Sulfuraetor at Wewahootee WTP. The project includes SCADA Design programming for PLC and HMI systems to support the project. (Reference: Water Capital Plan Project WT51)

Project Justification

The third Sulfuraetor provides redundancy and the capability to meet peak demand when one of the Sulfuraetors are taken offline for scheduled cleanings. This project was identified under the technical evaluations under the 2013 Water System Capital Plan Update project. The prioritization/sequencing was determined based on the prioritization framework and scoring, also under the 2013 Water System Capital Plan Update project; see Project Prioritization TM for more details about the scoring process.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will improve treatment process reliability.

Total Cost of Project	Total Cost to Date
$3,560,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$310,000	Bond
2020	$3,250,000	Bond
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$3,560,000	

Financing Comments

$310,000 Design; start 10/18, end 6/19

$3,250,000 Construction; start 9/19, end 5/20
30 years or greater useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-16-GI | Project #: WT-54 | Account #: 63-00 | CIP Classification: Infrastructure | District: City

Project Name: WT-54 Tier 4 Generator Improvements | FY Start 2019 Quarter Q2

Project Location: Dyal and Distribution | FY End 2021 Quarter Q3

Project Description

This project includes replacing the existing generators with EPA Tier 4 generators at rhe TCR Pump Station, Wewahootee WTP (switchgear also), Banana River PS and Viera PS.

Project Justification

The project will bring the backup power system up to current code. This project was identified under the technical evaluations under the 2013 Water System Capital Plan Update project. The prioritization/sequencing was determined based on the prioritization framework and scoring, also under the 2013 Water System Capital Plan Update project; see Project Prioritization TM for more details about the scoring process.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will allow emergency power systems to meet current regulations.

Total Cost of Project	Total Cost to Date
$4,290,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$430,000	Revenue
2021	$3,860,000	Revenue
2022	$0	$0 this FY
Total Capital Costs	$4,290,000	

Financing Comments

$430,000 Design; start 05/19, end 10/19

$3,860,000 Construction; start 10/20, end 1/21

30 years or greater useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-18-SB Project #: Account #: 62-00 CIP Classification: Building District: WS-Outside City

Project Name: WT58 Dyal WTP Storage Building FY Start 2022 Quarter Q3

Project Location: Dyal FY End 2022 Quarter Q1

Project Description

This project will include the construct of a new pole-barn type structure to protect equipment from the elements.

Project Justification

There is no storage space at the plant for large equipment. This structure is needed to protect the equipment from the elements.

Strategic Connection: Strategic Plan/Utilities Master Plan

TBD

Total Cost of Project	Total Cost to Date
$220,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$220,000	Revenue
Total Capital Costs	$220,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-18-BP Project #: Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: WT61 Dyal CO2 Bulk Package System FY Start 2020 Quarter Q4

Project Location: Dyal FY End 2020 Quarter Q1

Project Description

This project includes the removal of the existing steel pressure tanks and replacing it in kind with steel pressure tanks.

Project Justification

To replace existing aging infrastructure.

Strategic Connection: Strategic Plan/Utilities Master Plan

N/A

Total Cost of Project	Total Cost to Date
$1,040,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$90,000	Bond
2020	$950,000	Bond
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$1,040,000	

Financing Comments

design $90,000, construction $950,000
30 years or greater useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-17-TT Project #: WS18DT Account #: 64-00 CIP Classification: Machinery & Equipment District: WS-Outside City

Project Name: WT-62 Dyal TTHM Prevention and/or Reduction FY Start 2018 Quarter Q2

Project Location: Dyal WTP FY End 2018 Quarter Q1

Project Description

The project includes the evaluation and planning of a Unit Process to help prevent the creation of TTHM in water.

Project Justification

The City of Cocoa's distribution system has experienced rising TTHM sample results. This evaluation and planning effort will be to prohibit this trend from continuing.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will improve water quality.

Total Cost of Project	Total Cost to Date
$110,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$110,000	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$110,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$110,000	

Financing Comments

Planning $110,000; start 10/17, end 1/18

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-17-DF Project #: WS18RD Account #: 63-00 CIP Classification: Infrastructure District: WS-Outside City

Project Name: WT-63 Replacement of Dyal Finished Water Steel GST FY Start 2018 Quarter Q2

Project Location: Dyal WTP FY End 2020 Quarter Q2

Project Description

This project includes removal of existing steel tank and design and installation of a new 5 MG Crom prestressed concrete tank at Dyal.

Project Justification

To replace existing aging ground storage tank.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will replace aging infrastructure.

Total Cost of Project	Total Cost to Date
$7,480,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$640,000	Bond
2020	$6,840,000	Bond
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$7,480,000	

Financing Comments

Design $640,000; start 01/19, end 10/19
Construction $6,840,000 in FY20; start 10/19, end 03/20
30 years or greater useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4055

CIP #: CP-WS-15-OI Project #: WT-CO Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: WT-CO Ozone Improvements (Generator Replacement, Chiller Replacement, Contactor Improvements) FY Start 2020 Quarter Q2

Project Location: Dyal WTP FY End 2021 Quarter Q1

Project Description

This project includes mprovements to the ozone system at the Dyal WTP including replacement of the existing ozone generators and associated electrical, control panels and chiller replacement. (Reference: Water Capital Plan Project Update WT-45, WT-46, and WT-47)

Project Justification

The ozone generators and chillers are nearing the end of their life cycle which is estimated to be 2018. The new generators will be installed at the same location as the existing generators and will use the existing cooling system. These projects were identified under the technical evaluations under the 2013 Water System Capital Plan Update project. Ozone sidestream injection will result in higher ozone transfer efficiency and decreased maintenance primarily due to eliminating the need for maintenance on the current ozone diffusers. This project was identified under the 2012 Water System Capital Plan project. The prioritization/sequencing was determined based on the prioritization framework and scoring, also under the 2013 Water System Capital Plan Update project; see Project Prioritization TM for more details about the scoring process.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will replace aging infrastructure.

Total Cost of Project	Total Cost to Date
$4,550,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$1,513,504	Revenue
2021	$3,036,496	Revenue
2022	$0	$0 this FY
Total Capital Costs	$4,550,000	

Financing Comments

$390,000 Design; start 11/19, end 5/20

$4,160,000 Construction; start 8/20, end 2/21
30 years or greater useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-18-BS Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Biosolids Improvements Project FY Start 2020 Quarter Q4

Project Location: Jerry Sellers WRF FY End 2022 Quarter Q1

Project Description

Biosolids Improvements at the Jerry Sellers WRF.

Project Justification

Replacement of aging infrastructure.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$2,200,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$200,000	Revenue
2021	$200,000	Revenue
2022	$1,800,000	Revenue
Total Capital Costs	$2,200,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-17-PA Project #: WW-32 Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Bracco Pond Aeration FY Start 2019 Quarter Q4

Project Location: Bracco Pond FY End 2019 Quarter Q1

Project Description

Installation of surface aerators at the Bracco Pond.

Project Justification

Installation of surface aerators in the Bracco Ponds to prevent toxic algae blooms. Algal blooms can cause nutrient levels to exceed requirements due to their toxic effects on biomass.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$115,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$115,000	Revenue
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$115,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-18-BI Project #: WW-32 Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Bracco Pond Interconnect FY Start 2019 Quarter Q4

Project Location: Jerry Sellers WRF FY End 2019 Quarter Q1

Project Description

Automation of existing Bracco Pond Interconnect valve.

Project Justification

Existing Bracco Pond Interconnect valve is manually operated which requires operations staff to travel off site to provide supplemental reclaimed water to the Jerry Sellers WRF.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$90,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$90,000	Revenue
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$90,000	

Financing Comments

30 years or greater useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-18-CS Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Chemical Storage Relocation FY Start 2019 Quarter Q4

Project Location: Jerry Sellers WRF FY End 2020 Quarter Q1

Project Description

Relocation of chemical storage and feed facilities to improve operations.

Project Justification

The location of the existing chemical storage and feed facilities makes it difficult to automatically control the quality of plant effluent. Relocating the facilities will allow for greater control and automation.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$700,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$0	$0 this FY
2019	$100,000	Revenue
2020	$600,000	Revenue
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$700,000	

Financing Comments

30 years or greater useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-18-UP Project #: WS17CM Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: CMMS Update Phase II FY Start 2018 Quarter Q4

Project Location: Jerry Sellers WRF FY End 2018 Quarter Q1

Project Description

Data entry necessary to support use of CMMS. Purchasing of a printer to support use of the system.

Project Justification

The CMMS system is necessary to manage maintenance needs.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$50,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$50,000	$0	$0	$0

Recurring Annual Costs

Operating	$795
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$795

Capital Costs and Proposed Financing by Fiscal Year

2018	$50,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$50,000	

Financing Comments

Annual License Renewal = $795

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-18-GR Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Generator Replacement FY Start 2022 Quarter Q4

Project Location: Jerry Sellers WRF FY End 2022 Quarter Q1

Project Description

Generator Replacement at the Jerry Sellers WRF.

Project Justification

Replacement of aging infrastructure.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$200,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$200,000	Revenue
Total Capital Costs	$200,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-18-IP Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Internal Recycle Pump Replacement FY Start 2022 Quarter Q4

Project Location: Jerry Sellers WRF FY End 2022 Quarter Q1

Project Description

Replacement of the internal recycle pumps at the Jerry Sellers WRF.

Project Justification

Replacement of aging infrastructure.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$205,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$205,000	Revenue
Total Capital Costs	$205,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-18-FI Project #: WS16SF Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Jerry Sellers Flow Improvements FY Start 2018 Quarter Q4

Project Location: Jerry Sellers WRF FY End 2019 Quarter Q1

Project Description

Upgrades to the influent pump station, reject water system, sludge pumps and digesters at the Jerry Sellers WRF.

Project Justification

Upgrades are required to improve operation of the facility.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project was identified in the Wastewater Capital Plan.

Total Cost of Project	Total Cost to Date
$4,230,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$115,000	$0	$2,000,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$2,115,000	Bond
2019	$2,115,000	Bond
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$4,230,000	

Financing Comments

30 year useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-18-LE Project #: WS18SE Account #: 62-00 CIP Classification: Building District: City

Project Name: Jerry Sellers WRF Laboratory Expansion FY Start 2018 Quarter Q4

Project Location: Jerry Sellers WRF FY End 2018 Quarter Q1

Project Description

Expansion of the laboratory at the Jerry Sellers WRF.

Project Justification

Upgrades are required to improve operations of the facility.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$65,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$65,000	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$65,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$65,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-18-OP Project #: WS18PR Account #: 31-00 CIP Classification: Professional Services District: City

Project Name: Jerry Sellers WRF Operating Permit Renewal FY Start 2018 Quarter Q4

Project Location: Jerry Sellers WRF FY End 2018 Quarter Q1

Project Description

Jerry Sellers WRF Operating Permit Renewal

Project Justification

The operating permit for the Jerry Sellers WRF expires in 2018 and must be renewed.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$65,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$65,000	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$65,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$65,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-18-LP Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: LCP No. 1 Rehabilitation FY Start 2020 Quarter Q4

Project Location: Jerry Sellers WRF FY End 2020 Quarter Q1

Project Description

Rehabilitation of Local Control Panel No. 1.

Project Justification

Rehabilitation or replacement of aging infrastructure.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$200,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$200,000	Revenue
2022	$0	$0 this FY
Total Capital Costs	$200,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-18-CR Project #: WS1222 Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: MCC and Conduit Replacement Project (Carry Forward) FY Start 2018 Quarter Q2

Project Location: Jerry Sellers WRF FY End 2018 Quarter Q1

Project Description

Electrical wire and conduit replacement project

Project Justification

Project will replace aging infrastructure.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project identified in the Wastewater Capital Plan.

Total Cost of Project	Total Cost to Date
$2,500,000	$1,720,000

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$80,000	$0	$700,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$780,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$780,000	

Financing Comments

Carry Forward

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-18-MP Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Michigan Pond Supplemental Reuse FY Start 2019 Quarter Q4

Project Location: Michigan Pond FY End 2020 Quarter Q1

Project Description

Upgrades at the Michigan Pond to return reclaimed water to the Jerry Sellers WRF through the existing collection and transmission system.

Project Justification

During dry periods, it is difficult to meet the reclaimed water demand. Returning water from Michigan Pond will supplement the existing supply.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$715,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs	
Operating	$2,000
Maintenance	$1,000
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$3,000

Capital Costs and Proposed Financing by Fiscal Year		
2018	$0	$0 this FY
2019	$65,000	Revenue
2020	$650,000	Revenue
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$715,000	

Financing Comments

30 years or greater useful life

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-17-ML Project #: WS1510 Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Mud Lake Wetlands FY Start 2019 Quarter Q4

Project Location: Cocoa Conservation Area FY End 2020 Quarter Q1

Project Description

Feasibility study, permitting, final design, and construction of a reclaimed water application system at Mud Lake in the Cocoa Conservation Area.

Project Justification

Successfully implementing a reclaimed water application system at the Mud Lake wetlands would provide another disposal alternative for reclaimed water during wet weather, further reducing the need to dispose of reclaimed water in the Indian River Lagoon.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$1,190,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$40,000	$0	$0	$0

Recurring Annual Costs

Operating	$2,000
Maintenance	$1,000
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$3,000

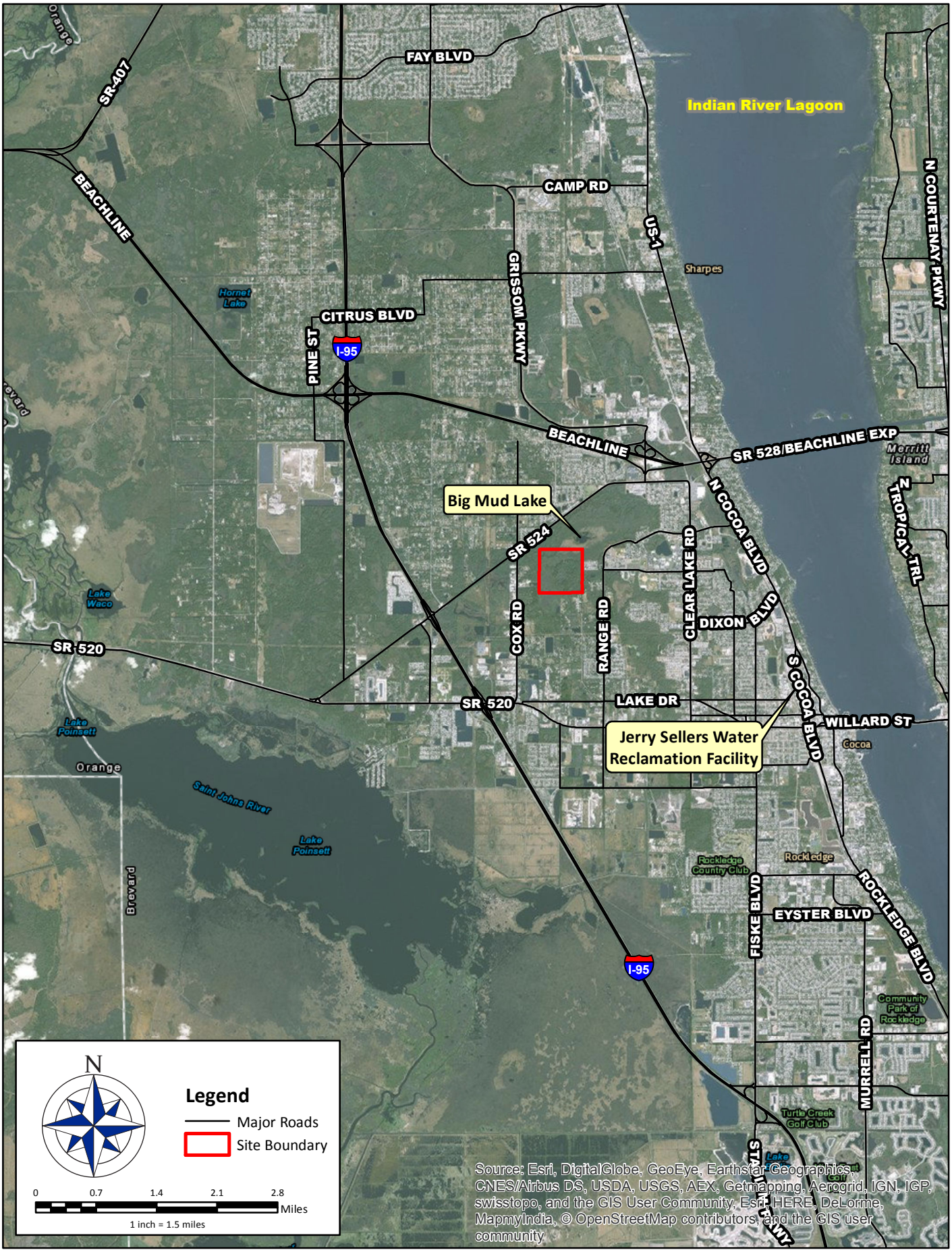
Capital Costs and Proposed Financing by Fiscal Year

2018	$40,000	Revenue
2019	$400,000	Revenue
2020	$750,000	Revenue
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$1,190,000	

Financing Comments

30 Year useful life

CIE_Designation ☐



CDM Smith

CP-WS-17-ML
Mud Lake Wetlands Location Map

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-18-FR Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: New F150 Ref Cab FY Start 2018 Quarter Q4

Project Location: Sewer Field Operations FY End 2018 Quarter Q1

Project Description

Tranportaion needed for the New Reuse Coordinator position pending approval.

Project Justification

Tranportaion needed for the New Reuse Coordinator position pending approval.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$21,200	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$21,200

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$21,200	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$21,200	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-18-WP Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Reclaimed Water Pump Replacement FY Start 2021 Quarter Q4

Project Location: Jerry Sellers WRF FY End 2021 Quarter Q1

Project Description

Replacement of the existing reclaimed water pumps at the Jerry Sellers WRF.

Project Justification

Replacement of aging infrastructure.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$600,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$600,000	Revenue
2022	$0	$0 this FY
Total Capital Costs	$600,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-18-RM Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement of MCCs 7 and 8 FY Start 2020 Quarter Q4

Project Location: Jerry Sellers WRF FY End 2020 Quarter Q1

Project Description

Replacement of MCCs 7 and 8 at the Jerry Sellers WRF.

Project Justification

Project will replace aging infrastructure.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project was identified in the Wastewater Capital Plan and will replace aging infrastructure.

Total Cost of Project	Total Cost to Date
$550,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$550,000	Revenue
2022	$0	$0 this FY
Total Capital Costs	$550,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-17-V16 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Replacement of vehicle #42 (2006 Ford E250 VAN) FY Start 2019 Quarter Q2

Project Location: Field Operations - Water Reclamation FY End 2019 Quarter Q2

Project Description

Replacement of vehicle #42 (2006 Ford E250 VAN) Serial# 1FTNE24W26DA11486.

Project Justification

The City of Cocoa Capital Improvement Program implements a systematic replacement of vehicles and equipment to minimize repair & maintenance cost and vehicle equipment down time. The purchase of new vehicles is designed to reduce vehicle obsolescence, safety, parts accessibility and more efficient vehicles.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$30,237	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$30,237	Revenue
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$30,237	

Financing Comments

Replace Date: 01/09/2019

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-17-RT Project #: WS17RT Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: RTU Replacement FY Start 2018 Quarter Q4

Project Location: Cocoa Collection System FY End 2022 Quarter Q1

Project Description

Replacement of the existing Motorola MOSCAD L RTU at the lift stations to the Motorola ACE3600, including panel enclosures.

Project Justification

The Motorola MOSCAD L RTU is currently used in 50 of the City's wastewater lift stations. One lift station does not have a RTU. The MOSCAD L RTU is no longer manufactured and considered an obsolete technology. With little spare parts and replacement RTUs, integration of the new ACE3600 is recommended to maintain system functionality and product support. A new panel enclosure is required to house the new technology and City standard components.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will replace aging infrastructure.

Total Cost of Project	Total Cost to Date
$750,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$150,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$150,000	Revenue
2019	$150,000	Revenue
2020	$150,000	Revenue
2021	$150,000	Revenue
2022	$150,000	Revenue
Total Capital Costs	$750,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-18-TR Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Tank recoating project FY Start 2022 Quarter Q4

Project Location: Jerry Sellers WRF FY End 2022 Quarter Q1

Project Description

Recoating of tanks at the Jerry Sellers WRF.

Project Justification

Recoating of tanks to protect structures.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$250,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$250,000	Revenue
Total Capital Costs	$250,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-18-TP Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Transfer pump replacement FY Start 2021 Quarter Q4

Project Location: Jerry Sellers WRF FY End 2021 Quarter Q1

Project Description

Replacement of the existing transfer pumps at the Jerry Sellers WRF.

Project Justification

Replacement of aging infrastructure.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$430,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$430,000	Revenue
2022	$0	$0 this FY
Total Capital Costs	$430,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-18-DC Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: UV Disinfection Conversion FY Start 2022 Quarter Q4

Project Location: Jerry Sellers WRF FY End 2022 Quarter Q1

Project Description

Conversion from sodium hypochlorite to UV disinfection at the Jerry Sellers WRF.

Project Justification

Replacement of aging infrastructure.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$2,530,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$2,530,000	Revenue
Total Capital Costs	$2,530,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-17-VI Project #: WS17VA Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Valve Identification Project FY Start 2017 Quarter Q4

Project Location: Jerry Seller WRF FY End 2017 Quarter Q1

Project Description

Locating and Identifying all wastewater and reclaimed water valve assets on the Jerry Sellers WRF and inputting data in a GIS database. Data will includes valve type, valves size, and valve location.

Project Justification

The Jerry Sellers WRF was constructed in multiple phases over a period of 60 years. There a numerous valves on site with unknown locations and purposes. The project would provide a database of valves and function for use by plant operation staff.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$60,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$60,000	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$60,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$60,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4120

CIP #: CP-WS-17-V2 Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Water Reclamation E250 Van FY Start 2018 Quarter Q2

Project Location: Wastewater FY End 2018 Quarter Q2

Project Description

2005 E250 Ford Van Vin #1FTNE24L75HB45908.

Project Justification

City of Cocoa Active Fleet.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$56,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$56,000	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$56,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$56,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4125

CIP #: CP-WS-17-R3 Project #: WS0904 Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: CIPP Rehabilitation Phases 3 - 6 FY Start 2018 Quarter Q3

Project Location: Cocoa Collection System FY End 2018 Quarter Q1

Project Description

Rehabilitation of CIPP of select gravity sewers in the Lift Station 10, 13, and 21 service areas and Lift Station 2 service area South of King St. (SR 520) in FY18. Rehabilitation of CIPP of select gravity sewers in the lift Station 15, 17 and 18 service areas in FY19. Rehabilitation of CIPP of select gravity sewers in the Lift Station 4, 5, 6 and 7 service areas in FY2020. Rehabilitation of CIPP of various gravity sewers selected based on the results of the cleaning and CCTV data in FY2021.

Project Justification

After an analysis of the collection system through CCTV data and the wastewater hydraulic model, pipes in this project were identified to have excessive structural defects including (but not limited to) cracks, fractures, holes, broken pipe, and infiltration. Infiltration contributes to hydraulic deficiencies, increased risk of SSO, and increased flows at the wastewater treatment plant, causing unnecessary treatment and increased treatment costs.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project will rehabilitate aging infrastructure essential to the sanitary sewer collection system.

Total Cost of Project	Total Cost to Date
$1,600,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$35,000	$0	$365,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$400,000	Revenue
2019	$400,000	Revenue
2020	$400,000	Revenue
2021	$400,000	Revenue
2022	$0	$0 this FY
Total Capital Costs	$1,600,000	

Financing Comments

CIE_Designation ☐

Prepared For:

Prepared By:

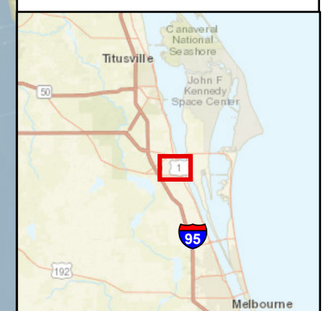
CDM Smith

Legend

- Existing Sewer Manhole
- Existing Gravity Sewer
- Existing Forcemain
- CIPP Phase 3 Manholes
- CIPP Phase 3 Gravity Sewer
- CIPP Phase 4 Manholes
- CIPP Phase 4 Gravity Sewer
- CIPP Phase 5 Manholes
- CIPP Phase 5 Gravity Sewer

N

0 800 1,600 Feet



Wastewater Collection System Evaluation

City of Cocoa, Florida

CIPP Improvement Projects Phases 3, 4 & 5

CP-WS-17-R3

Document Path: F:\Jamie\215885\CityofCocoa_May2017_CIPPphase3_4_5.mxd

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CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4125

CIP #: CP-WS-18-SR Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Lift Station No. 1 Replacement FY Start 2021 Quarter Q4

Project Location: Cocoa Collection System FY End 2021 Quarter Q1

Project Description

Lift Station No. 1 Replacement.

Project Justification

Replacement of aging infrastructure.

Strategic Connection: Strategic Plan/Utilities Master Plan

Project is identified in the Wastewater Capital Plan and will replace aging infrastructure.

Total Cost of Project	Total Cost to Date
$700,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$700,000	Revenue
2022	$0	$0 this FY
Total Capital Costs	$700,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4125

CIP #: CP-WS-17-V18 Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Replacement of vehicle #53 (2009 Ford F250 UTILITY) FY Start 2021 Quarter Q2

Project Location: Field Operations - Sewer FY End 2021 Quarter Q2

Project Description

Replacement of vehicle #53 (2009 Ford F250 UTILITY) Serial# 1FTNF20569EA32026.

Project Justification

The City of Cocoa Capital Improvement Program implements a systematic replacement of vehicles and equipment to minimize repair & maintenance cost and vehicle equipment down time. The purchase of new vehicles is designed to reduce vehicle obsolescence, safety, parts accessibility and more efficient vehicles.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$38,100	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$38,100	Revenue
2022	$0	$0 this FY
Total Capital Costs	$38,100	

Financing Comments

Replace Date: 10/09/2020

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4125

CIP #: CP-WS-17-V1 Project #: WW-33 Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Water Reclamation Fleet E250 Van FY Start 2019 Quarter Q2

Project Location: Field Operations - Wastewater FY End 2019 Quarter Q2

Project Description

Purchase of 2006 E250 Ford Van. Vin # 1FTNE24W26DA11486.

Project Justification

New vehicle required for daily operations.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$30,237	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$30,237	Revenue
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$30,237	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4125

CIP #: CP-WS-17-V3 Project #: WW-36 Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: WFO Sewer F250 Utility Ford FY Start 2018 Quarter Q2

Project Location: Field Operations - Wastewater FY End 2018 Quarter Q1

Project Description

Purchase of 2009 F250 Ford Utility Truck. Vin # 1FTNF20569EA32026.

Project Justification

New vehicle required for daily operations.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$38,100	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs	
Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year		
2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$38,100	Reserves
2022	$0	$0 this FY
Total Capital Costs	$38,100	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 421 **Dept/Div:** 4125

CIP #: CP-WS-17-V4 Project #: WW-37 Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: WFO Sewer F450 Dump Ford FY Start 2021 Quarter Q2

Project Location: Field Operations - Wastewater FY End 2021 Quarter Q2

Project Description

Purchased of 2001 F450 Ford Dump Truck. Vin # 1FDXF46F81EB77802.

Project Justification

New vehicle required for daily operations.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$75,900	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$75,900	Revenue
2022	$0	$0 this FY
Total Capital Costs	$75,900	

Financing Comments

CIE_Designation ☐

City of Cocoa Capital Improvement Plan
FY 2018 through FY 2022

Stormwater Enterprise Fund Projects

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 423 **Dept/Div:** 3570

CIP #: CP-SW-11-Cra Project #: PW08CG Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Annual Curb & Gutter R&M Program FY Start 2018 Quarter Q4

Project Location: City Wide FY End 2022 Quarter Q1

Project Description

Annual maintenance and replacement of sub-standard, deteriorated and non-existing curb. Some survey services from outside contractors may be included with this item for proper installation of new curb to the proper slope.

Project Justification

Annual maintenance and replacement of sub-standard, deteriorated and non-existing curb. Some survey services from outside contractors may be included with this item for proper installation of new curb to the proper slope.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$250,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$50,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$50,000	Revenue
2019	$50,000	Revenue
2020	$50,000	Revenue
2021	$50,000	Revenue
2022	$50,000	Revenue
Total Capital Costs	$250,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 423 **Dept/Div:** 3570

CIP #: CP-SW-11-CR Project #: SW08PL Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Annual Cured in Place Pipe Lining FY Start 2018 Quarter Q4

Project Location: City wide FY End 2022 Quarter Q1

Project Description

Cured in place pipe lining for the cities many miles of old metal drainage pipes through out the city.

Project Justification

There are old metal pipes throughout the city in various diameters that carry stormwater thoughout the city's drainage system. When these pipes fail, flow is blocked, and flooding results. A failed pipe also allows soil to enter the pipe, causing damage to roads, structures and yards. By lining these pipes it reduces the amount of material entering the river, reduces flooding risks, and decreases damage. Each pipe is approximately 100 feet in length and the average price per foot ranges from $40 to $100 per foot, depending on pipe size and condition.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$1,000,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$200,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$200,000	Revenue
2019	$200,000	Revenue
2020	$200,000	Revenue
2021	$200,000	Revenue
2022	$200,000	Revenue
Total Capital Costs	$1,000,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 423 **Dept/Div:** 3570

CIP #: CP-PW-17-FY Project #: PW17SI Account #: 63-00 CIP Classification: Infrastructure District: D1

Project Name: Fiske Blvd Complete Streets Roadway, and Sidewalk Improvements Phase 3 (General Fund) FY Start 2018 Quarter Q4

Project Location: Fiske Blvd FY End 2018 Quarter Q1

Project Description

Construct drainage and sidewalks, replace water main, reconstruct roadway and provide landscaping from Highland Ave to Peachtree Street

Project Justification

Fiske Blvd from Highland Ave to Peachtree St has poor surface drainage, sub-standard sidewalks and the roadway is in poor condition. These improvements will improve drainage and create a safer environment for citizens

Strategic Connection: Operational

Sidewalks, enhanced lighting and improved drainage provides a safe environment

Total Cost of Project	Total Cost to Date
$140,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$140,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$140,000	Combination
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$140,000	

Financing Comments

Possible funding through the SCTPO and FDOT
1,750,000 funded by General funds
140,000 funded by Stormwater

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 423 **Dept/Div:** 3570

CIP #: CP-PW-17-HS Project #: SW17HS Account #: 63-00 CIP Classification: Infrastructure District: D1

Project Name: Harrison Street Streetscape (Stormwater portion) FY Start 2018 Quarter Q4

Project Location: Cocoa Village FY End 2018 Quarter Q1

Project Description

Project to include improve drainage, provide bus parking, improve sidewalks, lighting, as well as landscaping and striping

Project Justification

Harrison Street is a mixed use area with commercial businesses on one side and Riverfront Park on the other. These inprovements will improve the overall appearance of this area

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$95,867	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$95,867	Revenue
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$95,867	

Financing Comments

The Capital Cost is the portion being funded by the Cocoa CRA TIF.
Split between the Utility Fund, Stormwater Fund and the Cocoa CRA (110) Fund

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 423 **Dept/Div:** 3570

CIP #: CP-SW-12-IR Project #: SW1503 Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Indian River Drive Baffle Box FY Start 2019 Quarter Q4

Project Location: Indian River Drive FY End 2022 Quarter Q1

Project Description

Install baffle boxes on Indian River Drive (IRD) outfall pipes.

Project Justification

To meet increasingly strict water quality standards, water quality flowing from IRD to the lagoon must be improved. Due to limited property, installation of nutrient-removal baffle boxes is the only practical way to improve water quality in this area. Installation of four baffle boxes at $20,000 each is proposed each year. The goal is to have all outfalls treated in 10 years.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$320,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$80,000	Revenue
2020	$80,000	Revenue
2021	$80,000	Revenue
2022	$80,000	Revenue
Total Capital Costs	$320,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 423 **Dept/Div:** 3570

CIP #: CP-SW-17-MB Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: City

Project Name: Mechanical Broom Sweeper FY Start 2018 Quarter Q4

Project Location: City FY End 2018 Quarter Q1

Project Description

The Stormwater division would like to replace its vacuum air sweeper. With a mechanical sweeper for sweeping the city streets it would allow for a more diverse sweeping of the city streets. This Sweeper is a different type. It allows for sweeping of the city streets during different times of the year.

Project Justification

The Stormwater division would like to replace its vacuum air sweeper. With a mechanical sweeper for sweeping the city streets it would allow for more diverse sweeping of the city streets. This Sweeper is a different type. It allows for sweeping of the city streets during different times of the year.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$310,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$310,000	Revenue
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$310,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 423 **Dept/Div:** 3570

CIP #: CP-SW-12-RR | Project #: SW1301 | Account #: 63-00 | CIP Classification: Infrastructure | District: D3

Project Name: Pipe Range Road Drainage Ditch | FY Start 2020 Quarter Q4

Project Location: Range Road | FY End 2020 Quarter Q1

Project Description

Install 3000 feet of Surplus 48" DIP water pipe and inlets on Range Road from Hooper Rd. north to Cocoa Bay Blvd.

Project Justification

Range Road is a heavy traveled road between SR 520 and Rosentine consisting of residential properties. Presently there is an open ditch conveyance system to collect stormwater. By piping this ditch it will reduce maintenance costs and even more importantly reduce safety issues. Public Works proposes this work to be done in three phases with the first phase being engineering, then two construction phases consisting of 1500 feet each.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$250,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$0	$0 this FY
2019	$0	$0 this FY
2020	$250,000	Revenue
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$250,000	

Financing Comments

PD&E cost $25,000Construction/Rehab cost 225,000

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 423 **Dept/Div:** 3570

CIP #: CP-PW-18-SS Project #: Account #: 63-00 CIP Classification: Infrastructure District: City

Project Name: Stone street Corridor Streetscaping (Stormwater portion) FY Start 2018 Quarter Q2

Project Location: Fiske Boulevard to the western side of the F.E.C. Railroad. FY End 2019 Quarter Q1

Project Description

Streetscaping of Stone Street Commercial Corridor. Design and Engineering in FY 2018 and construction could begin in Q4 of FY 2017.

Project Justification

This project will redevelop this culturally significant commercial corridor

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$120,414	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$120,414	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$120,414	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$120,414	

Financing Comments

A combination of TIF and other funding sources will be used for this project.
This project is split between the General Fund, Utility Fund and Stormwater Fund.

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 423 **Dept/Div:** 3570

CIP #: CP-SW-18-AM Project #: Account #: 31-00 CIP Classification: Professional Services District: City

Project Name: Stormwater GIS Asset Mapping FY Start 2018 Quarter Q4

Project Location: City Wide FY End 2019 Quarter Q1

Project Description

Map and enter stormwater pipes, manholes, catch basins, and other assets in GIS Data base

Project Justification

The city's NPDES permit requires the city to have an inventory of its physical assets. Currently, old mylar maps are the primary method of asset management. Cocoa has invested in a GIS system to manage its assets city wide. In order to enter stormwater assets into the database, they must be located in the field, inspected and described as to the condition and material. Brevard County has offeredto provide these services to the city. The advantage to having the county provide this service would be a seamless database system as storm water naturally flows between the city and county boundaries.

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$130,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$80,000	$0

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$80,000	Revenue
2019	$50,000	Revenue
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$130,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 423 **Dept/Div:** 3570

CIP #: CP-SW-17-FA Project #: Account #: 63-00 CIP Classification: Infrastructure District: D2

Project Name: US1 and Forrest Ave Stormwater Facility FY Start 2018 Quarter Q4

Project Location: Intersection of US 1 and Forrest Ave FY End 2019 Quarter Q1

Project Description

Construct a dry retention pond for storm water treatment prior to entering the Indian River

Project Justification

The City of Cocoa obtained this property from the Florida Department of Transportation. The location will allow the city to construct a dry retention pond to treat storm water prior to entering the Indian River

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$385,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$32,000	$0	$0	$218,000

Recurring Annual Costs

Operating	$0
Maintenance	$0
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$0

Capital Costs and Proposed Financing by Fiscal Year

2018	$250,000	Revenue
2019	$135,000	Revenue
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$385,000	

Financing Comments

CIE_Designation ☐

CIP Detail Project Report FY 2018 - FY 2022

CIP Fiscal Year Period FY 2018 - FY 2022

Fund: 423 **Dept/Div:** 3570

CIP #: CP-PW-18-YI Project #: Account #: 64-00 CIP Classification: Machinery & Equipment District: D1

Project Name: Yale Industrial Forklift FY Start 2018 Quarter Q4

Project Location: Public Works FY End 2018 Quarter Q1

Project Description

Replacement forklift for Public Works

Project Justification

The current forklift was inherited from the utility department in 2007. It was 10 years old at the time. It does not have the lift capacity or the reach or the safety features needed for what the division needs. The new forklift will have a 5000 pound capacity and a higher reach, plus enhanced safety features thus making the operation safer for the operator as well as other workers who my be near by

Strategic Connection: Operational

N/A

Total Cost of Project	Total Cost to Date
$32,000	$0

2018 Costs	PD & E	Land Purchase	Construction/Rehab	Miscellaneous
	$0	$0	$0	$32,000

Recurring Annual Costs

Operating	$100
Maintenance	$100
Personal	$0
Other Non-Capital	$0
Total Recurring Costs	$200

Capital Costs and Proposed Financing by Fiscal Year

2018	$32,000	Revenue
2019	$0	$0 this FY
2020	$0	$0 this FY
2021	$0	$0 this FY
2022	$0	$0 this FY
Total Capital Costs	$32,000	

Financing Comments

CIE_Designation ☐