

**Planning Commission Agenda  
Special Meeting  
March 15, 2022 - 5:30 p.m.**

**Daniel Grannan – Chair  
Tonia Herring – Vice Chair  
Billy Gause  
Randy Martin  
Doug Smith**



**Terry Thompson  
Alternate 1 –  
Alternate 2 –  
Chuck Dixon – School Board\***

- 1) Call to Order
- 2) Roll Call
- 3) Moment of Silence
- 4) Pledge of Allegiance
- 5) Chairman Comments - discuss meeting procedures
- 6) Adoption of Agenda
- 7) Special Meeting – Civic Master Plan of the City of Crystal River
  - a) Presentation of the Draft “Civic Master Plan for the City of Crystal River,” and to receive comment. This item will be presented to the City Council for its consideration to approve the Civic Master Plan by Resolution at a public meeting to be held on April 11, 2022, at 5:30 p.m.
- 8) Citizen Input: 3 minutes
- 9) Staff Comments
- 10) Commissioner’s Comments
- 11) Chairman’s Comments
- 12) Adjournment

\*Appointed by School Board pursuant to §163.3174, Florida Statutes.

**NOTICE TO PUBLIC**

**Any person who decides to appeal any decision of the Planning Commission with respect to any matter considered at this meeting will need a record of the proceedings and for such purpose may need to provide that a verbatim record of the proceeding is made, which record includes testimony and evidence upon which the appeal is to be based. (Section 286.0105, Florida Statutes)**

**Any person requiring reasonable accommodation at this meeting because of a disability or physical impairment should contact the City of Crystal River, City Manager's Office, 123 N. W. Highway 19, Crystal River, FL 34428 (352) 795-4216, at least two (2) days prior to the meeting.**



**ADOPTION DRAFT**

# Crystal River Civic Master Plan

MARCH 4, 2022



## PROJECT TEAM

### **DOVER, KOHL & PARTNERS**

*Town Planning*

Jason King, AICP, CNU-A, Principal

Robert Piatkowski, AICP

James Dougherty, AICP, CNU-A

Pamela Stacy King, CNU-A

Kenneth García, AICP, CNU-A

Xu Zhang, PLA, ASLA

Camilo Rivas

Elysse Dallas

Andre Leon Jackson

### **HALL PLANNING & ENGINEERING**

*Transportation & Mobility*

Richard Hall, P.E., Principal

Hannah Rubottom

### **GOODWYN MILLS CAWOOD**

*Stormwater Engineering & Resilience*

Brandon Bias, AICP, LEED Green Associate

Robert Brown, Ph.D., P.E.

## ACKNOWLEDGEMENTS

### **CITY OF CRYSTAL RIVER**

Joe Meek, Mayor

Robert Holmes, Vice-Mayor/Council Member

Cindi Guy, Council Member

Ken Brown, Council Member

Patrick Fitzpatrick, Council Member

Ken Frink, City Manager

Jack Dumas, Assistant City Manager

Leslie Bollin, Events & Marketing Director

Brian Herrmann, Planning and Community  
Development Services Director

Jenette Collins, Urban Planner

### **STEERING COMMITTEE**

CHARLENE BOSTICK

CHUCK DIXON

DAN GRANNAN

ROBERT HOLMES

AL HOPKINS

JEFF KINNARD

DAVE LAMBO

GERRY MULLIGAN

LISA VANDEBOE

JOSH WOOTEN

*...and hundreds of participants from the  
Crystal River community!*

***(Adoption Draft - Civic Master Plan)***

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# 1.

## *Introduction & Background*

This chapter provides an introduction to the project. It takes a glimpse into previous plans and studies completed for the City of Crystal River and the region, summarizing existing conditions and preliminary analysis that outlines the groundwork for the vision laid out in the subsequent chapters.

### **INTRODUCTION**

### **A BRIEF HISTORY OF CRYSTAL RIVER**

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# INTRODUCTION

This is an exciting time for Crystal River. The Civic Master Plan focuses on helping the city maximize its potential while at the same time making sure that it continues to be the place that its residents want it to be. The plan provides the chance to design key streets, public spaces, and other property while recommending regulations and strategies that are in alignment with the community’s values. The overall project is divided into focus areas to respond to the various opportunities and challenges in different geographies, as well as a civic framework of guiding principles that can be applied city-wide.

The Civic Master Plan focus areas are:

- The Copeland Park Neighborhood
- Downtown and Waterfront (the Community Redevelopment Area)
- New Centers along Highway 19

## WHY NOW

The Civic Master Plan reflects the city’s commitment to preserve and enhance the existing community while promoting new places of character that are both time-honored and meaningful. This commitment to a “place-based” approach became embedded in policy when the city adopted the region’s first form-based code overlay for its Community Redevelopment Area (CRA) in January 2020. This plan builds upon the city’s investments in the downtown and waterfront areas, along with many organizations’ working to bring new vitality to the city and revive Kings Bay. These efforts have resulted in expanded access to the waterfront, new parks, and a healthier ecosystem.

Private investors and local businesses are taking notice. Several new developments are planned or are under construction and new businesses are being established. However, the city lacks a strong vision for the future, specifically how best to integrate and connect new public and private spaces in a manner that reflects the character of the community that will be cherished for years to come. The 2021 update to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) resulted in Base Flood Elevations (BFEs) increasing by three to four feet, requiring new ways of building in the city. The plan explores how to meet these increased flood zone requirements without sacrificing walkable urbanism.

The Civic Master Plan was initiated to allow community members to engage with each other, city staff, leadership, and planning consultants to envision the future of Crystal River while working to establish a comprehensive set of recommendations based on the community’s goals. As a result, the plan will be used by the city, community members, local businesses, and property owners as a road map to guide future changes and improvements.

## PLANS ARE UNDER WAY TO:

- Develop a new “Town Square”
- Develop a new linear park, splash pad, the City’s historic water tower and the restored (historic) pump house building (Town Square phase 2)
- Work with FDOT to re-design Highway 44, a “gateway” into the City.



Historic photo of King's Bay



Historic photo of Citrus Avenue



Citrus Avenue today

# A BRIEF HISTORY OF CRYSTAL RIVER

## EARLY HISTORY

Crystal River and the surrounding area has an extensive history and is one of the longest continuously occupied sites in Florida. The area was initially inhabited by nomadic paleoindians 12,000 years ago, at a time when the climate, flora, and fauna were drastically different than today and the coast was 60 to 100 miles further west. The first settlements were built around 500 B.C., beginning a period of continual occupation by Native Americans lasting more than 1,600 years, ending before the Spanish conquistadors arrived in the Americas. The settlement area consists of burial mounds, temple and platform mounds, and a plaza area and a substantial midden that served as a center for ceremonies and trade. Today this important site of Native American history is protected as the Crystal River Archaeological State Park.

Settlers began moving to what is now Crystal River following the Second Seminole War and the passing of the Armed Occupation Act of 1842. Growth in the region was slow in the 19<sup>th</sup> century until after the Civil War. Citrus groves and industries based on natural resources, including turpentine and cedar, attracted more people in the late 1800's. Early settlers had big hopes for citrus and planted thousands of acres of orange and grapefruit trees. However, after the great freeze of 1894 to 1895, citrus growing never regained commercial viability. Phosphate was discovered in 1889 in east Citrus County and phosphate mining brought an industrial boom to the region in the early 1900s. There were at least 34 phosphate plants in operation in Citrus County in 1910. Industrial products and natural resources were shipped to urban areas outside of Florida first by sea and eventually by rail, once it arrived in 1888. The railroad provided an easier way to ship and transport goods as well as provide access for tourism. The population swelled during this era.

Citrus County was established in 1887 when Hernando County was divided into Hernando, Citrus, and Pasco Counties. Crystal River became a town in 1903 and was officially incorporated as a city on July 3, 1923.

## RECENT DECADES

In the decades following the city's incorporation, most residents in the region earned a living based on the land and nearby waters. Farming, fishing, lumbering, citrus growing, livestock raising, and tourism were the pillars of economy. The natural resources and weather in Crystal River created a perfect condition for growing a variety of crops and vegetables. At the same time, the vast virgin timber provided raw materials for products such as lumber, pencils, and wooden crates, among others. Fishing began at a small, local scale but eventually expanded to statewide markets.

The economy in recent decades has dramatically shifted towards tourism and away from mining and agriculture. Today the waters serve as much as a source of food but as an attraction for the tourist-based economy. Both new residents and visitors are drawn to the city by the natural resources and pleasant climate that have drawn in people for thousands of years.



Temple Mound at the Crystal River Archaeological State Park



Historic photo of Crystal River Waterfront





# PREVIOUS PLANS & STUDIES

*The Crystal River Civic Master Plan builds upon a strong foundation of previous plans, studies, and recently updated city regulations.*

## CRYSTAL RIVER COMPREHENSIVE PLAN (2011)

Objective 6 of the city’s adopted Comprehensive Plan describes how Complete Streets principles will be considered for all roadways to address the needs of bicyclists and pedestrians. The plan describes how the city shall view all transportation opportunities to improve safety, access, and mobility for all travelers.

In addition, Goal 3 of the Comprehensive Plan Land Use Element states that Crystal River will promote and maintain the existing character of the community through consistent land use. The city shall preserve, protect and improve the character of the city through the implementation of compatibility standards and the consideration of innovative development standards that may include a transfer of development rights, planned unit developments, form-based regulations, conservation subdivisions, or other regulations that encourage mixed use and clustered development patterns.

## HERNANDO/CITRUS MPO BIKEWAYS AND TRAILS MASTER PLAN

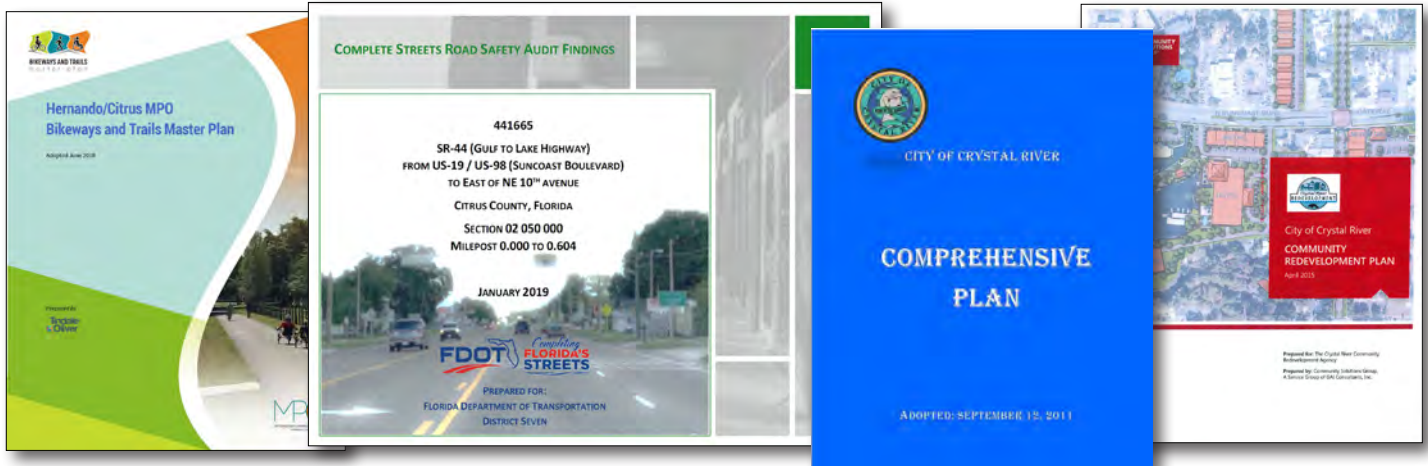
The Hernando/Citrus Metropolitan Planning Organization (MPO) Bikeways and Trails Master Plan represents a collaborative effort to create a vision that:

*Hernando and Citrus counties become communities where people can safely and easily ride bicycles and walk daily. A connected network of trails and on-street facilities will benefit the economy, public health, and quality of life for all members of the community.*

The Bikeways and Trails Master Plan includes a commitment to safety with a Vision Zero approach, equity and choice in recognizing that car ownership is not accessible to all, the health benefits of walking and biking, and the economic boost resulting from trail promotion and tourism.

### PARTIAL LIST OF PREVIOUS PLANS, STUDIES AND MORE:

- Crystal River Comprehensive Plan (2011)
- CRA Plan (1988)
- CRA Visioning Plan (2008)
- CRA Waterfront District Master Concept Plan & Strategies (2013)
- Bayside and Heritage Plans (2017)
- Land Development Code (2020)
- CRA Form Based Code overlay (2020)



Previous Plans & Studies

## CRYSTAL RIVER CONGESTION MANAGEMENT STUDY

This Hernando/Citrus MPO study addresses the need to redesign Highway 19 in downtown Crystal River, create new trail connections, and utilize Turkey Oak Drive as a truck route to reroute trucks away from downtown.

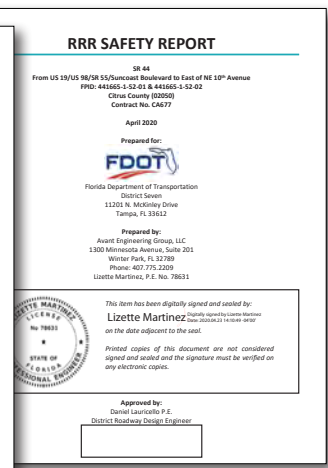
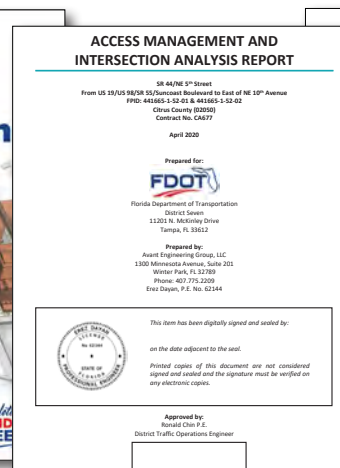
## FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) POLICIES

FDOT adopted a statewide Complete Streets policy in 2014 and a Context Classification Document in 2017. Implementing Complete Streets is an FDOT department-wide priority. The Complete Streets approach builds on flexibility and innovation in roadway planning and design to put the right street in the right place. Complete Streets serve the transportation needs of transportation system users of all ages and abilities, including pedestrians, bicyclists, transit riders, motorists, and freight handlers. A transportation system based on Complete Streets principles can help to promote safety, quality of life, and economic development.

Complete Streets are context sensitive and the approach provides transportation system design that considers local land development patterns. Roadways will be planned and designed to support the safety, comfort, and mobility of all users based on the unique context of each roadway. The FDOT context classification system broadly identifies the various built environments existing in Florida. The standards in the FDOT Design Manual are now based on this context sensitive approach. The context classification of a roadway will inform FDOT's planning, Project Development and Environment (PD&E), design, construction, and maintenance approaches to ensure that state roadways are supportive of safe and comfortable travel for their anticipated users. FDOT's Context Classification system is further discussed in The Civic Framework chapter.

### CONTINUED FROM PREVIOUS PAGE:

- FDOT Context Classification Document (2017)
- Crystal River Congestion Management Study (2017)
- SR-44 Final RSA Report
- Final RRR Safety Report
- Final RSA Memo
- Hernando/Citrus MPO Bikeways and Trails Master Plan (2018)



Previous Plans & Studies



# CRYSTAL RIVER AT A GLANCE

## FOCUS AREAS

### DOWNTOWN WATERFRONT / CRA

The downtown is characterized by the waterfront, main street shops, City Hall, traditional neighborhoods, and several civic spaces. Centered on the city’s new Town Square at the intersection of Highway 19 (a high-intensity FDOT thoroughfare) and Citrus Avenue (the city’s “main street”), the district extends outward nearly ½ mile in all directions. This area encompasses the CRA and City Council recently adopted a Form Based Code for the area that utilizes “building types” as its primary organizing principle.

### COPELAND PARK NEIGHBORHOOD

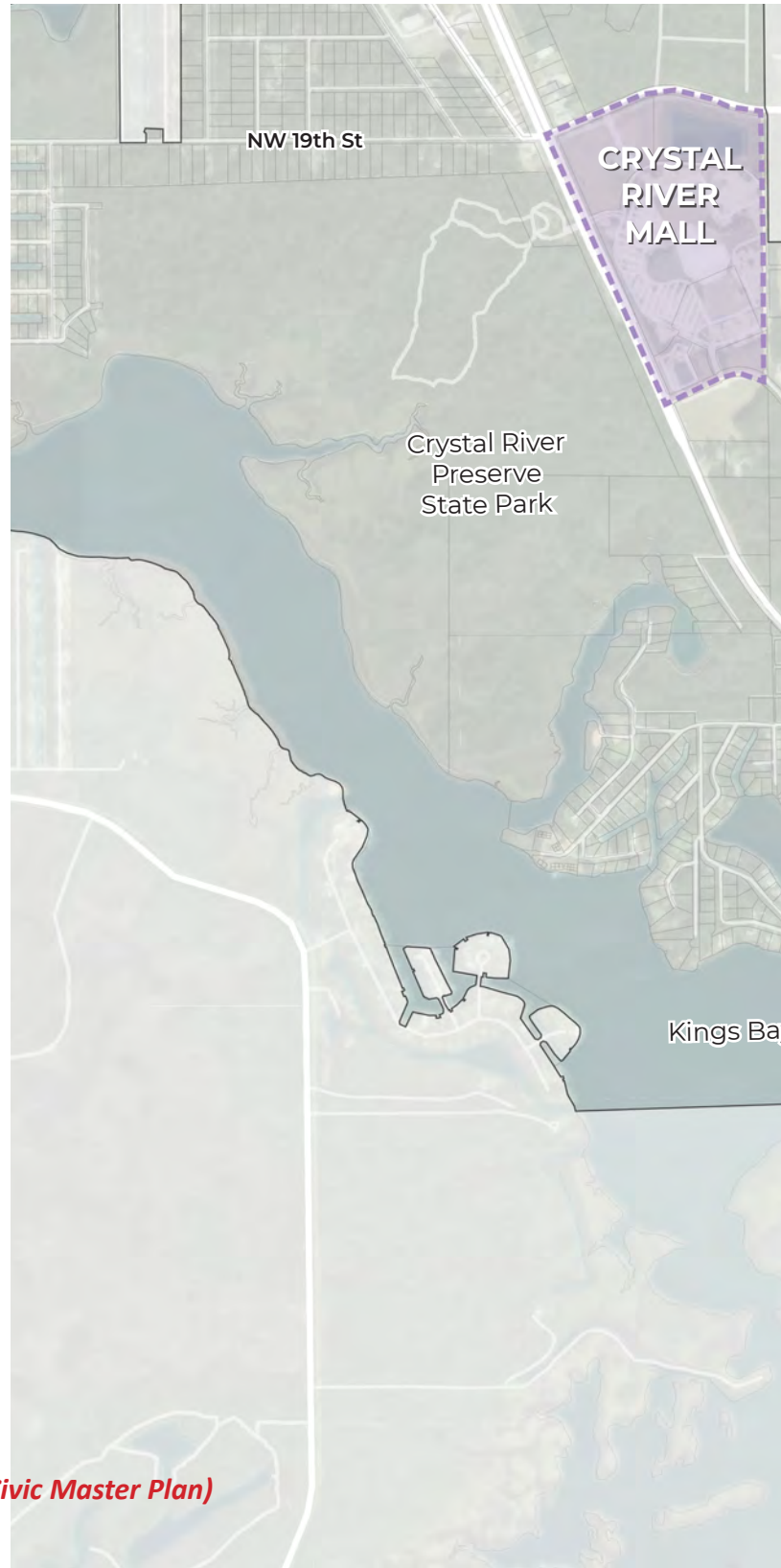
This area, which is characterized by residential neighborhoods, Crystal River Elementary School, and two well-used parks is centered on the intersection of Highway 44 (an intense commercial thoroughfare) and NE 8<sup>th</sup> Avenue (a neighborhood street), and extends for approximately ⅓ of a mile in each directions. Highway 44 bisects the neighborhood’s otherwise traditional grid of streets, dividing the community in two and creating a rather significant barrier for pedestrians.

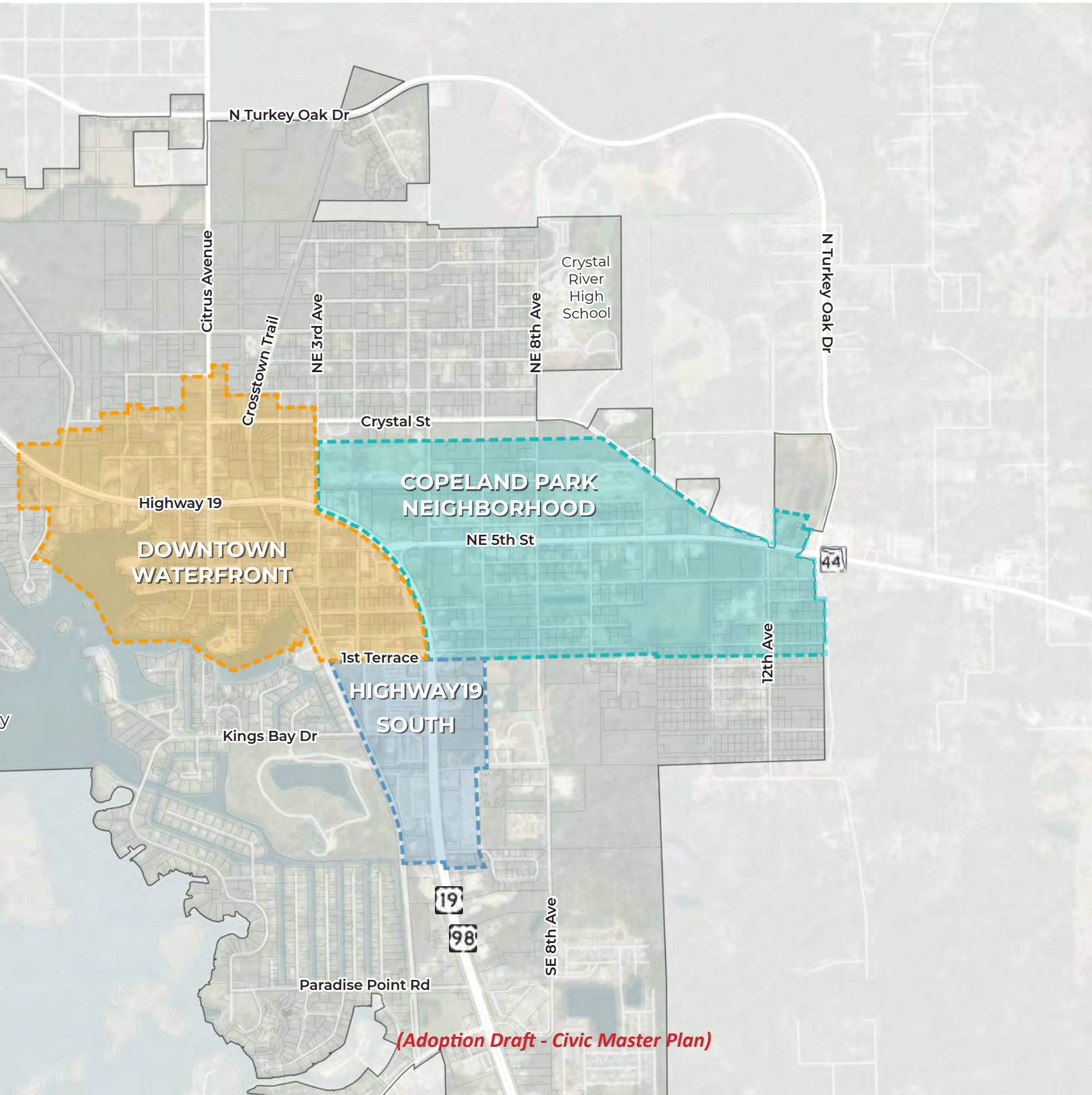
### CRYSTAL RIVER MALL

Following national trends, the Crystal River Mall has seen a decline in retail demand and has begun a transformation to expand mall uses beyond retail and into experiences that cannot be had online, including many independent stores, a growing variety of entertainment options, and small offices. The Crystal River Mall is in a good location and has a large area of land, including surface parking lots and vacant out parcels. This location presents an opportunity to re-use previously developed land for new, more productive uses without having to expand into the city’s natural lands.

### HIGHWAY 19 SOUTH

A number of areas along Highway 19 are characterized by first generation, low intensity, auto-oriented, suburban retail centers at or near the end of their lifespan. Retail centers contain infrastructure and, in some cases, front existing neighborhoods, making them ideal for new “tax-positive”, multi-modal, mixed-use infill development.





*(Adoption Draft - Civic Master Plan)*



# SOCIO-ECONOMIC SNAPSHOT

*This section examines the demographics of Crystal River. The information will help to form an understanding of Crystal River in terms of population, income, employment, or other data trends.*

*The following summary statistics show data from the US Census Bureau's 2015-2019 American Community Survey 5-Year Estimates, unless otherwise specified.*

## AVERAGE HOUSEHOLD SIZE



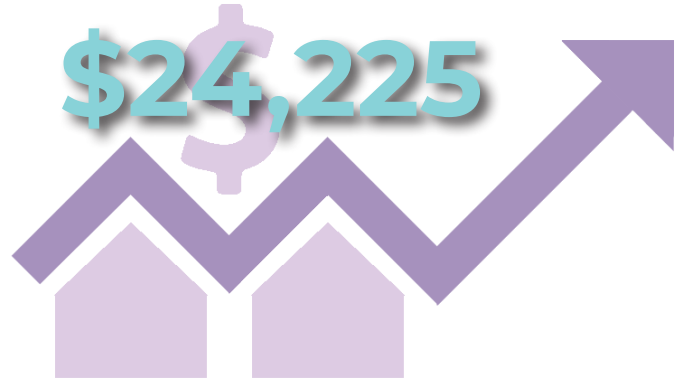
## HOUSEHOLDS

1,465



## MEDIAN HOUSEHOLD INCOME

\$24,225



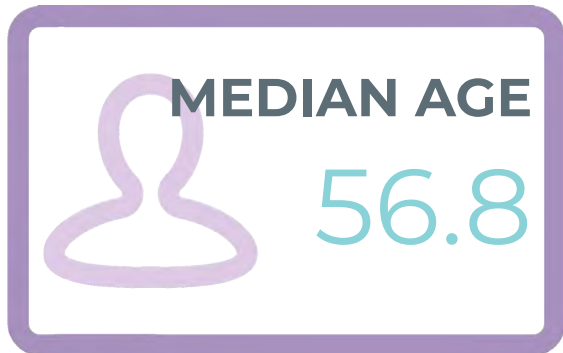
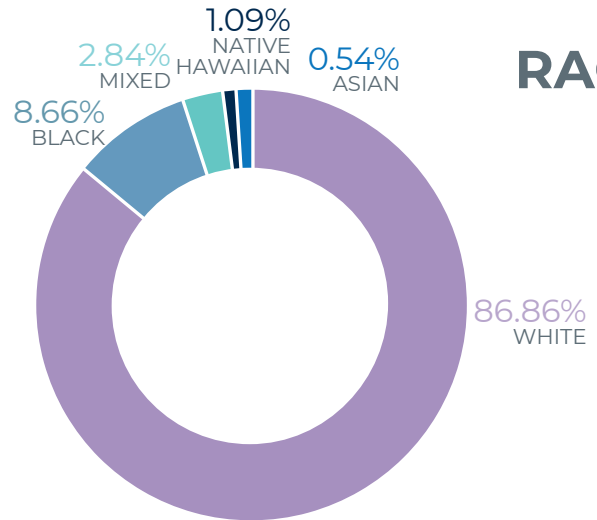
## POPULATION



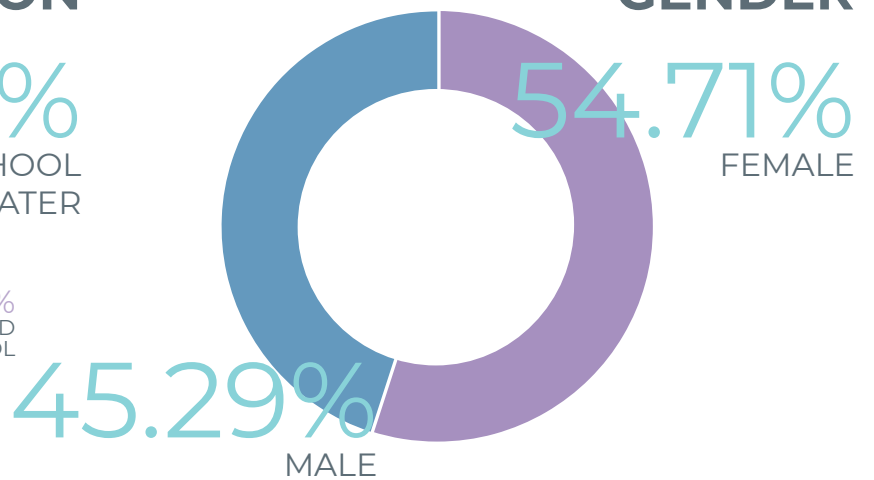
**28.4%**  
Poverty Rate

**17.3 min**  
Mean Travel Time to Work

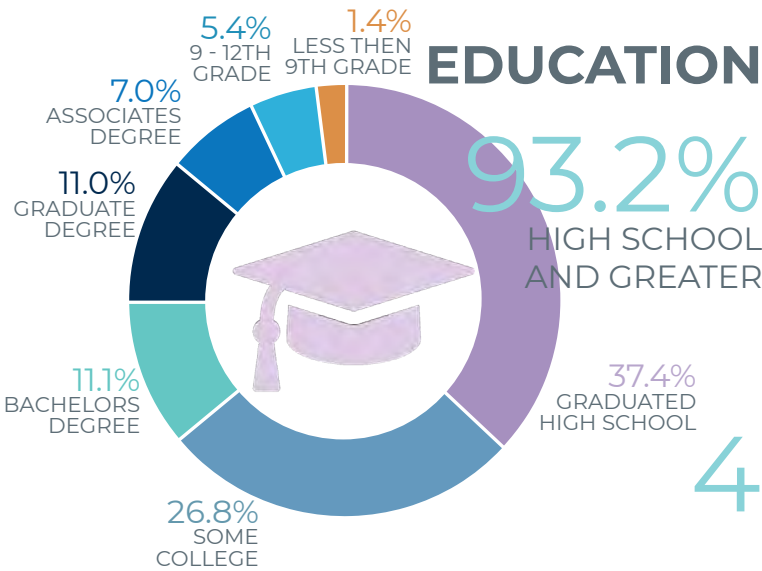
# RACE



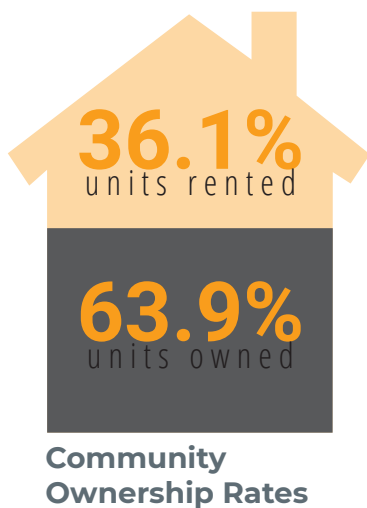
# GENDER



# EDUCATION



# HOUSING



**2,200**  
Total Housing Units



**\$691**  
Median Rental Cost



**\$114,000**  
Median Housing Value



# FOCUS AREAS SNAPSHOTS

## DOWNTOWN AND THE WATERFRONT

Downtown Crystal River has a small-town, walkable community character. Citrus Avenue is the community’s main street where historic buildings are home to local shops, restaurants, and bars. Traces of “old Florida” architecture can still be seen in the remaining traditional structures.

As the city expanded in the 1980s, retail growth moved out of the downtown and into shopping centers along US 19. The downtown declined as residential and commercial activities shifted outwards. In response, the Crystal River Community Redevelopment Agency (CRA) was established. The CRA has implemented funding mechanisms and created strategies and programs to successfully breathe new life into the downtown, particularly along Citrus Avenue. There are also special development standards and a form based code for the CRA. The downtown focus area shares the same boundary as the CRA, as shown on the following page.

The Town Square at the intersection of Highway 19 and Citrus Avenue is one of the most recently completed projects. The Town Square, which opened in July 2020, is built on land that had been vacant for more than 50 years. The park now serves as a central gathering space for events and is becoming a public centerpiece with new amenities, including “an interactive splash pad, open air gathering spot for special activities, the recently restored “pump house” building, and plans for a future children’s playground. All of these spaces have been built or are currently under construction as part of the next phase of Town Square.

Perhaps downtown’s greatest amenity is the waterfront along Kings Bay. Fed by 70 natural springs, Crystal River and Kings Bay has consistent warm water, making them a destination for manatees in winter. Thousands of visitors from around the world are drawn to Crystal River each year to experience the springs and the manatees. Downtown’s waterfront parks, including Hunter Springs Park and King’s Bay Park, provide public access to the waterways and are heavily used for swimming and kayaking. Several waterfront restaurants and bars provide a “boat up” experience with views across Kings Bay from outdoor decks.



Citrus Avenue



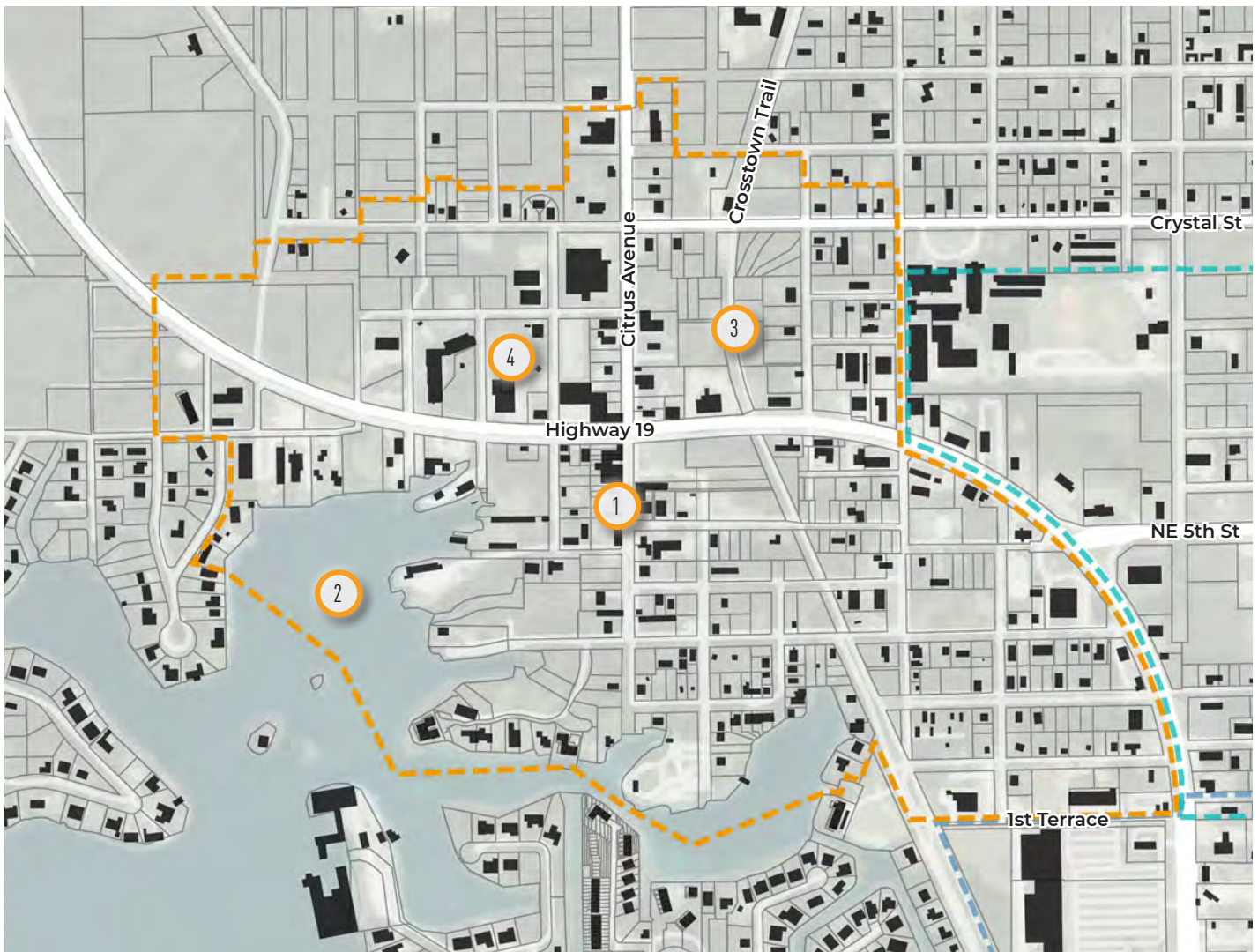
Citrus Avenue and new Town Square in Downtown Crystal River



Existing Kings Bay Riverwalk

## Highlights

- 1 Citrus Avenue**  
Citrus Avenue is Crystal River's main street and center of the downtown. Buildings are street-oriented with access from the sidewalk and parking provided on street, behind, or alongside the structure to create a walkable environment.
- 2 Kings Bay**  
The centerpiece of downtown is Kings Bay and the waterfront. The expanding Riverwalk will continue to increase public access to the water. Several vacant lots on the waterfront are key opportunity sites.
- 3 Crosstown Trail**  
The Crosstown Trail is a primary shared-use path running north-south through Crystal River following an old railroad right-of-way.
- 4 City Hall**  
Crystal River's City Hall is located on Highway 19 one block west of Citrus Avenue. The building occupies a large lot with several parks nearby and offers an opportunity for a more prominent and resilient complex.







Crystal River waterfront

However, public access to the bay is still limited and there are vacant sites in prime locations along the waterfront. The Kings Bay Riverwalk is significantly improving access to the water and creating additional opportunities for residents, visitors, and businesses to experience the waterfront. Phase one of the riverwalk has been completed with 3,800 feet of trails and boardwalks. The next phase will provide increased connections to waterfront destinations including local businesses and parks along the water.

## **THE COMMUNITY REDEVELOPMENT AGENCY (CRA)**

The Community Redevelopment Agency was created in 1988 to enhance the economic development of downtown by improving blighted areas. The CRA encompasses approximately 606 acres of land which includes much of the downtown area and adjacent waterfront. The Downtown Waterfront boundary is congruent to the CRA boundary. The agency has made numerous improvements to the streetscape along Citrus Avenue and NW 3<sup>rd</sup> street. The NW 3<sup>rd</sup> street Pier and Kings Bay Park were also constructed by the agency. The current Comprehensive Plan encourages a diversity of uses within the CRA area. Mixed use development and residential uses can lead to a more sustainable, lively downtown.

## NEIGHBORHOOD CENTERS

A number of areas along Highway 19 are characterized by suburban retail centers, many of which have high vacancy rates and are reaching the end of their design lifespan. Unlike the downtown and Copeland Park Neighborhood focus areas, these areas consist of large parcels of commercial land with just a single or few owners, are predominantly paved, have large buildings, and do not include any homes or public spaces.

These sites provide an opportunity for redevelopment into a wider range of uses that better connects with and supports surrounding neighborhoods. Neighborhood centers are places with a mix of buildings, uses, housing, and public spaces that serve the immediate neighborhood and the city as a whole. With the need for housing increasing and demand for retail space decreasing, transforming these sites into neighborhood centers allows for productive use of the land and the previous investments in infrastructure. Incorporating a mix of buildings and uses provides greater flexibility and economic resiliency to adapt to changing markets over time. There is also an opportunity to add new parks and public spaces and to connect to the Crosstown Trail. As the city's population grows, redeveloping in these areas can help limit development of natural land further from downtown.

### BENEFITS OF NEIGHBORHOOD CENTERS

With the right standards in place, redevelopment of these sites into neighborhood centers can:

- Make efficient use of existing infrastructure and investments.
- Expand upon the walkable downtown.
- Reduce development pressure on natural lands and undeveloped areas.
- Increase the amount of green space and pervious surfaces.
- Connect to the Crosstown Trail.
- Add to the city's housing stock.
- Continue the productive use of land in Crystal River.





## HIGHWAY 19 SOUTH OF DOWNTOWN

Highway 19 is the primary north-south corridor in Crystal River. The area along Highway 19 south of downtown is characterized by low intensity, auto-oriented, suburban retail centers with free standing buildings on large surface parking lots. These buildings are primarily occupied by discount retail outlets, local restaurants, and service industries with anchor tenants including a hardware store, Big Lots, and a marine supply store providing needed services and retail for the community.

However, some of the larger shopping centers have been losing tenants or are completely vacant. These sites are located close to downtown Crystal River and are connected by the Crosstown Trail. They are also within walking distance to Crystal River’s springs and waterfront. These sites represent prime opportunities to accommodate housing in an area that is already urban and where biking and walking to key destinations in the city is possible.



View along Highway 19 south of downtown

### *Opportunity Sites*

- 1 Kings Bay Plaza
- 2 Crystal Center
- 3 Crystal Square



Highway 19 south of downtown - existing development pattern

## CRYSTAL RIVER MALL

Crystal River Mall is an enclosed shopping mall located approximately one mile north of downtown at the intersection with North Turkey Oak Drive and across from Crystal River Preserve State Park. The mall initially opened in 1990 and is the largest enclosed shopping destination in Citrus County. The mall has ample parking that is occasionally used as a remote parking location for large Crystal River Events. For the most part, the mall's out parcels remain undeveloped or are now vacant.

Crystal River Mall has more than 30 businesses including many unique local ones and a growing number of entertainment options. However, like regional malls across the country, it is suffering the loss of department store anchors and apparel tenants. Today the mall is nearly 50% vacant.

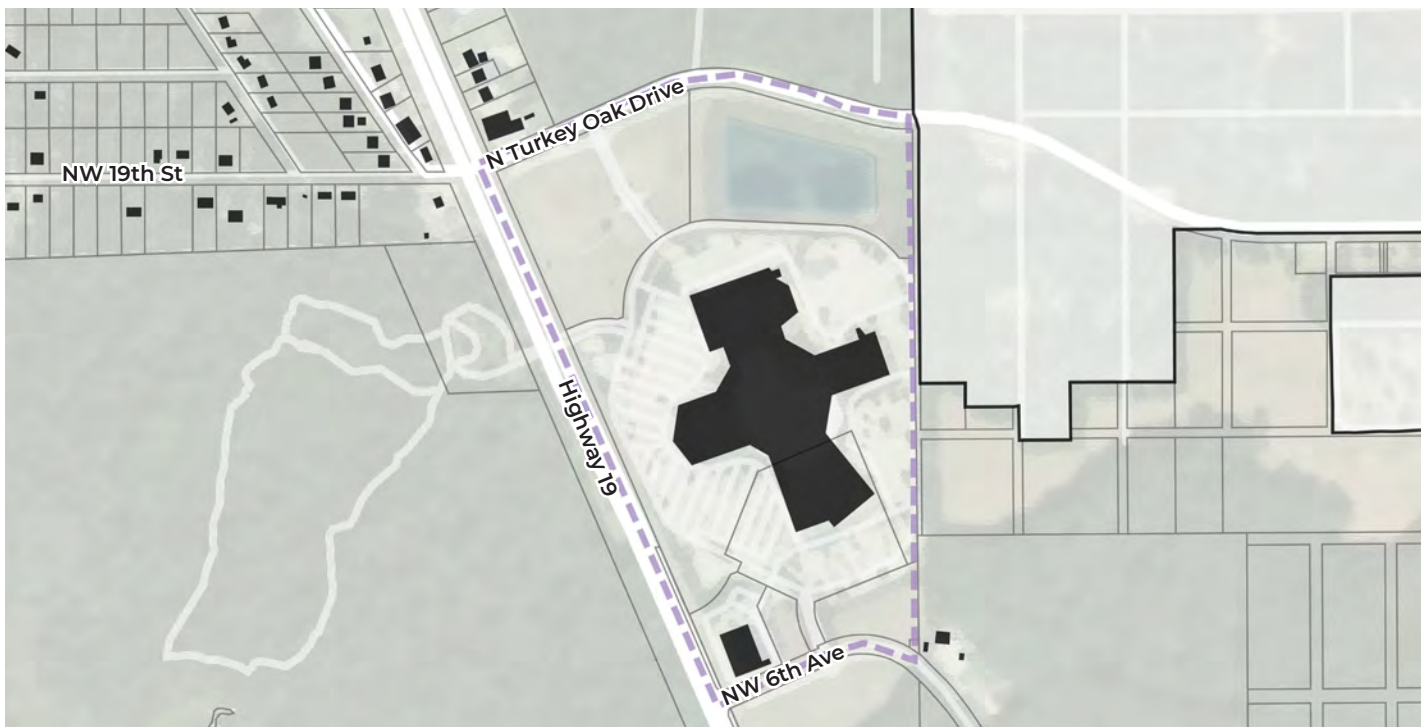
Yet the mall has had success at attracting new uses and there is tremendous opportunity to reimagine the mall site, its parking, and out parcels.



Crystal River Mall is home to many businesses, including local shops, offices, and entertainment destinations.



The Crystal River Mall has a 50% vacancy rate, following the trend for regional malls across the country.



Crystal River Mall existing development patterns



## COPELAND PARK NEIGHBORHOOD

The Copeland Park neighborhood is a residential neighborhood along a linear commercial corridor and includes three schools, and two well-used parks. Highway 44 bisects the neighborhood’s otherwise traditional grid of streets, dividing the community in two and creating a significant barrier between the two sides.

According to 2016 data from the American Community Survey, 14% of the surrounding households have no cars, more than double the 6.09% Citrus County average. The median household income is \$18,772 north of Highway 44 and \$27,803 south of Highway 44. In both cases, the median household income is lower than the Citrus County average of \$37,297. The poverty level for the United States according to US Poverty Federal Guidelines is \$25,750. There is a need for both affordable housing and additional means of transportation within the area.

### Highway 44 Existing Conditions

Highway 44 (Gulf to Lake Highway) from US-19 / US-98 to East of NE 10<sup>th</sup> Avenue is an east/west 5-lane undivided urban principal arterial roadway with a posted speed of 45 miles per hour (mph). Based on 2017 FDOT data, the study corridor recorded 31,500 AADT along Highway 44. The FDOT context classification is currently C3C – Suburban Commercial. There is a two-way-left-turn lane along this segment of the road. Highway 44 serves three schools to the north including Crystal River Primary School, Crystal River Middle School, and Crystal River High School. There is a two-block school zone between NE 7<sup>th</sup> Avenue and NE 9<sup>th</sup> Avenue, serving Crystal River Primary School. The posted speed limit for the school zone is 20 MPH.

The land use is commercial. Currently, the City’s High Intensity Commercial (CH) zoning district does not allow for residential uses. The City hopes to change this, but in the meantime the resulting businesses are a mix of both national chains and local stores; including CVS, WaWa, Big Dan’s Car Wash, RaceTrac, Coney Island Hot Dogs, AutoZone, State Farm Insurance, Bryant’s Barber Shop, Ace Hardware, and many more.

The corridor has four 12-foot travel lanes, a 4-foot paved shoulder that is marked as a bike lane, a 12-foot center two-way-left-turn lane, and a signalized intersection at US-19 / US-98 / Suncoast Boulevard . Although Highway 44 has sidewalks on both sides, the intersecting streets do not all have sidewalks.

Four-foot bike lanes are present on each side of Highway 44 east of NE 6<sup>th</sup> Avenue. An additional four-foot bike lane is located on the north side of US-19/ US-98 as well for connectivity. The current FDOT standard for newly constructed bike lanes is a seven-foot buffered bike lane. For resurfacing projects where it is not practical to move the existing curb, the width of the bicycle lane depends on the width of the available roadway pavement.

There is no fixed transit route along Highway 44 that could connect residents to other areas. A reservation-based service through Citrus County Transit exists during weekdays. Anyone can use this service, but reservations must be made two business days in advance. Those users who qualify for the Transportation Disadvantaged Program will receive a discounted fare.



Highway 44 is a commercial highway corridor dividing the Copeland Park neighborhood in half. Looking east on Highway 44 towards NE 10<sup>th</sup> Ave

## Highlights

- 1 Highway 44**  
 This commercial highway corridor is an important route through Crystal River, but divides the neighborhood in half and is primarily the location of suburban-style buildings.
- 2 Crystal River Middle School and Primary School**  
 Crystal River’s primary and middle schools are both located in this neighborhood on the north side of Highway 44.
- 3 Eastern Gateway**  
 Highway 44 at North Turkey Oak Drive is the eastern gateway to Crystal River, however, it is not the welcoming experience residents desire it to be.
- 4 Copeland Community Park**  
 One of Crystal River’s inland parks is located in this neighborhood south of Highway 44. At the time of this plan, the city is working with the community to upgrade the park.



A grid of residential streets extends north and south of Highway 44 creating blocks with a mix of homes, businesses, parks, and vacant lots.



Copeland Community Park





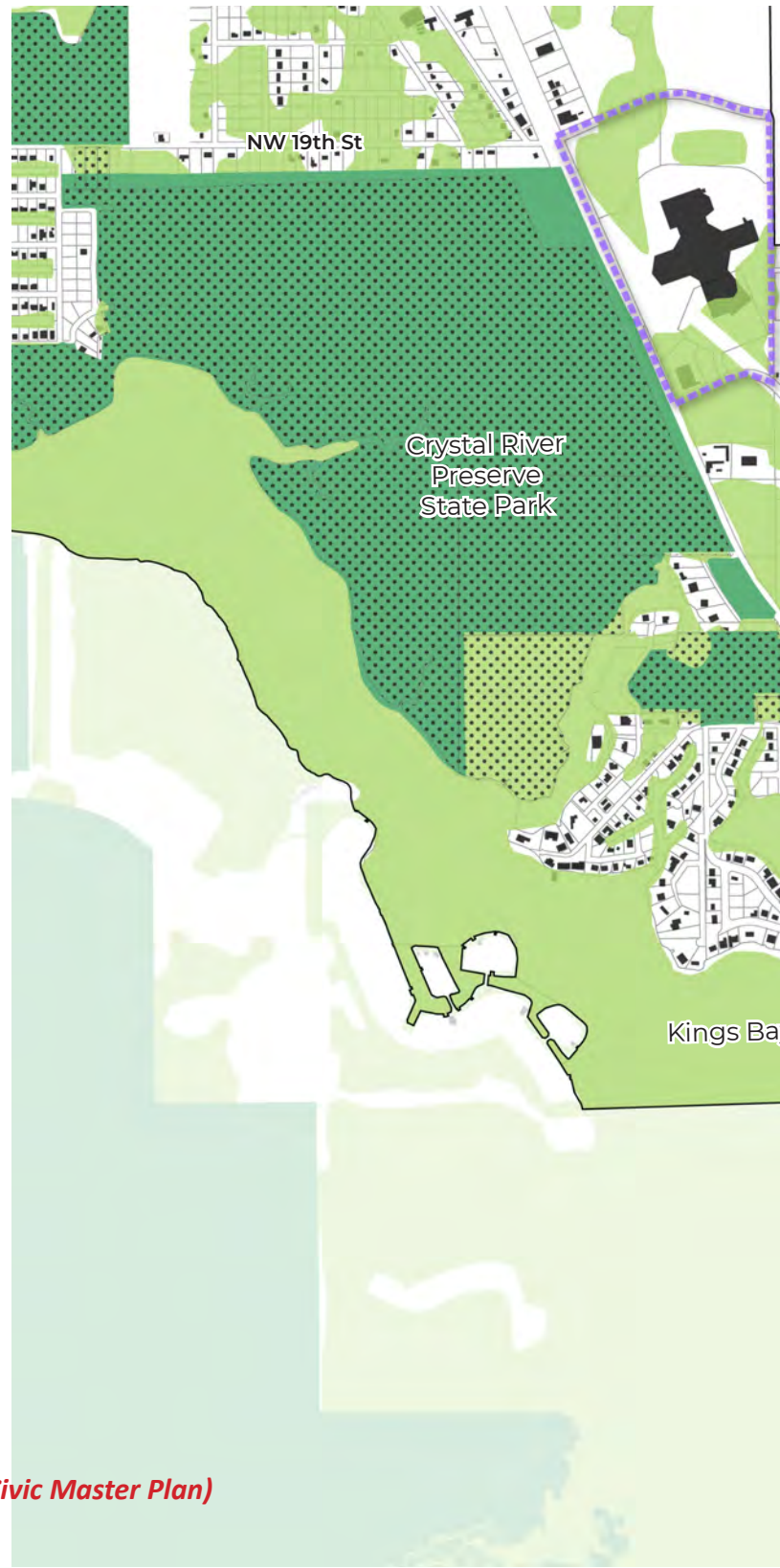
# FOCUS AREA ANALYSIS

## NATURAL AND CULTURAL RESOURCES

Crystal River has an abundance of wildlife, pristine forests, cypress swamps, and crystal-clear spring-fed rivers. Fortunately, many of the natural resources still remain intact. The abundant open spaces have made Crystal River a desirable destination to enjoy a day in the woods or on the water.

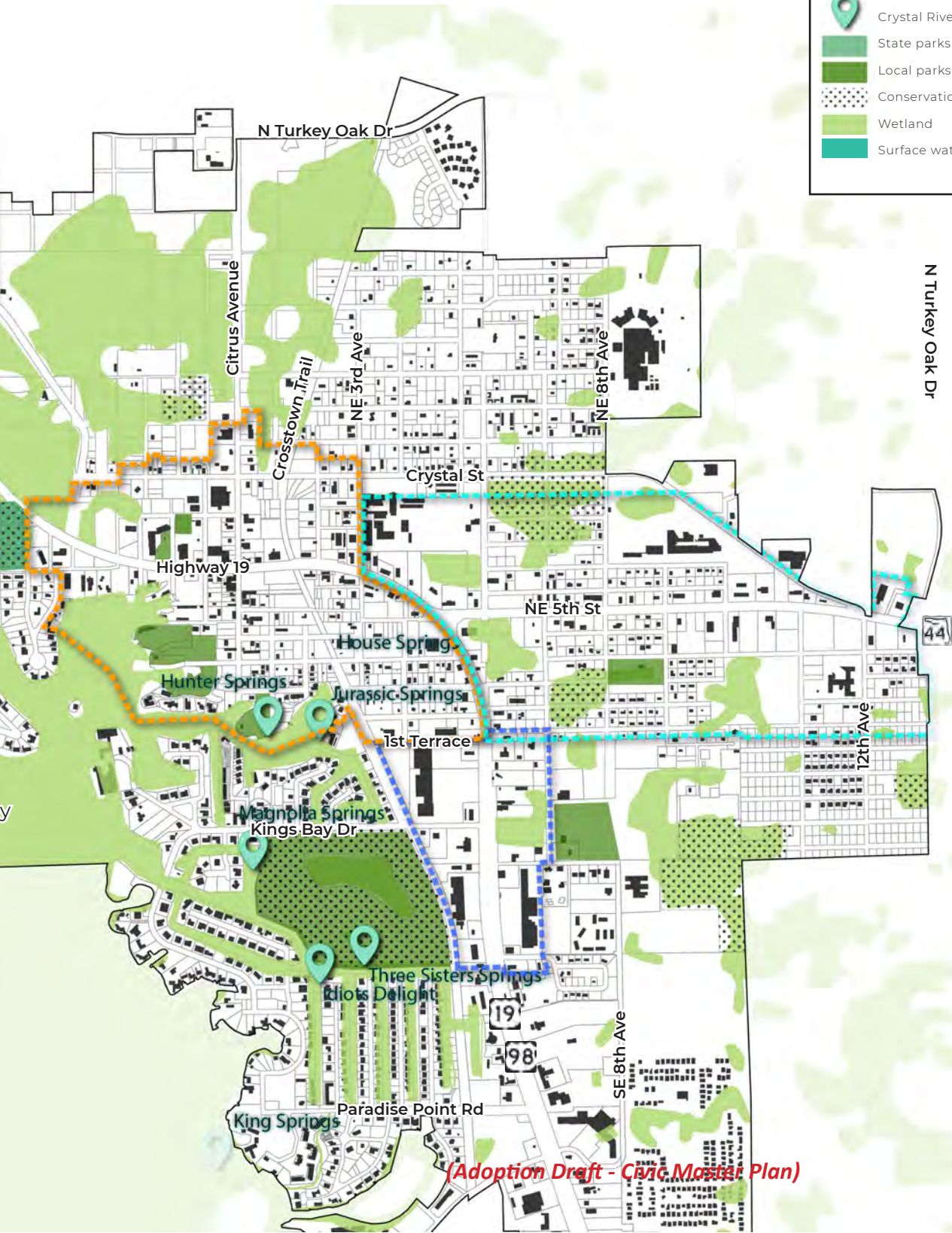
Crystal River is famous for being home to West Indian Manatees. Crystal River National Wildlife Refuge, Crystal River State Archaeological Park, and Three Sisters Springs all provide wonderful opportunities to commune with the unique natural landscape, history, and culture.

The Waterfronts Florida Partnership is a state initiated program that aims to maintain and enhance the natural environment for both ecotourism and fishing related businesses, as both industries are dependent upon a healthy climate and habitat. The city of Crystal River qualified for and received this designation in 2003. Development and land use around the waterfront should not only provide for these two uses, but also protect the integrity of the environment.



**LEGEND**

- Downtown Waterfront
- Crystal River Mall
- Highway 19
- Highway 44
- Crystal River City Boundary
- Crystal River Springs
- State parks
- Local parks
- Conservation Area
- Wetland
- Surface water



(Adoption Draft - Civic Master Plan)





# FEMA FLOOD ZONES

There are four major FEMA Flood Zone categories in Crystal River, which are described in Table 1. The majority of Crystal River and the project focus areas are situated in the AE flood zone.

The Federal Emergency Management Agency (FEMA) prepares flood maps that identify a community’s risk of flooding. This map includes floodplain boundaries for the 1% annual chance storm (or 100-year floodplain) and 0.2% annual chance storm (or 500-year floodplain), and the base flood elevation (BFE) for areas at risk of the 1% annual chance storm. The BFE is the surface elevation of the 100-year floodplain. For every foot that the finished first floor elevation (FFE) of a building is below the BFE, flood insurance premiums increase. In order to get a mortgage on a building in the 100-year floodplain, flood insurance is a requirement. Over the course of a 30-year mortgage, there is a 26% chance that the property will flood.

The Flood Insurance Rate Maps (FIRMs) were recently updated and adopted for Citrus County in January 2021. In Crystal River, the updated FIRMs caused a dramatic increase in the land classified as being in the AE Flood Zone because the BFEs increased from 8 feet to 11 or 12 feet, depending on the location within the City. Nearly all of the City limits are now located in the AE flood zone. Specific elevations and BFEs for the project focus areas are presented in Table 2.

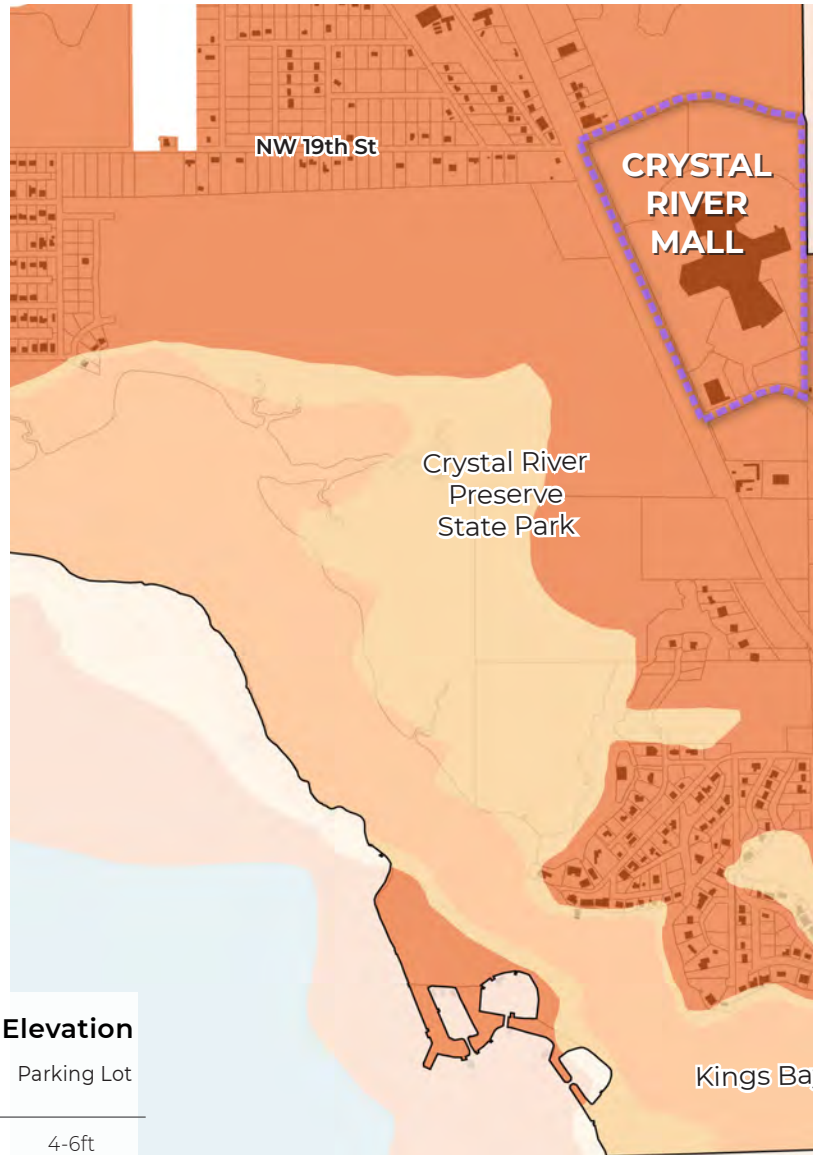


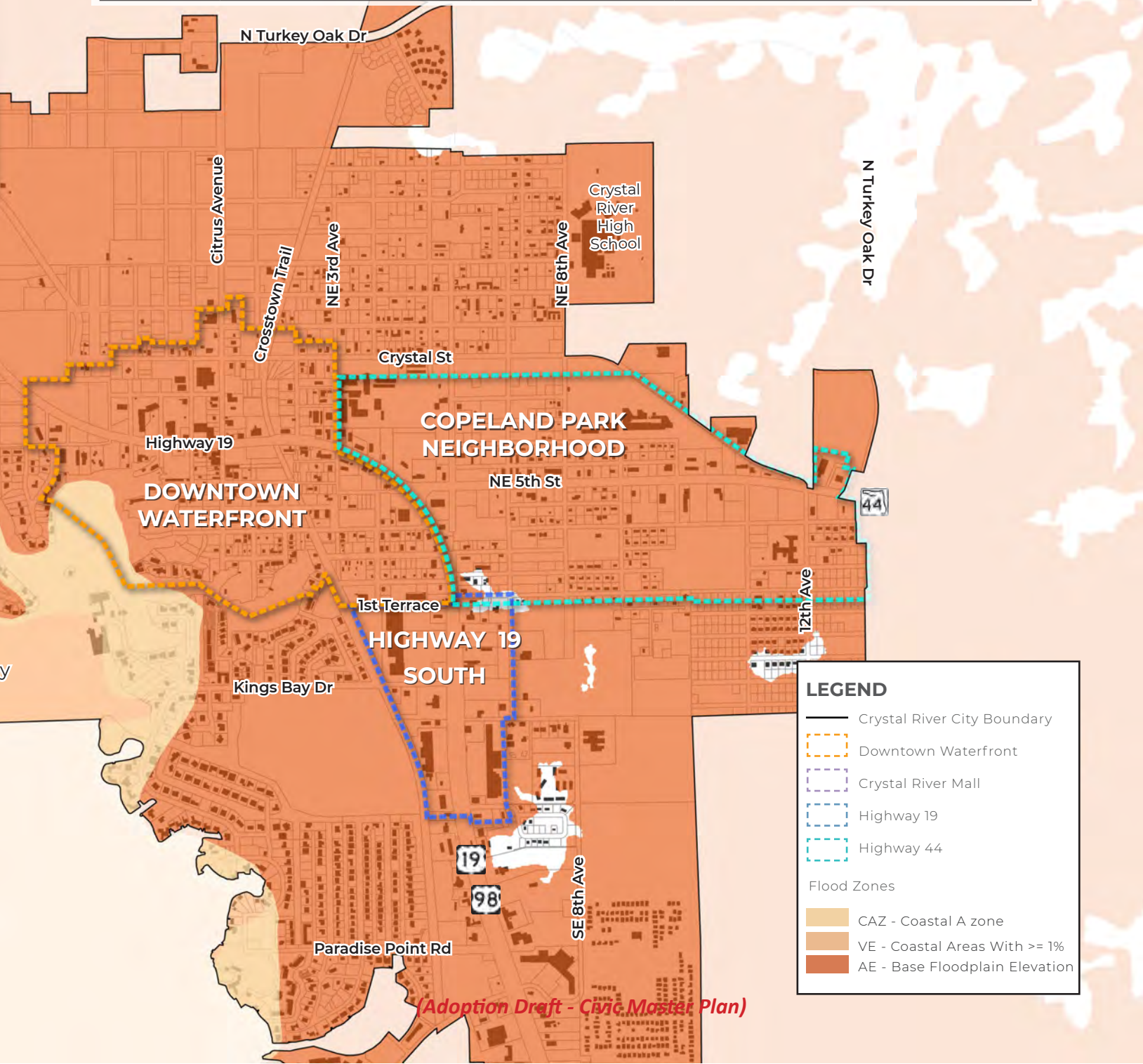
Table 2. Summary of Flood Zone and Elevations for Focus Areas.

Focus Area	Flood Zone <sup>1</sup>	Approximate Elevation	
		Building Footprint	Parking Lot
Kings Bay Plaza	AE-11 & AE-12	6 ft	4-6ft
Crystal Square	AE-12	7 ft	4-6ft
Crystal River Mall	AE-11 & AE-12	8 ft	7ft
CRA Downtown / Waterfront	AE-11 & AE-12	Numerous, varies <sup>2</sup>	
Copeland Park Neighborhood	AE-11	Numerous, varies	

<sup>1</sup> The number following “AE” is the BFE.  
<sup>2</sup> Most of Citrus Avenue is at approximately 4 feet.

Table 1. FEMA Flood Zone Categories and Descriptions \* 'E' indicates that a Base Flood Elevation has been identified.

Flood Zone	Flood Risk	Annual Percentage of Event	Flood Insurance Requirement for Mortgage	Other Notes
V or VE	High	1% (100-yr floodplain)	Yes	Velocity wave action; higher flood insurance than A/AE; specific building requirements below BFE.
A or AE	High	1% (100-yr floodplain)	Yes	Most of Crystal River and project focus areas are situated in this category.
X 0.2 Percent ("Shaded X")	Moderate	0.2% (500-yr floodplain)	No, recommended	
X	Low		No, recommended	



(Adoption Draft - Civic Master Plan)

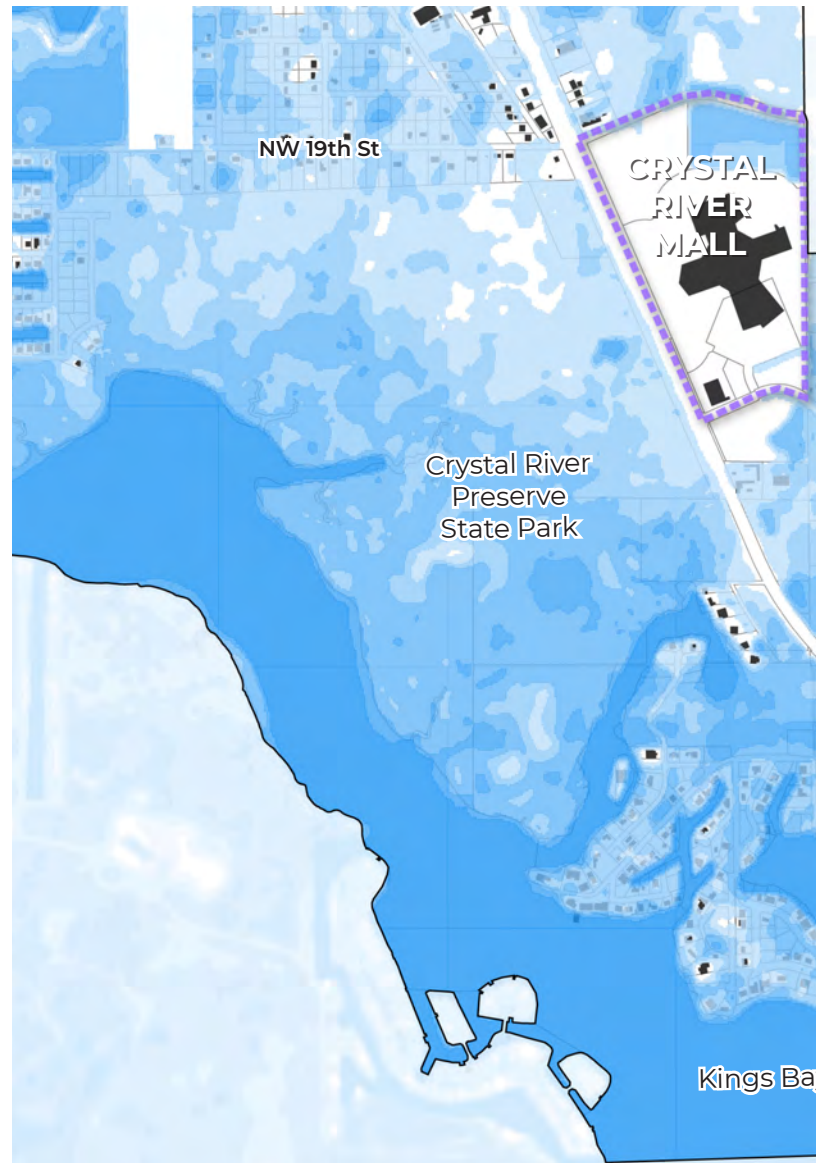


## SEA LEVEL RISE

Climate change has been associated with sea level rise (SLR) and poses potential risks for flooding and structural damages. SLR has been a persistent trend observed globally for over a century. In the past 50 years, relative sea level has risen approximately 6 inches in Cedar Key, Florida, which is the closest long-term gauging station.

Experts refer to SLR as a slow-moving coastal hazard event. A primary concern with rising seas is that it will exacerbate coastal hazards such as increased erosion rates, greater amounts of storm surge, and more frequent flooding from rainfall. As a coastal community, Crystal River has adapted to these hazards; however, it is critical that the changes in these hazards be considered in future design to minimize costly economic, cultural, and ecological damages. Modeling sea-level rise and storm surge dynamics can better inform the placement and protection of critical infrastructure. Currently, there is a lack of detailed data or modeling around how rainwater, or stormwater, flooding will change with rising seas in Crystal River. We know that as seas rise, the ability to drain rainwater is decreasing and will continue to do so in the future, but how much and exactly where has not been quantified. This is an area where additional modeling and research could inform planning and design of future projects.






As this project transitions from conceptual planning toward implementation, decisions on specific sea level rise considerations will be made based on consultation with the City. One tool to understand how these hazards are likely to change with rising seas and the impact on Crystal River is the NOAA Sea-Level Rise Viewer (<https://coast.noaa.gov/slr/>). Due to the low-lying elevations of the City, the areas inundated with water from a future high tide under the 3-foot SLR scenario in the “CRA Downtown / Waterfront” focus area is substantial.

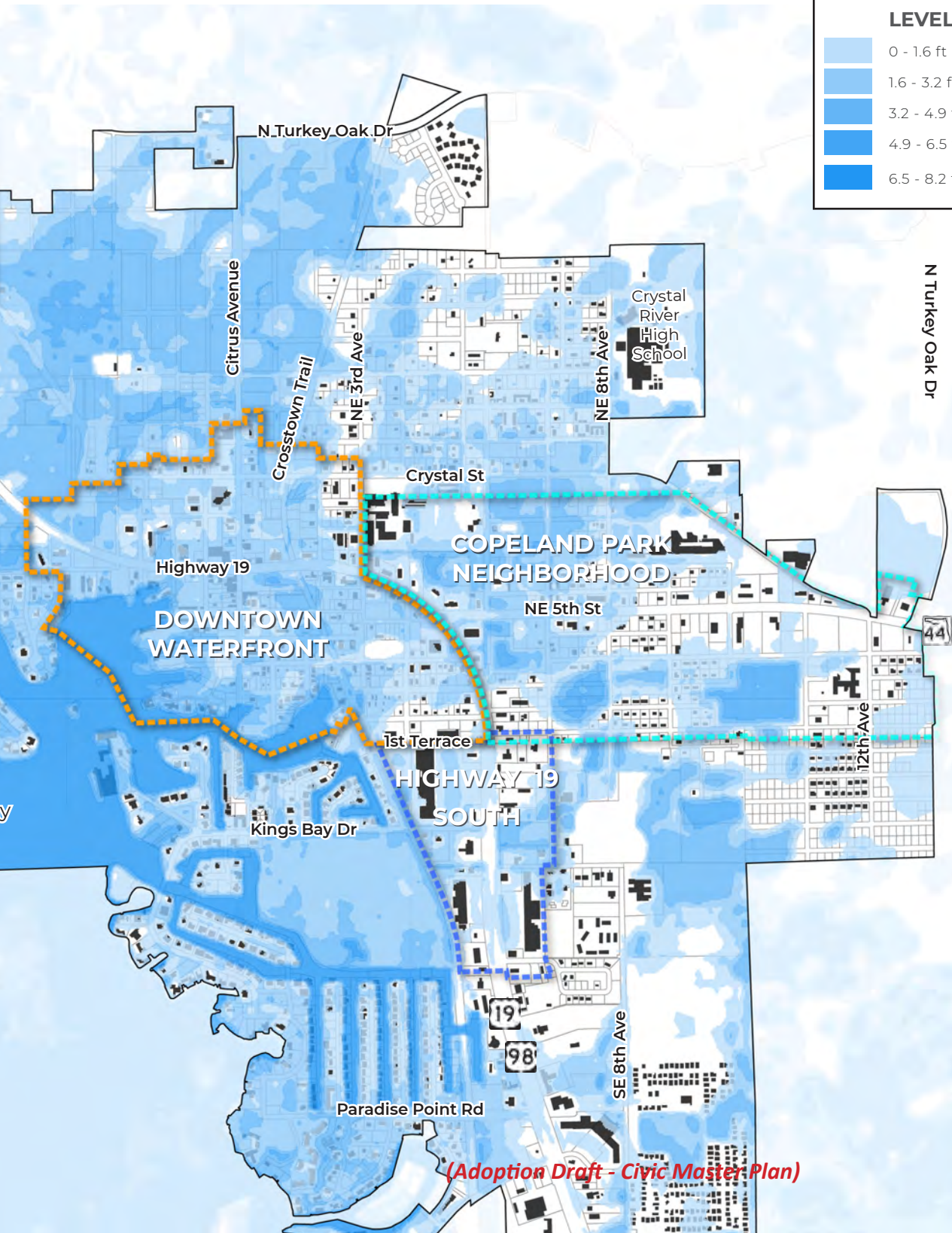


**LEGEND**

— Crystal River City Boundary

**INUNDATION DEPTH DUE TO 3-FT OF SEA LEVEL RISE**

	0 - 1.6 ft
	1.6 - 3.2 ft
	3.2 - 4.9 ft
	4.9 - 6.5 ft
	6.5 - 8.2 ft



*(Adoption Draft - Civic Master Plan)*



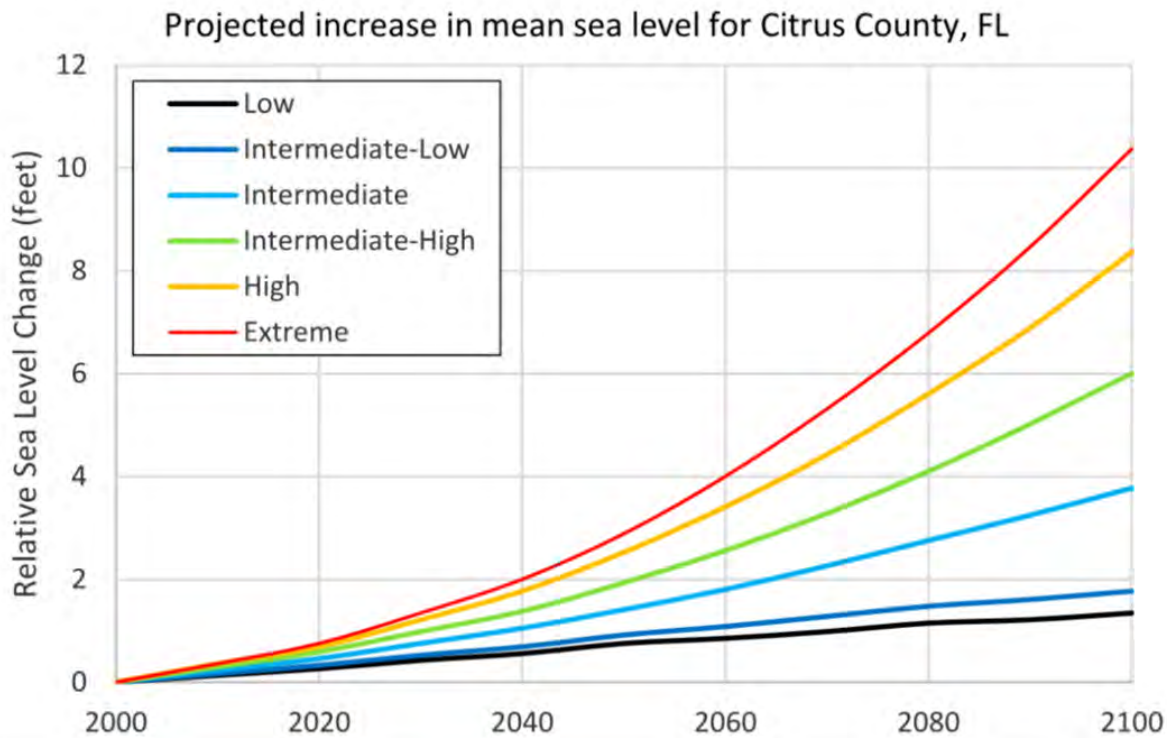
### FUTURE PROJECTIONS

Sea level rise in Citrus County, Florida is expected to be 25% greater than the global average based on the NOAA (2017) report, "Global and Regional Sea Level Rise Scenarios for the United States." The projections and probabilities for six SLR scenarios are presented in Figures 3 and 4, respectively. The SLR scenario probabilities are based on three carbon emission scenarios, which are also referred to as Representative Concentration Pathways (RCPs). The "Low" and "Intermediate-Low" scenarios have a very high probability of occurrence due to these being based strongly on the historic linear trends. Recent data is showing more of an exponential growth, so "Intermediate" or "Intermediate-High" are more common scenarios recommended for long-term planning, with the larger one being targeted more towards critical facilities. Based on the "Intermediate" scenario, relative SLR is expected to be 1.8 feet by 2060 and 3.8 feet by 2100. With no change in carbon emissions, this has a 17% probability of occurrence.

These scenarios were presented at the Stormwater Stakeholder Meeting to get feedback on whether the Crystal River stakeholders felt additional provisions should be in place to account for future sea level rise. Based on seven responses, 71% were in favor, 14% were against it and 14% were not sure. We know seas are rising; however, the amount they will rise is still uncertain. As discussed, it is important that future Crystal River projects and development consider rising seas with the long-term planning of the Civic Master Plan.

Global Sea Level Rise Scenario	RCP2.6 dramatic reduction in carbon emissions	RCP4.5 modest reduction in carbon emissions	RCP8.5 no change in carbon emissions
Low	94%	98%	100%
Intermediate-low	49%	73%	96%
Intermediate	2%	3%	17%
Intermediate-high	0.4%	0.5%	1.3%
High	0.1%	0.1%	0.3%
Extreme	0.05%	0.05%	0.1%

Probability of Each SLR Scenario Under Various Carbon Emission Scenarios.



Relative Sea Level Rise Scenarios for Citrus County, FL  
Data Source: NOAA (2017) Technical Report NOS CO-OPS 083; Site 1006152775

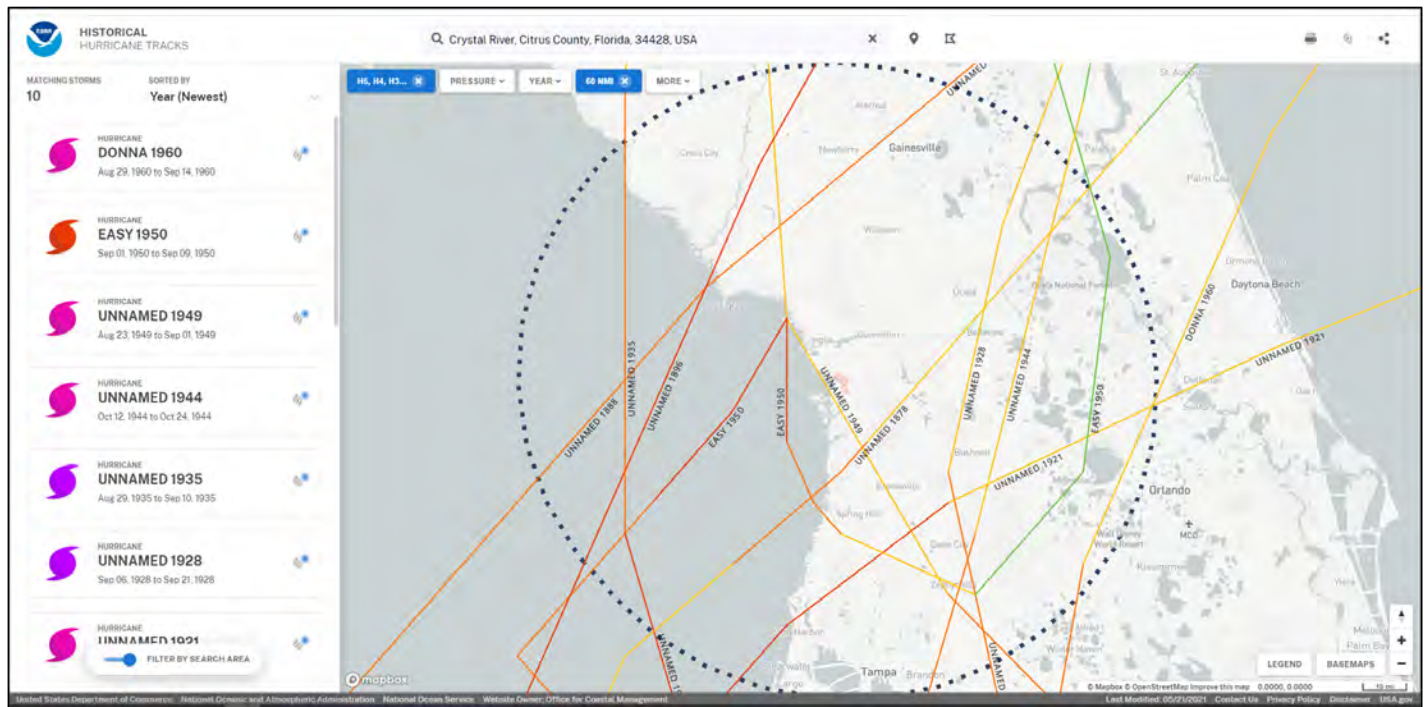
## HISTORIC FLOODING

Based on the NOAA Historic Hurricane Tracking Database, there have only been 10 hurricanes greater than a Category 1 since 1842, where the center of the storm was within 60 nautical miles of Crystal River. All except two were prior to 1950 and before Hurricanes were named. There have been zero Category 4 or 5 storms that met this distance criteria. Hurricane Easy in September 1950 was the most powerful storm with the closest proximity to Crystal River as a Category 3 that tracked 10-miles west of the City.

Crystal River is prone to storm surge from unnamed storm events as well as hurricanes that impact the Gulf Coast. In more recent memory, the flood event that caused the greatest depth of floodwaters was a “No Name Storm” on March 13, 1993. A “High Water Mark Line” sign was erected near City Hall at Highway 19 and NW 2nd Avenue. This land is at an elevation of approximately 3 feet and the height of the line is about 3 feet above the ground, so this storm would have impacted an elevation of approximately 6 feet. With the new FIRMs, this area is currently listed in an AE-12 flood zone.



High Water Mark Line near City Hall from Storm Event on March 13, 1993.

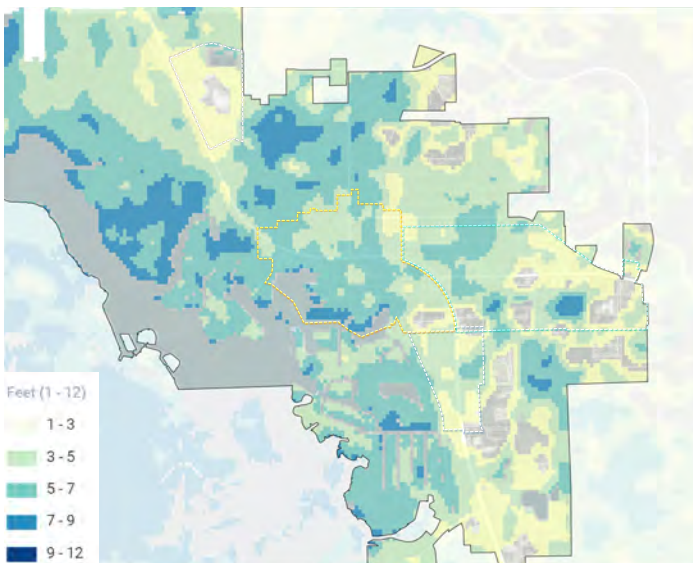
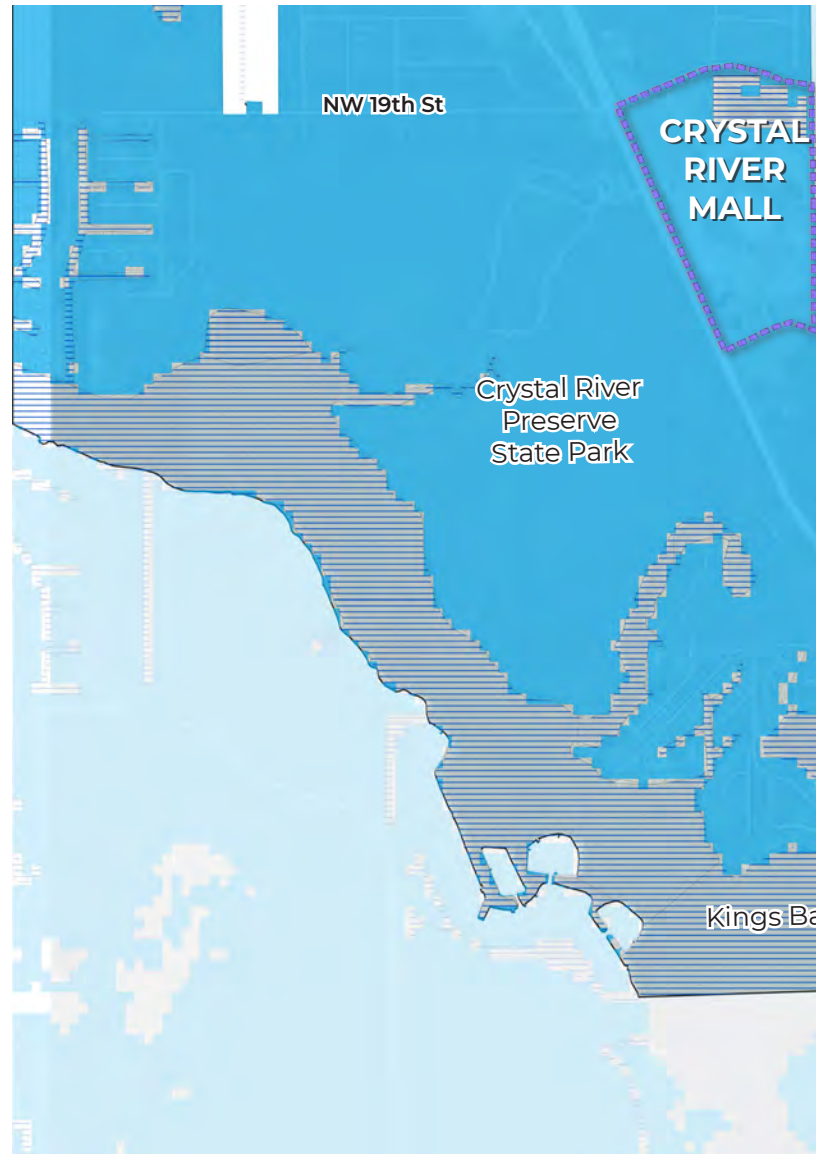


NOAA Historic Hurricane Track (conditions 60 nautical miles from Crystal River, and Category 2+ storms).

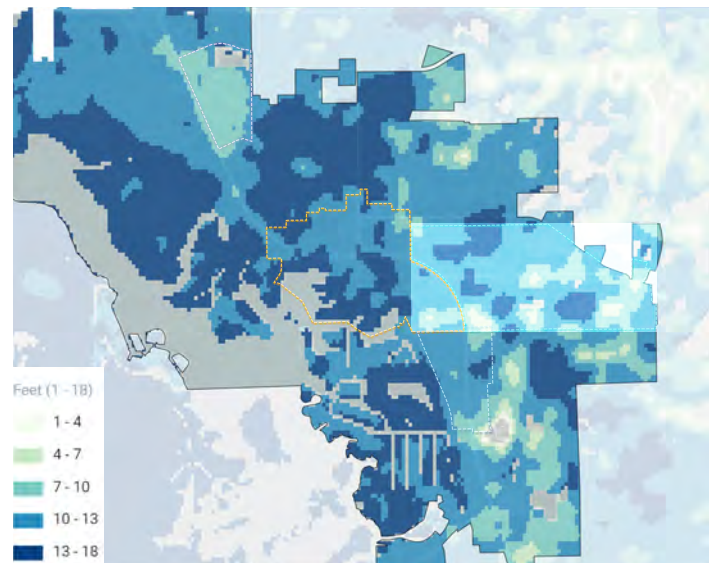


# STORM SURGE

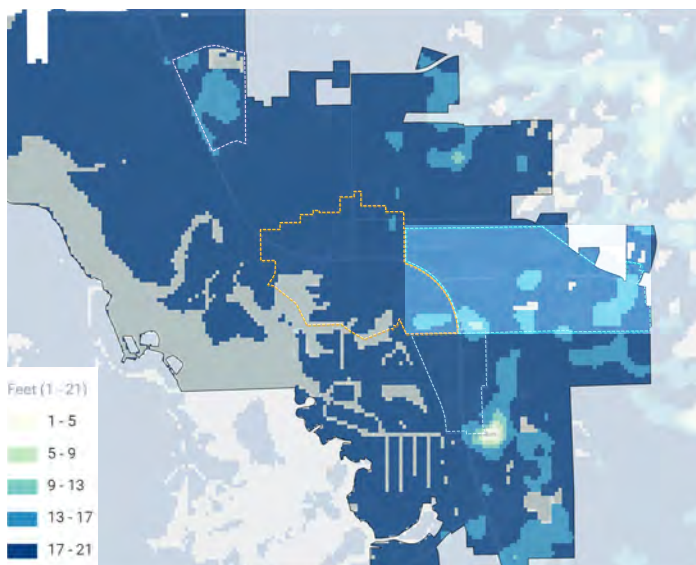
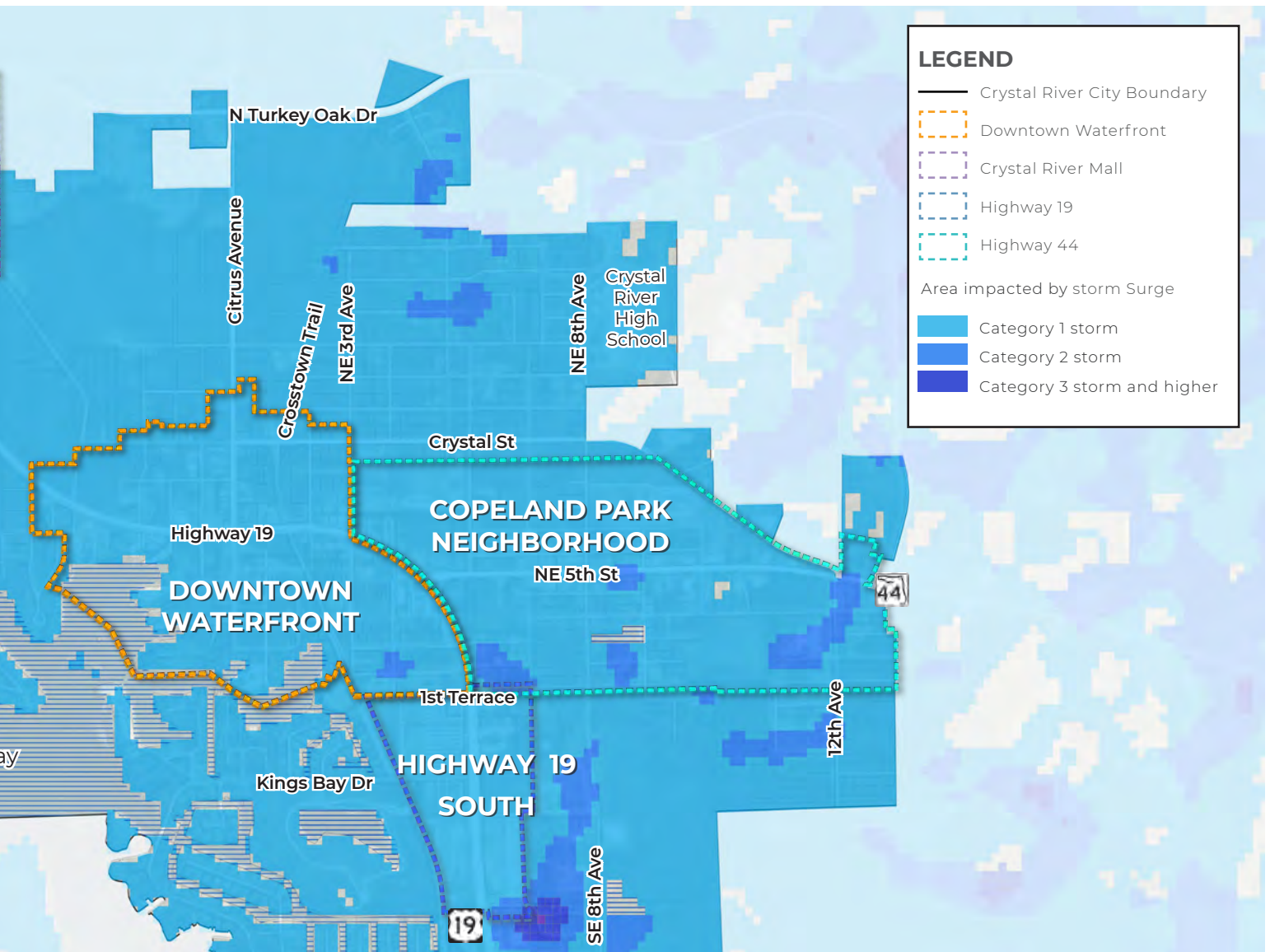
Almost all areas of land within the city of Crystal River will be impacted by higher than 1 feet storm surge even with a storm as weak as Category 1. Downtown waterfront areas are most severely impacted by storm surge. When the city suffers from a storm stronger than Category 3, downtown waterfront area can have a storm surge as high as 21 feet.



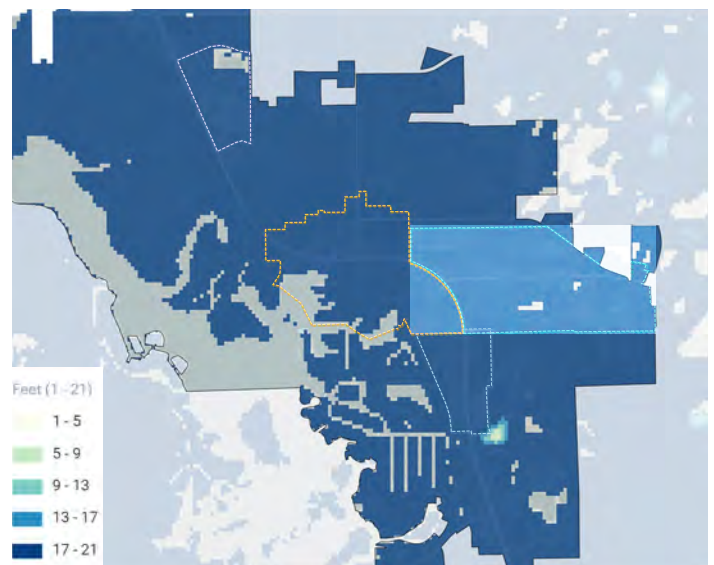
Storm surge height CAT 1



Storm surge height CAT 2



Storm surge height CAT 3



Storm surge height CAT 4 & 5





## WHERE TO GROW - DEVELOPABLE LAND

The city of Crystal River still has a lot of vacant land and potential for new development. However, existing conditions such as flooding and wetlands will limit new development.

The most potential for new development is seen to the east with large lots at the intersection of Highway 44 and Crystal Street, and new residential further south along NE 12<sup>th</sup> Ave. Large surface parking areas also present opportunities for redevelopment.

What is not conveyed by the existing buildings shown on the map is that developments are forced to occupy adjacent lots to manage their stormwater on-site with retention ponds. For instance the Dunkin Donuts at 8<sup>th</sup> Avenue prevents any corner lot development due to the location of its retention pond. The deep lots south of Highway 44 between NE 9<sup>th</sup> Avenue and NE 11<sup>th</sup> Avenue could provide a possible solution with shared stormwater management at the center of the block allowing buildings to remain close to the street.

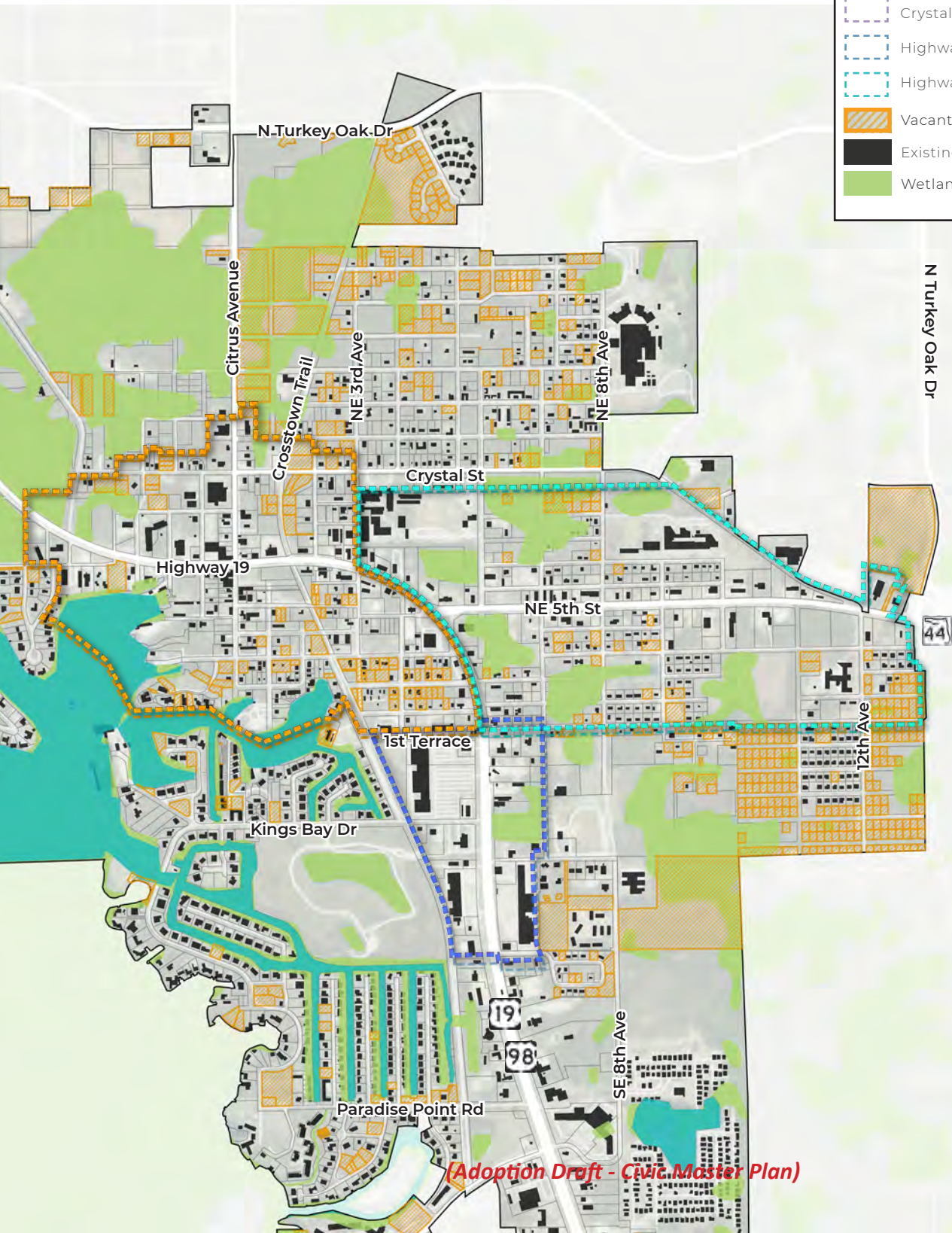
In addition to the area being in a flood zone and prone to severe inundation during large storm events, the area is susceptible to sea level rise. In planning for the long term future of the neighborhood, care must be taken in where we build and how.



**CONSOLIDATED STORM-WATER TREATMENT AT THE SCALE OF THE BLOCK (OR SEVERAL LOTS) IS VITAL TO THE CITY'S FUTURE**

**LEGEND**

- Crystal River City Boundary
- Downtown Waterfront
- Crystal River Mall
- Highway 19
- Highway 44
- Vacant lands
- Existing Buildings
- Wetlands



*(Adoption Draft - Civic Master Plan)*



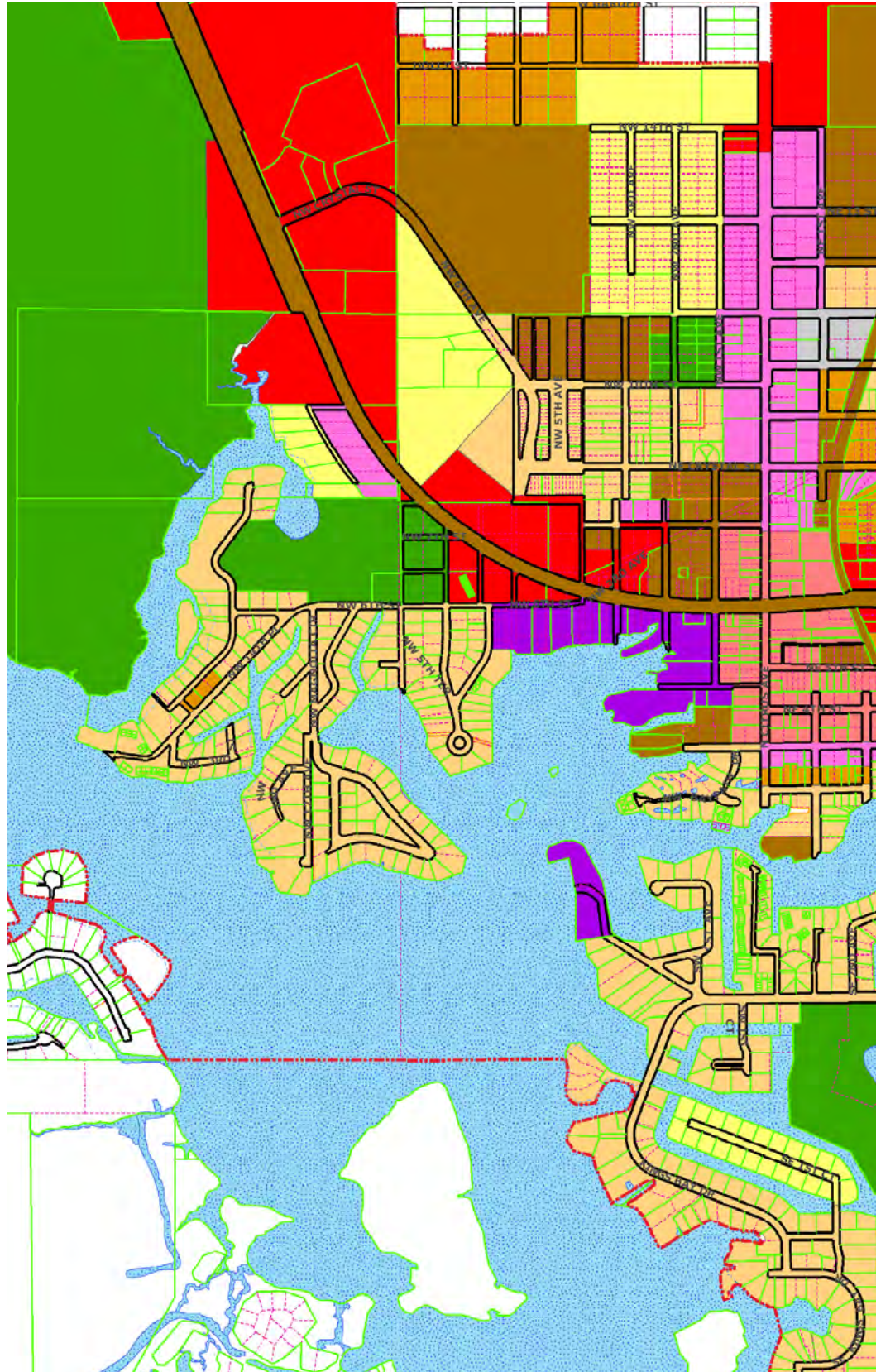
## FUTURE LAND USE

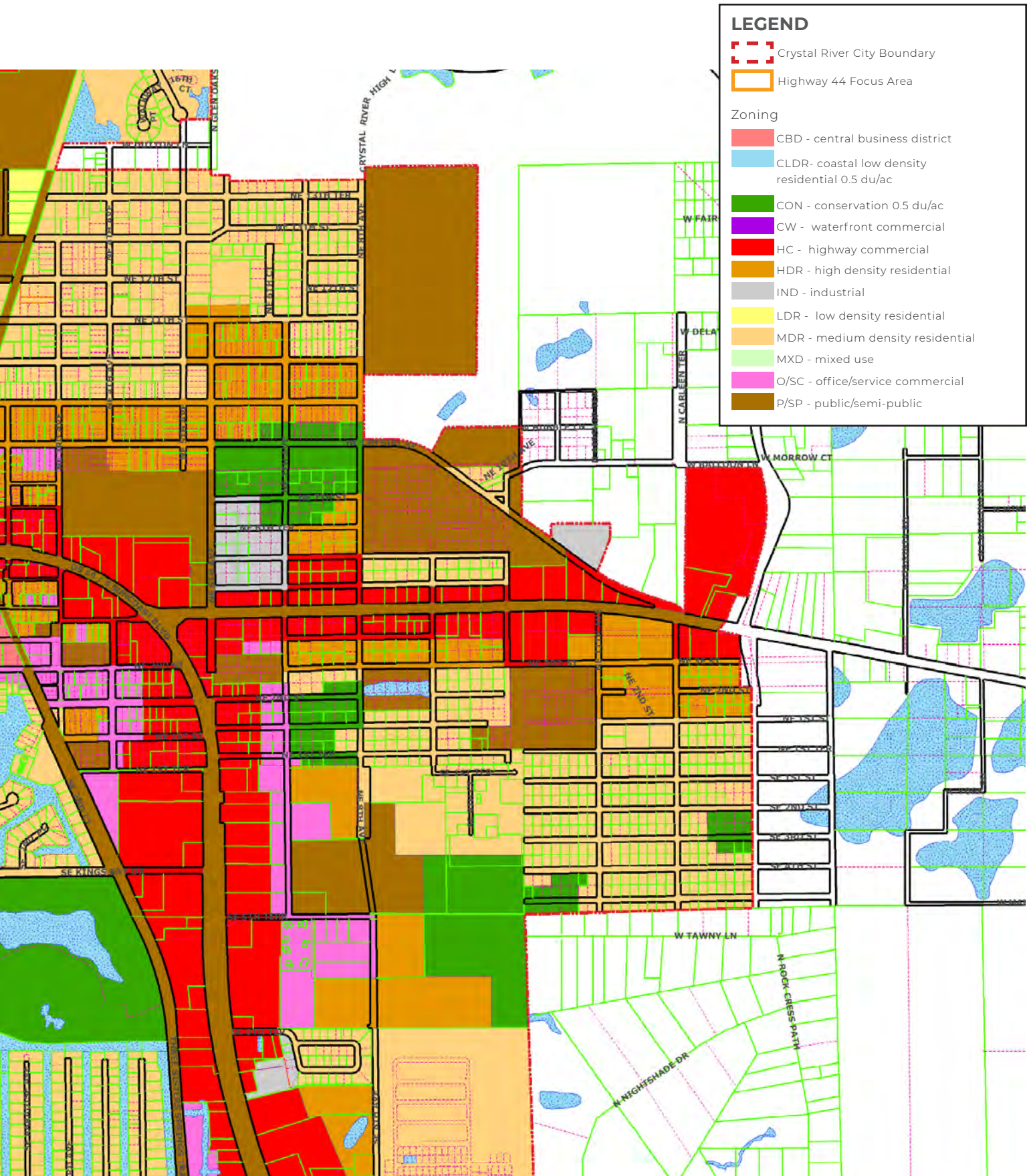
Though limited, the Future Land Use plan does contain some provisions that discourage urban sprawl. One example is the City's Community Redevelopment Area (CRA). The CRA is an overlay on the Future Land Use map. Citrus Avenue forms a spine that runs north / south through the 6 blocks of the historic center of Crystal River. Within the CRA the Avenue bisects the City and is designated as Central Business District (CBD) on the future land use map. North of the CBD area Citrus Avenue bisects an area that is designated Office/service Commercial on the Future Land Use map.

The waterfront area that is adjacent and southwest of the Central Business District is designated as Waterfront Commercial and Public/ Semi-public on the Future Land Use Map. Low Density Residential uses apply to most waterfront areas that are located outside of downtown.

The neighborhoods that line Highway 44 and Highway 19 are characterized by commercial uses along the two thoroughfares with low-density single-family housing extending back from there. One block deep on both sides of the two thoroughfares the Future Land Use designation is Highway Commercial (HC). This drops down to Medium Density Residential and quickly to Low Density Residential.

The zoning that fronts these two thoroughfares is High Intensity Commercial (CH). The CH district is established for large-scale businesses, commercial, light assembly, institutional uses, associated accessory structures, and essential public services.





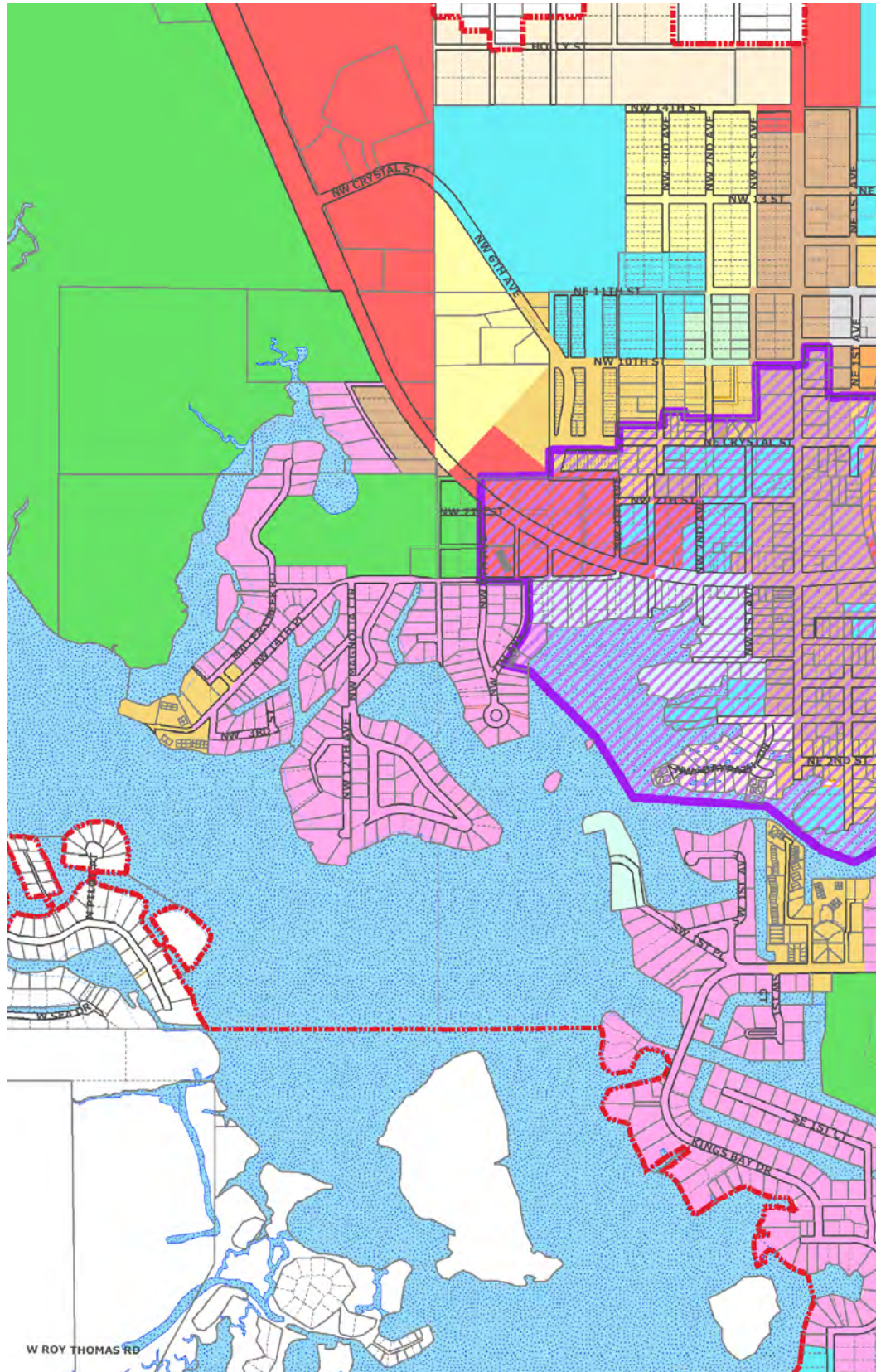


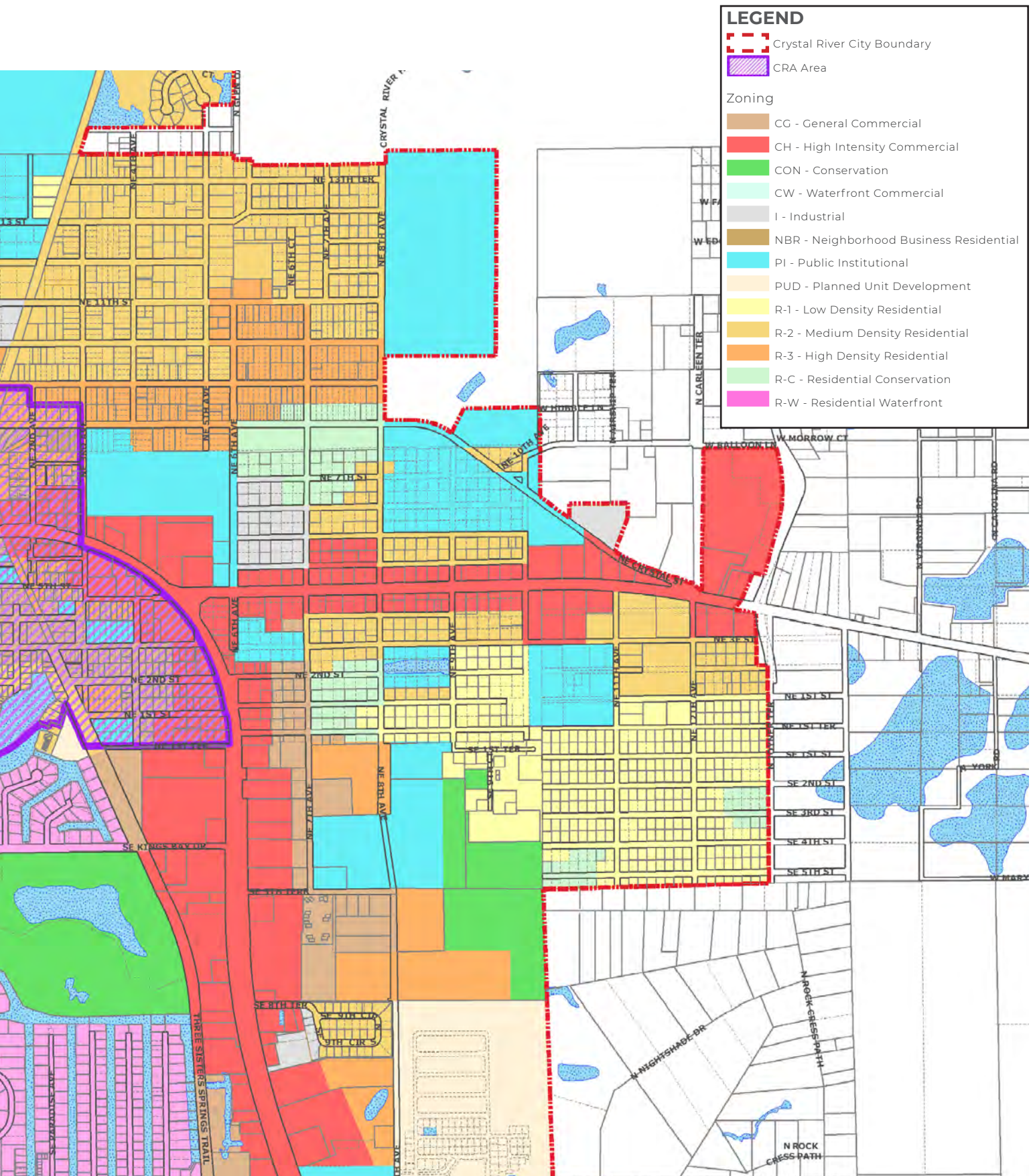
## ZONING

The zoning districts are created in coordination with the future land use map. The downtown core of Crystal River adjacent to Citrus Avenue is zoned as General Commercial (CG). The downtown waterfront has Waterfront Commercial zoning that supports water-related business and commercial uses, and resort housing units. Highway 19 and Highway 44 are lined with High Intensity Commercial (CH) zoning. This zoning is commercial only and does not allow any residential uses. With a floor area ratio (FAR) of 0.7 and 25-foot front setback, this results in the type of development seen recently along the corridor, with single-story buildings set behind parking lots.

The current zoning transitions from High Intensity Commercial to Medium Density Residential on both the north and south sides of Highway 44. As one heads south, the same High Intensity Commercial zoning district is found on both sides of Highway 19. Further south, along the eastern side of Highway 19 the zoning steps back to Neighborhood Business Residential and then High Density Residential. This allows for a horizontal mix of uses for residents within a short walking distance to commercial uses along both of the highway corridors. Unfortunately, the commercial development along Highway 44 and Highway 19 is primarily automobile-oriented rather than neighborhood service which reduces the likelihood of walk-up customers.

The CRA district is an overlay zoning district established to promote mixed-use, walkable, and connected new investment and revitalization throughout the traditional downtown, waterfront, and surrounding neighborhoods.









# 2.

# Planning and Public Process

This chapter outlines the planning process for phases one and two, which included a three-day virtual design charrette as well as a five-day in-person charrette. Phase one focused on Highway 44 while phase two focused on the entire city. The results of the public engagement and community input, as well as the preliminary site analysis found in Chapter 1, are summarized into the key findings at the end of this chapter.

## PROJECT TIMELINE

## ONLINE PUBLIC ENGAGEMENT SUMMARY

## PLANNING PROCESS - PHASE 1

## PLANNING PROCESS - PHASE 2

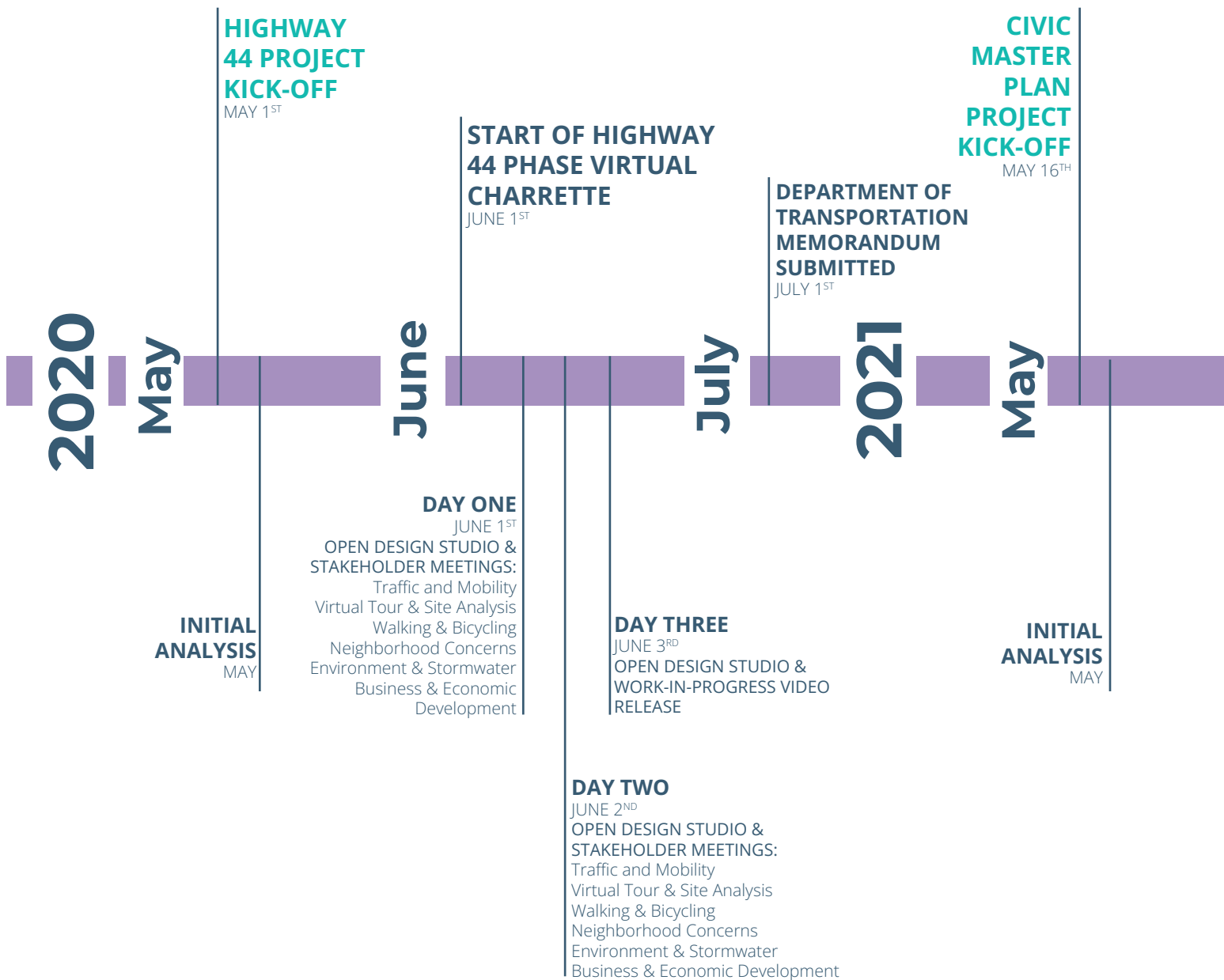
## KEY FINDINGS

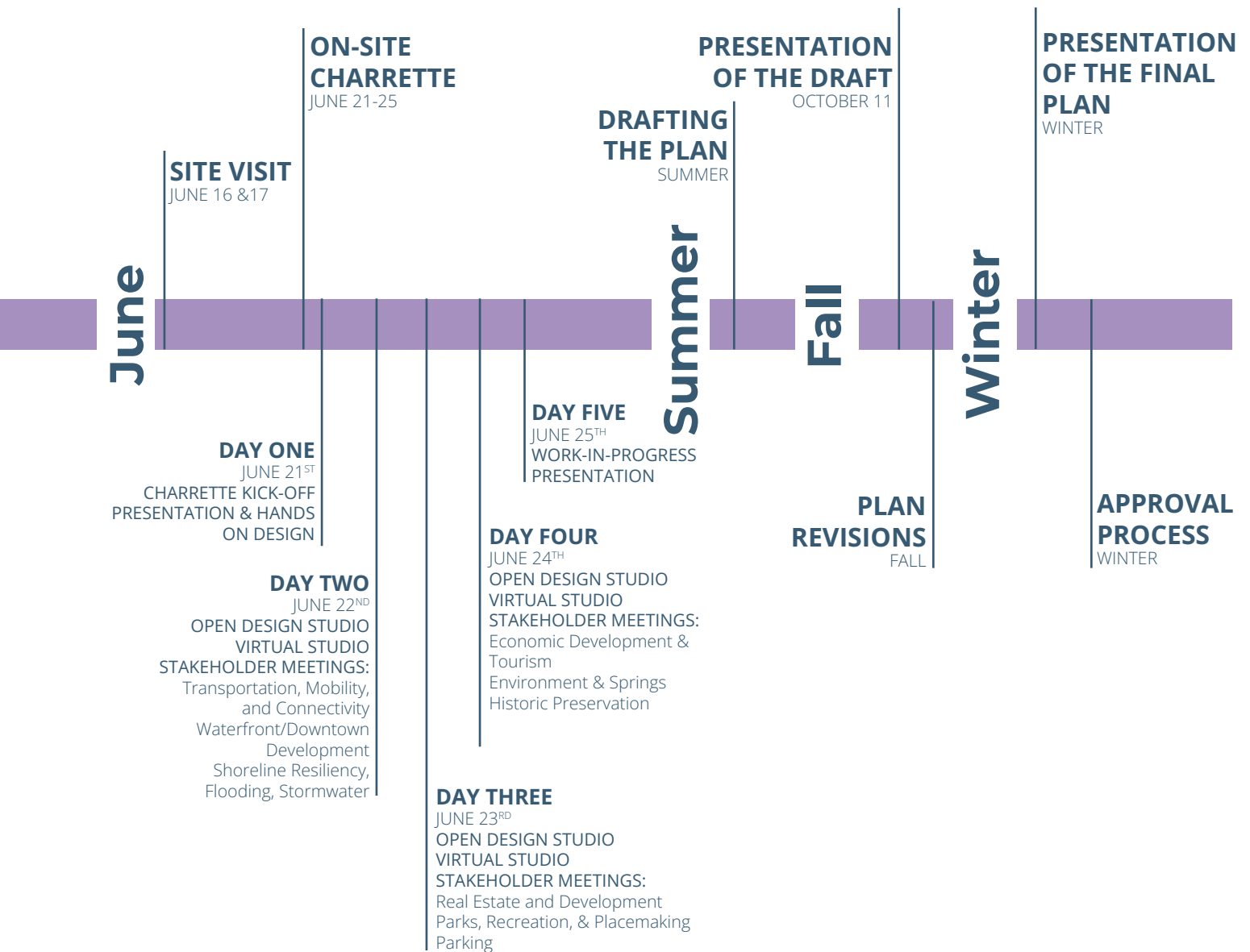




# PROJECT TIMELINE

Dover, Kohl & Partners' work in Crystal River was completed in two phases. Phase one was focused on Highway 44; the Florida Department of Transportation (FDOT) was moving forward with a resurfacing project and the City wanted to get the public's opinion on the changes before implementation. The Highway 44 phase was a virtual charrette that was completed in June 2020. After the work on Highway 44 in 2020, the team continued their work on the Civic Master Plan with phase two beginning in June 2021. The Civic Master Plan phase two was an on-site five day charrette that incorporated virtual components. Phase two encompasses all of Crystal River with specific focus on the downtown, Highway 19 plazas and the Crystal River Mall. Throughout the planning process DK&P worked closely with the Steering Committee and the planning team, consisting of Hall Planning & Engineering (HPE) and Goodwin Mills Cawood (GMC).







# ONLINE PUBLIC ENGAGEMENT

*The engagement portion of the planning process throughout phases 1 and 2 included an online component allowing community members to participate in the planning process at their convenience and from the comfort of home.*

The Crystal River Civic Master Plan website provides project updates, information about past and upcoming meetings, recordings of presentations, and multiple opportunities for community members to stay involved in the planning process. The engagement section of the website includes surveys, quick polls, and a citizen mapping tool.



Mobile device view



**307+**

Virtual Attendees



**500+**

Film Views



**3,232+**

Website Visits



**10**

Films

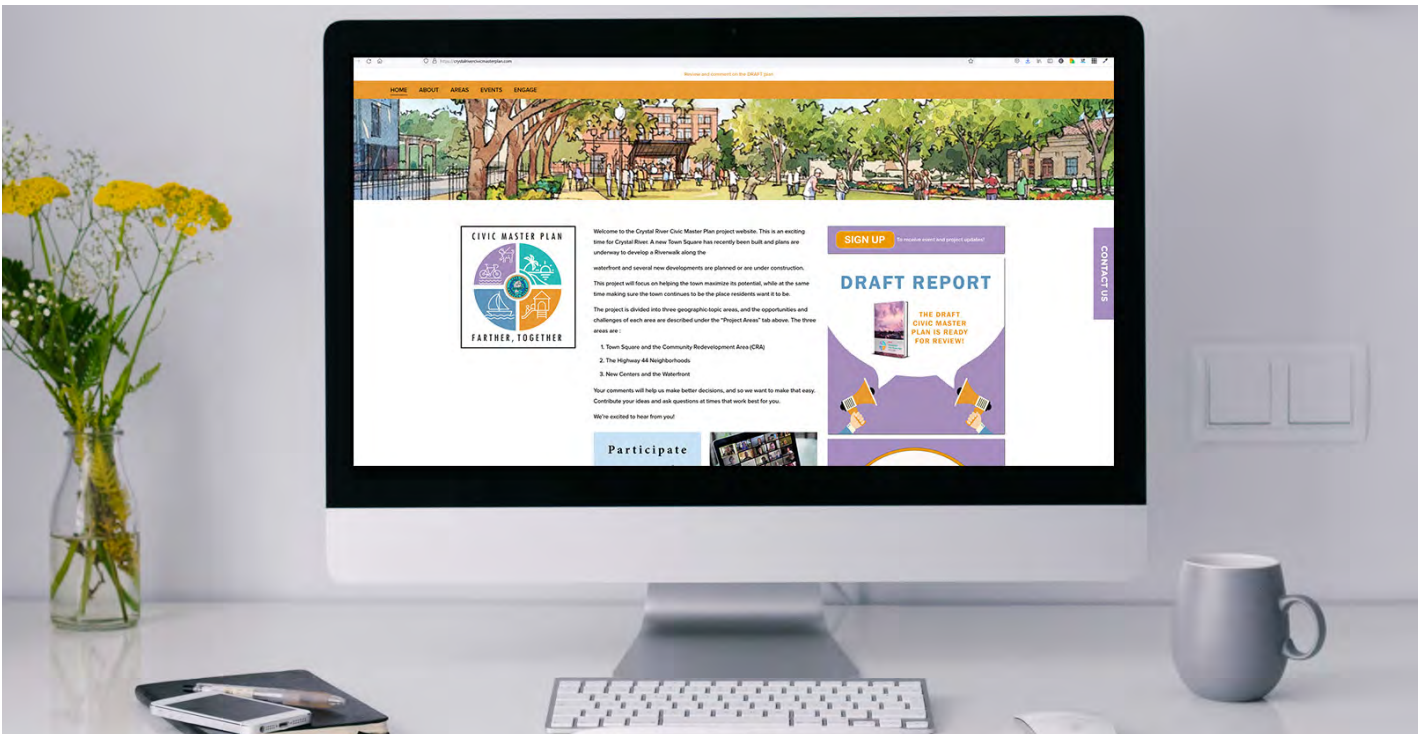


**3,200+**

Trackable Media Impressions

**5,000+ TOTAL**

"Involved" as of 09/27/2021



A view of the project website: [www.crystalrivercivcmasterplan.com](http://www.crystalrivercivcmasterplan.com)

# PHASE ONE: HIGHWAY 44 PLANNING PROCESS

*Phase one included the Highway 44 area. This process began with Highway 44 because the FDOT was moving ahead on a resurfacing project. The City of Crystal River wanted community input on how Highway 44 should look. The consultant team took a “Designing in Public” approach to the planning process which yields a hands-on, immersive and visual experience — and a better plan.*

## HIGHWAY 44 VIRTUAL CHARRETTE

### TAKING PUBLIC ENGAGEMENT ONLINE

It was decided early on that the in-person public engagement part of the planning process would need to transition to a hybrid online format to accommodate full public participation while maintaining the necessary social distancing and other precautions due to the COVID-19 pandemic. The Public Virtual Design Charrette took place June 1<sup>st</sup> through June 3<sup>rd</sup>. In order to ensure equal access to those unable to participate online, a one-night in-person workshop was hosted by City staff on Tuesday, June 2, 2020.

### VIRTUAL DESIGN CHARRETTE

From Monday, June 1 to Wednesday, June 3, 2020, a series of meetings were held to openly engage the community in a public design charrette. The planning team was led by Dover, Kohl & Partners and included Hall Planning & Engineering. During this time, the team presented initial findings in short films, gathered feedback through online forms, led stakeholder meetings, and worked on potential design and policy solutions for the Highway 44 Neighborhood area. The goal during this time was to identify key priorities and to build consensus on a vision and direction for the future of the Highway 44 Neighborhood area.

City staff took the consulting team on a virtual tour of the site via Google Earth to point out key challenges and opportunities. The Dover-Kohl team worked on potential solutions to the themes and concerns that emerged after their preliminary analysis. To begin, each member of the planning team studied specific areas along Highway 44 to illustrate how the City might resolve community concerns and improve the overall quality of life. Key topics studied included street design, bicycle infrastructure, traffic and parking, and place-making, including the idea of creating a "gateway" to the city.

The planning team held virtual stakeholder meetings and Open Virtual Studio times to learn how current efforts, concerns, and future goals might be included as a part of the civic master plan. Stakeholder meetings were designed around topics of concern, but the conversation with residents, staff and the consultant team was open to all concerns and suggestions.



Throughout the virtual design charrette, designers, planners, and engineers from the consultant team worked on draft illustrations, maps, diagrams, and policy recommendations for Highway 44 and its surrounding neighborhood. The public was invited to join the Open Virtual Studios to check-in on the team's progress and ask questions. The consultants shared their screens with participants, and had an open video chat to answer questions.

### ONLINE STAKEHOLDER ENGAGEMENT

In addition to Stakeholder Meetings and Open Design Studio times when people were able to meet and discuss their concerns and aspirations for the area, the project website operated as a hub for communication and stakeholder engagement. Numerous online tools including surveys, polls, and mapping exercises were used to communicate community preferences for the area. The results from this engagement and each of the exercises is described in more detail throughout this chapter.

### OPEN HOUSE

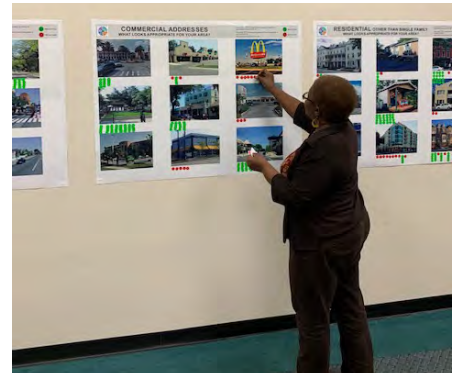
On the second day of the charrette, to broaden engagement and reach those who were not able to access or not comfortable using online platforms, the same engagement exercises that were available online were printed and set up in an Open House format at City Hall. Hand Sanitizer and space for social distancing was provided as people came to offer additional input. City staff were on hand to answer any questions and engage with participants as they came through the Open House.

### HIGHWAY 44 WORK-IN-PROGRESS PRESENTATION

The virtual design charrette culminated in a series of "Work-in-Progress" films that premiered on Wednesday, June 3, 2020 to summarize the events, engagement results, preliminary designs, and confirm the path for the master plan. The films showed initial design concepts for the public to review and discussed how these ideas were incorporated into the draft plan. The team then held one last virtual meeting to summarize the virtual charrette's events and allow the public to ask questions about the ideas presented in the films.



A view of the in-person workshop entry.



Participants at the in-person workshop completing the street design and community image surveys.

## PROJECT FILMS

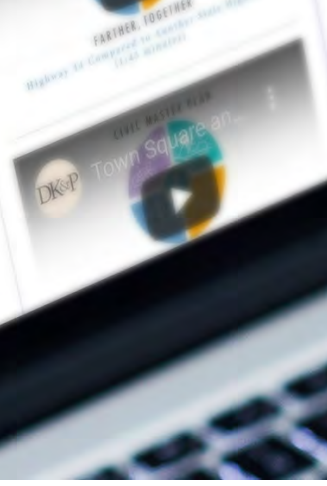
- 1 PUBLIC INVOLVEMENT FOR THE VIRTUAL CHARRETTE**  
 In Part One of the film series Jason King, the Project Director for the consultant team, discusses in detail the information and ideas the team received as part of the Crystal River Virtual Charrette. Over 150 people attended the project's meetings during a three-day period and the website received over a thousand responses to surveys, polls, and mapping exercises.
- 2 HIGHWAY 44 AND CRANDON BOULEVARD**  
 This film compares Highway 44 with Crandon Boulevard in Key Biscayne, another state road on the east coast of Florida that is attractive and multi-modal. Highway 44 is a critical facility when it comes to cross-state travel. There are constraints when it comes to “civilizing” the street and adding safety and beauty. However, the film asks the question: What elements do you see on other state roads that you would like to see on Highway 44 in Crystal River?
- 3 IN-DEPTH LOOK AT THE 9<sup>TH</sup> AVE & HWY 44 INTERSECTION**  
 Focusing on the intersection of Highway 44 and 9th Avenue, Aly Burkhalter, an urban designer on the planning team, discusses existing, short-, and long-term options for Highway 44 as well as looking at what new development could occur with an improved streetscape.
- 4 IN-DEPTH LOOK AT HWY 44 BETWEEN 7<sup>TH</sup> & 8<sup>TH</sup> AVENUES**  
 In this film by Robert Piatkowski of the planning team, the block of Highway 44 between 7<sup>th</sup> and 8<sup>th</sup> Avenues is seen transforming into a welcoming entrance to the City and connecting the two sides of the neighborhood back together.
- 5 IN-DEPTH LOOK AT HWY 44 BETWEEN HWY 19 & 7<sup>TH</sup> AVE**  
 This film walks through the design of Highway 44 from Highway 19 to 7<sup>th</sup> Avenue. Xu Zhang, designer on the planning team, discusses the new intersection design with Highway 19, a green stormwater management facility, and public space improvement.
- 6 FDOT CONTEXT CLASSIFICATION FOR HIGHWAY 44**  
 This film by Rick Hall of Hall Planning and Engineering provides an in depth discussion on traffic mobility and FDOT context classification for Highway 44.



Members of the DK&P team presenting ideas in the Work-in-Progress films (from top to bottom): Jason King, Aly Burkhalter, Rob Piatkowski, Xu Zhang, and Rick Hall.



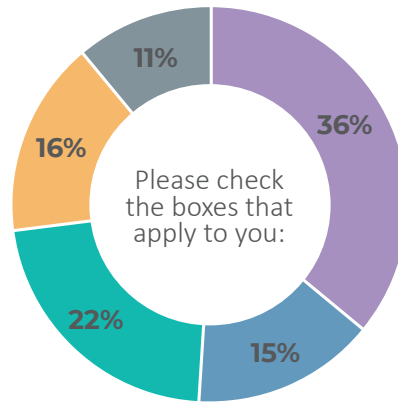
Welcome to Crystal River Civic Master Plan. This is an exciting time for Crystal River. The project will focus on helping the town maximize its potential while at the same time making sure the town continues to be the place residents want it to be. The project is divided into three geographic-topical areas and the opportunities and challenges of each area is described under the "Areas" tab.



## ENGAGEMENT RESULTS



### WHO PARTICIPATED:



- I live in Crystal River
- I work in Crystal River
- I live and work in Crystal River
- I visit Crystal River
- Other

Please check the boxes that apply to you:

## QUICK POLLS

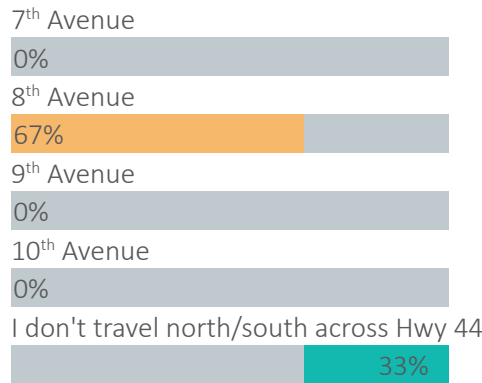
Do you think the beautification of Highway 44 is worth local investment?

Beautification could involve investments like the planting of trees and shrubs or the addition of a welcome sign and banners.



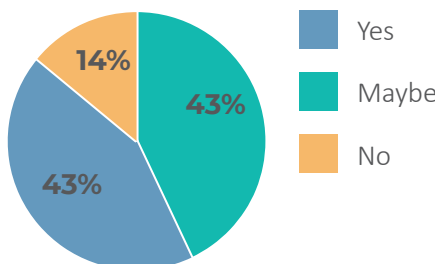
The FDOT resurfacing plan closes every north/south connection at 7<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, and 10<sup>th</sup> in the interest of decreasing crashes.

If you are traveling north/south and crossing Highway 44 which road are you most likely to take?

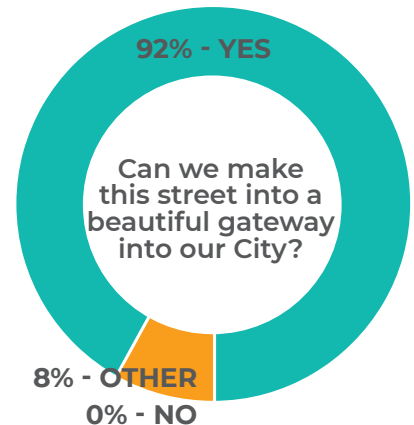


This response identifies a preference to keep 8th Avenue open to through traffic, with other intersections as less of a priority.

Would you be willing to pay more in taxes and fees in order to see Highway 44 elevated to be more resilient in the future as seas rise and street flooding becomes more prevalent?



(Adoption Draft - Civic Master Plan)





## SURVEYS

### How would you rank the following possible enhancements to Hwy 44?

Respondents ranked possible enhancements in order of importance with #1 being the most important enhancement to #10 being the least important enhancement.

1. Trees along the side planting strips (shading the sidewalks)
2. Trees in the center median
3. Wider sidewalk
4. Wider bike lane
5. Center medians for pedestrians to “take refuge” as they cross the road
6. More crosswalks
7. Repave the roadway surface
8. Gateway signage
9. Adding barriers to the center turning area in order to restrict turns and decrease accidents
10. Repave the sidewalk surface

### How would you rank this list of potential improvements to Hwy 44?

Respondents ranked potential improvements in order of importance with #1 being the most important improvement to #10 being the least important improvement.

1. New pedestrian-scale lighting
2. Placing utility poles underground to improve aesthetics and resilience in storms
3. Stormwater treatment like rain gardens to hold water and feed side landscaping
4. New site furnishings including benches and trash receptacles
5. Safer traffic speeds (30 mph instead of 45)
6. On street parking for local businesses
7. A roundabout at the intersection of Highway 44 and Highway 98
8. ADA crossings to help the visually-impaired
9. More signage to clarify rules for drivers
10. Bus shelters





# SHORT ANSWER QUESTIONS

The elementary school is frequently ranked high, yet the surrounding neighborhood does not seem to have the type of demand that one might expect.

**Why do you think this is? Would the area benefit from a greater mix of uses? Perhaps a more robust mix of housing types? What do you think?**

Driving through the neighborhood, some of the houses and buildings seem to be rundown. Some of the sidewalks need to be restored. Perhaps a minimum architectural standard needs to be explored creating a unified image of the city as a coastal Florida destination.

A greater mix of housing that is affordable to young families is needed, along with affordable after-school daycare.

More housing and child friendly amenities

Affordable housing is an issue throughout the Citrus County area, especially near the schools. It would be beneficial to develop some attractive apartments, duplexes, and small single family homes within the area to allow families to take advantage of what we hope will be a walkable downtown area.

# COMMUNITY IMAGE SURVEY

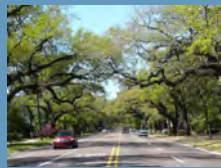
“The Community Image Survey” asks about what someone would like to see (or not see) and also about the “look” of new additions to the area. During the In-Person Workshop red dots were used on images they DID NOT want to see and green dots were used for things they DID want. The Virtual Charrette website asked if community members would like to see “more of this” or “not so much”.

## STREETS

**MORE OF THIS**

**SPLIT INPUT**

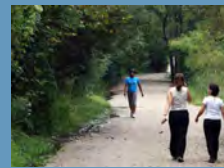
**NOT SO MUCH**



## OPEN SPACES

**MORE OF THIS**

**SPLIT INPUT**



The current speed limit and street design is not conducive for the current bike lanes, especially without greater separation. We have a large number of cyclists in the area. Nicer bike lanes may help to attract them to the corridor as well. I do not foresee casual cyclists using the bike lane unless it is very well protected or separated. They will likely use the neighborhood streets.

I believe the bike lanes should be inboard next to sidewalk with a grass buffer as most people that casually bike are afraid to be near traffic no matter the speed.

Use it to connect both sides of town. There are not safe transitions for foot or bike traffic from the east to west sides of town.

I would not ride a bike on 44 unless the speed was 35. The speed is too high now for traffic going in and coming out of places of business. I probably would only ride my bike on the sidewalk.

FDOT has proposed 5 foot bicycle lanes on the thoroughfare with speed limits of 35 and 40 mph.

**What do you think? What about street trees? There are almost none on the corridor, yet the neighborhoods have them...Thoughts?**

## CIVIC BUILDINGS

## COMMERCIAL

MORE OF THIS

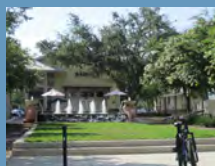
SPLIT INPUT

NOT SO MUCH

MORE OF THIS

SPLIT INPUT

NOT SO MUCH





Copeland Park is the primary civic space in the neighborhood. There seems to be a lack of small and mid-size civic spaces in the neighborhood.

What do you think about this? Do you see room for improvement? Is it worth the investment?

Definitely worth the investment. At present, it is not very welcoming. Copeland Park could be a very beautiful space but it would benefit from a more pleasing design with better landscaping. I understand the need for the fence around the drainage area, but it is UGLY. Connect Copeland Park with LeGrone Park with a nice walking path.

I agree. I would like to see the City create a plan that calls for simultaneous changes to local density and open space. Currently, there is no vision for this area. We need one.

They should put something for the kids like a splash pad and park equipment. There is nothing for families on the east side.

Many responses indicated a positive feeling towards improving Copeland Park and noted a scarcity of funds and wanting to prioritize improvements based on demand and usage.

### RESIDENTIAL

MORE OF THIS

SPLIT INPUT

### SINGLE FAMILY

NOT SO MUCH

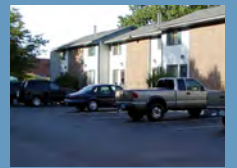
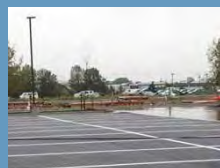
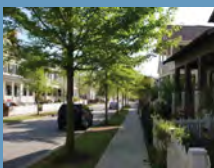
### RESIDENTIAL

MORE OF THIS

SPLIT INPUT

### OTHER THAN SINGLE FAMILY

NOT SO MUCH

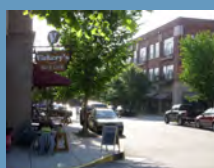


### SIGNS

MORE OF THIS

SPLIT INPUT

NOT SO MUCH



Parking needs to be available and more of a downtown feel.

Tree lined streets and paved walkways

Given everything that we have mentioned, what improvements would you most like to see in order for you to be willing to walk along this thoroughfare for a few blocks to shop and dine?

Pedestrian-friendly streets, gateway signage, landscaping in the road.

I would like a cohesive type of architecture, green space, trees and ordinances in place to promote our town.

Crosswalks should be illuminated when people are in them. Sidewalks wider if possible.

# NEW USES SURVEY

"The New Uses Survey" asks about new residential, professional, or commercial uses that you would like to see in the Highway 44 Neighborhood area. During the In-Person Workshop, red dots were used on images they DID NOT want to see and green dots were used for things they DID want. The Virtual Charrette website asked if they would like to see "more of this" or "not so much".

## MORE OF THIS

Multi-Use Path



Neighborhood Square



Passive Park



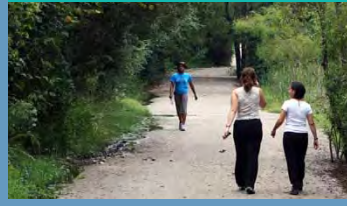
Commercial Center



Neighborhood Coffee Shop



Nature Trail



Separated Mobility Lane



Courtyard Bungalows



Duplex



Townhomes



Senior Center



Bed & Breakfast



Accessory Dwelling Unit



Strip Commercial Center



Office Park



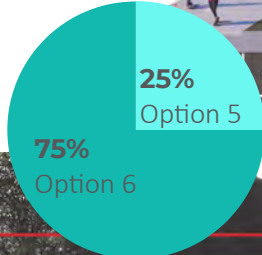
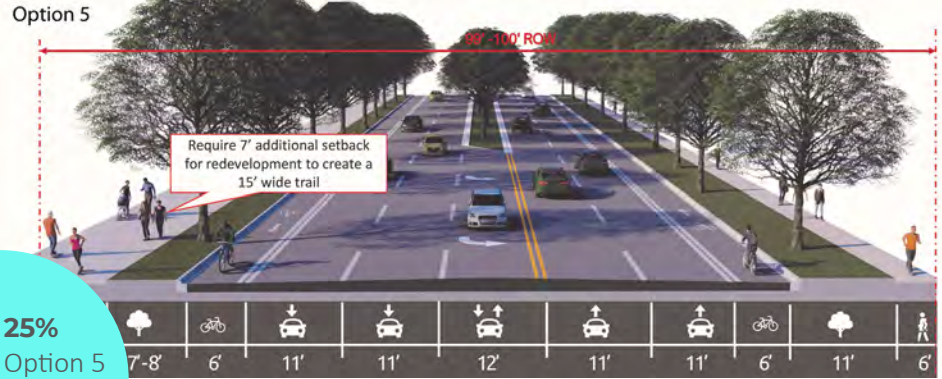
**NOT SO MUCH**



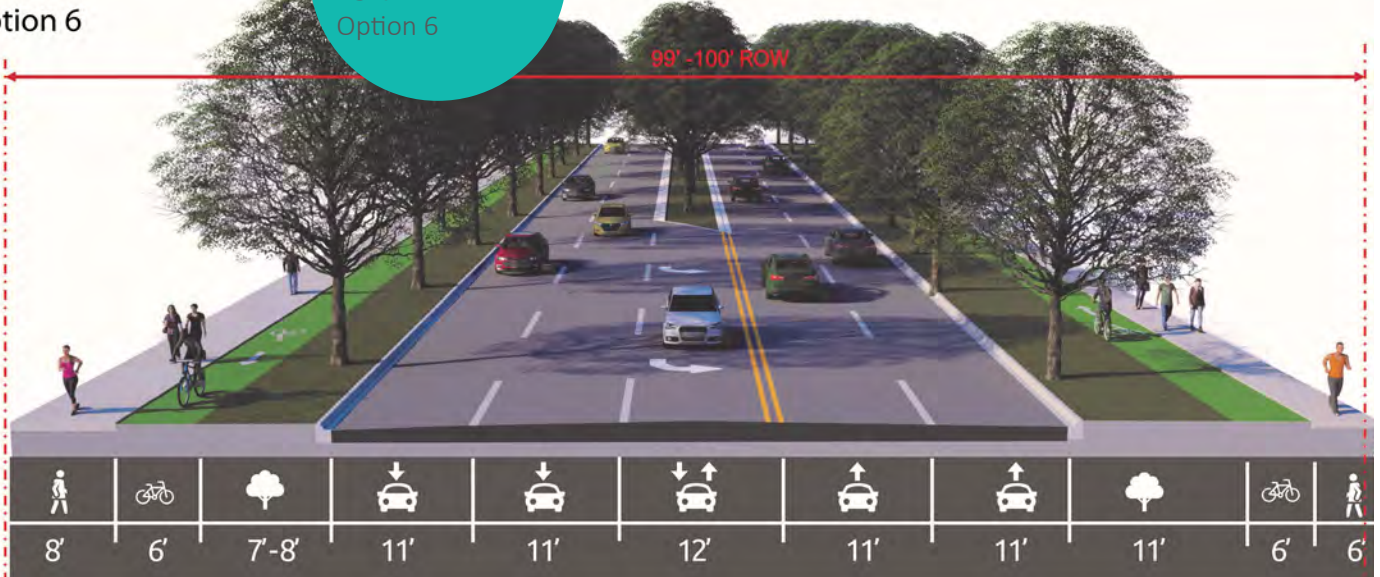
# HIGHWAY 44 STREET DESIGN SURVEY

Pick your favorite street design.

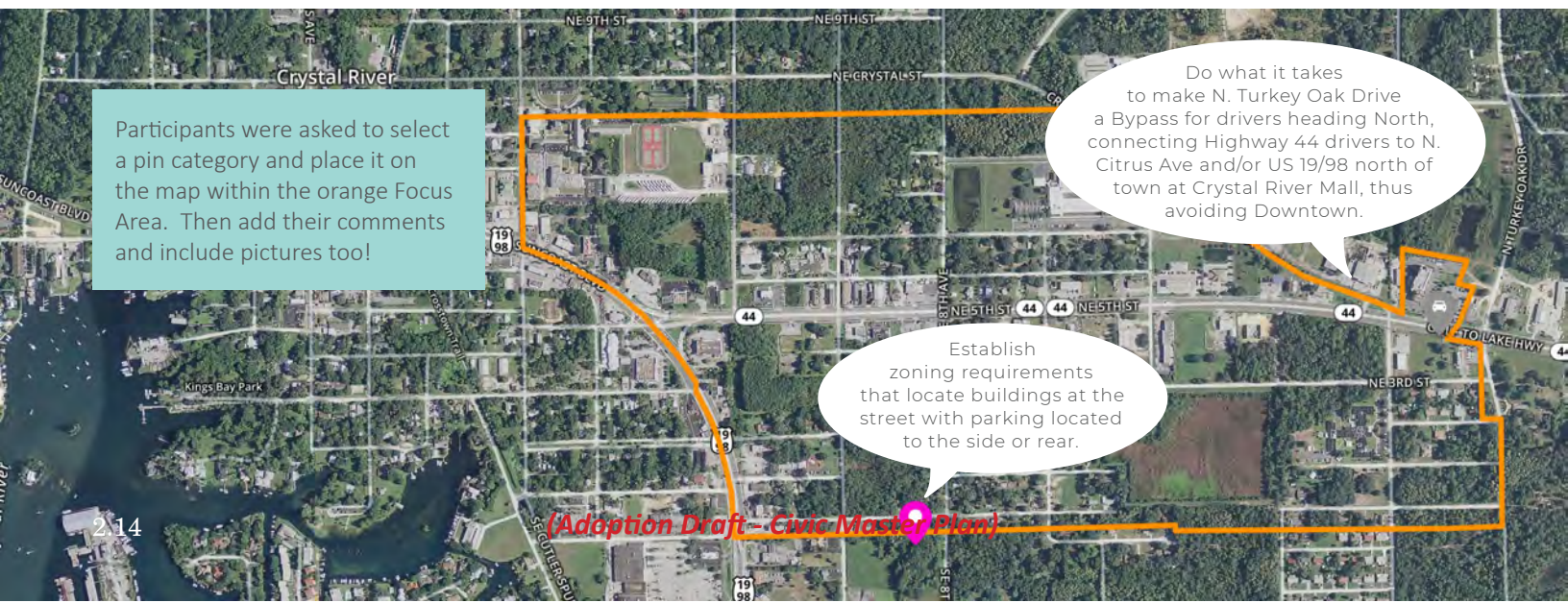
Of eight options, participants only selected two favorites.



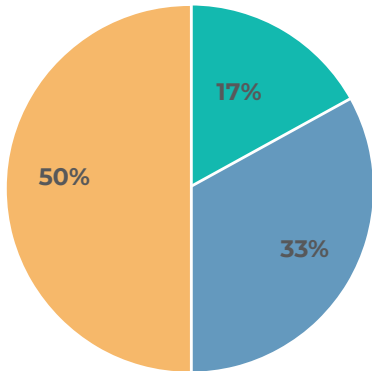
Option 6



# HIGHWAY 44 NEIGHBORHOOD PUBLIC INPUT MAP



# WORK-IN-PROGRESS SURVEY

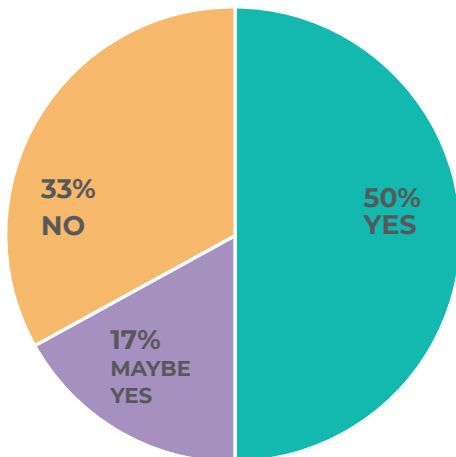


Were you able to attend any of the live meetings or events?

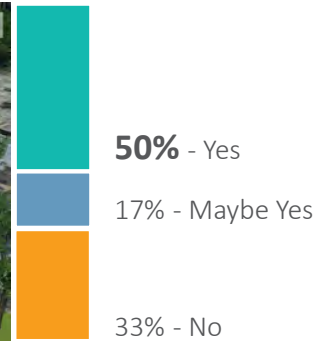
- Yes- Stakeholder Meetings
- No- But I have been following online
- No
- 0%** Yes- Open Virtual Studio
- 0%** Yes- In Person Workshop

Of the many ideas for Highway 44 and its surrounding neighborhood, do you feel that the plan is on the right track?

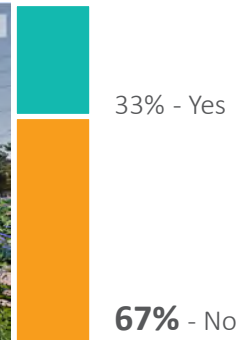
- Yes
- Maybe Yes
- No
- I need more information



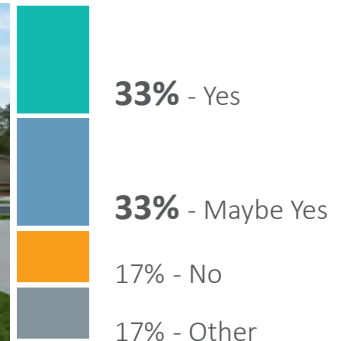
Do you like this idea for the Highway 44 gateway entrance to Crystal River?



Do you like this idea for the intersection of Highway 44 and Highway 19?



Do you like this idea for the intersection of Highway 44 and 9th Street?





# PHASE TWO: CIVIC MASTER PLAN PLANNING PROCESS

## CIVIC MASTER PLAN CHARRETTE

From Monday June 21 through Friday June 25, 2021, the Dover-Kohl team hosted an in-person public design charrette in Crystal River to engage the community and gather input to create a shared vision for the future of Crystal River. During the week, the team presented initial findings, gathered feedback, and worked on potential design and policy solutions for Crystal River. The goal during this time was to identify key priorities and to build consensus on a vision and direction for the future of the city. The charrette incorporated online open design studio sessions to allow participation in the planning process for those unable to attend in-person events. Presentations were posted online along with engagement opportunities including surveys and polls.

Throughout the week the team spoke to over 440 participants who provided input for the plan. Participants included business owners, residents, employees and community members.

## KICK-OFF PRESENTATION AND HANDS-ON DESIGN SESSION

The in-person charrette began with a kick-off presentation by Dover, Kohl & Partners at Crystal River High School, attended by over 100 people. As people arrived, a community image survey got participants thinking about key issues. Jason King and Rob Piatkowski began the presentation with a recap of initial findings and applicable best practices. Initial findings were based on the existing conditions the team noticed during their prior experience in the area, research and site visit. The initial findings included issues such as traffic patterns, water management, infrastructure and urban design. Live polling questions were asked to get a better understanding of who was represented and what their priorities might be.

At the end of the presentation the audience was given questions about what Crystal River needs, and what they would like to see happen in the city. These questions were discussion starters for the small groups. The audience broke into ten tables. At the tables participants were able to speak with facilitators, draw on maps and describe their big ideas for Crystal River. By summarizing three



The design team touring Crystal River



Participants at the kick-off presentation and hands-on design session

# 440+ Total Participants

big ideas each table could describe what was most important to them. This exercise allowed for residents to interact with other residents and professional planners. All the maps that were drawn on were used to create a synthesis map. After the small group exercise a group leader got up to share their groups big ideas and what they discussed. Each table's maps were displayed to show where the big ideas would be located in Crystal River.

## OPEN DESIGN STUDIOS

From Tuesday, June 22 through Thursday, June 24, 2021, open design studios were held for community members to see the work as it was being produced, engage in discussions about the potential solutions, and bring suggestions. Residents could stop in at any point and meet with members of the planning team to discuss issues they were interested in. These sessions provided the planning team with feedback from the public to refine the plan and concepts as they were being created.



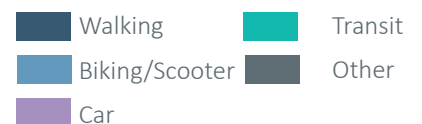
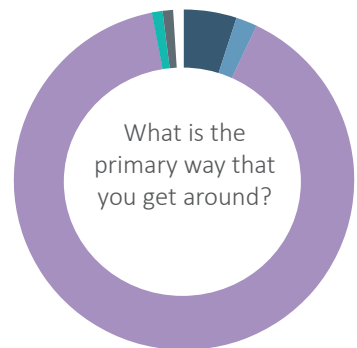
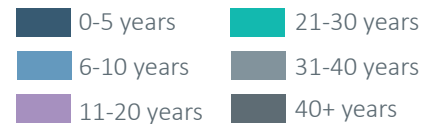
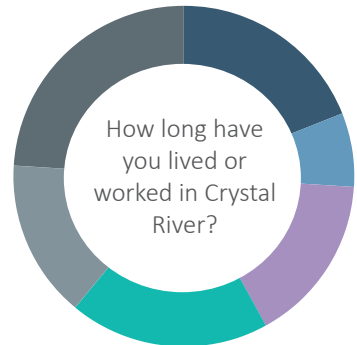
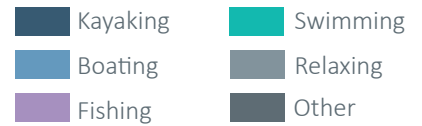
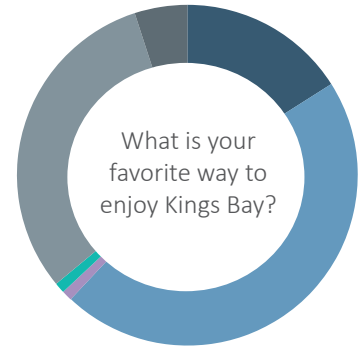
Hands-on design session small groups

## Selection of responses from the Project Kick-off presentation Survey:

Do people have what they need in the area? What else could be needed?



## Kick-Off Presentation Live Polling Results:







Throughout the week, each member of the planning team studied specific areas in Crystal River to illustrate how the plan could best address community concerns. During the open studio the planning team worked on creating renderings and illustrative plans for the different focus areas. While team members were working, the public could look over their shoulders and check in on their progress. The maps from the hands-on design session were displayed on the studio walls and additional maps were available for residents to view and draw on. Surveys were also provided for additional feedback about the plan.

### STAKEHOLDER TECHNICAL MEETINGS

Throughout the week there were multiple technical meetings on topics such as the environment, traffic, parking, the springs, development and more. These meetings focused on specific issues relating to Crystal River and included key stakeholders in the discussion. Having key stakeholders provide insight helped focus and refine the plan. Each stakeholder had specific ideas for the area that aligned with their needs or goals. The planning team is incorporating this input into the plan to reflect the needs of community members.

### WORK-IN-PROGRESS PRESENTATION

At the end of the week long engagement process there was a presentation that included the team's findings and designs. Over 80 people attended the presentation at the old Crystal River train station. Ken Frink, the City Manager, started off the presentation by introducing the team. Jason King began by sharing the results of the polls and feedback gathered from over 440 participants. Renderings for key locations were presented giving a vision of what Crystal River could become, including: potential waterfront development following FEMA standards; suggestions for historic preservation districts; design ideas for City Hall; and mixed-use redevelopment of the 579 plaza. The designs were focused around the five big ideas for Crystal River which were created after receiving input from the community during the week. At the end of the presentation participants were asked how they felt about each of the design ideas and if the team understood their vision for the city.



Andre Jackson and a resident at the open design studio

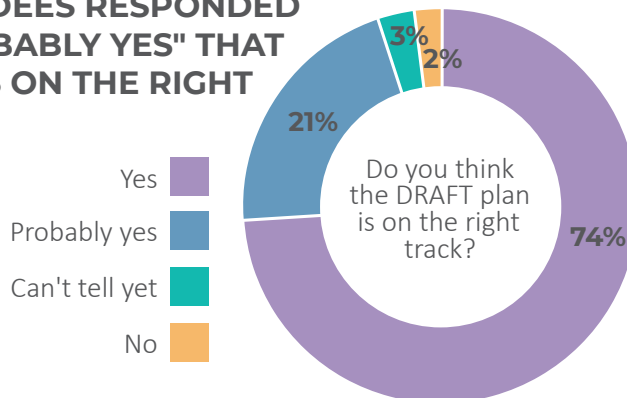


Brian and a local resident at the open design studio



A presentation at a technical meeting

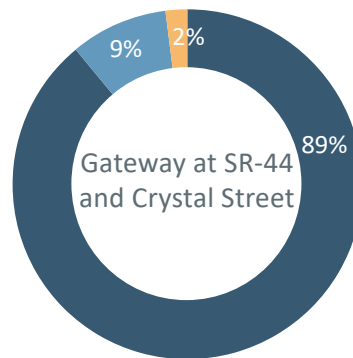
**95% OF ATTENDEES RESPONDED "YES" OR "PROBABLY YES" THAT THE PLAN WAS ON THE RIGHT TRACK.**



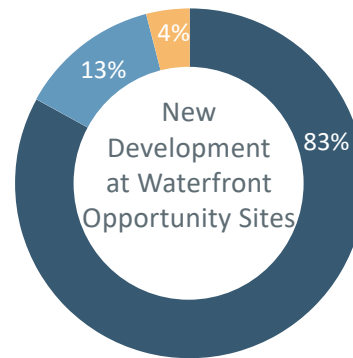
Jason King presenting ideas at the Work-in-Progress presentation

## WORK-IN-PROGRESS PRESENTATION POLLING RESULTS

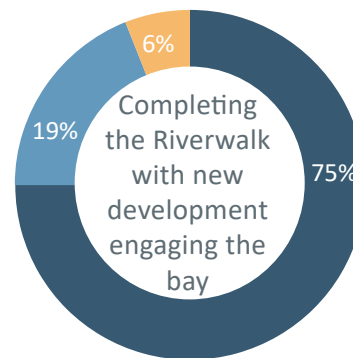
What do you think of this idea?



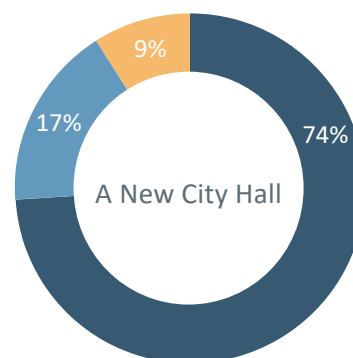
- I like it
- Not sure yet
- I don't like it



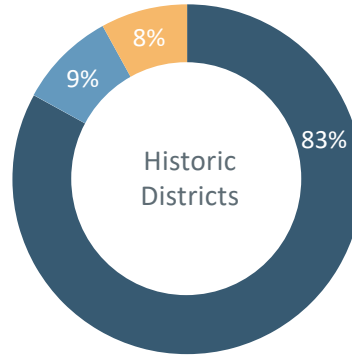
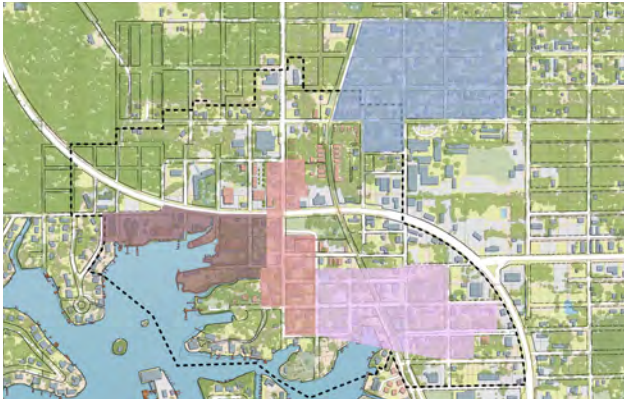
- I like it
- Not sure yet
- I don't like it



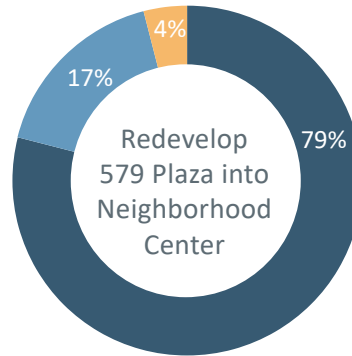
- I like it
- Not sure yet
- I don't like it



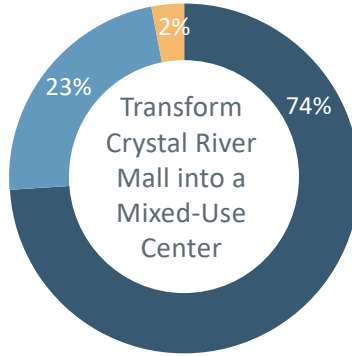
- I like it
- Not sure yet
- I don't like it



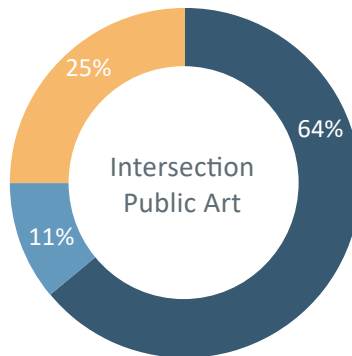
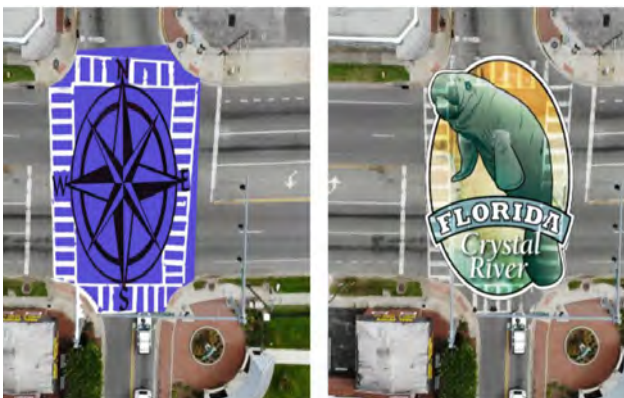
- I like it
- Not sure yet
- I don't like it



- I like it
- Not sure yet
- I don't like it



- I like it
- Not sure yet
- I don't like it



- I like it
- Not sure yet
- I don't like it

# SHORT ANSWER QUESTIONS

What design features (connected sidewalks, landscaping and street trees, new public spaces, etc.) would you like to see as part of future development? What types of uses would best serve Crystal River?

Substantial landscaping along the entire US 19 corridor as that is the area that most people see when traveling through Crystal River.

Front porch communities, live/work housing or buildings, bike paths, walking trails.

Palm trees, long public fishing piers where people can fish from without having to own a boat, eco-friendly bike paths and trails around town with bike-parking options, outdoor retail and dining mall that is non-residential, evening entertainment potential, drive-in theater.

Sidewalks, landscaping and trees, public areas, small shops and restaurants to meet the demands of the residents and visitors. More locally owned businesses.

# COMMUNITY IMAGE SURVEY

“The Community Image Survey” asks about what someone would like to see (or not see) and also about the “look” of new additions to the area. During the In-Person Workshop red dots were used on images they DID NOT want to see and green dots were used for things they DID want. The Virtual Charrette website asked if community members would like to see “more of this” or “not so much”.

## STREETS

## OPEN SPACES

MORE OF THIS		NOT SO MUCH	MORE OF THIS		SPLIT INPUT
					
					
					
					



Tree-lined streets are the most aesthetically pleasing, although not always possible. Sidewalk cafes have their place but should be limited to specific areas. Sidewalk congestion by servers, patrons, etc, makes it hard to navigate as a pedestrian. Broad streets with sidewalks and no shade are ugly & don't make much sense in Florida. It's too hot to be exposed to the sun completely. Use the natural shade elements to keep us covered and to make things look nice.



More access for disabled and elderly Ramps, etc. Sound activated cross walks and texture.

Big outdoor shopping centers such as in Ocala and Brooksville do not fit our small town feel.

Bicycle paths should be separated from traffic, streets and highways, for the safety of everyone. Paths along the side of streets and highways cause unnecessary risks to the riders and pedestrians. Bicycles should not be ridden on sidewalks or crosswalks.

Which streets & trails types would serve you the best? What about for people of different ages and abilities? Which options are we missing altogether? Are any not well suited for the area?

## CIVIC BUILDINGS

MORE OF THIS	SPLIT INPUT	NOT SO MUCH	MORE OF THIS	NOT SO MUCH
				
				
				
				

## COMMERCIAL

What would best improve mobility in Crystal River? Are any additional mobility and transportation options missing from this discussion? Are any of these not appropriate for Crystal River?

I love scooters and mopeds, golf carts and of course, bicycles! Bicycles should be everywhere so you can use them anytime.

Limited trails through preserves using recycled tires for bike paths, resting places along the way for picture taking and interacting with nature. Scooter rentals or e-bike rentals CAN detract from our natural charm if they are deployed in a way that encourages sidewalks over outdoor exploration.

Full-size buses are not needed. Smaller, trolley-sized buses, maybe. Bikes, carts, mopeds, scooters, are the preferred methods as you are in the elements. This is what people come here for.

## MOBILITY

## RESIDENTIAL

MORE OF THIS

NOT SO MUCH

MORE OF THIS

SPLIT INPUT

NOT SO MUCH





### WHICH HOUSING TYPES WOULD SERVE CRYSTAL RIVER THE BEST? ARE ANY TYPES OF HOUSING MISSING FROM THIS DISCUSSION? ARE ANY OF THESE NOT APPROPRIATE FOR CRYSTAL RIVER?

More affordable housing in Crystal River, but issues with flooding are always a problem.

Single Family housing.

Spacing between homes, well kept lawns, sidewalks, preserve the older homes that are able to be saved.

Don't destroy the city's strength- its small town character without the ugly and heavy development in south Florida.

Bungalows and cottage-type town houses would be lovely.

### WHICH PUBLIC SPACE TYPES WOULD SERVE CRYSTAL RIVER THE BEST?

We need family friendly parks and access to the water without damaging our waterways.

Parks, sitting areas for visiting, pet walk areas

More event and gathering type spaces for daily use as well as special events and festivals.

A stage or bandshell for outdoor musical performances.

## ONE WORD CARDS

During the kick-off presentation and hands-on design session participants were asked to write down one word to describe Crystal River as it is now and a different word to describe how it could be in the future. The words that are used more often become bigger while the rarely used words are smaller.

#### Now



#### In the future



# Key Findings:

*The knowledge gained from both the site analysis in Chapter 1 and the public input in Chapter 2 are summarized here as the key findings for the Civic Master Plan that serve as the foundation for the Vision chapter.*

## WALKING & CYCLING SAFETY:

Pedestrian and cyclist safety needs improvement especially along Highway 19 and Highway 44. This includes better crossings at intersections and the Crosstown Trail.

## PLACEMAKING:

Create a sense of arrival to Crystal River and the Nature Coast. Improve the look of existing commercial and industrial areas in order to make the area more attractive for new families and housing. Keep a Florida coastal aesthetic in terms of architecture standards and street tree species. Continue to make downtown an attractive area by adding new amenities including art galleries, museums, maker spaces and more. Maintain a cohesive aesthetic look. The Copeland Park neighborhood, "is really one neighborhood"...that has been divided by the highway and will be further divided by closing all intersections.

## TOURISM:

Balance tourist and resident needs, keeping the area attractive to residents while still maintaining a high level of tourism. Build eco-tourism to help maintain the local economy. More activities for tourists would help keep visitors in the area for longer vacations.

## HISTORIC PRESERVATION:

Throughout Crystal River are historic homes that add to the character of the area. These homes need to be protected to maintain the history and character of the city.

## ENVIRONMENT & STORMWATER:

Develop a stormwater management strategy in response to increased flooding and to facilitate new development. FEMA has new regulations requiring buildings to be higher in elevation; a strategy for design is needed.

## MOBILITY:

Prioritizing other modes of transportation will reduce the demand for parking. Improvements to the trail system could include safer crossings, extending the trails and adding amenities along them. The number of driveways on Highway 44 increases the potential for both auto and pedestrian collisions.

## LOCAL BUSINESS & ECONOMIC DEVELOPMENT:

There needs to be affordable housing for young families close to the schools. A public parking strategy is needed for downtown and along Highway 44.







# Big Ideas & Civic Framework

This chapter introduces the Five “Big Ideas” forming the key recommendations of this Plan along with a civic framework of citywide concepts for the plan implementation. This chapter sets the stage for the plan vision outlined in the next chapter.

## THE 5 BIG IDEAS

### **BIG IDEA 1: CONTINUE TO MAKE DOWNTOWN A VIBRANT DESTINATION**

*Civic Toolkit: Urban Design & Placemaking*

*Civic Toolkit: Parking*

### **BIG IDEA 2: REVITALIZE AGING RETAIL CENTERS AND INVEST IN NEIGHBORHOODS**

*Civic Toolkit: Housing and Infill Development*

### **BIG IDEA 3: BUILD SAFE, COMFORTABLE & INTERESTING STREETS**

*Civic Toolkit: Street Design*

*Civic Toolkit: Planning for Bicyclists*

### **BIG IDEA 4: PROTECT & RESTORE HISTORIC PLACES**

*Civic Toolkit: Historic Preservation*

*Civic Toolkit: Property Maintenance Codes*

### **BIG IDEA 5: INCREASE ACCESS TO NATURE & BUILD RESILIENCE**

*Civic Toolkit: Building Adaptation to Flooding*

*Civic Toolkit: Stormwater and Sustainability*

*Civic Toolkit: Parks, Squares, and Open Space*

# *The 5 Big Ideas:*

CONTINUE TO MAKE **DOWNTOWN**  
A **VIBRANT DESTINATION**

**REVITALIZE** AGING RETAIL CENTERS **&**  
**INVEST** IN **NEIGHBORHOODS**

**BUILD** **SAFE, COMFORTABLE,**  
**& INTERESTING STREETS**

**PROTECT & RESTORE**  
HISTORIC PLACES

INCREASE ACCESS **&** BUILD  
TO **NATURE** **RESILIENCE**

*Five “Big Ideas” form the key recommendations of this Plan. The five ideas came from conversations held with residents, businesses, and stakeholders. Although specific details may change as the plan is implemented, the “Big Ideas” should remain intact.*

Add art galleries, residences, maker spaces, and museums as well as attractive entry points. Create places local want to go while staying artistic, chic, authentic, and affordable. Extend the CRA boundary. Increase concerts and programming of Town Square and other downtown parks. Add short-term rentals in select places Downtown. Add more art including paint and asphalt art with CDBG monies. Update and refine architectural and landscaping standards. Place overhead wires underground or in mid-block locations.

Utilize adaptive reuse and redevelopment when possible, especially throughout the Downtown. Design and invest in Copeland Park. Connect east and west sides of town by reinventing aging corridors. Allow lots to densify by up-zoning and by implementing ADU's, as currently allowed by ordinance. Add assisted living centers and allow cottage courts (pocket neighborhoods) to house people affordably. New development of compact, walkable, mixed-use centers of activity should be encouraged. Allow industrial and residential at the mall site. Encourage economic development and build the town's tax base. Beautification.

Enable pedestrians and cyclists to use the ROW safely and comfortably. Make Highway 19 safer to cross with four-way zebra crosswalk crossings. Provide bike infrastructure (especially for those who cannot afford to drive) and bike routes for recreation. More bike stations and shared bikes. Promote bike parking structures as art installations. Promote wheelchair paths and ADA accessibility throughout the downtown. Establish golf cart connections across arterials. Three Sisters Street should become a beautiful landscaped entry with lights in the trees.

Protect historic structures that are not within local historic districts. Do not tear-down historic structures to build surface parking. Fix and repurpose existing buildings. Empower code enforcement. Investigate an anti-blight ordinance. Use both local historic districts and national historic districts.

Protect the environment, particularly the bay and river water quality. Enact a stormwater master plan that promotes storm sewers in new development areas and includes district-wide stormwater systems. Clean ditches to allow stormwater to flow. Add swales to new streets. Create a cohesive trail system. Use permeable pavement. Install edible gardens along the Kings Bay Riverwalk. Electric vehicles: establish a municipal fleet goals, transit provider goals, and charging station goals (both public and private). Invest in Yeoman's Park. Economic resilience: focus on aviation businesses and education at Crystal River airport. Add tech space. Increase the quality of tourism. Stock Kings Bay with bass and fish.

# Big Idea 1

## CONTINUE TO MAKE DOWNTOWN A VIBRANT DESTINATION

*Crystal River is an international destination for people seeking experiences of nature and wildlife, but the City is also working to become a destination for shopping, dining, working, and living. At the same time, Crystal River residents seek to grow in a way that protects and enhances the high quality of life they currently enjoy.*

*“Downtown” is centered on Citrus Avenue at the new Town Square and includes the growing Riverwalk. Importantly, these amenities are as much for locals as for visitors. New additions to the Downtown should continue to focus on local needs and recreation and involve a balanced mix of uses, including large and small homes, retail spaces, workplaces, civic buildings, and amenities. Economic development builds the tax base which supports Crystal River’s high quality of life.*

*Crystal River has begun investing in itself and it has proven that people can expect big returns from public investment. There is a new town square in Crystal River on Citrus Avenue, the city’s main street. The town square is home to a fountain, statuary, manicured green grass, and public bathrooms. The square’s sidewalks are shaded by newly planted oaks and is fronted by historic buildings and murals. A splash pad and wetland trail are located on the square’s southern edge. Public spaces like this are almost never created today: It is centrally located as if it was planned from the city’s founding. It is well defined by buildings on two edges and forest on another. And it is versatile enough to host any of the town’s numerous Downtown events.*



Aerial view of the waterfront vision

## KEY PRIORITIES AS ILLUSTRATED BELOW:

- 1 Complete the Kings Bay Riverwalk
- 2 Add new waterfront developments that engage the Riverwalk and complement existing waterfront uses
- 3 Increase opportunities for boater-friendly destinations, such as restaurants.
- 4 Reimagine city hall as civic building anchoring Downtown and incorporating a resilient design in response to flooding and sea level rise.
- 5 Transform Highway 19 into a safer, more beautiful street that is easier to cross.
- 6 Provide enough parking on-street and in mid-block locations to not disrupt the walkability and character of the Downtown.





# PROPOSED IMPROVEMENTS & POLICIES

## PROMOTE A MIX OF USES

*The Downtown should seek to add additional uses and build an active street life. The key to active street life is to create a place of diverse activity including living, working, schooling, shopping, recreating, and socializing.* The Downtown is off to a great start but residents that participated in the Charrette noted several uses that may be lacking including waterfront restaurants and drinking establishments, variety stores, gourmet coffeehouses, pubs, juice shops, offices, light industrial, and artisan shops. Multiple opportunity sites were identified and conceptually designed as part of the Illustrative Master Plan. The Plan shows these uses located within street-oriented buildings like corner stores, “Main Street” shops, and multi-story mixed-use buildings in accordance with the City’s form-based code.

People also wanted more programmed activities and beautification that would bring people Downtown more regularly. Examples include: concerts, art, entry features that announce one’s arrival into the City, safe and complete streets, and additions to neighborhood parks in communities that are adjacent to the Downtown.

## CREATE DOWNTOWN LIVING OPTIONS

*Downtowns offer a lifestyle with living, dining, and recreation only a short walk away from ones home. Residential units also provide a built-in customer base for businesses. Homeownership and long-term renters bring both economic and social stability.* Residents participate in public meetings and look after the places they live. Local residents add less traffic to strained transportation systems because they are more likely to walk or bike than to drive for short trips.

## CHERISH THE WATERFRONT

Crystal River’s waterfront has been going through exciting changes and improvements. *Vacant properties around the bay provide opportunities for new mixed-use developments and boater-friendly destinations that cater to both locals and visitors.*

Due to the hard work and dedication of local community groups, including Save Crystal River, the water quality in Kings Bay has improved over recent years. *Investments in Downtown infrastructure, streets and buildings should reduce the amount of untreated stormwater entering the bay and contribute towards improving the bay’s health.*

## Complete the Riverwalk and Integrate it with Surrounding Uses

*Phase I of the Kings Bay Riverwalk is complete and future phases will create a comprehensive and connected pedestrian network along the waterfront. The riverwalk provides public access to Kings Bay, allowing all an opportunity to enjoy this wonderful natural amenity.* In its current state, the Riverwalk is already a way to access multiple parks, restaurants, live music, parking areas, natural areas, fishing opportunities, charter boat rentals, and scenic overlooks for stunning sunsets across the bay. Properties and buildings along the Riverwalk should directly connect and engage with this amenity.

## CONTINUE TO BUILD CITRUS AVENUE AND NORTHEAST 5<sup>TH</sup> STREET AS LOCAL MAIN STREETS

Downtowns need more than just one “postcard worthy” street like Citrus Avenue. *As development continues in the Downtown, it should be constructed in a way that adds to the walkable fabric of the historic center.* Contemporary development can compliment historic development by obeying the rules of the City’s form-based code. Build-to-lines and attention to the fronts-and-backs of buildings are essential.

## MAKE DOWNTOWN A COMPLETE, COMPACT, AND CONNECTED NEIGHBORHOOD:

**Complete:** Possessing the greatest variety of uses possible.

**Compact:** Host a population density that is high enough to support the desired uses.

**Connected:** Connected internally with streets and pedestrian pathways, and connected to surrounding neighborhoods by streets, bicycle infrastructure, parkway and trail connections, and transit.

## STRIVE TO “BUILD UP” AND “NOT OUT”

Many of the businesses in Downtown are popular and have a loyal client base, yet many buildings remain underutilized. *Some underutilized properties in Downtown that are vacant or have only parking could have buildings appropriate to the Downtown added.*

A variety of building types should be added to the Downtown mix, including rowhouses, live-work units, and mixed-use buildings with shopfronts on the ground floor.

## STUDY AND ADOPT PARKING STRATEGIES TO MANAGE AND MAXIMIZE PARKING

While parking may seem like a simple issue, its impacts have far reaching effects on the ability of Downtown to become the vibrant center envisioned. Ensuring there is an adequate supply of parking throughout the Downtown was a key takeaway from the Charrette. This includes parking for local businesses, events, and trailer parking. However, an over abundance of concentrated parking can degrade the walkability and charm of Downtown, creating gaps in the street wall that make it less likely that people will walk. Parking lots also take away space from beneficial and tax paying uses, such as businesses and homes. *A series of parking strategies should be implemented, beginning with reducing the need for parking, followed by careful parking placement, shared-parking, and utilizing sites outside of Downtown to provide parking for larger events.*

## A NEW CITY HALL

Crystal River’s City Hall, located at the corner of Highway 19 (North Suncoast Blvd) and NW 2<sup>nd</sup> Avenue, houses a broad range of municipal facilities of crucial importance to the community. *The aging building complex is, however, in need of refurbishment and resilience upgrades to lift it out of the floodplain.*

Upgrading City Hall could have additional benefits including a configuration that creates a greater civic architectural presence along with improvements to Little Springs Park and the Creative Playground.

## CONTINUE TO SUPPORT THE CRA

The Community Redevelopment Agency (CRA) funds important activities including local festivals and events. The CRA administers a grant program to improve commercial and residential facades. It helps pay for attractive signage, landscaping, sidewalks, and crosswalk improvements. The CRA commissions pole banners and street amenities. *The continuation and expansion of these programs relies on additional funding in the form of new investment within the Downtown and CRA boundaries.*

## EXPAND JOB OPPORTUNITIES

The community identified the Downtown as a location for new workplaces. Offices, light manufacturing, and artisan uses should be considered. Offices located above stores, live/work buildings, and shopfront buildings should all be designed to fit the Downtown context. *Temporary uses should be encouraged as a way to incubate new businesses that may not be able to afford commercial rents but could still help the City add enough uses to become a regional destination.*

## ENCOURAGE LOCAL OWNERSHIP

*People want to visit and live in authentic places. People will choose independently owned establishments like breweries, barbers, bistros, and bike shops because of a connection felt with the business owner or operator.* People want to express their appreciation, get a glimpse of an expert doing what they are good at, hear their story, be part of it, and support their vision.

A locally-owned business is more likely to express a unique vision and less likely to adopt a uniform aesthetic that is currently in vogue. Unlike corporate chains, small businesses retain control.

*Beyond authenticity, micro-chain and family-operated businesses are key to the resilience of the local economy.* While chain and corporate establishments are the first to leave when economies slow, local businesses struggle through the economic ups and downs.

Local owners are also more likely to get involved and help solve urban problems at their doorstep. Organizations like the Crystal River Main Street reinforce local businesses commitment to the City and to each other.





## Civic Toolkit:

# URBAN DESIGN & PLACEMAKING

*Urban design guidelines should be applied across the Downtown, Crystal River's neighborhood centers, and any place where a walkable environment is desired.*

*These guidelines can help ensure that such places become shaped, comfortable, connected, safe, and memorable.* These urban design guidelines inform the way streets, buildings, and public spaces are designed in relation to each other. When combined with the policies and strategies included in this Plan related to transportation, resilience, historic preservation, and parks, among other topics, the scenes envisioned by the community during the Charrette start to come to life.

### BUILD-TO LINES

The best streets take on a defined spatial form, sometimes compared to a public "room"; the buildings form the walls. When the proportion of building height to street width is sufficient to create a sensation of spatial enclosure, a stronger sense of place will result. When the proportion of building height to street width is too low it is difficult to achieve a sense of place. *It is essential that the front walls (or planes) of storefronts be aligned. A build-to line tells a designer exactly where the front plane of each building should be located to form a coordinated street wall. Build-to lines should be enforced along Downtown streets as Citrus Avenue's vitality extends.*

### SHAPING THE SPACE

*Streets, plazas and squares should function as outdoor rooms, surrounding occupants in a space that is welcoming and usable. These outdoor rooms are shaped by the space between buildings from building face to building face. How the space is shaped effects the experience had in it.* A 1:3 ratio for building height to width is often cited as a minimum section for a sense of enclosure. Creating this sense of enclosure involves more than just a narrow street width or tall buildings. Streets, plazas and squares must be sized properly for their use and should be defined with appropriate building sizes. Trees and features such as lighting also play a critical role in defining the space.

### STREET DESIGN

Streets should be designed as public spaces and thoroughfares for mobility. *Street lighting and trees are*

*vertical elements that help to define the public realm while also making the pedestrian feel safer and more comfortable.* Trees add a sculptural quality and interest to the streetscape.

### APPROPRIATE BUILDING HEIGHTS

Many factors must be carefully weighed when considering appropriate building heights for a community: the relative location in the City, the envisioned future, the surrounding existing context, housing needs, opportunities for employment, transportation infrastructure, and financial feasibility, to name but a few.

Today, buildings in Crystal River are typically one to two stories. *New buildings and those substantially renovated will have to meet the latest FEMA flood regulations, requiring a base floor elevation of 11 to 13 feet above sea level. With an average ground level of four feet, the typical resulting first floor needs to be elevated or flood-proofed seven to nine feet above the ground.*

*Mixed-use development in the Downtown and new neighborhood centers along Highway 19 are recommended to have a range from two to three stories in addition to the elevated first floor.* With taller buildings comes an increased importance on their design, along with the design and use of the public spaces that they help to shape.

### BUILDING ORIENTATION

*Building orientation is the first step in making great streets and public spaces that define great neighborhoods. Buildings have fronts, sides, and backs; the appropriate and most carefully designed faces of buildings should front streets and public spaces. Building rears or sides, which often incorporate a building's service functions and typically have less doors and windows, should not face the public realm but should face alleys, mid-block parking, or the backs of other buildings.*

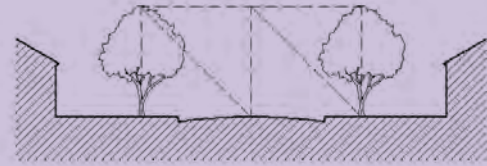
Establishing the relationship between the fronts and backs of buildings to ensure that public spaces have natural surveillance is another best practice for good neighborhood design. Fronts of buildings ideally face the fronts of other buildings, and sometimes face the sides of buildings. However, the front of a building should never face the back of another.

## SCALE SPACES COMFORTABLY FOR USERS

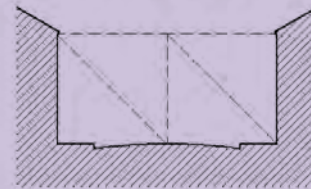
(Excerpted from: *The Lexicon of New Urbanism*)

Enclosure is a physical attribute of thoroughfares and open spaces, contributing to a sense of place. The height-to-width ratio of buildings to the space between them is the proportion of spatial enclosure and is related to how the human eye perceives space. If the width of space is such that the eyes' cone of vision encompasses less street wall than open sky, the degree of spatial enclosure is slight.

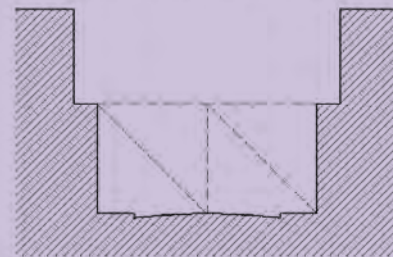
As a general rule, the tighter the ratio, the stronger the sense of place. The ratio of 1:6 is the perceivable maximum. The ratio of 1:3 is best for public squares. The ratio of 1:1 creates more intimate pedestrian spaces. Note that the ratio is based on the entire distance between buildings, from building face to building face. In the absence of spatial definition by building facades, disciplined tree planting is an alternative. Trees aligned for spatial enclosure are necessary on wider thoroughfares or those with substantial front yards.



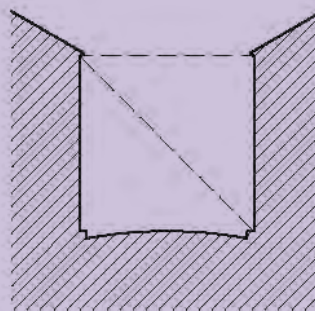
Spatial enclosure by tree canopy



Spatial enclosure by building height

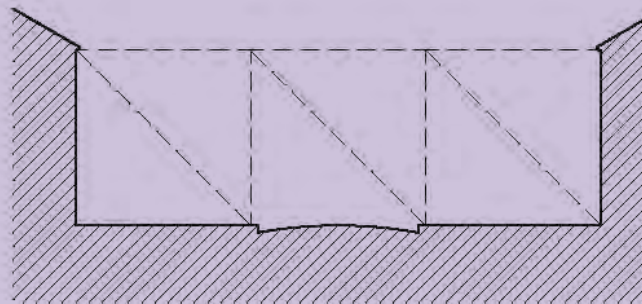


Spatial enclosure by recess line



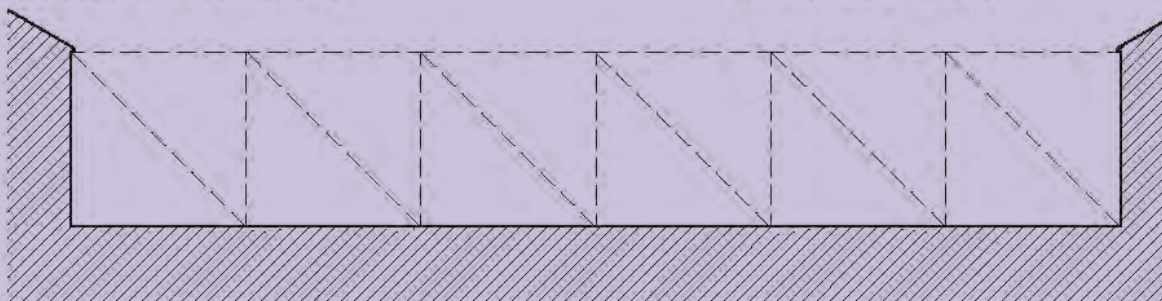
1:1

(The best for thoroughfares)



1:3

(The best for squares)



1:6

(Adopted from *The Draft Civic Master Plan*)  
(The perceivable maximum)



## STREET-ORIENTED ARCHITECTURE

### Frontages

Frontage is the privately-owned layer between the façade of a building and the property line. The combination of the private frontage, the public streetscape and the nature of the street (or public space) creates the character of the public realm.

The frontage of a building is a primary contributor to pedestrian activity. *Buildings should have functional doorway entries and exits at an average of 75 feet or less along nonresidential or mixed-use buildings or blocks.* Functional entries at short intervals allow activity at many street segments and helps to keep spaces safer.

### Shopfronts

*There is an economic advantage to creating unique one-of-a-kind environments such as main streets. With mixed-use environments, great care should be given to the architectural components that make for a good building-to-street relationship that encourages pedestrians and improves sales per square foot.* For mixed-use buildings, an expression line (just above the ground floor) such as a cornice or eyebrow that forms a base, should be incorporated into the building design to separate the private upper floors from the public street and commercial space below. The Anatomy of a Shopfront diagrams on the following page illustrate the elements that create an interesting shopfront and active sidewalk.

*Shopfronts should line Citrus Avenue and 5th Street in Downtown as well as new streets in neighborhood centers across the City. Shopfronts should also line the Kings Bay Riverwalk when possible.*



Examples of well designed shopfronts and mixed-use buildings

## PARKING LOCATIONS

The design of Downtowns and neighborhood centers should prioritize the experience of the people living in, visiting, working at, or otherwise just enjoying the place. This generally means public spaces shaped by buildings with comfortable proportions and lined with street-oriented architecture. However, parking is still necessary and must be accommodated within the design of the area.

*On-street parking should be maximized for public use to support local merchants. Other parking should be located behind or to the sides of buildings.*

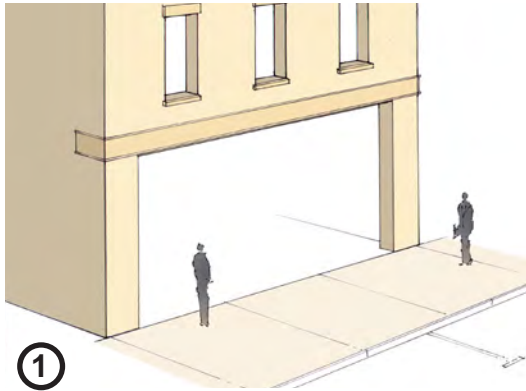
Meeting the latest FEMA flood zone standards will require the first floor of buildings to be elevated or floodproofed to, in many cases, seven to nine feet above the ground, depending on the ground elevation. *There is an opportunity to use the uninhabitable space under the buildings for parking. However, these ground spaces should be screened from the street and public spaces to not take away from the public realm.*

## VACANT PARCELS

Vacant lots can be a challenge and an opportunity. *When private lots remain undeveloped, they can decrease property values, safety, and health while placing a strain on a municipality's finances.* Vacant parcels and buildings often fall into disrepair, it is usually left to the city to undertake the maintenance of the property. This could mean demolishing the building or maintaining the land to avoid hazards to public health. These services draw on the municipality's financial resources for parcels that are not providing any revenue.

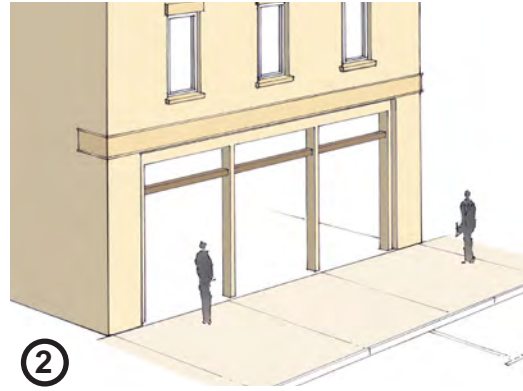
*Building within these lots is also a more efficient way for Crystal River to provide services. Roads and infrastructure are already in place, and filling in vacant lots can help neighborhoods become more complete and walkable, while also reducing pressure for development at the edges of the City and making it easier to preserve the natural areas around Crystal River for people to enjoy.*

## THE ANATOMY OF A SHOPFRONT



①

The basic building mass - placed close to the street. Generous shopfront with vertically-oriented windows above.



②

Columns sub-divide the shopfront opening and transoms help achieve well-proportioned shopfront windows.



③

Cased windows sit atop knee-height bulkheads.



④

Pedestrian-oriented entrance, signage, and lighting.



⑤

Awnings provide shade and rain protection.



⑥

A gallery provides a second-floor terrace.



## Civic Toolkit: **PARKING**

Historic buildings Downtown were constructed at a time when parking requirements did not exist, and so, property owners were able to build structures on the majority of their site. With the introduction of parking requirements, it became difficult to build a marketable building and accommodate the required parking on the small lots in Downtown. The continued success of Downtown and the future success of new neighborhood centers depends on increased access to these hubs of community life and economic activity. The thoughtful accommodation of parking is an important piece of the equation.

### **PARKING MANAGEMENT**

Parking management is a set of programs and regulations that affect the supply, demand, location and price of parking. *When properly managed, the parking system can support economic vitality and make neighborhoods and business districts more livable.*

### **RECOMMENDED PARKING STRATEGIES**

#### **Reduce the Demand for Parking**

*The first step to reducing excessive, inefficient, and unattractive surface parking in prime downtown locations is to address the root cause: reducing the need for and amount of un-managed surface parking. This can be done by re-balancing the city's mode split, or percentage of people walking versus biking and driving.*

Several strategies to improve walkability and bikeability are described across this plan, and are necessary steps towards an attractive and vibrant town.

Many in the planning and urban design communities are switching precisely to this approach of looking first at land use patterns and complete streets practices, before studying vehicular traffic improvements. While maximizing the way people are able to move in and around Downtown Crystal River is a critical first step towards controlling current and future parking demand, there are several other strategies that can be used to better manage parking behavior and supply.

#### **Manage the Parking Supply**

*The second step is to address the supply of parking in downtown and at neighborhood centers. The following strategies can be applied to manage the supply and demand for parking as Crystal River evolves over time.*

As the City updates its zoning codes, ordinances and parking policies, these modern mitigation and management concepts can be evaluated to further reduce the reliance on the personal automobile in downtown and in the surrounding communities.

- 1 Review Parking Regulations**  
Review and modify, if needed, existing parking regulations to support the town center vision as described in this plan and to permit the recommended parking strategies.
- 2 Create “Park Once” Environments**  
The goal of creating vibrant mixed-use centers supports the creation of “park once” environments. In such places, many trips require only one parking space.
- 3 Maximize On-Street Parking**  
On-street parking should be maximized along streets in Downtown and within new neighborhood centers to reduce the need of on-site parking and surface lots. On-street parking is especially important for meeting commercial and business parking requirements and is convenient for customers. ADA accessible parking should be included in key locations.
- 4 Allow Shared Parking**  
Various land uses have different peak periods of parking demand. Allowing complementary land uses to share spaces, rather than requiring separate spaces for each separate use, can more efficiently allocate space for parking.
- 5 Establish a Fee-in-Lieu Program**  
Private development can pay into a fee-in-lieu program to utilize and support the centralized parking and reduce the number of surface spaces required on each lot.

- 6 Provide Centralized Shared Parking**

In place of on-site parking, centralized parking should be provided in mid-block locations on publicly-owned parcels to serve multiple buildings and leverage shared parking to reduce the number of spaces needed and limit unused spaces. Mid-block parking can help to preserve downtown's pleasant walking environment and character by shielding the parking with buildings.
- 7 Improve Parking and Mobility Wayfinding**

Consistent and clear signage and wayfinding consistent with Downtown's branding can help direct visitors to areas where parking is available and to the important destinations within Downtown. This simple strategy can help make more efficient use of existing parking facilities. Clear signage should also be placed to differentiate public parking from private parking to avoid a potential source of confusion and conflict as to where one can park.
- 8 Establish Employee Parking Locations**

Parking spaces nearest Downtown destinations can more likely benefit businesses when they are available to visitors and patrons. Employees of these businesses also need a place to park while at work, but by occupying the most proximate spaces, turnover rates are low during the day and spaces are not as available for customers. Policies and programs to provide designated parking for employees can ensure that there is adequate parking for both patrons and employees.

Certain off-site public parking lots could have designated permit spaces for employees to park in during normal business hours. Business and property owners can enter into covenants with the City whereby it is agreed that employees would not park in the on-street spaces in Downtown.
- 9 Implement Parking Time Limits**

Implementing a parking time limit of 2 hours along with increased enforcement can promote higher turnover on key blocks in downtown in an effort to maintain one to two open parking spaces per block.
- 10 Implement Metered Parking**

On-street paid parking can be an effective tool to address high parking demands and low turnover in Downtown. Implementing paid parking should only occur after the enhanced enforcement and modified time limits have been applied first and still are not producing the desired results.
- 11 Reduce or Eliminate Parking Requirements**

Downtown Crystal River and the proposed neighborhood centers are different from the rest of the City and should have correspondingly different parking requirements.
- 12 Utilize the Space Underneath Buildings**

Nearly all new buildings in Crystal River will need to be elevated to meet flood regulations. Some of the resulting space could be used for on-site parking. These areas could serve as ADA accessible parking or resident parking.
- 13 Remote Parking**

During peak season or large events, shared parking facilities located further from Downtown could help meet temporarily high demand for parking. These locations should also function as mobility hubs, served with multiple options for traveling to Downtown, such as bikeshare or perhaps a trolley.
- 14 Parking for Other Vehicles and Bikes**

Ensuring ample secure and convenient bicycle parking is a critical step for encouraging bike use. Similarly, space should be provided for golf cart parking. Golf carts are a popular mode of transportation in Crystal River and take up less space to park than a car or truck. Parking also needs to be available for boat trailers. Ideally, centralized trailer parking could be provided outside of the downtown core.

# Big Idea 2

## REVITALIZE AGING RETAIL CENTERS AND INVEST IN NEIGHBORHOODS

*Crystal River seeks to reinvent aging properties along its commercial corridors with new compact, walkable, mixed-use centers of activity. Growth that redevelops sites where public infrastructure funding and private development have already been made will have the greatest economic, environmental, and social benefit. New development which requires new infrastructure and is located in environmentally sensitive areas degrades the ecosystem and costs the taxpayer.*

### THE COPELAND PARK NEIGHBORHOOD

The historic Copeland Park neighborhood is the first part of Crystal River one reaches when arriving from the east. While Highway 44 brings visitors and travelers to and through Crystal River, the road cuts the Copeland Park neighborhood in half. ***Correcting past mistakes begins with transforming Highway 44 into a street that helps to bring together instead of further dividing this neighborhood.*** Investment in the neighborhood should add to businesses and uses needed by the community, a range of housing types, and improvements to parks, sidewalks, and trails.

### HIGHWAY 19

Along Highway 19, Kings Bay Plaza and Crystal Center are doing well economically and host valued local businesses but could be optimized with a greater addition of uses. Crystal Square is currently vacant. ***In time the corridor could become a good candidate for mixed-use development.***

### CRYSTAL RIVER MALL

***The Crystal River Mall is in need of reinvestment.*** The Mall is home to the kind of stores one usually finds on local main streets like an independent bookstore and antique shop. However, the Mall is also home to hallways with dozens of closed shops. At the time of the Charrette, Crystal River Mall's 435,000 square feet was only at 50% capacity. This area can be reenvisioned as a new neighborhood and job center.



Aerial view of Crystal River with Highway 19 and it's surrounding development clearly visible

## KEY PRIORITIES AS ILLUSTRATED BELOW:

- 1 Reconnect and invest in the Copeland Park Neighborhood
- 2 Reimagine the Crystal River Mall as a new regional center utilizing the existing large buildings.
- 3 Diversify centers with a balanced mix of housing, work space, shopping, and recreation.
- 4 Create a new center for the surrounding neighborhood with walkable mixed-use, street-oriented urbanism.
- 5 Repurpose smaller shopping centers to fit within their context and support today's uses and activities
- 6 Redevelop when possible to limit the development of greenfields and forested areas.







# PROPOSED IMPROVEMENTS & POLICIES

## BUILD UPON THE EXISTING FRAMEWORK OF THE CITY

A connected network of streets and regular blocks form the framework of Crystal River’s historic neighborhoods. These mostly residential neighborhoods are separated from one another by large retail shopping centers and state highways, breaking up the street network and isolating neighborhoods from one another. The Downtown and surrounding neighborhoods also have a high number of vacant lots.

*The City should utilize this existing framework for great, walkable neighborhoods to accommodate the growing population and visitors while limiting development further from the Downtown.*

## CREATE NEW CENTERS FOR CRYSTAL RIVER’S NEIGHBORHOODS

Crystal River, following national trends, has existing demand for walkable neighborhoods and neighborhood centers, destinations that can define a community and offer a variety of uses, activities, and housing in one location. *There is value in the convenience and proximity to services and amenities offered by neighborhood centers, as demonstrated in the Downtown along Citrus Avenue.*

*In addition to supporting the Downtown, new neighborhood centers should be created in coordination with the surrounding communities.* Neighborhood centers come in a variety of shapes and sizes. They can range from a single neighborhood store to several blocks. *Crystal River should create centers of a variety of sizes, from larger regional centers to small four corner intersections, or neighborhood crossroads.*

### KEY CHARACTERISTICS OF NEIGHBORHOOD CENTERS

- Include a balanced mix of housing, work space, shopping, and recreation.
- Defined with street-oriented urbanism

## Redevelop Vacant Shopping Centers

Traveling south on Highway 19 from Downtown, large retail shopping centers dominate the scene. These shopping centers generally consist of large single story buildings set far back from the street with fields of parking. Some of these shopping centers are home to valued local businesses and important stores for daily needs. Others are completely vacant.

*Large, vacant shopping centers provide an opportunity for creating new mixed-use neighborhood centers with housing, businesses, open space, parking and other desirable amenities. A network of blocks and streets can integrate the neighborhood center into the surrounding community and provide more options for accessing the site and its destinations.*

The current shopping centers are almost completely covered by pervious surfaces, either asphalt or buildings. New designs can increase the amount of pervious surfaces and green space, creating neighborhood amenities while also reducing the impact of stormwater runoff.

## Add New uses to Existing Shopping Centers

Other shopping centers are still actively used and serving the community. *However, the large size of these properties affords an opportunity to add new uses and create a center on what is currently underutilized parking or vacant buildings. Diversifying the uses by adding residential, office, or other community services makes for a more resilient investment and can attract more customers looking for an experience unique to Crystal River.*

## Repurpose Small Retail Centers

Smaller shopping centers are located along the entire length of Highway 19 and Highway 44 in Crystal River. Many are home to local businesses that reflect Crystal River. *Small retail centers can be enhanced with new landscaping and upgraded facades that help create more street-oriented design.* Small interventions can move an area towards street-oriented design without requiring completely rebuilding.

## Create New, Crossroads Centers

*Small crossroads centers with commercial uses catering to local residents' daily needs are vital elements of walkable, sustainable neighborhoods.* They may simply consist of several mixed-use, street-oriented buildings at an intersection. A prime opportunity for such a center is at Highway 44 and 8th Avenue where a crossroads center can introduce a walkable destination and in-town character to the otherwise suburban strip.

## REIMAGINE CRYSTAL RIVER MALL AS A NEW REGIONAL CENTER

The Crystal River Mall is located at the intersection of North Turkey Oak Drive and Highway 19 and consists of a large existing investment in infrastructure and buildings. *Like regional malls nationwide, decreasing retail demand has left nearly half of the mall empty, creating an opportunity to reimagine the site. Possibilities range from utilizing the existing large buildings to starting over from scratch, although a scenario in the middle is much more likely.* The Mall provides potential space for new large anchors like an Amazon fulfillment center, a call center, or a satellite campus for a local university. At the same time, the soundest strategy for the vast mall property would be to convert it to a diversity of uses including residential uses, assisted living centers, or hotel uses.

## RECONNECT AND INVEST IN THE COPELAND PARK NEIGHBORHOOD

The historic Copeland Park neighborhood extends eastward from Downtown towards the city's boundary. Over the past decades, the neighborhood has been divided in half by Highway 44 widenings and dis-invested in. *Reconnecting the neighborhood entails redesigning Highway 44 into a safer street that is easier to cross. Investment in the neighborhood includes helping homeowners and businesses renovate their properties, creating new homes on vacant lots, upgrading parks, providing sidewalks, and encouraging walkable centers with community-serving businesses and organizations.* Zoning and development regulations should be revised to support and restore this neighborhood.

## PRIORITIZE MIXED-USE DEVELOPMENT

Mixed-use development is a type of urban development that blends residential, commercial, cultural, institutional, or entertainment uses into one place. Ideally, those functions are to some degree physically and functionally integrated, and provide pedestrian connections and open spaces.

Mixed-use, multi-story buildings can also adapt better to a changing market than large, single-story, single-use buildings because of the wider range of potential tenants and the ability to include multiple tenants who provide a mix of goods and services.

## IMPROVE GATEWAYS & MAIN CORRIDORS

Crystal River is served by several main thoroughfares that provide access to and through the city. These corridors serve as gateways to the city, providing the first impressions of Crystal River. In particular, Highway 44 and Highway 19 are currently not as welcoming as residents desire and do not reflect the city's image. *The city should reimagine the Highway 44 gateway as a mixed-use center, hinting at the historic downtown ahead while also providing needed amenities for the surrounding neighborhood.*

## CONTROL SIZE AND SCALE ALONG HIGHWAY 19 AND HIGHWAY 44

*Commercial, office and residential development should not be consumed in single, massive complexes, they should be developed at numerous multiple mixed-use centers.* Development must be encouraged along major intersections first, to create walkable centers where each new reinvestment will encourage the next. Any intersection that achieves redevelopment on all four sides will have the feel of a complete place and become a magnet for new investment. *It is essential that new development respect the existing neighborhood and appropriately transition from larger mixed-use buildings to residentially-scaled development closer to the community's homes. This can be achieved by expanding the city's form-based regulations which employ metrics that respect the community's vision for the corridor.*



## Civic Toolkit:

# HOUSING & INFILL DEVELOPMENT

*As Crystal River attracts new residents, it is important that housing affordability is maintained and that new housing contributes to the character and quality of life of the City.*

### INFILL HOUSING

*The Crystal River Civic Master Plan proposes a variety of housing types that can be added to infill locations throughout the city in order to capitalize on existing infrastructure, reduce suburban sprawl, and offer smaller, less costly home options.*

Infill reinforces the value of existing assets as well as the sense of community. New infill will raise valuations and over time allow financing for renovation and additional new units. Filling in the gaps in existing neighborhoods increases safety, as there will be more eyes on the street and more people who are likely to be engaged with the appearance, quality, and security of the community. It will also generate more tax revenue per acre for the city.

### TRADITIONAL NEIGHBORHOOD DEVELOPMENT (TND)

*TND is a type of development that creates a complete neighborhood using traditional town planning principles centered on walkability, vibrant public spaces and mixed-use developments.* TND provides a variety of housing types allowing people with different ages and incomes to live in the same neighborhood.

### HOUSING CHOICES

A mix of residential building types creates neighborhoods which allow a diversity of ages and incomes, and permit residents to trade up or downsize their homes without having to move away. *Multi-generational and life-cycle neighborhoods create strong social networks, avoid concentrations of poverty or wealth, and lead to safer communities.* A large variety and scale of housing choices can be found between the conventional single-family home and multi-family apartment complex.

### PLANNING FOR AFFORDABILITY

Maintaining affordability in Crystal River will require a combination of market-friendly tools as well as additional programs and strategies:

- Streamlined development review
- Promote “Missing Middle” Housing types
- Reduced Minimum Parcel Size
- Require large project to include a mix of building and unit types
- Encourage multi-family and apartments in new TND centers along Highway 19
- Promote Accessory Dwelling Units (ADUs). Strategies may include an expedited approval process, reduced fees, and offering several pre-approved building plans.
- Establish a Community Land Trust

### KEY CONSIDERATIONS FOR HOUSING

- 1 Opportunity Sites**  
Actively encourage the redevelopment of large opportunity sites on Highway 19
- 2 Zoning and Land-Use**  
Revise zoning and land-use regulations to allow for mixed-use developments of enough intensity and predictability to get realistic developments built
- 3 Infill Development**  
Encourage infill development in the downtown and Copeland Park neighborhoods
- 4 Missing Middle Housing**  
Ensure that residential density controls are calibrated to allow for missing middle housing types (discussed in more detail on the next page) including townhouses, duplexes, fourplexes, cottage courts, accessory dwelling units, and small apartment buildings

# “MISSING MIDDLE” HOUSING



*There is a growing demand for alternative housing types and walkable neighborhoods throughout the United States. The term “Missing Middle” was conceived by Daniel Parolek of Opticos Design, Inc. to define a range of multi-unit or clustered housing types compatible in scale with single-family homes that help meet the growing demand for walkable urban living, often lacking in conventional suburban subdivisions.*

## MISSING MIDDLE HOUSING CHARACTERISTICS

(Excerpted from [missingmiddlehousing.com](http://missingmiddlehousing.com))

- 1 **Walkable Context:** Missing Middle housing types are best located in a walkable context. Buyers and renters of these housing types are often trading square footage for proximity to services and amenities.
- 2 **Small-Footprint Buildings:** These housing types typically have small- to medium-sized footprints, similar to nearby single-family homes. This allows a range of Missing Middle types with varying densities to blend into a neighborhood.
- 3 **Lower Perceived Density:** Due to the small footprint of the building types and the fact that they are usually mixed with a variety of building types within the neighborhood, the perceived density of these types is usually quite low. But, the actual measured densities can meet established thresholds for supporting transit and neighborhood-serving main streets.
- 4 **Fewer Off-street Parking Spaces:** A balance must be sought between providing necessary car storage, and the expense and impact on community design of too much parking. Since they are built in walkable neighborhoods with proximity to transportation options and commercial amenities, Missing Middle housing types typically do not provide more than one parking space per unit.
- 5 **Smaller, Well-Designed Units:** Most Missing Middle housing types have smaller unit sizes, which can help developers keep their costs down and attract a different market of buyers and renters, who do not have such options in many communities.
- 6 **Simple Construction:** Missing Middle housing types can be simply constructed, which makes them an attractive alternative for developers to achieve good densities without the added financing challenges and risk of more complex construction types. This aspect can also increase affordability when units are sold or rented.
- 7 **Creates Community:** Missing Middle housing creates community through the integration of shared community spaces within the building type (for example, bungalow courts), or simply from being located within a vibrant neighborhood with places to eat and socialize.
- 8 **Marketable:** Because of the increasing demand from baby boomers and millennials, as well as shifting household demographics, the market is demanding more vibrant, sustainable, walkable places to live. Missing Middle housing types respond directly to this demand.

# Big Idea 3

## BUILD SAFE, COMFORTABLE AND INTERESTING STREETS

*Complete Streets are streets for everyone. They are designed and operated to prioritize safety, comfort, and access to destinations for all people who use the street, including older adults, people living with disabilities, and people who cannot afford or do not have access to a car. Complete Streets make it easy to cross the street, walk to shops, jobs, and schools, bicycle to work, and move actively with assistive devices.*

*Features of Complete Streets policies include inclusive roadway design, lane striping, bicycle lanes, paved shoulders suitable for bicyclists, pedestrian safety signs, crosswalks, pedestrian control signals, bus pull-outs, curb cuts, raised crosswalks, ramps, and traffic calming measures.*

*Creating Complete Streets means transportation agencies like the Florida Department of Transportation must change their approach to community roads.*

*By adopting a Complete Streets policy, communities direct their transportation planners and engineers to routinely design and operate the entire right of way to prioritize safer slower speeds for all people who use the road, over high speeds for motor vehicles. This means that every transportation project will make the street network better and safer for people walking, biking, driving, and riding transit.*



Highway 44 reimagined as a Complete Street at the intersection with NE 9<sup>th</sup> Ave

**KEY PRIORITIES AS ILLUSTRATED BELOW:**

- 1 Implement context sensitive street design principles to create streets that support the surrounding community.
- 2 Provide safe locations for bicycling, such as separated bike lanes, where possible.
- 3 Include sidewalks that are wide enough for people to pass one another and that are separated from the pavement by a planting strip.
- 4 Pay attention to the design of intersections. Utilize high visibility crosswalks
- 5 Plant street trees help to shape the space of the street, bring nature into the city, provide shade for pedestrians, and buffer pedestrians from passing cars.
- 6 Line main streets with a variety of buildings and uses located next to the sidewalk.





# PROPOSED IMPROVEMENTS & POLICIES

## IMPROVE THE HIGHWAY 19 CORRIDOR

The Highway 19 corridor lacks diversity of design as it passes through a range of place types, from the rural countryside to downtowns like Crystal River's, creating conditions that are sometimes not compatible or supportive of what is happening alongside the street on the adjacent properties.

A more vibrant, walkable Highway 19 Corridor would require tailored street designs to support the urban context. *When passing through Crystal River's Downtown the right-of-way for Highway 19 must be redesigned to provide a true balance of transportation modes, supporting pedestrian, bicycle, and transit networks, as well as automobiles.*

As Highway 19 passes through walkable centers, the street should adapt to an urban context. The street must be safe to cross and provide a welcoming arrival at key intersections. The travel lanes should be narrow, there should be on-street parking, and wide sidewalks should extend between street-fronting buildings and the parallel parking spaces. Street trees should be closely-spaced and regularly planted along the sidewalk in tree grates.

## TRANSFORM HIGHWAY 44 INTO A COMPLETE STREET & RECONNECT THE NEIGHBORHOOD

*Similar to Highway 19, Highway 44 is a regional facility with five lanes of fast moving traffic. The highway splits the historic Copeland Park neighborhood in half and offers no safe way to cross.* Transforming Highway 44 into a more vibrant, walkable complete street through Crystal River will help to achieve many of the neighborhood's goals including reconnecting the neighborhood with Highway 44 as a seam instead of a barrier, offering a more beautiful and welcoming experience along the street, providing a more inviting place to walk, and supporting a neighborhood center with mixed-use development.

## DESIGN CITRUS AVENUE AS A UNIFIED WHOLE

*Citrus Avenue is the City's "Main Street" and in its current form it works for both residents and visitors. Upgrades are possible however. An essential distinction of vibrant, pedestrian-oriented streets is that the*

*public space which businesses front is designed as a whole concept, including auto elements (such as travel lanes, parking and curbs), public components (such as trees, sidewalks and lighting) and private elements (shopfronts and buildings). These elements should be coordinated to create a unified outdoor location, just as a room is designed to achieve a unified, comfortable space.*

Pedestrian safety could be increased by providing parallel parking along the sidewalk wherever it doesn't exist, creating a physical buffer between pedestrians and moving vehicles. Outdoor dining and casual strolling become safer behind the on-street, vehicular buffer.

Pedestrian comfort is enhanced with wide sidewalks for walking and outdoor dining, as well as a canopy of street trees and awnings on buildings to provide shelter from the sun and rain. Street furniture such as benches could provide an opportunity for pedestrians to sit. Trash receptacles help keep the public realm clean. Pedestrian interest is held with human-scaled facades, shopfronts and signage. Street-oriented architecture would present doors, windows, balconies, and porches which face the street.

## CREATE SAFER CROSSINGS ON HIGHWAY 44 AND HIGHWAY 19

High-speed streets and oversized intersections make it difficult for people to cross safely and restrict access for some neighborhoods to community assets and facilities, including schools. *Intersection and trail crossing improvements should be made across the city and are outlined in the Recommended Bicycle & Pedestrian Improvements Map.* Intersection improvements may include completely redesigned intersections, high visibility crosswalks, signage, signalization, and pedestrian beacons, among other interventions.

## ADOPT AND IMPLEMENT A COMPLETE STREETS POLICY

*The City of Crystal River should adopt a Complete Streets resolution followed by policies and standards to implement that resolution.* Streets within the Downtown and Traditional Future Character Areas, Neighborhood Centers, and along school routes should be prioritized for complete streets treatments.

## SIDEWALK INVENTORY AND MASTER PLAN

As part of the Complete Streets Program the city should establish a plan to identify locations for sidewalks and a priority for implementation. *Establish priority locations for sidewalks, sidewalk repairs, and sidewalk improvements in areas with high or potentially high levels of pedestrian activity such as near schools, parks, and within the downtown waterfront.* Some small, local residential streets with low traffic volumes may not require sidewalks, or can be a lower priority.

## COMPLETE THE REGIONAL AND LOCAL TRAIL NETWORKS

In Crystal River today, there are two shared-use paths - the Crosstown Trail and a trail along Highway 19 from West Fort Island Trail to NE 1<sup>st</sup> Terrace. *The Hernando/Citrus MPO's Bikeways and Trails Master Plan envisions an ambitious expansion of the County's bikeways and trail facilities connecting to regional and statewide networks. Additional trails are proposed in this plan to increase connectivity within the core of Crystal River and to complement the existing and previously proposed trail networks, as shown in the figure later in this section. The trails should connect Downtown to Three Sisters Springs, Yeomans Park, proposed mixed-use development along Highway 19 and Highway 44, and Fort Island Beach.* Trail facilities can provide a viable alternative for travel, provide a recreational experience for residents, attract bicycle tourism, and help facilitate new development.

## EXPAND AND ENHANCE THE BIKE NETWORK

Designing and implementing a bikeway network that is appropriate for the surrounding context should be strongly correlated to land use characteristics and to the desired development or preservation goals for each neighborhood in Crystal River as outlined by the Future Character Areas in Chapter 4. *The proposed network should be further fine-tuned at the scale of the block. This can occur through a Bicycle Master Plan that incorporates existing Crystal River multi-use trails, proposed bikeways and the latest advancements in bicycle planning.*

*As planning for trails and bikeways continues, alternate routes may be easier to implement or may better meet the needs and concerns of the community.*

The Recommended Bicycle Network Map endorses a minimum grid and vision bicycle network, based on the Hernando/Citrus MPO's Bikeways and Trails Master Plan and on proposals established in the Civic Master Plan.

*In addition to a bikeway network, numerous design countermeasures may be applied to streets to increase the visibility and safety of existing and proposed bikeways. These include bicycle boxes, bicycle detection and signal heads, wayfinding and informational signs, bicycle refuge islands, and ongoing bicycle safety campaigns.*

## IMPLEMENT CONTEXT SENSITIVE STREET DESIGN

*Context based street design recognizes that the design of a street should correspond to the type of place that it passes through and that the design of the street can reinforce the community's vision.*

### State Roads

Work with FDOT to adopt a new Context Classification Map for state roads within Crystal River based on the envisioned land use and development patterns in the Civic Master Plan and future updates to zoning.

### Create a Local Classification of Street Types to Guide Improvements on City Streets

Just as context classification can help design state roads that correspond to the areas they pass through, the same classification for local streets can provide clear direction to city agencies on the appropriate design standards and dimensions for different streets across the city.

### Update Street Design Standards and Public Works Standards

The city's street design and public works standards should be updated to match and support the local context-based approach to street design that prioritizes pedestrian safety and comfort and incorporates green infrastructure.

## MAKE TURKEY OAK DRIVE INTO A TRUCK ROUTE

*The city should work with FDOT to reduce truck traffic on Highway 44 and along Highway 19 through the downtown by designating Turkey Oak Drive as the primary truck route.*





## Civic Toolkit: STREET DESIGN

### AN INTRODUCTION TO CITY STREETS

Streets can be beautiful places. Buildings and street trees give the space a sense of enclosure. Proper proportions and details create a comfortable space to be in that operates harmoniously together.

Streets are also for mobility, providing a *right-of-way* to get from where we are coming from to where we are going. How streets function should be based on a continuum, from pure mobility, such as an interstate highway, to a destination itself with strong economic and social functions, such as a pedestrian-only shopping street, like Lincoln Road in Miami, for example.

*In walkable neighborhoods and downtown, streets must always provide a mix of mobility and place making. They need to be great addresses and provide access to businesses and residences. They must also be spaces for socializing, commerce, dining, gathering, vending, and celebrating.* In these places, the long-distance travel function of a street should take a backseat to its place making function with less focus on moving people through the city and more on being in the city.

*Several important state highways pass through Crystal River, Highway 44 and US 19 / US 98. These are key facilities for statewide mobility, exemplified by their Strategic Intermodal System (SIS) designations. These highways are also the primary gateways to the city and bisect historic neighborhoods and the downtown. The design of these streets and how they transition from rural and suburban highways into downtown streets is a key element of this Civic Master Plan.*

Designing and building great streets can be a challenging task, balancing the priorities of many stakeholders and agencies. A great deal of this plan is devoted to designing streets as public spaces. This section provides guidance on turning streets into spaces where people want to be. And getting it right largely depends on following a context-based design approach.

### CONTEXT SENSITIVE STREET DESIGN

*There are two dimensions to classifying streets for design, functional classification and context area type. Functional classification refers to typical engineering language such as highways, arterials, collectors, or local roads. The context area type refers to the type of place in which the road traverses. Both aspects need to be considered when looking for the appropriate design of a street and its surrounding context.*

The function of context-based street design is to balance the multiple and sometimes competing demands placed on streets to create a transportation system that provides mobility while also functioning as a vibrant place of commerce and community. The context describes the physical form and characteristics of a place, interpreted on a block-by-block basis for thoroughfare design. What happens within the bounds of the right-of-way should largely be determined by the setting of private development laying outside of the right-of-way lines.

Context-based awareness, such as through the development of this Civic Master Plan, will result in careful planning and effective implementation of street designs based on clear and lean plans and regulations. *The Civic Master Plan will lead to successful placemaking when the transportation system is designed in harmony with the future vision.*

*It is not surprising that, given their multiple roles in urban life, streets require and use vast amounts of land. In the United States, 25 to 35 percent of a city's developed land is likely to be in the public right-of-way, mostly streets. If we can develop and design streets so that they are wonderful, fulfilling places to be, community building places, attractive public places for all people of cities and neighborhoods, then we will have successfully designed about 1/3 of the city directly and will have an immense impact on the rest.*

*- Allan Jacobs, Great Streets*

*Context-based design is one of those fundamental solutions regarding development planning, infrastructure design, and engineering. When places are well understood, treasured context can be preserved. Also, unacceptable places can be programmed for future changes — changes based on a better balance between public and private interests.*

*The arterial, collector, and local street classifications are still applicable, although the design of each is guided by the Context Area in which the street is located. These designations are based on intended network function. Different street types of various functional classifications should still be designed differently, but with respect to the Context Area in which it is traveling through. In most cases, context should override conventional planning by functional classification of streets and highways.*

The context will help determine where streets should prioritize commerce and community and where mobility should be prioritized. In all cases, streets should be designed to safely and comfortably accommodate all modes of travel, although some modes are given more prioritization than others depending on the context.

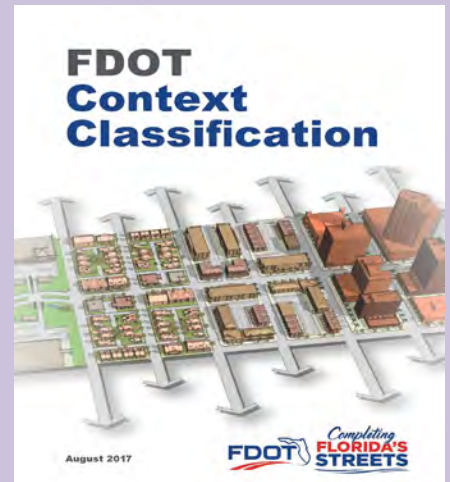
## **FDOT CONTEXT CLASSIFICATION**

*The Florida Department of Transportation (FDOT) has adopted a context classification system to plan and design state facilities in greater harmony with the surrounding land use characteristics and intended uses of the roadway. The context classification assigned to a roadway segment determines the key design criteria elements for arterial and collector roadways, including the design speed, which informs lane width, street tree placement, on-street parking, and other elements necessary for good street design.*

The City of Crystal River should coordinate with FDOT District 7 to refine the context classifications for SR 44 to ensure that its design can prioritize both pedestrians and place as one enters the city. Turning SR 44 into a safer and more comfortable street for pedestrians to walk along and cross is a vital component in reconnecting the Copeland Park neighborhood to the other side of the highway.

SR 44 is the eastern gateway to the city, although its character does not reflect the welcoming arrival into the city that residents desire. Three schools are also located on the north side SR 44, but with no safe crossings. ***With the appropriate context classification and through coordination with FDOT, the design of SR 44 and other state highways in Crystal River can be modified with safer intersections and crossings for pedestrians, as well as a more beautiful, comfortable and interesting experience for all traveling along the street. One that is befitting of the city's location along Florida's "Natural Coast."***

One way to help ensure that streets, including County and State roads, enhance the character of the community and support biking and walking in desired neighborhoods, is for the city to adopt a Context Classification Map.



## **REFINE CONTEXT CLASSIFICATION DESIGNATIONS**

FDOT's context classification system incorporates eight context zones, or character areas, for the purpose of street design, ranging from natural to urban core. While the FDOT Context Classification guide and Design Manual were developed for state facilities, the same classifications can be applied to local streets across Crystal River.

The diagram on the following page recommends context classifications for both the state and local streets that reinforce the community vision. These context classifications allow for and support street designs that prioritize the pedestrian and walkable neighborhoods.



*The map to the right displays the City’s recommended classification areas. The Future Character Areas Map (Pg. 3.29), in conjunction with the Recommended Context Classification Map, provides a vision for what each area of the city should be like in the future in terms of development patterns, land uses and street types.*

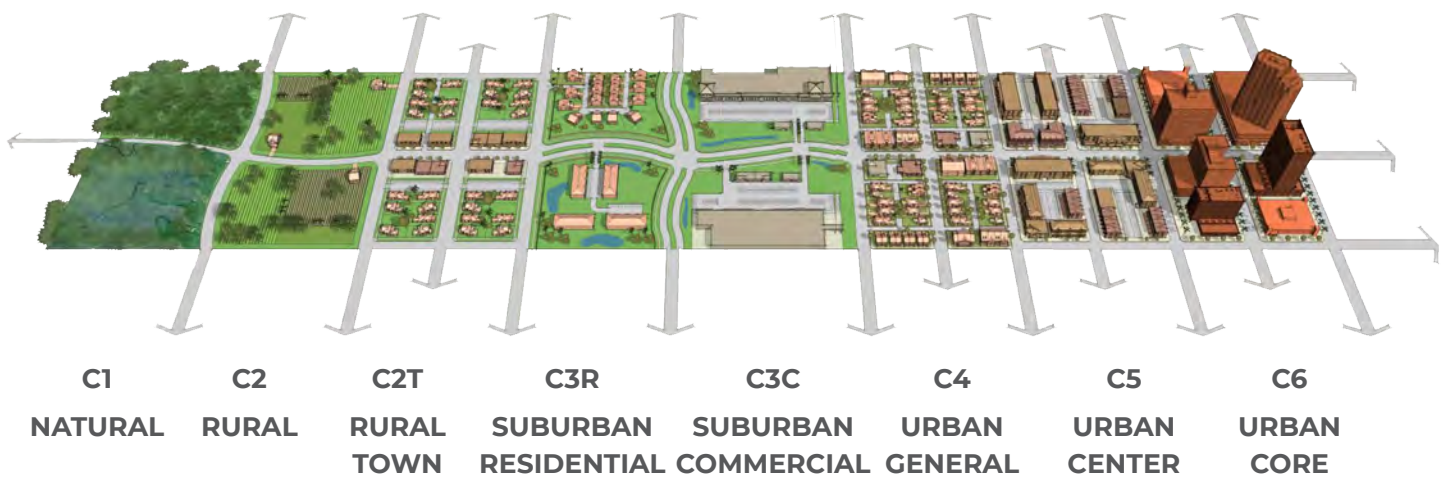
These maps inform which places are intended to be walkable urban, and which are to be drivable-suburban. The design of streets should be based on the Context Classification and reflect the Future Character Area in which it is located. In those areas that are envisioned as walkable urban places, streets should prioritize pedestrians and bicyclists. In those areas envisioned as drivable suburban, streets should be designed for all users, although an emphasis may be placed on the motorist.

*To achieve the community’s multiple goals of vibrant nodes of commerce and community, revitalization, sustainable and affordable housing, and walkability, new street standards will need to be adopted with the following features:*

- Lower target speed;
- Shorter curb radii;
- On-street parking; and,
- Narrower travel lane widths.

Arterial roads should become urban main streets as they enter more urban areas or neighborhood centers. High-speed roads should transform to low-speed designs as they enter traditional neighborhoods to slow traffic to pedestrian-friendly speeds of 20 miles per hour or less.

Widening roads to accommodate through-traffic decreases local livability and should be avoided. *New road capacity created through widening is quickly absorbed by drivers who previously avoided the congested road. This is known as “induced traffic” and explains the failure of newer, wider roads to reduce traffic congestion. Every increase in roadway capacity leads to increases in vehicle miles traveled.* To reduce congestion, public transit, bikeways, sidewalks and mixed-use zoning and land use patterns that allow people to walk between destinations rather than drive should be explored.

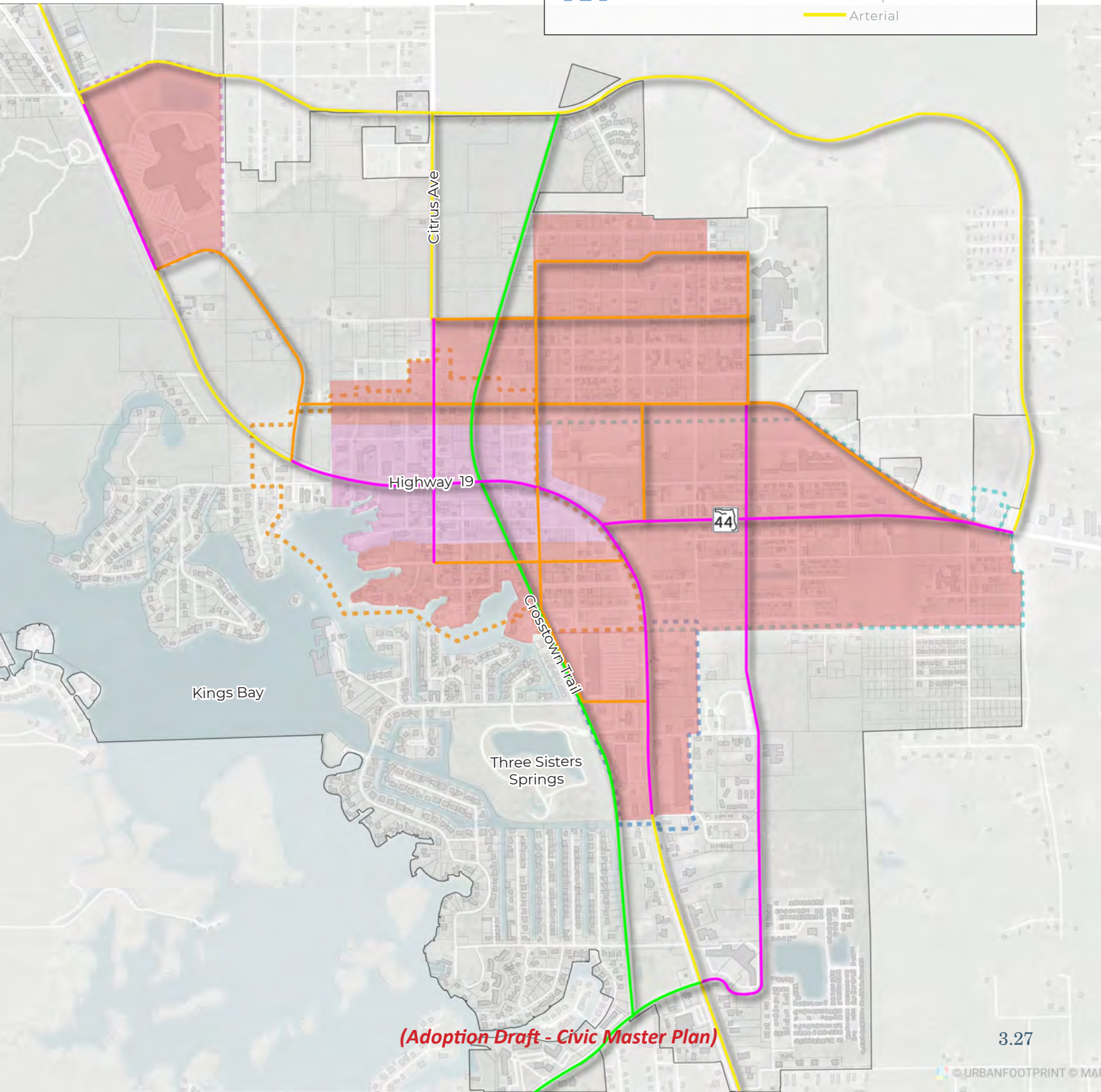


FDOT Context Classifications

# RECOMMENDED FUTURE FDOT CONTEXT CLASSIFICATION MAP

**LEGEND**

Crystal River City Boundary	<b>Context Zones</b>
<b>Focus Areas</b>	C4 - Neighborhood General
Mall Boundary	C5 - Town Center
CRA Boundary	<b>Functional Classification</b>
Copeland Park Neighborhood	Trail
Highway 19 Boundary	Collector
	Compact Arterial
	Arterial



*(Adoption Draft - Civic Master Plan)*



## STREETS FOR WALKING, SHOPPING & DINING

Towns and cities across the country are in the process of restoring old neighborhoods and creating new neighborhoods that are both walkable and accessible.

*Strategies that make the City of Crystal River easier to navigate on foot or bicycle will also make the area more livable and attractive. Most transportation corridors should be more than just roadways for cars. They should be designed to reflect a balance between many modes of transportation and the surrounding land uses.*

This is particularly the case for smaller cities where many destinations are within walking and biking distance of residential areas, but poor or incomplete pedestrian and bicycling facilities make it uncomfortable or dangerous for people to choose those options for getting around.

### COMPLETE STREETS

*“Complete Streets” is a concept for streets designed to enable safe access and mobility for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities.* Where gaps in the bicycle and pedestrian networks exist, effective and safe circulation is hindered. In key locations, such as neighborhood centers and near schools and parks, a well-connected network is especially important.

### SPEED MANAGEMENT

Another important aspect of walkability and public safety involves reduced traffic speeds and the use of traffic calming devices. *The speed of vehicles is a critical component of pedestrian safety and comfort. A pedestrian involved in a collision with a vehicle has a 95% chance of survival if the car is traveling at 20 miles per hour; there is a 10% chance of pedestrian survival if the car is traveling at 40 miles per hour. Pedestrian-friendly speeds are typically 20-25 miles per hour and are no more than 30 miles per hour.*

Furthermore, many of the key design criteria for streets that are safe and comfortable for pedestrians and bicyclists, as well as for streets that are beautiful, such as lane widths, tree placement, and curb radii, are dimensions stipulated in the design manuals as factors of speed. With slower speeds, acceptable lane widths decrease and the space between street trees and the curb are reduced. *Designing for slower speeds is critical for creating streets that actually encourage motorists to travel at lower speeds rather than relying on signage and posted speed limits alone. The geometry of the street has a much greater affect on motorist behavior.*

### SIDEWALKS

Wide and continuous sidewalks allow for active, safe, and healthy lifestyles. Properly-designed pedestrian networks accommodate persons with disabilities, the elderly, and children who walk to school and other places.

For walking to become a regular, acceptable, and dignified means of transportation in Crystal River, most streets should include sidewalks or other types of walkways. The City should embark on a process of adding sidewalks where they are currently missing. *A comprehensive sidewalk plan should be implemented that prioritizes sidewalk investments and ensures those investments result in a connected network. Emphasis should be placed on connecting neighborhood centers to their surrounding communities, along routes used by students in Crystal River to get to school, and along corridors with both high pedestrian and high automobile demand.*

*Sidewalks must also be comfortable places to make walking an inviting means of getting around. In Florida’s hot and humid climate, shade is essential. Sidewalks should be lined with street trees that have shade-providing canopies or covered with galleries and arcades.* The street trees should be planted between the sidewalk and edge of pavement to provide a buffer between motor vehicles and pedestrians. All sidewalks should have a minimum clear zone of six feet, which should be wider along busy shopping or entertainment destinations.

# MAKING SPACE FOR GREAT STREETS

## RIGHT-SIZING

*One technique for creating Complete Streets is implementing road diets, or right-sizing streets to balance the amount of road space for all people (pedestrians, bicyclists, transit users, drivers, and others). The community’s vision from this Civic Master Plan and any updates to the Future Land Use or zoning should be the foundation upon which the road diet design stands. In the compact urban context, slow moving vehicles and shared space guides street design. In suburban settings, with higher vehicle speeds, design relies more on signal timing and separate dedicated spaces to dictate how people move through and use the roadway. **When there are desired context changes, as have been suggested in the Context Classification Map, these changes should be documented as justification for rightsizing existing roads. Road diets based on economic revival, like the revitalization of downtown Crystal River, have the greatest chance of success and can be beneficial for revitalizing commercial corridors that have been eroded by road widening over the years.***

Current best practices, which are shaping local ordinances throughout the country, include the National Association of City Transportation Officials (NACTO) and the Congress for the New Urbanism/Institute of Transportation Engineers Manual (CNU/ITE Manual). These references recommend adjustments to street dimensions that are required for a road diet (e.g. narrowed lane widths and parking space dimensions, wider sidewalks, minimum size of bike lanes, etc.). Lower vehicle speeds are necessary to both implement the design elements of a road diet according to the referenced manuals, and to create a safe environment for those not driving.

## Where is Right-Sizing Appropriate?

*On existing four-lane streets with less than 25,000 ADT (Average Daily Traffic, or the average traffic volume per day), transportation experts around the country are recommending road diets as a priority.* Conversion of a four-lane undivided road to a three-lane undivided road, made up of two through-lanes and a center two-way left-turn lane is a common retrofit. In these instances, the four-lane to three-lane roadway diet does not result in a loss of traffic capacity. This is because the two left lanes on a four-lane undivided highway function as left turn lanes and “block” the through going traffic. The center two-way left-turn lane in the three-lane undivided road scenario effectively takes the place of the two left lanes.

Streets with three-lanes or two-lanes may also be considered for a road diet. Road diets can be completed on streets of all sizes; however, the redesign will need to be customized, depending on where the street is located and the desired land uses adjacent to the roadway that are envisioned for the future. **Any road diet decisions should be made with respect to the surrounding envisioned context as defined by the Future Character Areas.**

## BENEFITS OF ROAD DIETS INCLUDE:

- Overall crash reduction of 19 to 47 percent;
- Reduction of rear-end and left-turn crashes through the use of a dedicated left-turn lane;
- Fewer lanes for pedestrians to cross and an opportunity to install pedestrian refuge islands;
- The opportunity to install bike facilities when the cross-section width is reallocated;
- Reduced right-angle crashes as side street motorists must cross only two lanes of traffic instead of three;
- Traffic calming and reduced speed differential, which can decrease the number of crashes and reduce the severity of crashes if they occur;
- The opportunity to allocate the extra roadway width for other purposes, such as on-street parking, landscaping, street trees, and bike or pedestrian enhancements;
- Complete Streets environment with places for people, not only cars;
- Simplifying road scanning and gap selection for motorists (especially older and younger drivers), making left turns from or onto the mainline.



# SAFE CROSSINGS AND INTERSECTIONS

The best way for safe crossings and intersections is to design the streets themselves to be safe, comfortable, and interesting for pedestrians. This entails low design speeds with narrow travel lanes (typically with two lanes and no more than four) and tight curb radii resulting in motorists traveling at lower speeds and shorter crossing distances for pedestrians.

Highway 19 and Highway 44 both have fast moving traffic across at least five lanes, making pedestrian and bicyclist crossings dangerous. This plan outlines numerous strategies for right-sizing these streets based on context, but interim improvements are needed.

*For multi-lane roadway crossings where vehicle AADT (Annual Average Daily Traffic) is above 10,000, a marked crosswalk alone is typically not sufficient. More substantial crossing improvements are needed for the safety of those crossing.*

The crosswalk enhancements and traffic control devices described on this page can be used to improve non-motorized crossings of major streets or at mid-block crossing locations, including trail crossings. For detailed design criteria, please consult the MUTCD, NACTO, and FHWA for guidance.

## TRAFFIC CONTROL DEVICES

### Rectangular Rapid Flashing Beacons (RRFB)

Rectangular Rapid Flashing Beacons are active warning devices used to alert motorists of crossing pedestrians at uncontrolled crossings. However, they should not be used where pedestrians must cross more than two lanes at once or where traffic speeds tend to be 40 mph or higher.

### HAWK Beacon (High-Intensity Activated crosswalk beacon)

Where more than two-lanes of traffic must be crossed or where speeds tend to be higher, HAWK beacons should be used. HAWK beacons are a traffic control device used to stop road traffic and allow pedestrians to cross. This device is also known as a Pedestrian Hybrid Beacon and can be used as an alternative to traffic control signals. HAWK beacons are appropriate for 4-lane streets, like Highway 19.












## CROSSWALK ENHANCEMENTS

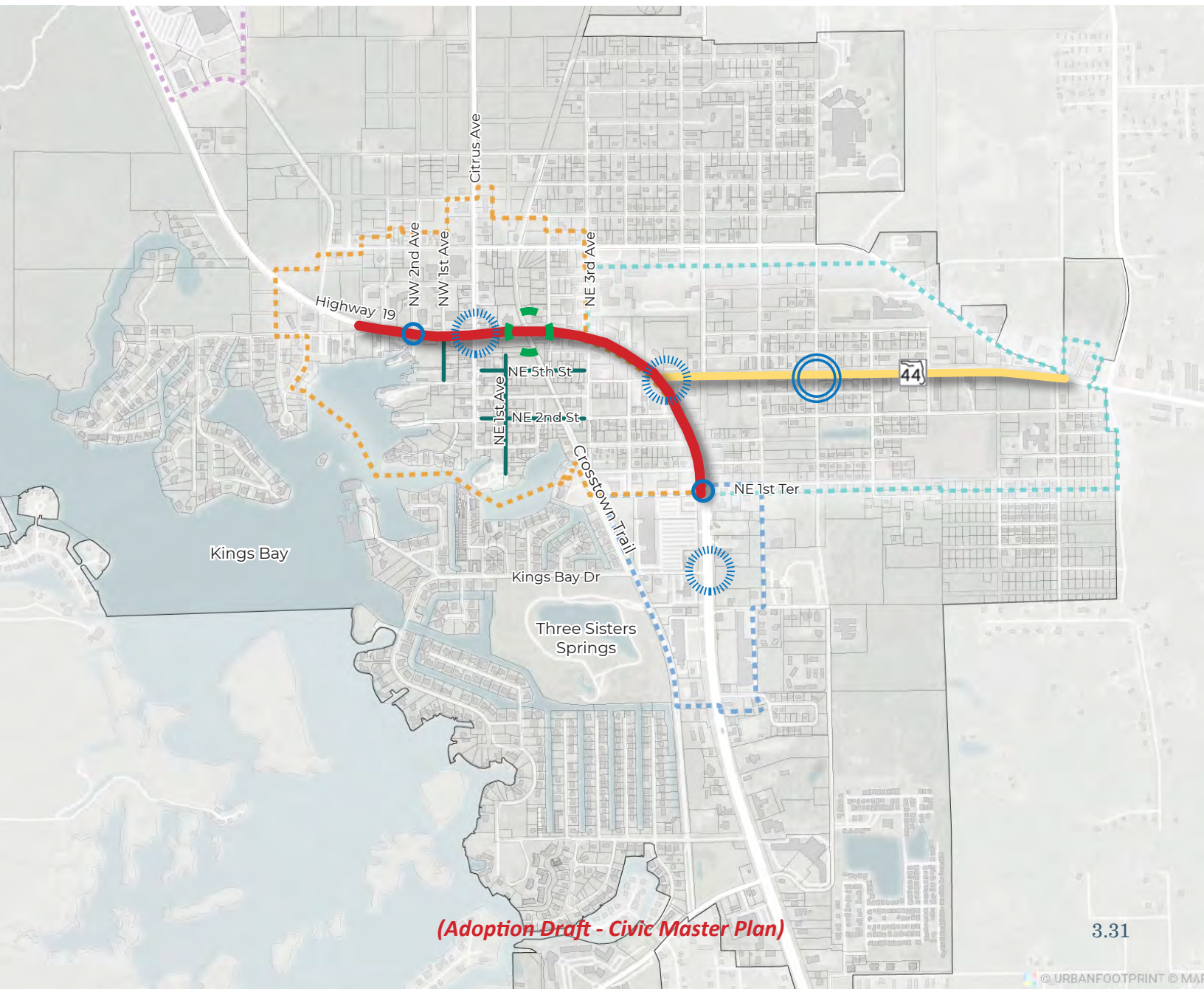
- 1 High-Visibility Crosswalk Markings**  
Marked high-visibility crosswalks, such as a ladder, continental design, or diagonal marking, should be utilized wherever crosswalks are marked.
- 2 Improved Nighttime Lighting**  
Lighting at mid-block or intersection crosswalks can help improve pedestrian safety. Lighting should be placed in advance of crosswalks on both approaches to illuminate the front of the pedestrian and avoid creating a silhouette.
- 3 Advance Stop/Yield Line**  
Advance stop or yield lines placed 20 to 50 feet in advance of a marked crosswalk encourage motorists to stop further back from the crosswalk, promoting better visibility between pedestrians and motorists.
- 4 Parking Restriction on the Crosswalk Approach**  
Restrict parking in the crosswalk approach to improve sightlines for motorists and pedestrians. The minimum setback is 20 feet in advance of the crosswalk where speeds are 25 mph or less, and 30 feet where speeds are between 26 and 35 mph.
- 5 Curb Extensions**  
This treatment, also known as bulb-outs, extends the sidewalk or curb line out into the parking lane, which reduces the effective street width.
- 6 Pedestrian Refuge Island**  
A pedestrian refuge island is a median with a refuge area that is intended to help protect pedestrians who are crossing a multilane road. Refuge islands are highly desirable for mid-block pedestrian crossings on roads with four or more travel lanes, especially where speed limits are 35 mph or greater and/or where annual average daily traffic (AADT) is 9,000 or higher. They can also be located at intersections.

## PEDESTRIAN, STREET & INTERSECTION IMPROVEMENTS

This map provides a blueprint of existing, planned, and proposed pedestrian network, street, and intersection/crossing improvements. Once completed, this network of redesigned streets and intersections would make it easy for people of all ages and abilities to get around the city and connect to key destinations.

### LEGEND

- |  |  |  |
|--|--|--|
|  Crystal River City Boundary  |  Redesigned Streets<br>Highway 19 |  Improved Intersections and Crossings<br>Redesigned Signalized Intersection |
|  Focus Areas<br>Mall Boundary |  Highway 44                       |  New Signalized Intersection  |
|  CRA Boundary                 |  Downtown Streets                 |  Improved Trail Crossing  |
|  Copeland Park Neighborhood   |  |  Improved Crossing with Traffic Control Device                              |
|  Highway 19 Boundary          |  |  |



*(Adoption Draft - Civic Master Plan)*





# REIMAGINING HIGHWAY 19

*Highway 19 is the primary north-south route through Crystal River. While serving an important mobility function, Highway 19 divides the downtown in half and is a barrier between the downtown waterfront and the surrounding neighborhoods. Reimagining this roadway can reconnect downtown, resulting in a safer, more inviting experience befitting Crystal River.*

## HIGHWAY 19 TODAY

Highway 19 became the primary route through Crystal River when it opened as a two-lane roadway in 1931, replacing a more circuitous route through the City. Over thirty years later in 1964 the roadway was widened to four lanes. Today, the roadway is four lanes north of the intersection with Highway 44 and six lanes to the south.

*Highway 19 today is suburban in nature, both in its street design as well as the land use that surrounds it. The highway has a C3C Context Classification (Suburban Commercial). It is classified as an Urban Principal Arterial Roadway that is a part of the Strategic Intermodal System (SIS), State Highway System (SHS), and the National Highway System (NHS). The 2020 traffic volumes, measured as Average Annual Daily Traffic (AADT), vary significantly along the length of the roadway. North of Citrus Ave, Highway 19 carries about 15,500 vehicles per day. Between Citrus Ave and Highway 44 that number is 24,000 and south of Highway 44 the AADT is 25,500.*



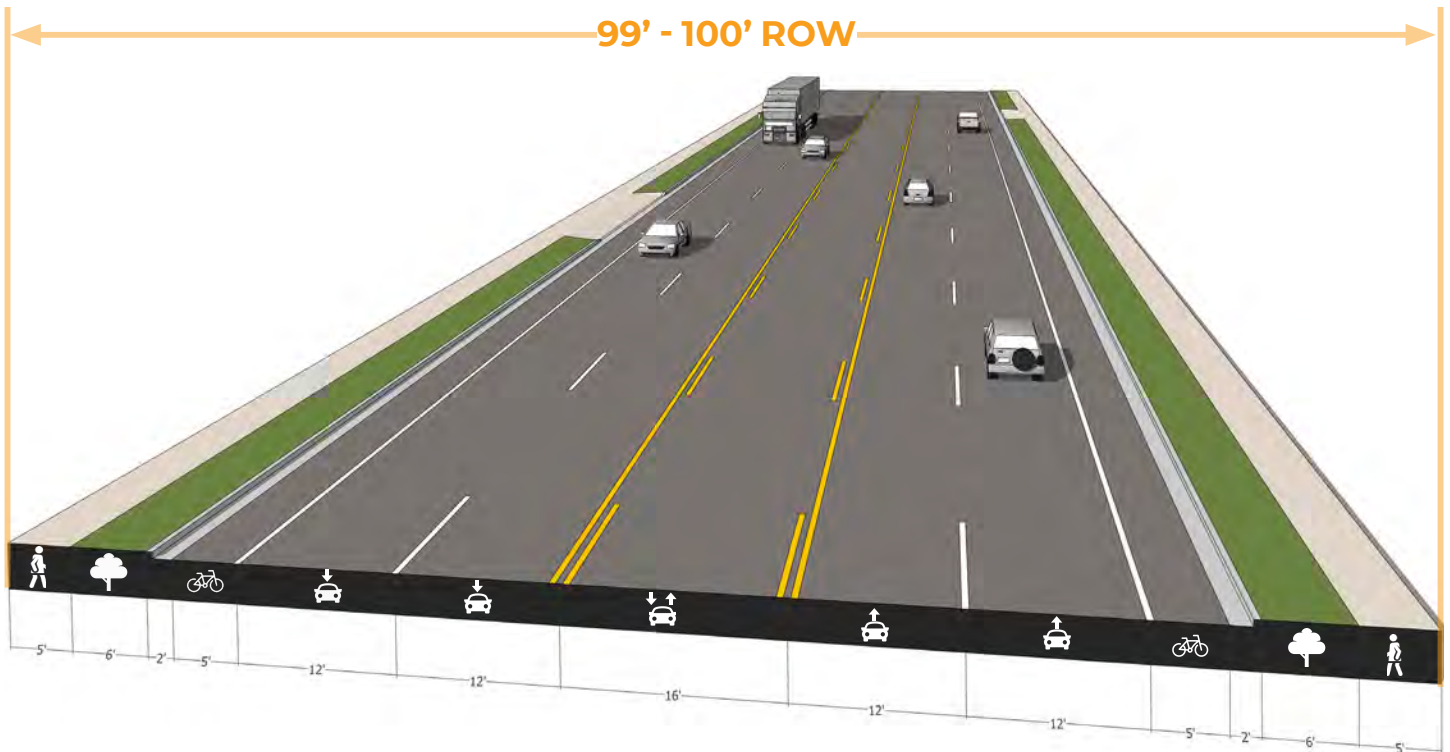
Photo of Highway 19 in downtown Crystal River

*Redesigning highway into the resident’s vision starts with revising the FDOT context classification to correspond to the envisioned land use in the downtown as proposed in the Future Character Areas Map. Updating the zoning to match the Future Character Area designation would further support changes to the context classification, allowing for a more urban street design that is safer for pedestrians and cyclists within downtown. The proposed context classifications are C5 and C4, as shown in the future context classification map. With Highway 19 being both on the State Highway System and the Strategic Intermodal System (SIS), a design variation will likely be needed for a design speed of 25 mph through the C5 context and 35 mph through the C4 context.*

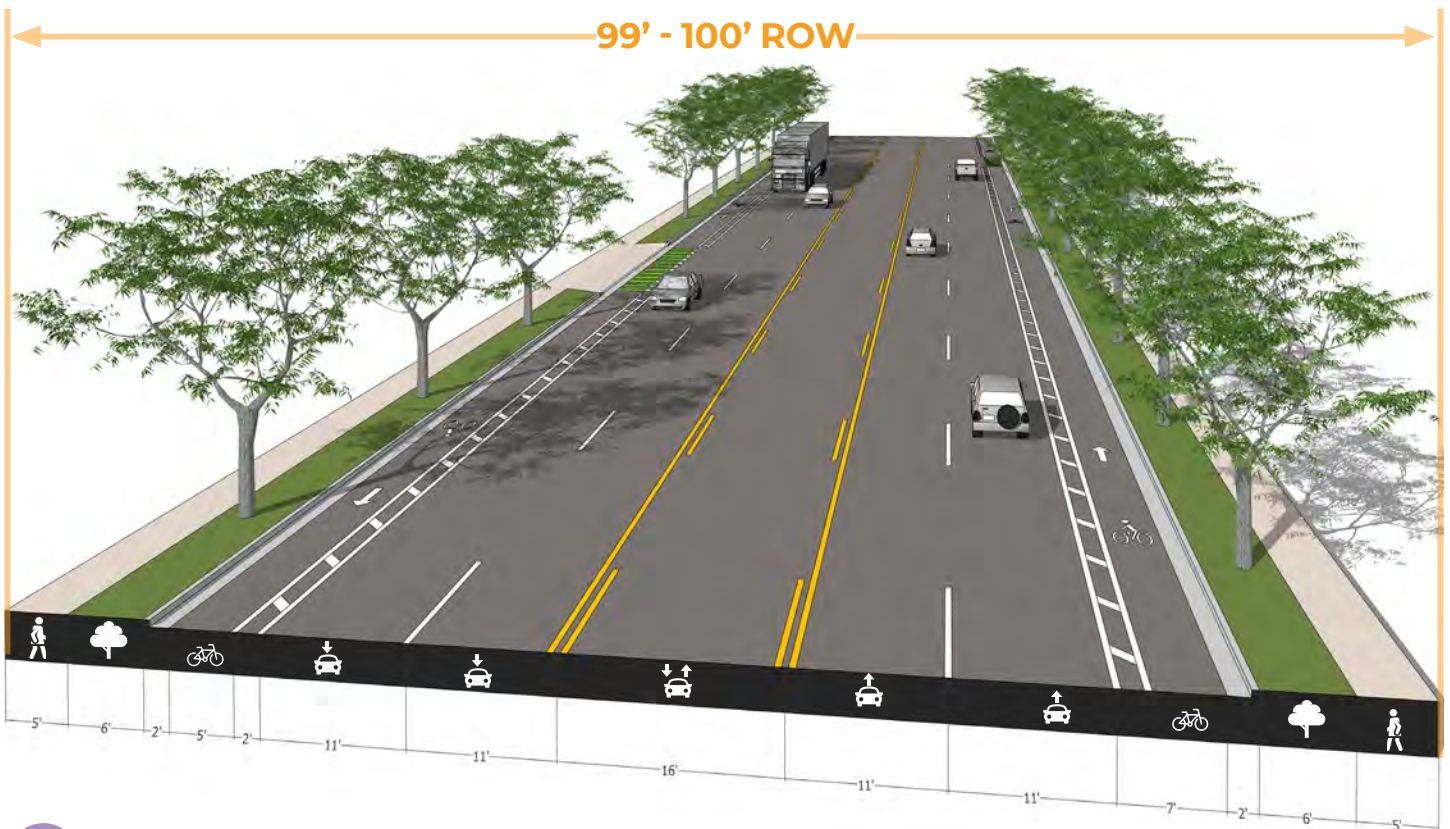
## MAKING HIGHWAY 19 A CROSSABLE AND COMPLETE STREET IN DOWNTOWN

During the charrette, residents expressed their desire to see Highway 19 enhanced with street trees and reconfigured into a place that is safe and inviting to pedestrians. People want to be able to walk across at Citrus Avenue and cross on golf carts the same way other state highways may be crossed on golf carts. The typical cross section for Highway 19 through downtown Crystal River is shown to the right.





**TYPICAL STREET SECTION: EXISTING CONDITIONS**



**A TYPICAL STREET SECTION: BUFFERED BIKED LANES**



## RECOMMENDED STREET SECTIONS

The proposed context classifications and design variations would support slower posted speed limits and allow changes to the street design that encourage slower speeds and achieve the community's goals for Highway 19.

The plan proposes two recommendations for reimagining Highway 19. The first is the short-term recommendation based on what can be done right away. The second is the long-term recommendation, improvements that may take longer to realize due to higher costs and more complicated construction.

### Short-Term Recommendation

*The short-term recommendation is illustrated in typical section A and fits within the existing curb-to-curb dimensions of the street.* This means that costs remain low and the amount of construction is limited as the drainage infrastructure remains as is. *This short-term design reallocates the existing pavement through restriping, narrowing the travel lanes to 11-feet and providing buffers for the bike lanes. Street trees are added within the existing planting strip between the sidewalk and curb.*

### Long-Term Recommendations

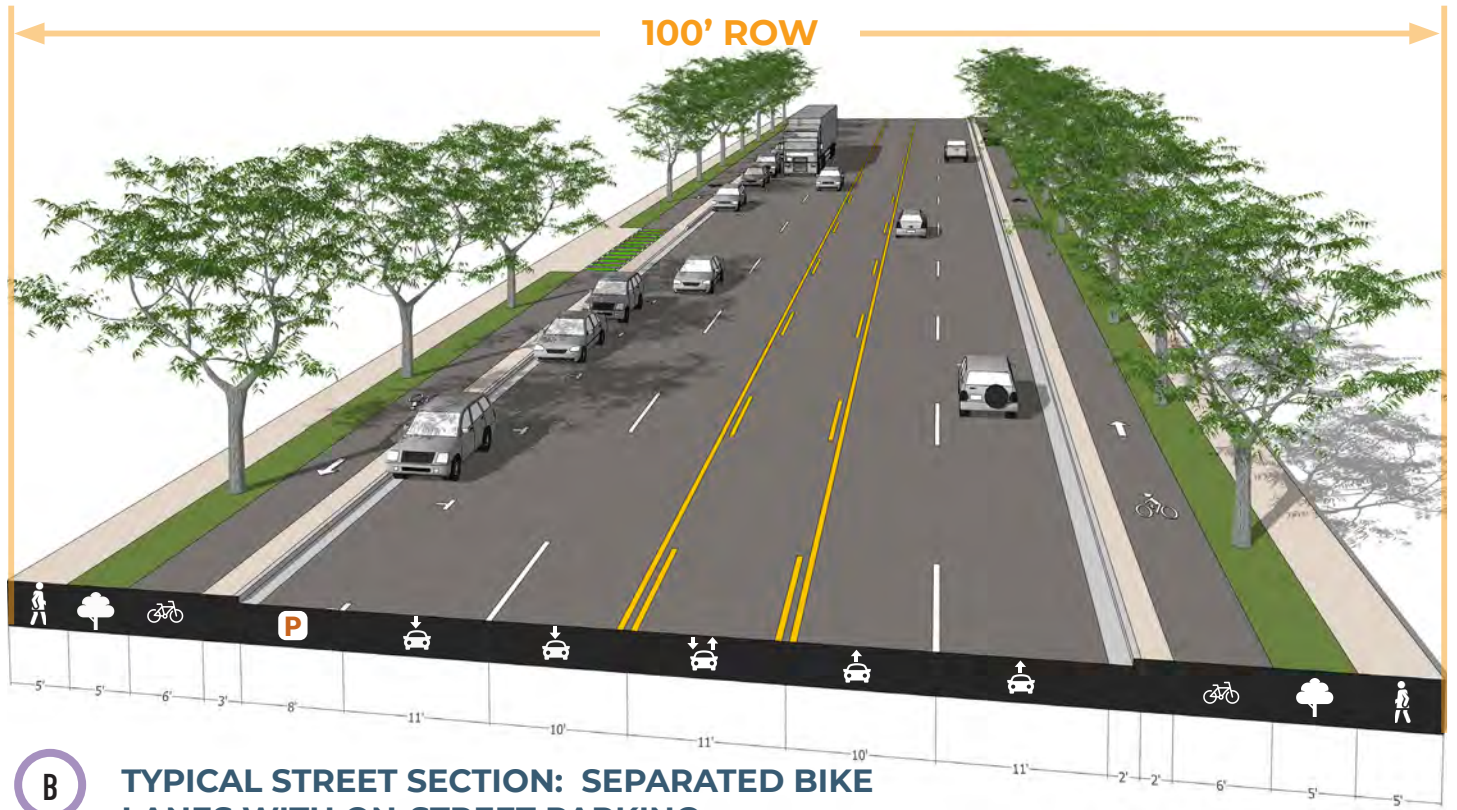
*The preferred design for Highway 19 through downtown requires right-sizing the street, allocating space from travel lanes to parking and bike facilities, as shown in sections B and C. Both scenarios maintain four travel lanes and a center left turn lane. These scenarios do require changing the curb locations and a lower design speed in order to narrow the lane widths and to add street trees along the blocks through downtown.*

The benefits to these proposed designs include safer pedestrian and cyclist conditions, a more scenic street with lush canopy trees, and easier and safer crossings, especially when combined with the crosswalk enhancements and traffic control devices outlined earlier. Typical Section B could allow for intersection pedestrian refuge islands by dropping the parking lane on the intersection approach and shifting the lanes to accommodate a median at the intersection. This is recommended for the intersection with Citrus Ave and the Crosstown Trail Crossing.

*Rebuilding Highway 19 according to these sections would compliment the city's investment in revitalizing downtown and create a welcoming, vibrant, and greener place for residents and visitors to enjoy and share.*

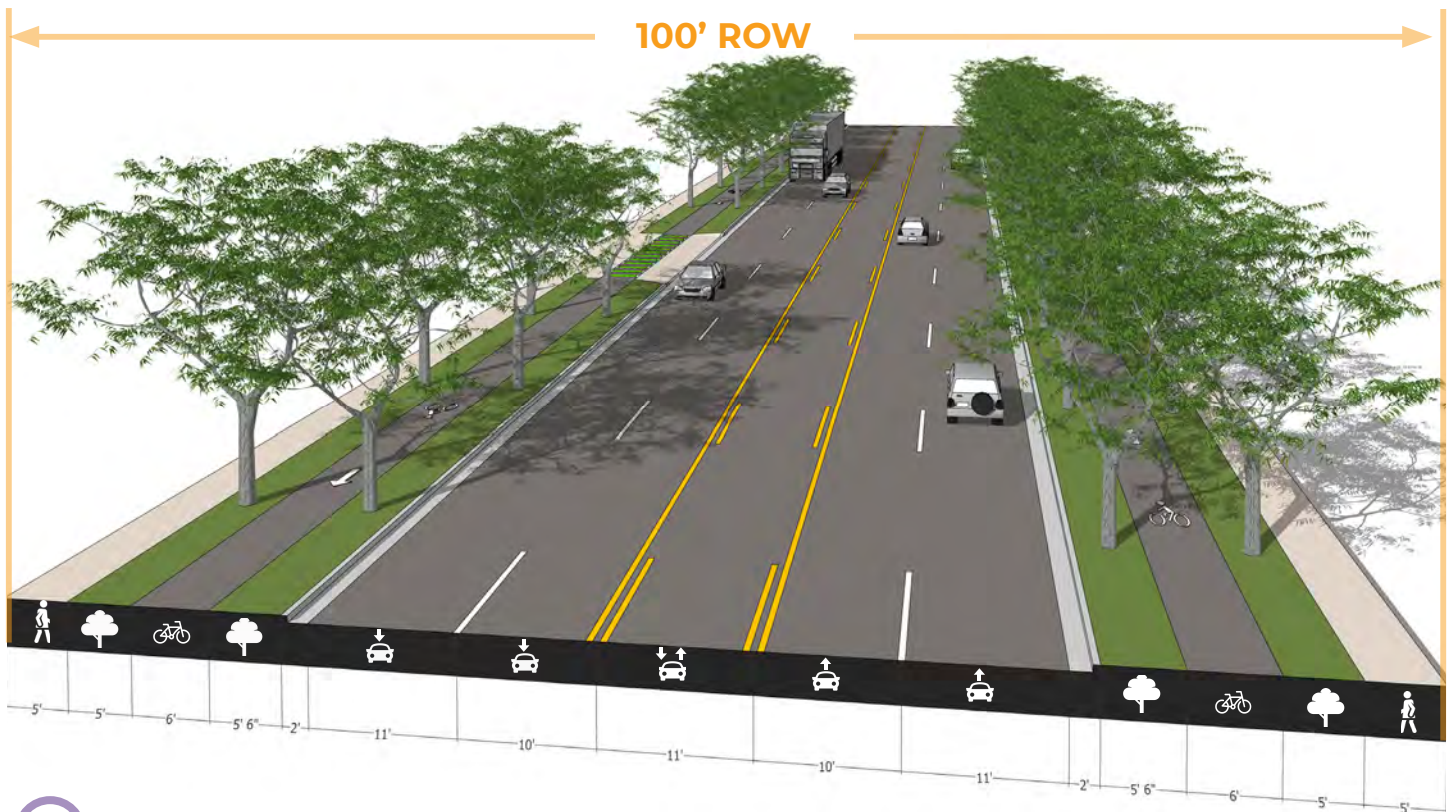
## ACTION STEPS FOR HIGHWAY 19

- 1 Update City Regulations**
  - Update future land use and zoning along Highway 19 through downtown to match Future Character Area designations.
- 2 Adjust Context Classification**
  - Work with FDOT D7 to refine Context Classification of Highway 19 in downtown from C3C to C4 and C5.
- 3 Modify SIS Facility Designations**
  - Coordinate with FDOT D7 for a Design Variation to allow for design speeds of 25 and 35 mph
- 4 Improve Intersections & Crossings**
  - Implement crosswalk enhancements and traffic control devices at key intersections, including Citrus Avenue and the Crosstown Trail crossing.
- 5 Implement Short-Term Recommendations**
  - Implement short-term recommendations as show in Section A, including restriping, narrowing travel lanes, and providing buffers for the bike lanes.
  - Plant trees within the planting strips between the road and the sidewalks.
- 6 Implement Long-Term Recommendations**
  - Pursue long-term street reconstruction of Highway 19 through downtown based on Section B or C, including a redesigned intersection with Highway 44.
  - Include separated bike lanes on both sides of the roadway.



**B**

**TYPICAL STREET SECTION: SEPARATED BIKE LANES WITH ON-STREET PARKING**



**C**

**TYPICAL STREET SECTION: SEPARATED BIKE LANES WITH AN ALLEE OF TREES**

*(Adoption Draft - Civic Master Plan)*



# REIMAGINING HIGHWAY 44

*As the primary eastern gateway to the city, a critical piece of regional and local mobility infrastructure, as well as a barrier dividing a historic neighborhood, re-imagining Highway 44 presents an opportunity to achieve many of the neighborhood’s goals.*

## HIGHWAY 44 TODAY

*Highway 44 today is suburban in nature, both in its street design as well as the land use that surrounds it. Highway 44 in the planning area has a C3 Context Classification (Suburban Commercial) and is a Low Volume Roadway per criteria established in the FDOT Design Manual (FDM). It is classified as an Urban Principal Arterial Roadway that is a part of the Strategic Intermodal System (SIS), State Highway System (SHS), and the National Highway System (NHS). The current Average Annual Daily Traffic (AADT) is 29,600 and the Design Year (2042) AADT is 36,200 according to the FDOT RRR (3R) Safety Report (April 2020).*



Photo of Highway 44 at NE 6th Ave looking east

## FDOT 3R RESURFACING PROJECT

In 2020, the Florida Department of Transportation (FDOT) presented plans to resurface Highway 44 and make safety improvements. The main intent of the FDOT 3R project is rehabilitating the existing asphalt pavement through milling and resurfacing. The scope also called for alterations which included widening the sidewalk to 8-feet on the north side of the roadway, upgrading all sidewalks, curb ramps and driveways to be ADA compliant throughout the corridor as well as modifying the typical section from a 5-lane section with an open median to a 4-lane divided section including a 14-foot median to prevent north-south vehicular movement across SR 44 at multiple intersections. The four existing travel lanes would be reduced to 11-feet and the bicycle lanes would be increased to 5-feet.

*While these changes to the street all add up to an improvement in safety for pedestrians, bicyclists, and motorists, the safety benefits were minimal and there was little to reconnect the neighborhood or create an*

*inviting place where people want to be. The main concern was closing the intersections to cross traffic, meaning longer travel distances for those on bike or driving when trying to cross from one side to the other, further separating both sides of the neighborhood.*

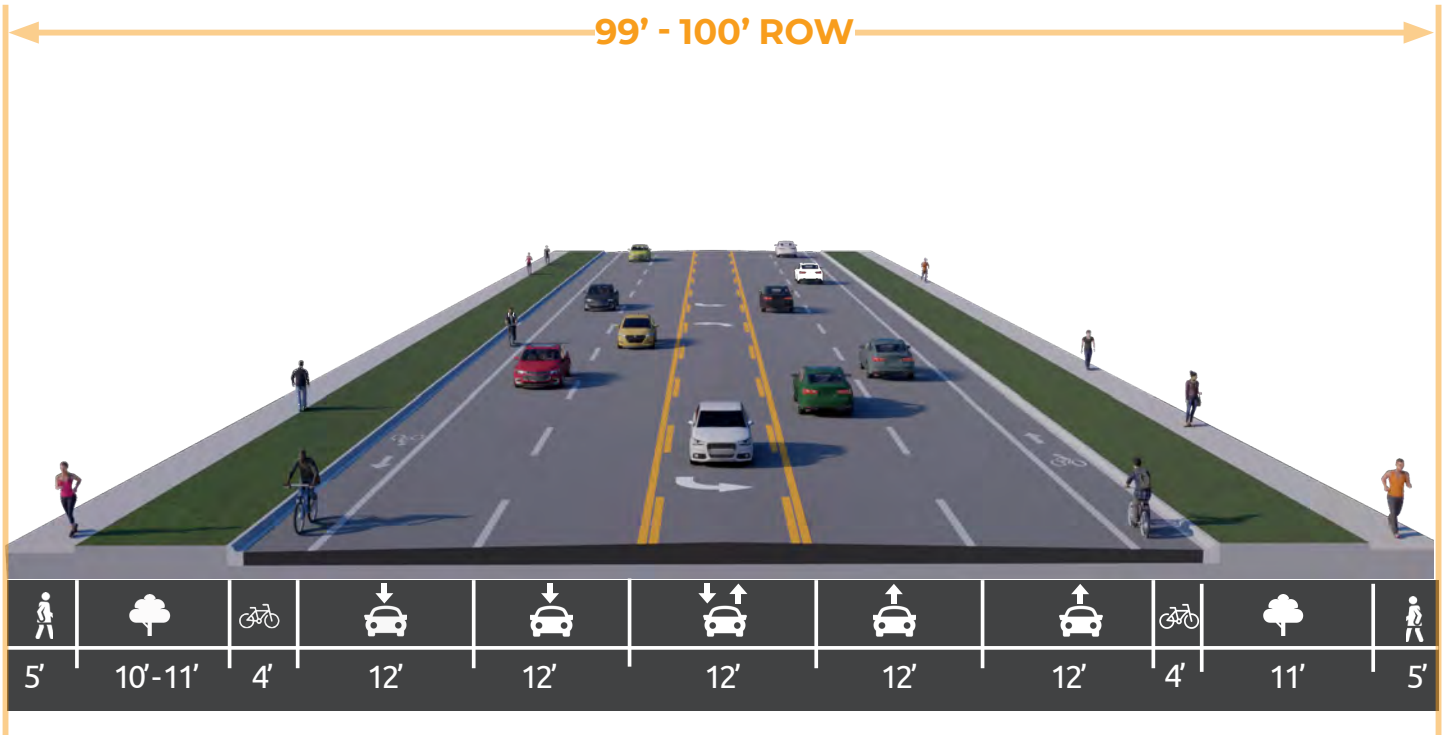
## HYBRID STREET DESIGN

The initial charrette focused on Highway 44 to help the community address these concerns with the FDOT while there was still time to make revisions to the design of the roadway as part of the 3R Resurfacing project. Highway 44 was rethought as a street that will help reconnect the neighborhood and provide a more welcoming entrance to the city outlining both short- and long-term possibilities for the roadway.

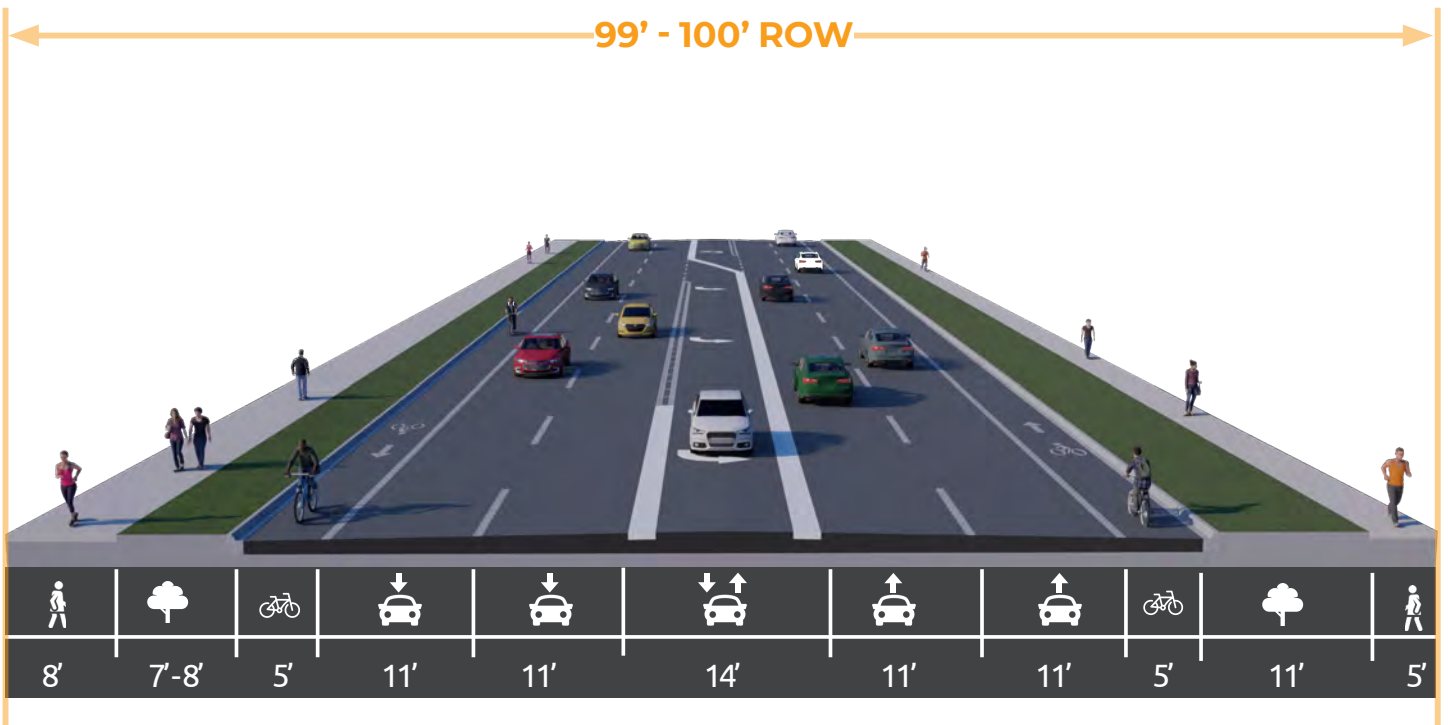
As a result of these recommendations and subsequent meetings between Crystal River, FDOT and the consultants, a hybrid plan was agreed upon that will better meet the goals of the community. The majority of the FDOT planned improvements will remain including improving the sidewalks and bike facility. However, the center turn lane will not become a median and the thoroughfare will remain open for vehicle turning, as well as crossing at 7<sup>th</sup> Avenue, 9<sup>th</sup> Avenue, and 10<sup>th</sup> Avenue. (Due to the need of long left turn lanes onto Highway 19, 6<sup>th</sup> Avenue will be closed) In addition, the city will receive a full signalized intersection with crosswalks at 8<sup>th</sup> Avenue. In short, there will be no medians in place to block cross access of vehicles along the thoroughfare.

In addition to the revised thoroughfare design, the FDOT will support a future change to upgrade the thoroughfare context classification from C3 to C4 if and when the city makes the appropriate changes to its zoning.

*The hybrid street design is a victory for the city, the community, and FDOT. It is the best blend of providing a safer thoroughfare while not creating a greater divide within the adjacent neighborhood. The new traffic signal at 8th Avenue will provide a safe pedestrian and bike crossing to allow people to cross to get to the schools on the north side of the highway and the park on the south side of the highway.*



**TYPICAL STREET SECTION: EXISTING CONDITIONS**



**A TYPICAL STREET SECTION: FDOT PROPOSED 3R PROJECT**



### Long-Term Recommendation

It was made clear to the planning team that bike facilities immediately adjacent to the travel lanes were unsatisfactory on a street with such high traffic volume.

*The long-term recommendation is to locate the bike facility adjacent to the sidewalk, above the curb, and with the planting strip and trees between the bike facility and the roadway, making it safer and far more appealing to a wider section of the community.*

*This separated bike lane option, while optimal, does require a larger investment as it changes the location of the curb and gutter, with associated impacts on drainage infrastructure.* Ideally, a center median would be located within the center turn lane, however, it should not block or cut-off intersections.

With a C4 context classification, the street could also be designed for slower speeds. This allows for additional street trees and new intersection designs that facilitate safer crossings for all.

### TURKEY OAK DRIVE AS A TRUCK ROUTE

*The city should work with FDOT to reduce truck traffic on Highway 44 and along Highway 19 through the downtown by designating Turkey Oak Drive as a truck route.* Truck routes can be established close to downtown and designed to keep large trucks traveling through, but routed away from the walkable downtown street network. Signage and design elements can help prevent the routing of autos and small trucks away from town center areas to avoid drawing away valued customers.

### ACTION STEPS FOR HIGHWAY 44

- 1 Adjust Context Classification**
  - Adjust the Context Classification from C3 to C4 within the study area.
- 2 Modify SIS Facility Designations**
  - Reduce speed to posted 35 mph on the Strategic Intermodal System (SIS) Roadway in keeping with the C4 Context.
  - Continue to pursue study of moving the SIS Facility designation to Turkey Oak Drive and Turkey Oak Drive designated as a Truck Route. (The MPO has commissioned a study on improvements to Highway 44 and Turkey Oak Drive)

### 3 Enhance Center Median and Side Planting Areas

- Maximize center planting strips by taking advantage of permissible design deviations on left turn queue lengths.
- Plant trees within the center median.
- Plant trees within the planting strips between the road and the sidewalks. At a minimum keep the planting strips at the center and sides clear so that trees can be planted at a later time.

### 4 Garner City Commitment

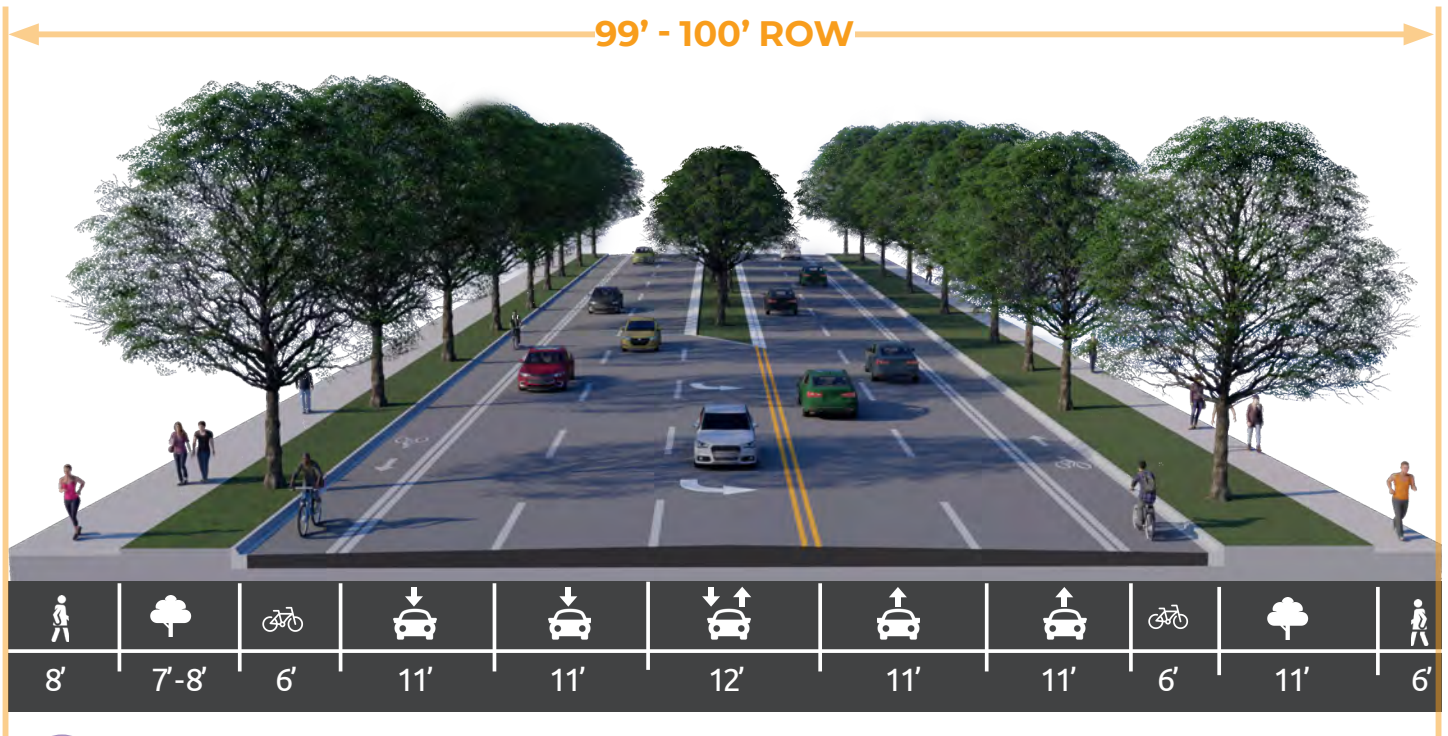
- Have the City of Crystal River commit and promise to all planning efforts needed to support these changes including zoning, land use, and land development regulation changes.

### 5 Improve Intersections

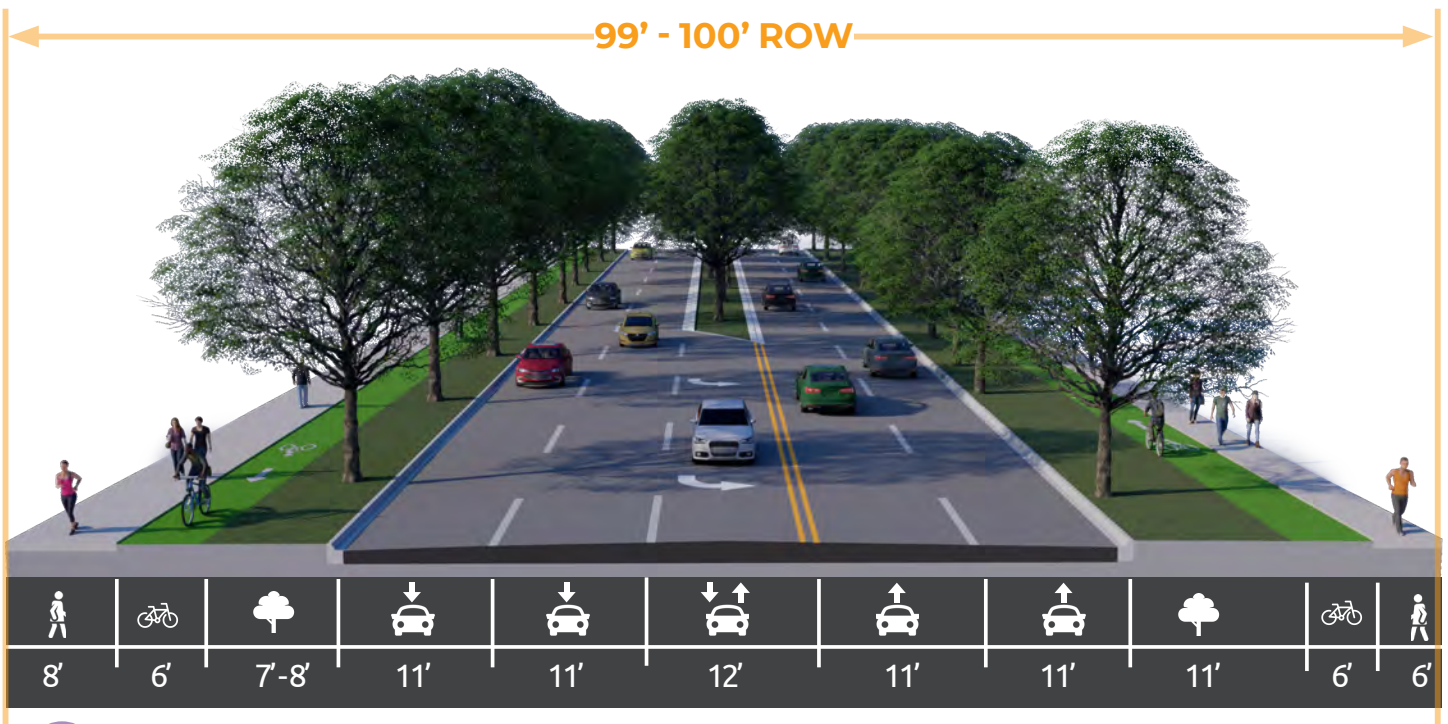
- FDOT has agreed to crosswalks at the intersection of NE 8th Avenue. Continue to request regular intersections with four crosswalks at the intersections of NE 7th Ave, NE 9th Ave, and NE 10th Ave, even if these come with future improvements.
- The FDOT has agreed to a signalized intersection with crosswalks at NE 8th Avenue. Continue to strongly request a second regular intersection at NE 10th Avenue, even if this comes with future improvements.
- Work to get funds for future traffic signals as needed at the other intersections.
- Recommendations 5.b and 5.c will require Signal Warrant Analysis.

### 6 Upgrade Bike Facilities

- Investigate the feasibility of a protected cycling path on both sides of the roadway. The roadway would be reconstructed in such a way that would provide travel lanes, side planting strips, protected bike lanes, sidewalks, and then private property. Our initial survey suggests that a cycling path could be located within the existing Right-of-Way and not require additional Right-of-Way to be purchased.



**B** Typical Street Section: Initial Short-Term Recommendation



**C** Typical Street Section: Long-Term Recommendation

**HIGHWAY 44 MUST:**

- Provide mobility for freight and passengers
- Complete the missing link in the regional trail network
- Serve local businesses
- Reconnect the neighborhood
- Be safe, comfortable, and convenient to cross on foot
- Become a welcoming and beautiful gateway experience to the city



*Civic Toolkit:***PLANNING FOR BICYCLISTS**

*Bicycle and pedestrian trails, also known as shared-use trails when the two share the same path, can be a critical piece of Crystal River’s transportation system and for creating connections across the City and region, especially when combined with on-street bicycle facilities (such as separated bike lanes and cycle tracks).* This trail network can help reduce the number of trips taken by motor vehicles and allow people to more conveniently access downtown and other destinations across the city without requiring a car trip. Convenient access to trails also has health implications for nearby residents with research showing that those living near trails tend to exercise more than those living further away.

*This is not to say that driving won’t remain a part of daily life, but rather that bicycling can also become just as convenient, safe and comfortable for getting around - adding another option so that driving isn’t the only option. This is especially the case for local trips of short distances where if only there was a route that was comfortable, more people would choose to bike for some of their trips.*

*Having multiple mobility options to choose from is key for a sustainable and resilient future.* According to the AAA, the average annual cost of car ownership in 2019 has reached \$9,282, which is, “the highest cost associated with new vehicle ownership since AAA began tracking expenses in 1950.”<sup>1</sup> The intent is not to replace all car trips with bike trips, but to raise walking and biking to a level that is on par with driving. By not requiring that every trip be made by a car, it is possible to allow people to meet their needs without having to own a car, or at least, owning fewer cars per household. Trails also provide a way to escape from the home, to experience the outdoors and the wonderful natural environment of Crystal River and the “Nature Coast.”

<sup>1</sup> <https://newsroom.aaa.com/auto/your-driving-costs/>

**CURRENT BICYCLE PLANNING**

*Crystal River and Citrus County have an ambitious vision for bikeways and trail facilities based on an existing and growing framework of regional trails. The Hernando/Citrus MPO adopted a Bikeways and Trails Master Plan in June 2018 as the vision for the future of bicycling in Hernando and Citrus counties.*

As of 2018, Citrus County had 63 miles of bike lanes with an additional 6 miles in the works, and 83 miles of trails, or off-road bike facilities, with a further 18 miles funded for construction. The regional trails in Citrus County that form the backbone for the bicycle network are the 46-mile long Withlacoochee State Trail and the 42-mile long Suncoast Trail. These trails connect Citrus County to the larger region and to the rest of the state, with connections to the Coast-to-Coast trail (under construction)<sup>2</sup>, which will connect St. Petersburg on the Gulf of Mexico to Titusville on the Atlantic Ocean along a continuous paved multi-use trail. Citrus County also has a trail along CR 486 / Norvell Bryant Highway and in Crystal River there is the Crosstown Trail.

*There are plans and funding to extend the trail along Norvell Bryant Highway west to connect with the Crosstown Trail. From there, a new trail will eventually follow Fort Island Trail to Fort Island Beach. Highway 44 is also a key link in the regional and local bike facility network, with a proposed trail that would connect the Withlacoochee State Trail in Inverness to the Suncoast Parkway Trail extension, to Downtown Crystal River and the Crosstown Trail.*

<sup>2</sup> <https://floridadep.gov/parks/ogt/content/florida-coast-coast-trail>

## TRAIL-ORIENTED DEVELOPMENT

*A somewhat recent phenomenon across the country is new homes and businesses fronting and focusing along trails, something that can be called trail-oriented development. This is occurring in small towns, such as Winter Garden, Florida, medium sized cities including Madison, Wisconsin, and large cities like Atlanta. Businesses and residences in locations like these place a building frontage along the trail with the trail as the primary access and driving economic force for the development. The trail is the focal element of these developments, in which buildings engage the trail as they would a walkable street with shopfronts and residential entrances.*

Cities along the West Orange, Pinellas and Withlacoochee State Trails have seen renewed vibrancy and economic activity in areas of their cities that embrace the trails. Dunedin, Winter Garden, and Inverness are just some examples of cities near Crystal River that have become re-enlivened in large part due to focusing on their trail network as a quality of life and mobility asset.

As a growing destination for eco-tourism based on its high-quality natural amenities, Crystal River would do well to connect to this network of trails and become a “bike friendly” place to be.

## BECOME A PREMIER BICYCLING DESTINATION

Crystal River is well positioned to become a premier bicycling destination. There are opportunities to link to the region’s natural beauty with connections from Downtown to the springs and other area waterways. Scenic walking and biking trails throughout Crystal River’s natural areas can be a destination themselves.

*A robust, high quality trail network can also help Crystal River capture a piece of the region’s growing bicycle tourism boom and strengthen the connection between Downtown and key visitor destinations, including Three Sisters Springs. Careful design and implementation of bicycle and pedestrian facilities is therefore an important element for the overall continued revitalizing of Downtown and extending it outwards along Highway 44.*

*The Florida Office of Greenways and Trails’ Trails Town Program recognizes those communities located along or in proximity to one or more long-distance non-motorized recreational trails where people can safely, “venture off the main path to enjoy the services and unique heritage of the nearby community.”<sup>3</sup> Those*

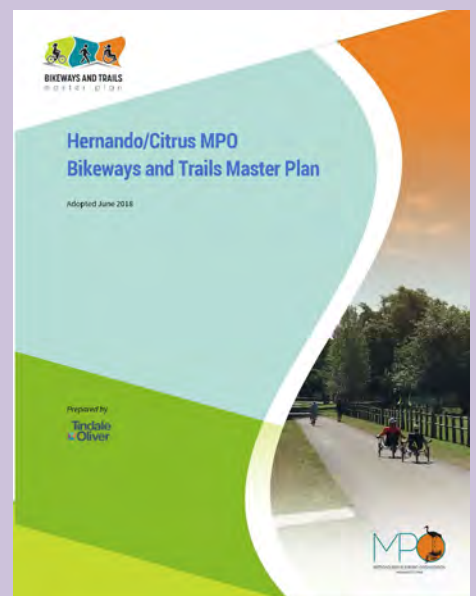
<sup>3</sup> <https://floridadep.gov/sites/default/files/Trail%20Town%20Assessment%20Final.pdf>

### BIKEWAYS AND TRAILS MASTER PLAN VISION

*The Bikeways and Trails Master Plan Vision is that Hernando and Citrus counties become communities in which people can safely and easily ride bicycles and walk daily. A connected network of trails and on-street facilities will benefit the economy, public health, and quality of life for all members of the community.*

### BIKEWAYS AND TRAILS MASTER PLAN GOALS

- **Safety** – Increase safety for people who walk and bicycle in Hernando and Citrus counties.
- **Connectivity** – Create a network of efficient, convenient bicycle and pedestrian facilities in Hernando and Citrus counties.
- **Equity/Livability** – Increase transportation choice and community livability through the development of an integrated multi-modal system.
- **Health** – Encourage health and fitness by providing a safe, convenient network of facilities for walking and biking.
- **Economic Development** – Promote tourism and economic opportunities by developing a safe, connected network of biking and walking facilities.





*towns that meet the criteria established by the Office of Greenways and Trails can become recognized as a Trail Town through this program. The Trail Town assessment will help Crystal River identify what it can do to benefit from its location along key trails and to grow the economy because of the trail community and visitors.* The first designated Trail Town was Dunedin in 2018. Embracing the Pinellas Trail through its downtown is credited with increasing business occupancy rates from 30 percent to 100 percent.<sup>4</sup> The success of Trail Towns is not solely because of the trail, but that the area around the trail becomes a walkable, vibrant, and interesting place- a place people love and want to be. The trail and quality placemaking build upon each other, offering a place worth going to and a way of getting there, and also an activity to do in a place worth going to. This symbiotic relationship can best be summarized by the saying, “the whole is greater than the sum of its parts.”

## EXPANDING CRYSTAL RIVER’S BICYCLE NETWORK

Designing and implementing a bikeway network that is appropriate for the surrounding context should be strongly correlated to land use characteristics and to the desired development or preservation goals for each neighborhood in Crystal River. The proposed network should be further fine-tuned at the scale of the block.

<sup>4</sup> <https://www.americantrails.org/resources/floridas-growing-trail-town-program>

*This can occur through a City Bicycle Master Plan that incorporates the trails from the MPO’s Bikeways and Trails Master Plan, local bike facilities connecting the City’s neighborhoods, and the latest advancements in bicycle planning.*

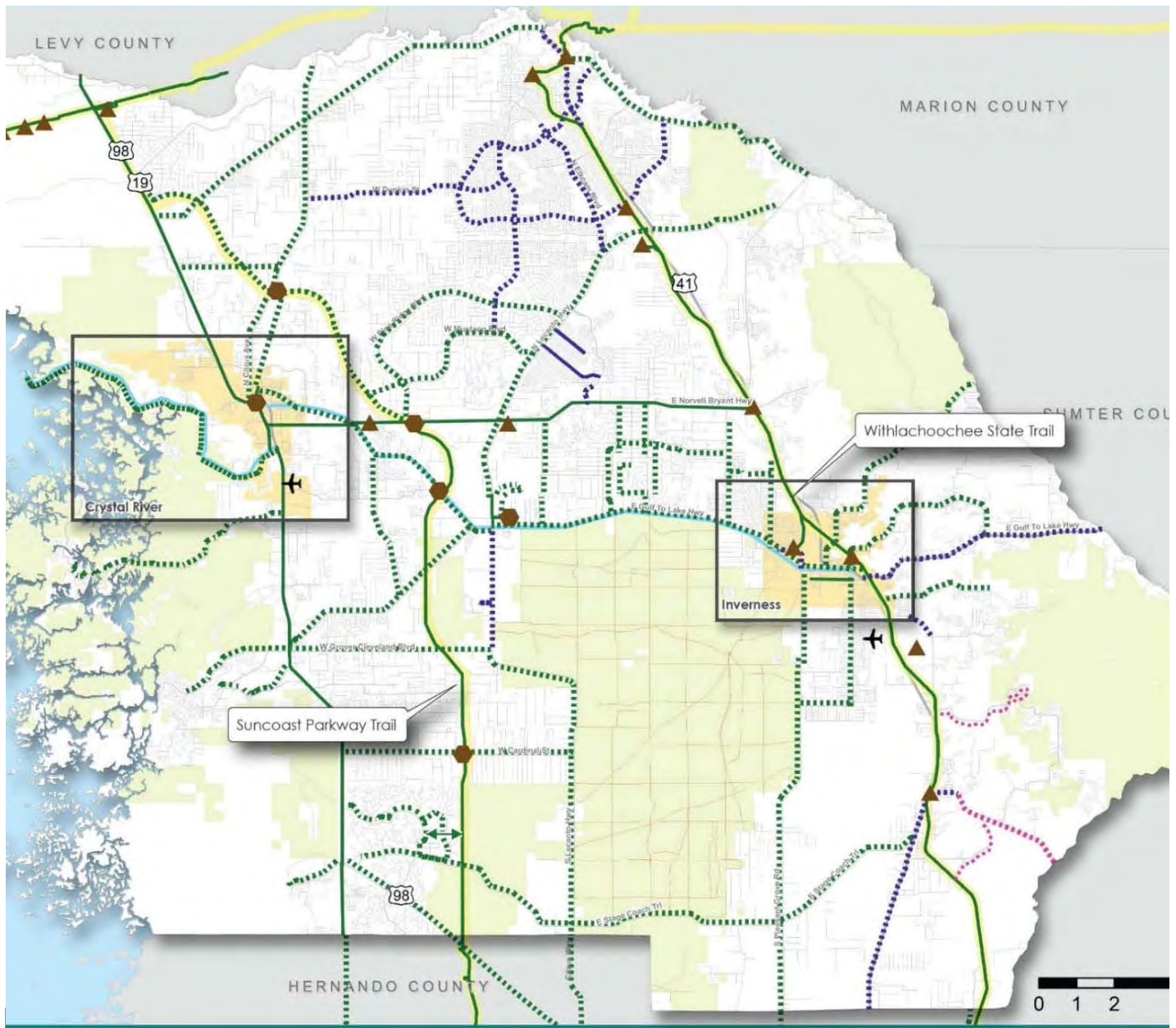
*To grow the network and ability to travel around Crystal River safely on two-wheels, an on-street and off-street bicycle network should be developed with the City Bicycle Master Plan. A preliminary bicycle network for the planning focus areas is included as part of the Civic Master Plan.* It is also important to address safety for riders of all-abilities and continue filling in gaps in the existing bicycle and trail network. Riding a bicycle or crossing a street should not require bravery. Separated, buffered bike facilities, improved intersections, secure bicycle parking, and ADA compliant sidewalks are all ways to address these common concerns.

As a next step in implementation, the City should create a detailed map and design for priority trail connections. For walking and biking to be safe and comfortable, trails should generally be 12 feet wide, where possible, and no less than 8 feet. In areas of higher use, wider trails are recommended. Safety and comfort along the trails should also be improved through the addition of pedestrian-scaled lighting and the planting of native shade trees. For recreational purposes, loops of various distances should be created to offer opportunities for people to select a route of their desired length.



Example of Trail-Oriented Development along the West Orange Trail, Winter Garden, FL  
**(Adoption Draft - Civic Master Plan)**

The Vision Map for Citrus County developed as part of the **Bikeways and Trails Master Plan** illustrates an ultimate bicycle and pedestrian network for the county. This map depicts multi-use / shared-use trails adjacent to County and State roads, including those that already have an existing on-street bicycle facility, which aligns with Citrus County's commitment to add trails adjacent to roadways whenever they are widened. A 2017 MPO resolution also requested that FDOT include separated multi-use paths or sidewalks in the design of their collectors and arterials.



**Proposed Needs**

- ..... Trail<sup>1</sup>
- ..... Buffered Bike Lane<sup>2</sup>
- ..... Needs Study<sup>3</sup>
- Proposed Trailheads

**Existing/Committed Facilities**

- Trail; Trail, Committed
- Bike Lane
- Buffered Bike Lane
- ▲ Existing Trailheads
- ▲ SUNTrail Network
- ✈ Airports
- Unpaved Trail

<sup>1</sup> Trails are proposed to be added to roads, where feasible, as they are widened.  
<sup>2</sup> Buffered bike lane is a dedicated space on the road including a 5' bike lane and a 2' buffer.  
<sup>3</sup> Facility type will be defined during study phase.



## RECOMMENDED BICYCLE FACILITIES

Methods for creating a safe and desirable bicycle network include the process of making all significant destinations accessible. Traits of a proper bicycle network include the use of a combination of four types of bikeways:

1. **Bicycle lanes & Buffered Bicycle Lanes** - are demarcated by striping within medium-speed roadways.
2. **Separated Bicycle Lanes** - include a cycle track, with a physical separation of bikes from car traffic.
3. **Shared-use Paths / Trails**- are physically separated from vehicular traffic and are often located outside of the downtown.
4. **Shared Routes** - the majority of thoroughfares— are low-speed streets in which cars and bikes mix comfortably. These streets have low traffic volumes and often include various traffic-calming devices and signing.



### Bike Lanes

A typical bike lane is a portion of the roadway which has been set aside for the exclusive or preferential use of cyclists. It is usually designated by adding a stripe, signage, and pavement markings. Bike lanes allow cyclists to ride at their own speed without interfering with motorists.

*Conventional bike lanes run along the curb sides of the roadway, or adjacent to parked cars when on-street parking is present. Cyclists usually travel in the same direction as traffic. These unprotected bike lanes work best on streets where the posted speed is less than 35 mph and should ideally be 6 feet in width, although 5 feet is also possible.*



### Buffered Bike Lanes

*Like typical bike lanes, buffered bike lanes run along the curbs of the roadway or adjacent to on-street parking. However, they offer additional protection from moving traffic in the form of a buffer space between the edge of the bike lane and the edge of the vehicular travel lane. Adding a buffer encourages more cyclists to use the facility.*

If the buffer is 3 feet or wider the interior should have diagonal cross hatching or chevron markings. Narrower buffers can be marked with two solid white lines, which also helps discourage crossing. Buffered bike lanes are strongly preferred to typical bike lanes in areas with greater traffic volume and higher travel speeds.

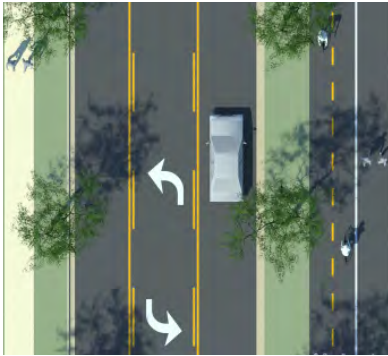


### Separated Bike Lanes

*Separated bicycle lanes (also known as protected lanes or cycle tracks) offer significant improvements in safety performance over other on-street bicycle facilities, including buffered lanes. Raised cycle tracks are bike facilities that are vertically separated from the roadway.* Sometimes they occur at the plane of the sidewalk, often with a furnishing zone or planting strip between the cycle track and the roadway, and sometimes they are placed at an intermediate height between the road and the sidewalk. At intersections, they may be dropped and merged with the street or continue on the sidewalk, where they cross with pedestrians.

Raised cycle tracks / Separated bicycle lanes are more attractive to a wider variety of cyclists and work best along streets with higher speeds or traffic volumes. When adjacent to on-street parallel parking, the separation between the parking lane and the bike lane should be three feet.

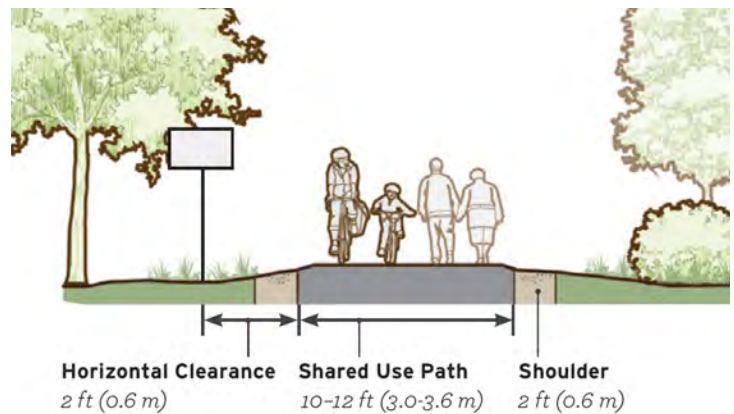
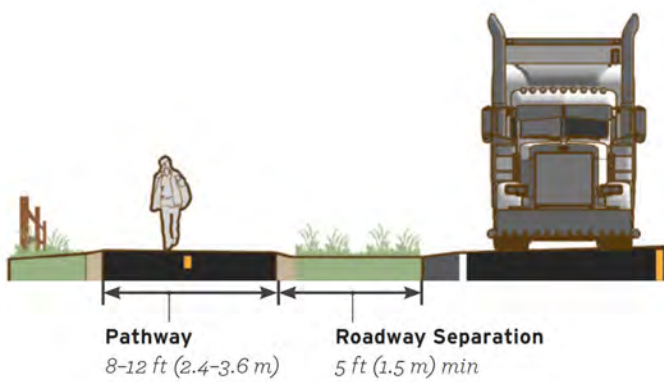
***(Adoption Draft - Civic Master Plan)***



### Shared-Use Path / Trail

*Shared-use paths are a type of trail designed to provide off-road routes for many different users including cyclists, runners, pedestrians, and manual or motorized wheelchair users. While similar to other recreational trails, these paths are part of a larger transportation system and serve as a supplement to on-street bike lanes, shared roads, and paved shoulders.* For walking and biking to be safe and comfortable, shared-use paths should generally be 12 feet wide, where possible, and no less than 8 feet.

The Federal Highway Administration (FHWA) provides guidance on the design of multi-use trails that can inform the next step of planning. Graphics from FHWA’s Small Town and Rural Multi-modal Networks (below) illustrate recommended minimum standards for trails that are separated from motorized traffic and trails that are adjacent to motorized traffic.



Above: FHWA illustrations showing key dimensions for shared use path adjacent to motor vehicles (left) and for shared use path separate from vehicles (right)

### BIKE PARKING

Planning for safe and comfortable shared-use paths, separated bike lanes, cycle tracks, and other bicycle facilities are just part of the equation for creating a city where biking is a viable option for getting around. ***There must also be convenient and secure locations to park and store bicycles. Ample bicycle parking should be provided, including sheltered long-term parking for residents and workers and both public and private parking. Offices can also be encouraged to provide showers for those commuting by bike.***

To ensure ample secure and convenient bicycle parking, regulations identifying the minimum amount and type of parking should be required by zoning.

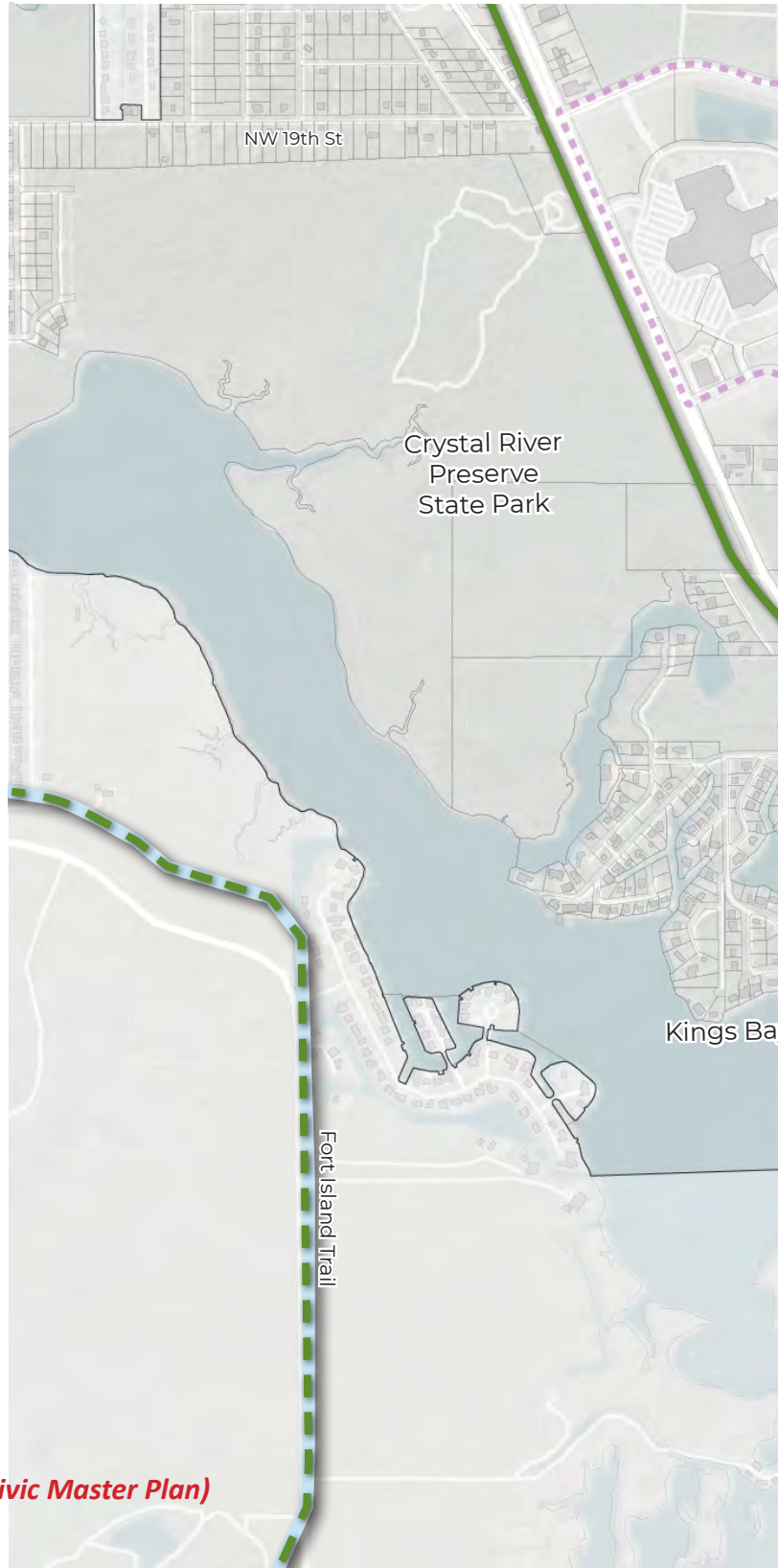
Raised cycle tracks / Separated bicycle lanes have been documented to offer other benefits as well, including increased rates of bicycling activity and increased storefront sales revenues. Some of these sales increases are associated with reduced vehicle speeds and improved street appearance, in addition to the effects related to increased cycling activity.



# COMPLETING A REGIONAL AND LOCAL TRAIL NETWORK

## RECOMMENDED BICYCLE NETWORK MAP

*A regional cycling network should be a top priority in becoming a state destination.* As recreational tourists come to kayak in Three Sisters Springs, they can bike to lunch in the Copeland Park neighborhood or Downtown. *This will require a trail connection from Highway 44 along Highway 19 to the Crosstown Trail. This connection won't just be for tourists but will give Copeland Park neighborhood residents greater access to nature and recreational activities.* In addition to the connection to the Crosstown Trail, Citrus County plans to connect Crystal River to the Norvell Bryant Highway trail and extend a trail to Fort Island Beach.



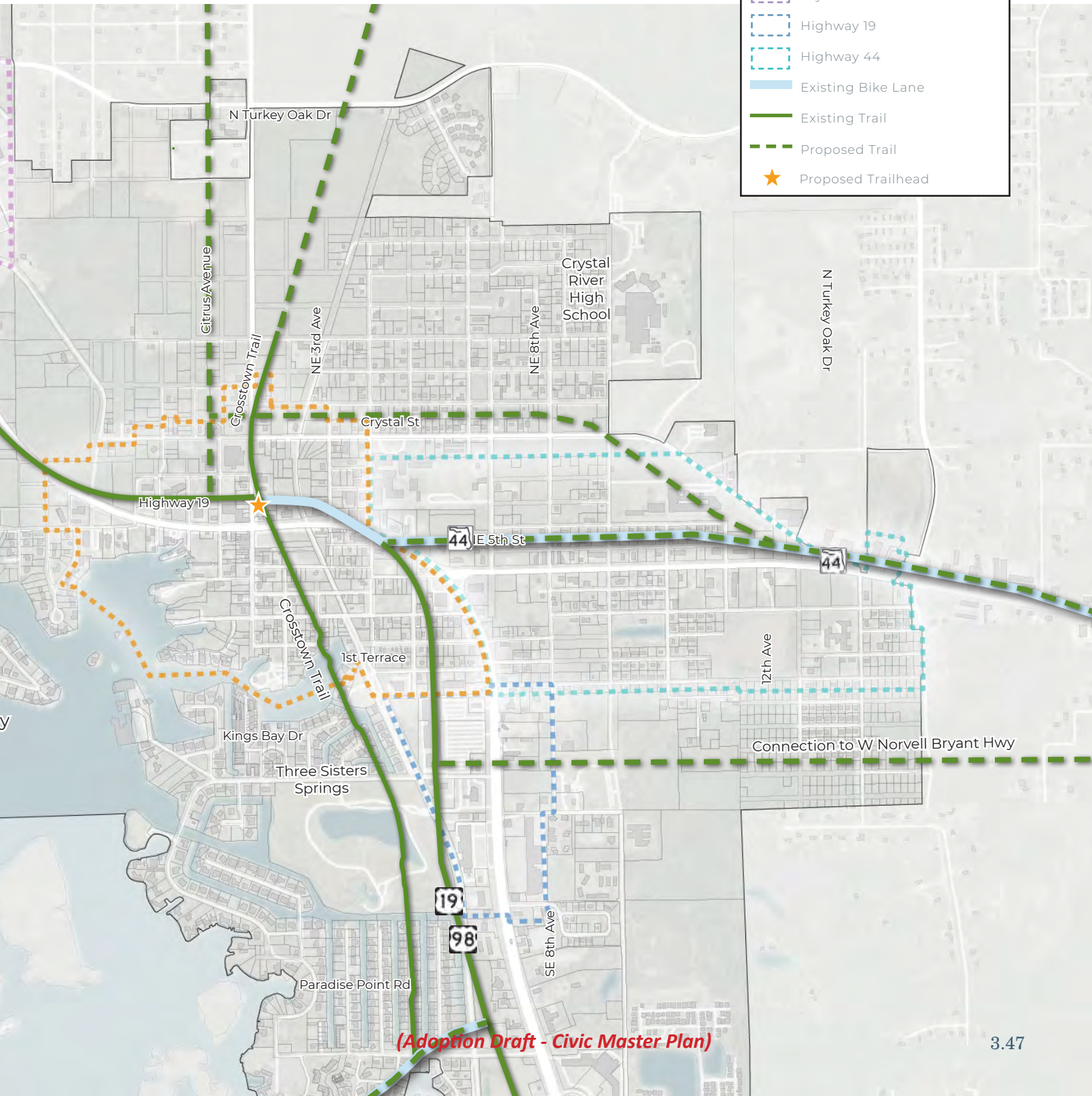
Crosstown Trail



Norvell Bryant Highway

**LEGEND**

- Crystal River City Boundary
- Downtown Waterfront
- Crystal River Mall
- Highway 19
- Highway 44
- Existing Bike Lane
- Existing Trail
- Proposed Trail
- Proposed Trailhead



(Adoption Draft - Civic Master Plan)



# Big Idea 4

## PROTECT AND RESTORE HISTORIC PLACES

*Crystal River has a number of buildings that are listed on the National Register of Historic Places. As a result, the city's residents have expressed interest in creating a Local Historic District, a National Historic District, or possibly both.*

*Many historic buildings, designed according to earlier regulations, cannot meet contemporary code requirements at a reasonable cost. Since improvements often result in noncompliance they are allowed to deteriorate. Those that are renovated are forced to comply with the latest building and floodplain codes. As a result, the historic character of the building is lost. However, if a historic district is in place the same buildings are provided greater flexibility and latitude from both building and floodplain codes and additional funding sources become available. As a result, this leads to renovation.*



The old Crystal River City Hall building. Built in 1939 by WPA labor and now listed on the National Register of Historic Places.

## BENEFITS OF HISTORIC PRESERVATION DISTRICTS TYPICALLY INCLUDE:

- 1 Exemption from FEMA regulations
- 2 Increased property values
- 3 Credits for rehabilitation of historic structures
- 4 Prevention of historic building teardowns
- 5 Incentivize economic development





# PROPOSED IMPROVEMENTS & POLICIES

## CREATE LOCAL AND NATIONAL HISTORIC DISTRICTS

*The City of Crystal River needs to work with the private sector, independent organizations, and citizens to protect and enhance the city's historic resources. This should include the creation of both local and national historic districts before deterioration of these assets creates an insurmountable burden for the community and property owners.* Local historic districts provide the strongest protection of the historic resources that contribute to the quality of life, remind us about our past, and provide a stimulus to economic vitality and tourism. National historic districts provide recognition and opportunities for tax benefits and other financial incentives.

## ADOPT A PROPERTY MAINTENANCE CODE

*A formal property maintenance code can provide the city and property owners with clearer requirements on building and property maintenance requirements and clear up any ambiguity as to what is enforced.* Several models for enforcement of such a code are explored to help achieve a cooperative approach to maintaining safe and compliant properties.

### *Civic Toolkit:*

## HISTORIC PRESERVATION

Crystal River has a long history dating back to the mid 1800s and throughout the city historic buildings dating back to the 1920s can be found. The downtown, in particular, consists of a significant number of historic buildings. The old City Hall was built in 1939 and now serves as a museum. One of the oldest buildings on Citrus Avenue was built in 1920 and now is a restaurant. These buildings add to the character of Citrus Avenue and should be preserved to protect the integrity of the area.

*Historic districts provide protection for these buildings and the character of Crystal River. A historic district can be established when buildings are at least fifty years old and either have architectural style or historical significance. Buildings in the district need to be continuous to create a comprehensive district. Once a historic district is designated, all of the properties in that area will be under specific guidelines whether or not they include a historic building.*

Historic districts still allow for flexibility and adaptation to changing needs. Buildings in historic districts are allowed to be retrofitted to serve new functions and remain economically viable under changing market conditions. One local example of this is the old pump house in downtown, which is being preserved and also retrofitted to provide usable indoor event space at the new Town Square. What a historic district does is maintain the character and form of the area while uses change over time. *A historic district along Citrus Avenue can help keep it a quaint main street while still allowing new businesses to thrive.*



Historic Citrus Avenue



Historic Citrus Avenue

## TYPES OF HISTORIC DISTRICTS

There are two types of historic districts, National and Local. It is important to distinguish between the two. While they are different, in certain circumstances they can be complimentary.

### National Districts

*National districts are recognized by the federal government. The district would be approved by the National Register of Historic Places and could receive benefits like rehabilitation tax credits or preservation incentives. The buildings need to be historically, architecturally or archaeologically significant to create a nationally recognized historic district. Designation is achieved through national uniform criteria. The National Register tends to focus on a concentrated area of buildings. Design restrictions only occur when rehabilitation tax credits are being used.*

*The National Register of Historic Places program helps coordinate efforts that identify, evaluate, and protect America’s historic resources, however, National Districts provide no protections against local demolition or alterations of structures. Locally Designated Historic Districts are needed to preserve and protect properties.*

### Local Districts

*Local districts are designated by a local ordinance which is then maintained by a historic preservation committee. The benefit of this is that it can encompass more area to protect as many buildings as possible. The main goal of a local historic district is to maintain the character of the area. The local districts would not restrict use, only aesthetics. Design guidelines are created to regulate any major renovations or new construction. A process occurs where changes to a building or new buildings undergo a design review in order to receive a Certificate of Appropriateness. If the renovations or changes are routine and the replacements are the same then there is no need for a review.*

### Coordination between National and Local Districts

*A local district can be larger than the national district to provide protection to a greater area. It depends on what the community feels is appropriate.*

## SUMMARY OF HISTORIC DISTRICT TYPES AND BENEFITS

	Local District	National District
Protection from Demolition & Alteration	Yes	No
Tax Benefits and Incentives	Local	National
Preserved Scale, Massing & Lot Size	Yes	No
Controlled Architectural Character	Yes	No
Protection from Federal Government Actions	No	Yes
Protection from Local Government Actions	Yes	No

### A LOCAL EXAMPLE:

Floral City is a historic district located in Citrus County. Currently it is the only historic district in the county but Crystal River could become the second! Floral City was founded in 1883 when the railroad moved west. The national historic district was nationally recognized in 1993 and was established to help protect buildings and historic trees by bringing recognition to them and provides federal tax credits for rehabilitation projects for the 26 historic buildings and two structures included within the district.





# BENEFITS OF HISTORIC PRESERVATION DISTRICTS

*Historic districts provide a variety of benefits for the community and individual land owners.*

## EXEMPTION FROM FEMA REGULATIONS

*The majority of Crystal River is located in the regulated floodplain, and due to the new FEMA flood maps, buildings will need to be elevated substantially from previous requirements.* The process of requiring a building to be elevated occurs when there is significant investment to improve an existing structure or for any new building.

Constructing a building on stilts or raising a building can be a significant cost and could result in reduced development. **Any structure that is listed individually in the National Register, state inventory, or local inventory of historic places may be exempt from FEMA regulations and can still receive FEMA flood insurance; however, at a higher cost than structures built to current flood elevation requirements.** Historic homes can be lifted if the owner wants to do that. Elevating homes should be permitted in the historic district design guidelines. **Exception from the FEMA standards will allow for continued investment in Crystal River’s historic areas.**

## INCREASES IN PROPERTY VALUES

*Historic districts protect the character of neighborhoods. Landowners do not have to worry that the neighborhood will fall into disrepair or unsightly developments will happen. This keeps property values stable and can even increase property values.* Historic districts are places where residents can connect with the past and experience a city in a different way. These areas are valuable which is reflected in property values.

**BENEFITS OF HISTORIC PRESERVATION DISTRICTS**

- 1 Exemption from FEMA regulations
- 2 Usually an increase of property values
- 3 Rehabilitation credits
- 4 Prevents teardowns
- 5 Economic development



Potential Historic Home



Potential Historic Home

## NATIONAL HISTORIC DISTRICT-REHABILITATION CREDITS

*Once a national historic district is created landowners have access to rehabilitation tax credits (RTC). This is a federal tax credit that is equal to 20% of the allowable expenses incurred in a certified rehabilitation of a certified historic structure.<sup>1</sup>* The rehabilitation needs to be certified by the Secretary of the Interior. Once the work is completed the State Historic Preservation Office and the National Park service will certify that it follows the Secretary's Standards for Rehabilitation and approve the tax credit. This is an incentive to restore old homes and improve the character of the neighborhood.

## LOCAL HISTORIC DISTRICT- PREVENTS TEARDOWNS

*Historic districts provide protection against historically significant homes being torn down. If a land owner wants to remove a building on their property they would need to gain approval from the local historic preservation committee.* The committee would assess the building to certify that it is either able to be restored or beyond restoration. If there is no chance the building could be restored then the landowner would gain approval from the committee to tear down the structure.

## ECONOMIC DEVELOPMENT

Historic preservation creates continuity with history and provides a reminder that great accomplishments are timeless. Nevertheless, the economic effects of historic preservation are critically important. Historic districts provide a variety of benefits for the community and individual land owners. In most cases property values tend to increase in historic districts. Which benefits property owners and the city.

*There are several ways that preservation can help to create economic benefits, including the following:*

- **Job Creation:** Restoring and preserving historic structures creates new spaces for businesses and can subsequently create job opportunities.
- **Property Values:** Many people place personal value on historic buildings, others simply value uniqueness. Restored historic structures typically have a positive effect on the local market.
- **Property Taxes:** Federal tax breaks of up to 20% of expenses are available for properties that are restored within national districts.
- **Tourism:** The historic quality of Crystal River sets it apart from most other beach vacation destinations, attracting both those interested in history and those avoiding generic places.
- **Localization:** Repair and preservation keep money in the local economy. Also, smaller buildings attract small, local businesses rather than large chains.

1 <https://www.nps.gov/tps/tax-incentives.htm>



## CREATING LOCAL HISTORIC DISTRICTS

### COMPONENTS OF A LOCAL HISTORIC DISTRICT PROGRAM

*The Plan recommends a starting point for delineating new local historic districts.*

#### Considerations for Creating a Local Historic District

The National Trust for Historic Preservation recommends ten steps for establishing a local historic district. These steps are critical for building local support for historic districts and tailoring the district and its regulations to local needs. A summary of these steps is provided below (For more information see: [savingplaces.org](http://savingplaces.org)):

- 1 Consider the whole package.**

Whatever the goal for your community, keep in mind that historic district status is simply one tool to protect community character and should be used in combination with other planning and revitalization strategies.
- 2 Recognize the district's associative value and economic advantages.**

Keeping buildings, sites, and objects around for future generations to appreciate is one of the deepest justifications for historic preservation. In addition, well-preserved and revitalized historic districts can give an older area an economic boost.
- 3 Make a compelling case.**

Clearly articulate the benefits of creating a local historic district to government officials. More importantly, help property owners fully understand what designation will mean for them, since their property use will in some ways be restricted. Robust presentations and discussions up front can minimize controversy later.
- 4 Form a broad-based task force.**

Bring together community members who are hard workers, civic-minded, supportive, and willing to learn. Get the local governing body to pass a resolution officially recognizing the task force. The group then becomes the primary driver for creating the local district, and may even position some of its members as candidates for appointment to the preservation commission.
- 5 Launch a public awareness campaign.**

Begin early to build public and political support. Creating a district will affect and interest a wide range of citizens, so target your outreach to diverse groups, including elected officials, media, the business community, religious leaders, and schoolchildren. Make sure your education materials are clear, concise, and easy-to-understand.
- 6 Ally with a local nonprofit preservation organization or historical society.**

These types of groups are often the most logical to coordinate district supporters' activities. They can help educate constituents, organize lobbying efforts for preservation legislation, conduct historic resource surveys (see next tip), poll residents, provide staff assistance, and more.
- 7 Identify and gather information on your community's historic resources.**

This step, captured in a historic resource survey, produces a working inventory of sites and structures that informs judgment about where, what size, and how many historic district designations should be made.
- 8 Set the district boundary lines.**

Consider the relationship between natural and man-made features; how does that relationship inform the district's character? Analyzing the potential district in this way then guides decisions around setting appropriate boundaries, and takes into account a variety of historical, visual, physical, political, and socioeconomic factors.
- 9 Go through the design review process.**

A compulsory or mandatory design review program is most common, and requires property owners to follow established design review guidelines (just as they're required to follow building and fire codes, for example). Sometimes the guidelines are advisory and incentive-based, while other times communities follow a combined approach to make regulations and ordinances more palatable.

10

**Keep educating even after historic district designation occurs.**

The most effective community education programs are continuous, and it's especially important that the people who purchase property in a historic district know they're subject to restrictions. Some ways to do this include: educating real estate agents, adding district status to real estate listings, mailing designation notices and commission information with the annual tax or water bills, and forming neighborhood association "welcome committees" to share guidelines.

*Before a historic district can be established, a historic survey needs to be conducted to certify the area.* The survey requires commissioning a historian to assess the area. This survey will help determine the district boundaries. *To maintain the character of the area's structures, historic districts have design guidelines that apply to both existing structures and new development. A historic preservation commission is needed to review any changes to historic buildings.* This commission would review and approve applications to receive a certificate of appropriateness. This certifies that any changes made follow the design guidelines.

**Components of any Local Historic District program should include:**

1. An ongoing survey and evaluation process of structures;
2. Clear historic district ordinance and design guidelines;
3. Financial incentives to encourage rehabilitation and restoration;
4. Adequate budget allocations for qualified historic preservation staff in the city;
5. Cooperative educational efforts with the private sector and citizen groups;
6. Coordination of preservation initiatives with education, citizen participation, history, public art, and other programs; and
7. Adaptive reuse policies supported by tax or other incentives.

**BECOME A FLORIDA CERTIFIED LOCAL GOVERNMENT**

The Certified Local Government (CLG) Program was enacted as part of the National Historic Preservation Act Amendments of 1980. Designation as a certified local government makes historic preservation a public policy through passage of a historic preservation ordinance. Florida's Certified Local Government Program assists in the survey, designation and preservation of historic and cultural resources as well as technical assistance and training. CLG jurisdictions may also apply for federally funded CLG subgrants to conduct survey, planning and National Register nomination projects.

To apply to the Florida CLG Program, the city must:

1. Enact a historic preservation ordinance that meets the criteria set forth in the Florida CLG guidelines
2. Establish a preservation review board or commission consisting of at least five members
3. Submit the Florida CLG application for review
4. Complete the CLG agreement

**CREATE A HISTORIC PRESERVATION FUND**

*The city should consider creating a Historic Preservation Fund (HPF) to enable owners of historically contributing properties to restore historic details on their property or implement sea level rise adaptation projects.*

*In order to make this program successful the following steps should be taken:*

1. The city's planning, building and economic development departments should coordinate to fully flesh out how such a program could best be implemented.
2. The city should create a selection committee that would review applications from property owners. This committee would be charged with reviewing improvement plans, before the use of funds are approved.
3. The selection committee would make their recommendations to the City Commission, who in turn would approve or deny the application for funds.
4. Property owners would be required to use all requested funds for historic preservation or adaptation to sea level rise.





# POTENTIAL HISTORIC DISTRICTS

*A preliminary analysis demonstrates that there are four areas in Crystal River with potential to be designated as historic districts. These areas consist of multiple buildings constructed before 1950 with architectural or historical significance. Further review by specialized historians would be required to certify the buildings and confirm these initial findings.*

## 1 CITRUS AVE DISTRICT

Citrus Ave has many different historic buildings all within close proximity. This area would be the first priority because it would set precedence for the other areas.

## 2 WATERFRONT DISTRICT

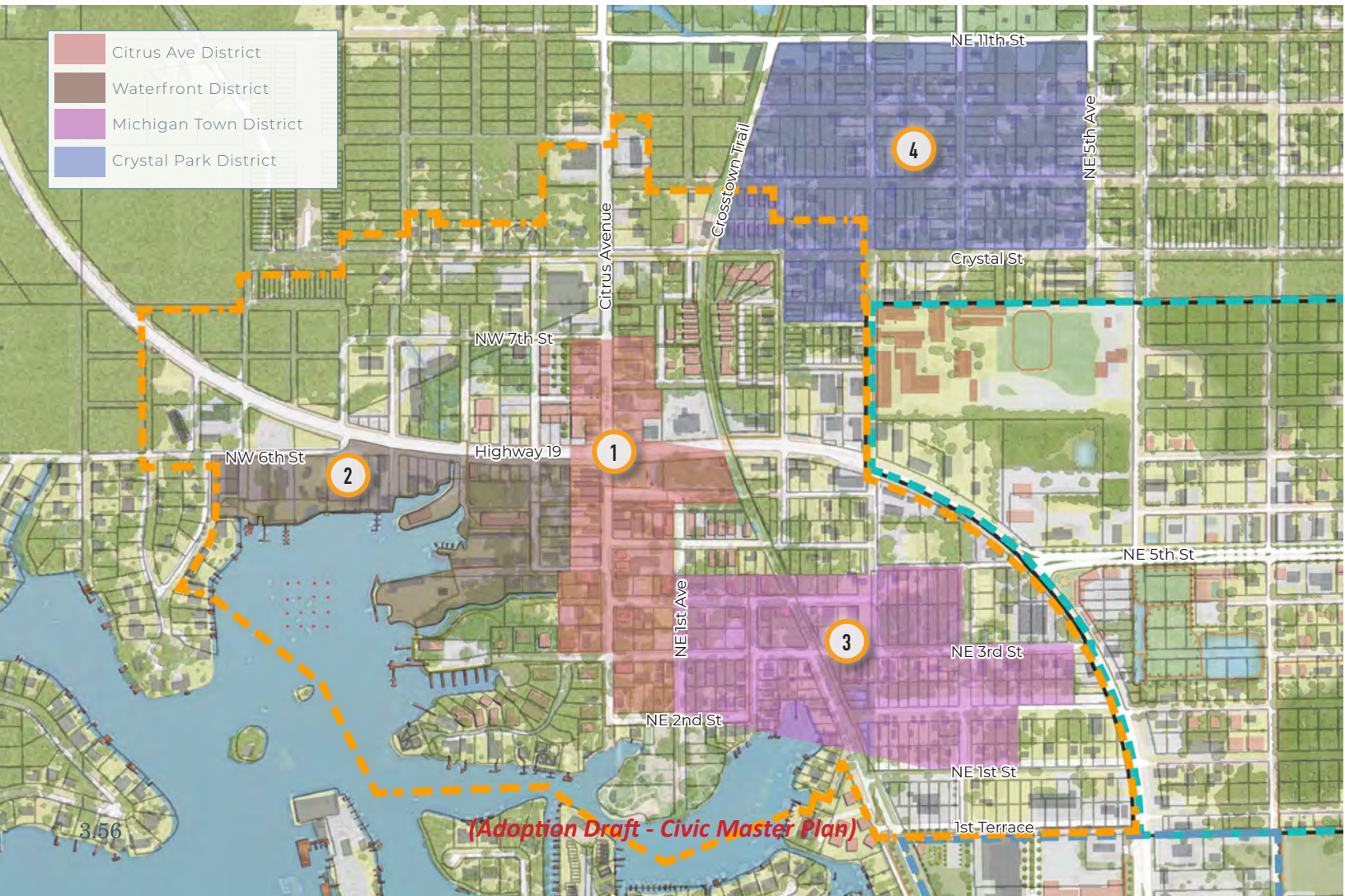
The waterfront contains historic buildings that add to the character of Kings bay.

## 3 MICHIGAN TOWN / SPRINGDALE EDITION DISTRICT

Michigan Town has a long history and contains historic homes. Some of these homes are in need of repair and are at risk for being torn down.

## 4 CRYSTAL PARK DISTRICT

Crystal Park is a historic neighborhood and even a school that could potentially contribute to a historic district.



# Architectural Styles in Crystal River



## FRAME VERNACULAR

Frame vernacular homes are simple wood frame buildings. In the past they were created by local builders without an architect.

**Characteristics:** Wood cladding exterior, front gable roof, large porch

## VICTORIAN

This style began in England and spread to the United States. The design is ornate. A turret or tower is also common with this style.

**Characteristics:** Steep pitched roof, ornate gables, wrap around porches, tower or turret



## COASTAL ECLECTIC

Coastal eclectic homes are traditional, bright, and charming.

**Characteristics:** Wood exterior, metal roof, bright colors

## ARTS AND CRAFTS

Arts and craft homes are a collage of different styles. There is typically a large porch with a low pitched roof. Along the roof there are exposed roof trusses. Houses in this style normally have an addition to the house that sticks out.

**Characteristics:** Low pitched roof, large prominent porches, exposed roof trusses



## BUNGALOW

Bungalow is a house type that was based off Indian housing types in the 18<sup>th</sup> and 18<sup>th</sup> century. They usually are a one story house with a low pitched gable roof. A classic characteristic is the tapered porch columns.

**Characteristics:** 1 to 1.5 stories, tapered columns, wood cladding exterior, widely bracketed gable roof

## QUEEN ANNE

The Queen Anne style houses have an irregular, rambling plan and silhouette. Different materials are often combined but an iconic characteristic is the distinct woodwork. Often windows have different shapes and sizes. Eyebrow windows are distinct to this architectural style. A turret or tower is also common with this style.

**Characteristics:** Tower or turret, decorative exterior, combination of different materials, Victorian detailing





## *Civic Toolkit:*

# PROPERTY MAINTENANCE CODES

*Enforcing a maintenance code within a community can be just as important as having a building code*

## PROPERTY MAINTENANCE CODES

A property maintenance code makes the maintenance of an existing commercial and/or residential building and its property from an option to a legal requirement.

*These codes provide a comprehensive approach toward property maintenance and enforcement, combining all relevant items for enforcement from the city's ordinances into a single document for reference by property owners and city staff.*

A property maintenance code should provide clear standards to be met, that can be measured, assessed and enforced to avoid ambiguity. The additional clarity afforded can assist property owners and staff, providing both with a better understanding of the requirements.

### **Adopt a Property Maintenance Code for Crystal River**

The City of Crystal River should consider adopting a formal property maintenance code for non-residential buildings along with best practices on code enforcement.

*The International Property Maintenance Code (IPMC) provides a starting point for enacting non-residential and residential property maintenance codes. The model ordinance must be carefully reviewed and tailored*

*to Crystal River's ordinances, unique circumstances, and desired outcomes.* The application of a property maintenance code to residential properties requires an even higher level of tailoring to local conditions. *Part of the code should include a checklist of items for inspection to further keep property owners and the city clear on the requirements.*

The use of these codes for residential properties should balance homeowner needs and costs with the benefits to the community. *For historic buildings, the rules should encourage building rehabilitation and avoid demolition. The city should also provide educational resources on available funding to assist with needed maintenance upgrades.*

## INTERNATIONAL PROPERTY MAINTENANCE CODE

In 2021, a new revision of the International Property Maintenance Code (IPMC) was issued. Throughout the years, this code has proven to be successful and has been enforced in major cities both within and outside Florida, including Orlando, Gainesville, and Fort Myers, as well as Evanston, IL, and Lorain, OH. The code provides a comprehensive and specific set of rules outlining how properties should be maintained; this is done by establishing minimum requirements for the maintenance of existing buildings with model code regulations that contain clear and specific property maintenance and

property improvement provisions. This code is known to be one of the most thorough for property maintenance. The topics included in the IPMC include light, ventilation, occupancy limitations, plumbing, fixtures, mechanical and electrical requirements, and fire safety, amongst others. Some of the code development committee members include the American Institute of Architects (AIA) and the National Association of Home Builders (NAHB). In general, the code is highly respected and had been successfully implemented throughout the years.

## MAINTENANCE CODE COMMUNITY ENFORCEMENT AND HOW IT WORKS

*In addition to the building code, every city should have an active code that ensures the maintenance of a property's interior and exterior. These codes help maintain order by motivating compliance within communities to properly conserve them as much as possible.* Typically, government officials are responsible for ensuring that the code is being respected. If a violation is noted, the owner would receive a written notice of violation with a deadline to correct the violation. Hearings and re-inspections are also common during this process, and consequences tend to increase with time. Although code enforcement can be an issue within some communities, common practices can be implemented to motivate compliance amongst all those involved.

### Code Enforcement Best Practices

*Although code enforcement practices vary from place to place, two of the most common enforcements are Systematic and Complaint-Base code enforcements. At its core, the difference between these two is that the first one focuses on a concentrated area of buildings in need of maintenance, whereas the later one operates on a building-to-building basis depending on reported complaints.* Between both, Complaint-Base code enforcement is most effective when complaints in a single area are minimal. When an entire block or small portion of a city is lacking in building maintenance, Systematic Code Enforcement would be most beneficial.

*In order to best ensure code enforcement, a Cooperative Model between property owners and city officials is recommended.* Under the Cooperative Model, code enforcement officers work with property owners to help them bring their properties into compliance. This includes educating property owners about building maintenance and financial resources that are available to help make the necessary repairs

*A strategy within this model to be considered is the Proactive Strategy, in which inspections are regularly scheduled regardless of a complaint being filed or not.* Routine inspections ensure violations are noted early, avoiding any serious complications that could lead to a dangerous hazard towards the community and helping owners become aware of defective conditions before they worsen. This approach may also incentivize preventive maintenance.

Distinct methods work differently in distinct communities. Needless to say, knowing the community and adapting to it will always be the best practice to guarantee proper code execution.

## TIPS TO HELP ENSURE PROPERTY MAINTENANCE CODE COMPLIANCE

- Treat neighbors with kindness when reporting a violation
- Persistence is key to see changes
- Be mindful of any reported violations
- Ensure the community is being heard, not only the officials
- Provide a space for anonymous complaints
- Periodically ask for feedback of officers performing inspections
- Offer an option in which the city preforms the changes and property owners can pay afterwards
- Educate property owners on importance of property maintenance
- Maintain ethical behavior through the process
- Treat all complaints and violations equally

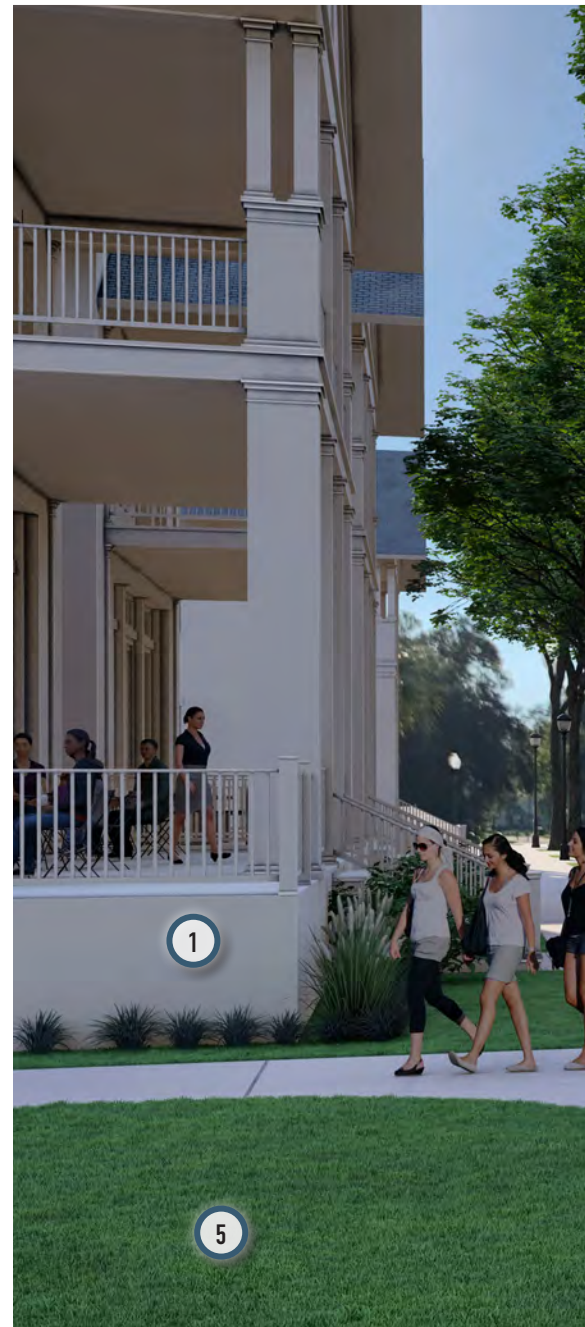
# Big Idea 5

## INCREASE ACCESS TO NATURE AND BUILD RESILIENCE

*Charrette participants said that they were proud of the natural beauty and sport offered by Crystal River's bays and rivers and expressed a desire to see even greater public access. The most choiceworthy communities do more than simply preserve their natural features: they celebrate them. At the same time residents wish to protect major natural features. In addition to their ecological benefits, there are many reasons to preserve the landscape. Natural features provide a sense of local character which contributes to property values.*

*Crystal River's natural beauty is accompanied by the risks of flooding and sea level rise while also necessitating a high level of stormwater management to protect the bay and springs. Both existing and new development will require changes to protect properties from flooding events.*

*New FEMA requirements necessitate elevating or raising buildings to 12 or 13 feet above sea level, posing a challenge to creating infill development and street-oriented architecture. New strategies and design standards for stormwater and FEMA requirements are needed to support the city's goals for a vibrant walkable downtown and new neighborhood centers.*



An extension of downtown's "main street" along 5<sup>th</sup> st, illustrating sustainable and resilient design.

## KEY PRIORITIES AS ILLUSTRATED BELOW:

- 1 Adopt standards for elevated and floodproofed buildings meeting FEMA requirements.
- 2 Utilize low impact development and green infrastructure in public and private projects to improve water quality and reduce stormwater runoff.
- 3 Plant and maintain proper street trees.
- 4 Coordinate stormwater, FEMA, and parking requirements to support infill development.
- 5 Create district-wide stormwater systems in downtown and neighborhood centers to reduce the burden on individual lots to promote infill development.





# PROPOSED IMPROVEMENTS & POLICIES

## INCREASE ACCESS TO THE BAY

*Increasing people’s access to nature, especially Kings Bay, builds a local environmental ethic. Two city parks in the downtown, Kings Bay Park and Hunter Springs Park, provide free access to the waterfront.* The city’s Riverwalk and its adjacent public and private destinations give residents and visitors a respect for the Bay. At the same time, overdevelopment can affect the health of the bay and surrounding wetlands.

## PROTECT WETLANDS

*Wetlands are found throughout Crystal River and include both coastal and tidal wetlands and inland and nontidal wetlands. Tidal wetlands are largely comprised of coastal salt and brackish marshes, mudflats, mangrove, and other swamps subjected to periodic tidal influence. Nontidal wetlands principally include freshwater marshes, ponds, shrub and wooded swamps, and bogs. Nontidal wetlands represent a complex assemblage of inland wet environments.*

Wetlands in their natural state perform ecological functions, which are vitally important to the environment and economic health of the city and impossible or costly to replace. Wetlands protect the quality of surface waters by slowing the erosive forces of moving water. They provide a natural means of flood control by reducing flood peaks, thereby protecting against the loss of life and property. Wetlands improve water quality by intercepting and filtering out waterborne sediments, excess nutrients, heavy metals and other pollutants.

Wetlands are also sources of food, shelter, essential breeding, spawning, nesting and wintering habitats for fish and wildlife. These include migratory birds, endangered species and commercially and recreationally important species. Wetlands need to be recognized as part of a complex, interrelated, hydrologic system.

In recent decades, a number of federal, state and local government programs have been developed for preserving wetlands. Citizens and local, state and federal officials are frequently involved in conflicts over proposed wetland conversions and the management of surrounding land uses which threaten to degrade or destroy nearby wetlands.

*The city must continue to:*

- *Regulate human-controlled activities which cause adverse impacts to wetlands;*
- *Provide protection for isolated wetlands;*
- *Strengthen the biological component of the permitting process by recognizing the value of wetlands for wildlife habitat; and*
- *Provide incentives to encourage landowners to protect existing wetlands.*

## PLANT AND MAINTAIN PROPER URBAN STREET TREES

*Trees improve property values, and establish a sense of place. Urban street trees in Downtown Crystal River should be planted in aligned rows, with regular spacing, using consistent species. Proper, formal tree placement shapes public space, produces shade continuous enough to make walking viable, and has a calming effect on traffic.*

Typically, urban design plans recommend that trees should be native species which are pollution tolerant and do not produce seeds or fruit which stain and litter the sidewalk. However, in Crystal River there was a strong interest in planting fruit trees and shrubs. Crystal River is in a Plant Hardiness Zone of 9A according to the U.S. Department of Agriculture (USDA). Zone 9 is a bit too chilly for many of the fruits recommended (mango, banana, and papaya for example), but several tropical fruits are hardy enough to tolerate the area’s cool temperatures. They include: avocado, starfruit, passion fruit, kiwi fruit, and all varieties of citrus (the county’s namesake fruit). Other fruit varieties include several hardy varieties of apples, apricots, peaches, and other orchard favorites that thrive without long chilling periods.

## ADAPT TO CLIMATE CHANGE

Climate change is a worldwide environmental event with enormous consequences. The long-range impacts of that change will have major implications for coastal communities like Crystal River, especially. *The Intergovernmental Panel on Climate Change describes the impacts the community faces:*

- *Coastal and low-lying inundation*
- *Severe health impacts from extreme heat and air quality deterioration*
- *Endangerment of life and property through extreme weather events*

The city must adapt swiftly, intelligently, and equitably to these negative consequences. This will require coordination with builders, engineers, architects, environmentalists, policy makers, scientists, and the general public, and may also aid in advancing the climate goals of other organizations, private and public. *The city must work to achieve net-zero Greenhouse Gas (GHG) Emissions and prepare for the negative effects of climate change going forward. The city should consider climate-related issues in all policies and actions that guide development and redevelopment. The City must re-consider emergency management and evacuation plans and develop resiliency plans.*

## CREATE NEW PARKS AND INVEST IN AND EXPAND EXISTING ONES

Crystal River has a great park system including several highly utilized waterfront park's showcasing the beauty of Kings Bay. *The city should continue to invest in expanding its park system in critical locations and invest in existing parks across the community to ensure that all parks have high quality amenities that serve their neighborhoods.*

## UTILIZE LOW IMPACT DEVELOPMENT (LID) TECHNIQUES

*Low impact development (LID), or green infrastructure, uses vegetation, soils, and natural processes to manage stormwater and create healthier built environments with fewer negative impacts on surrounding green space and wildlife habitat. This infrastructure can be installed along streets, in public spaces, and on private properties and can be small scale and cost effective.* Increased use of LID treatments throughout can help improve stormwater runoff quality before it reaches the bay.

## CREATE DISTRICT-WIDE STORMWATER SYSTEMS

Current stormwater requirements for commercial, mixed-use and some multi-family development require stormwater to be managed on-site, posing a challenge to new infill development. *Instead of requiring each property in downtown or along highway 44 to use a portion of its site for stormwater management, the city should explore district-wide stormwater strategies for areas where mixed-use and infill development is desired.*

*A district-wide approach crosses property lines and creates a centralized location to capture, treat and hold*

*stormwater runoff.* The centralized location could consist of biofiltration basins, regional stormwater retention basins, or constructed stormwater wetlands, that also can function as new public spaces.

## EXPAND THE SANITARY SEWER SYSTEM

*Continue to build out the sanitary sewer system to improve water quality.*

## CONTINUE TO INVEST IN THE BAY'S HEALTH AND THE KINGS BAY RESTORATION PROJECT

In recent years, Kings Bay has seen dramatic improvements in water quality thanks to the efforts of the Kings Bay Restoration Project, Save Crystal River, and other community groups. *The city should continue supporting these groups to continue to improve water quality in the bay, remove Lyngbya, and plant eelgrass.* A healthy bay is essential not only for the environmental benefits, but for supporting the natural amenities that attract residents and visitors to the city.

## ADOPT DESIGN STANDARDS FOR ELEVATED BUILDINGS

The FEMA Flood Insurance Rate Maps (FIRMs) adopted in 2021 expanded the land classified as being in the AE Flood Zone because the BFEs increased from 8 feet to 11 or 12 feet. New construction or substantially improved structures are now required to be elevated or floodproofed to 1 foot above BFE, making the street-oriented architecture described in this plan for walkable places, challenging. *The city should adopt design standards to ensure that buildings meeting the new FEMA regulations will also maintain street-oriented architecture.*

## COORDINATE PARKING, FEMA, AND STORMWATER REGULATIONS

The construction of infill development and new mixed-use development will depend on coordinating the interrelated regulations of parking, FEMA flood zones, and stormwater. Each of these regulations necessitates portions of a site to be devoted to non-revenue generating uses and increases construction costs. *Within the downtown CRA and new mixed-use centers, the city should coordinate reduced parking requirements, expanded on-street and centralized parking, district-wide stormwater systems, historic designations, and design standards for elevated and floodproofed buildings, as appropriate, to encourage the development envisioned in this plan.*





## Civic Toolkit:

# BUILDING ADAPTATION TO FLOODING

*There are several ways to consider future conditions in planning and design that span a range of approaches from how things are built to integrating natural protections. For example, because coastal wetlands can act as a buffer to storm surge and absorb floodwaters, protecting and enhancing wetlands is an important approach. Another is low-impact development, which fosters good stormwater management techniques by treating stormwater near its source.*

### BUILDING WITHIN THE FLOOD ZONE

One common strategy to address anticipated sea-level rise risks and subsequent stormwater flooding is to elevate the finished first floor elevation of a building in areas that are vulnerable. The building code can regulate the construction of structures to maximize their capacity to withstand flooding. ***The lowest floor of a structure must be raised to or above the BFE. Some communities also add freeboard (or additional elevation above the current floodplain) to accommodate rising seas. Crystal River currently requires 1 foot of freeboard.*** This has the added benefit of keeping insurance rates for individuals and businesses lower even as flood maps and insurance regulations are updated. ***An alternative strategy for non-residential properties that does not involve elevating is to implement floodproofing measures and utilize specific, allowable construction materials.*** These are described in detail in the next section.

#### Meeting Floor Zone Standards

When the BFE is substantially higher than the ground elevation, areas below an elevated first floor are often used as parking. ***In non-residential applications, the experience for a pedestrian at the ground level should be considered. The facade facing the main street can have temporary uses such as food trucks, street vendors, and outdoor seating. However, in the CRA Downtown, where most of the buildings are historical and constructed on or near grade, it is recommended to implement a combination approach of elevating the first floor and adding additional floodproofing measures to keep the street environment and protect against major flood.*** This approach is recommended for any new construction to be resilient and safe from the 100-year storm event.

***Creating a Historic District is also a good approach to maintain the character of existing historical structures.***

It is recommended to consider only having allowances for existing structures to do renovations and to focus

on protecting the true historic structures. Based on current flooding conditions and how sea level rise (SLR) will magnify flooding, new construction should have more targeted and stringent floodproofing/ protection requirements. ***While new construction or redevelopment could be built on grade, or well below the BFE, in a Historic District, this is very unwise due to the known flooding risks, and it will impose a very expensive flood insurance premium on the property owner for not meeting floodproofing or elevation specifications.*** The magnitude of flood insurance needs to be a consideration and known up front before allowing this type of construction.

### COMMUNITY RATING SYSTEM (CRS)

***The Community Rating System (CRS) is a voluntary program associated with the National Flood Insurance Program (NFIP). Under CRS, communities participating in NFIP are rewarded for doing more than regulating construction of new buildings to the minimum national standards. Program participants are rewarded with discounted flood insurance premiums for policyholders within their community.*** The Class system for CRS is from 10 to 1, where a Class 10 only meets the basic requirements of the NFIP and there is no savings on flood insurance premiums. Each class improvement, i.e., smaller number, results in an additional 5% reduction in flood insurance premiums for those in the Special Flood Hazard Area (SFHA), which is the VE or AE flood zones. For those in a non-SFHA, there is a 5% reduction for classes 7 through 9, and a 10% reduction for classes 1 through 6.

Citrus County participates in CRS as a Class 5, so their insurance premium reduction for properties in the SFHA is 25% and 10% in the non-SFHA. Crystal River is currently a Class 7, so their premium reduction in the SFHA is 15% and 5% in the non-SFHA. The next class improvement will give both the SFHA and non-SFHA a 5% increase in insurance premium reductions.

## Freeboard Impacts on Community Rating System (CRS) Class

*With the revised Flood Insurance Rate Maps (FIRMs) that were adopted in 2021, the city essentially got an equivalent increase in freeboard of 3 or 4 feet because the BFE increased from 8 feet to 11 or 12 feet.* While they may want to consider dropping their additional one-foot of freeboard requirement since the magnitude of recent flooding has only ever reached 6 feet and they are now required to build an additional 3 or 4 feet; this is not recommended. The 2021 Addendum to the 2017 CRS Coordinator's Manual set 1-foot freeboard as the minimum pre-requisite for a CRS Class 8. Therefore, without freeboard, they would automatically decrease from a Class '7' to a '9', which will cause flooding insurance savings to decrease from a 15% reduction to a 5% reduction.

In the CRS Program, including additional freeboard is one way to score major points to increase class level. When there are no filling restrictions, moving from 1 to 3 feet of freeboard can get 275 points, which is equivalent to half of a class, as each class is separated by 500 points. When fill is prohibited, the increase from 1 to 3 feet of freeboard is worth 380 points.

*Since the county is two classes above the city in CRS, there might be some easy targets to farther reduce flood insurance premiums for city residents. Therefore, it is also recommended to conduct an audit of the city's CRS program to determine if there are current practices or simple additions that can be implemented to improve the city's CRS Class.*

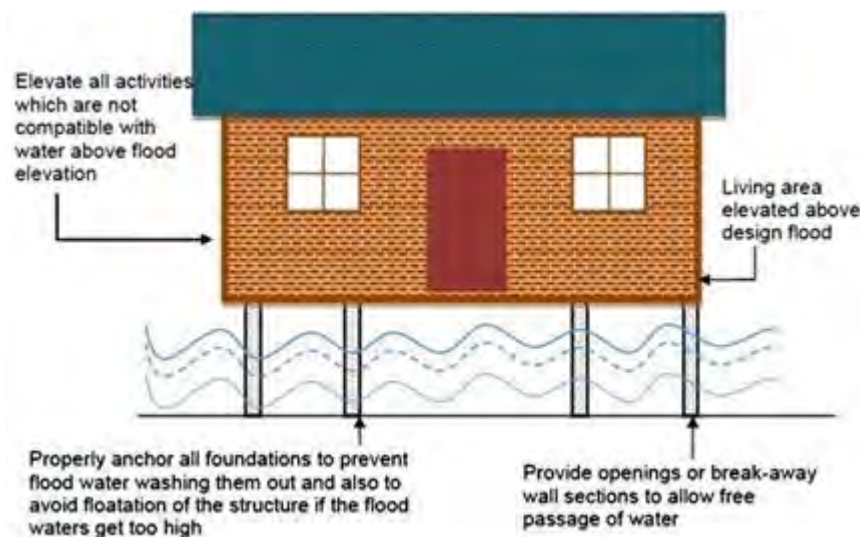
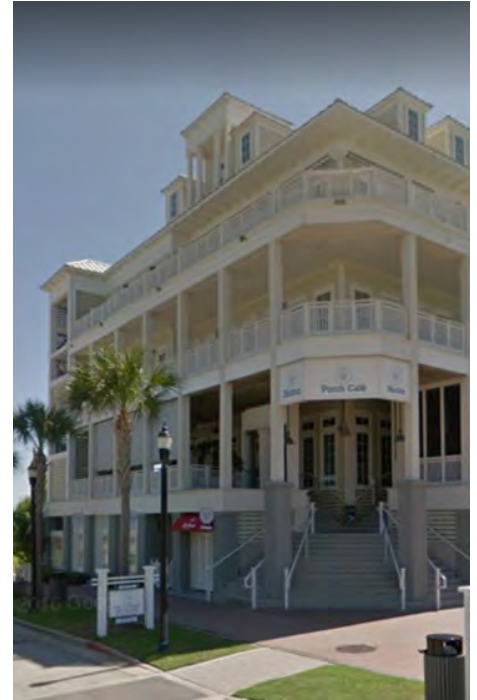


Diagram of meeting FEMA regulations through elevating



Examples of elevated buildings



# FLOODPROOFING FOR NON-RESIDENTIAL STRUCTURES

**FEMA accepts floodproofing for non-residential facilities, and for critical facilities that cannot be moved but are currently subject to potential flooding. In such cases “floodproofing” may be the only option.**

Often times, critical facilities and other important non-residential structures are unable to move due to their ‘historical’ status, lack of a better location to move to, or financial constraints. Therefore, “floodproofing” may be the only option. In lieu of relocation, FEMA allows for floodproofing of non-residential buildings, given the local ordinances permit. FEMA outlines different ways to floodproof these facilities, including dry floodproofing measures, wet floodproofing measures, and combinations of both. **Though the list is very extensive for what FEMA approves/ recommends, example measures for these floodproofing scenarios are summarized below. These include physical barriers such as door inserts, floodwalls, and shields and also include potential flood-resistant materials such as flooring, electrical units, etc.**

These floodproofing strategies can be combined with elevating structures to an intermediate height to meet FEMA standards for mixed-use and commercial structures. This technique should be applied in Downtown and neighborhood centers where creating a vibrant streetscape is a priority.

There are many different options and specifications in regards to floodproofing non-residential facilities, as outlined on FEMA’s website. Additional Federal guidance documents on floodproofing are:

- NFIP Technical Bulletin 3-93, Non-Residential Floodproofing: Requirements and Certification for Buildings Located in Special Flood Hazard Areas in Accordance with the National Flood Insurance Program (FEMA 1993a)
- USACE’s Flood Proofing Regulations (EP 1165-2-314), a technical model for floodproofing-related regulations but not a regulation (USACE 1995)

FEMA’s Technical Bulletins provide guidance on complying with the minimum requirements of existing NFIP regulations on limited topics including non-residential floodproofing, wet floodproofing, flood damage-resistant materials, and elevators. The NFIP Technical Bulletin 3-93 provides step-by-step guidance on:

- NFIP regulations that apply to the design of floodproofing for non-residential buildings
- Planning considerations (e.g., warning time, flood characteristics)
- Minimum engineering considerations and equations for calculating flood forces
- Preparing the Floodproofing Certificate for Non-Residential Structures

### Dry Floodproofing Measures:

- Flood Shields
- Gaskets and Seals
- Sump Pumps
- Pressure relief systems
- Floodwalls & Levees

### Wet Floodproofing Measures:

- Flood Damage Resistant Materials
- Protection of Vulnerable Equipment and Contents
- Flood Openings for Equalization

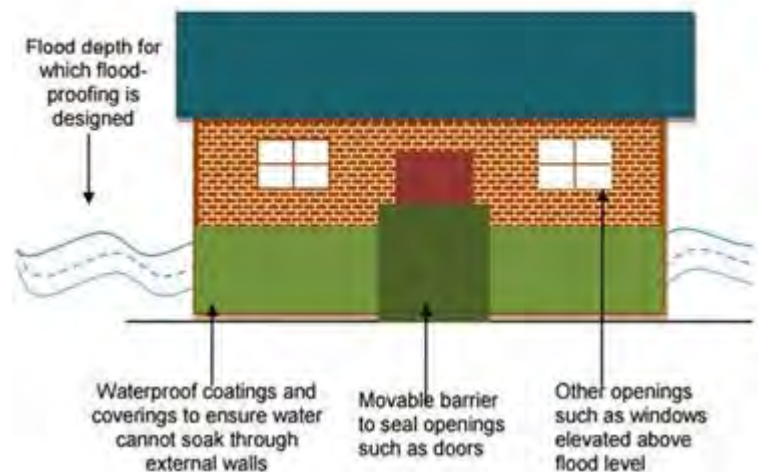
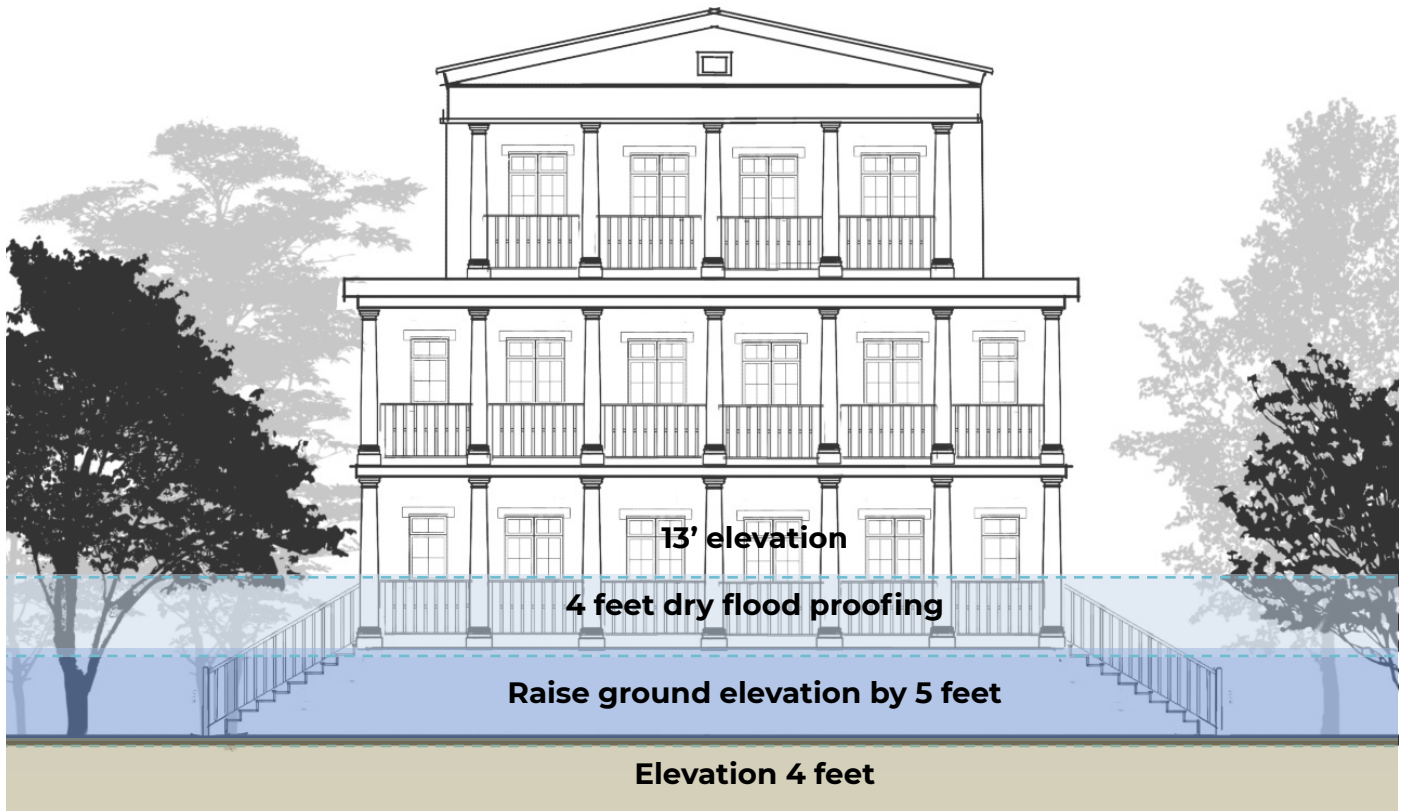


Diagram of meeting FEMA regulations through floodproofing



A combination approach of elevating the first floor and adding additional floodproofing measures to meet FEMA standards is recommended in the CRA Downtown and neighborhood centers for mixed-use and commercial buildings to help create a vibrant and pedestrian-friendly streetscape.

## Historical Buildings

The NFIP gives special consideration to the unique value of designated historic<sup>1</sup> buildings and structures. When voluntary retrofit floodproofing measures are applied to historic buildings, the measures should be designed to mitigate or reduce the flood risk while preserving the building's historic integrity. Consultation with the State Historic Preservation Officer and a design professional (engineer or architect), preferably one experienced in rehabilitating historic structures, is necessary. Retrofit floodproofing measures for historic buildings need not be comprehensive to provide at least some degree of protection.

1. The NFIP definition of "historic structures" includes structures that are (1) listed or preliminarily determined to be eligible for listing in the National Register of Historic Places, (2) certified or preliminarily determined by the Secretary of the Department of Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined to qualify as a registered historic district, or (3) designated as a historic site under a State or local historic preservation program that is approved by the Secretary of the Department of Interior.

The techniques listed below may have minimal impact on the historically significant features of the structure (FEMA 2008b):

- Elevating electrical and mechanical systems and utilities
- Relocating contents
- Creating positive drainage, where the grade allows water to drain away from the building
- Using flood damage-resistant materials



## FUNDING OPPORTUNITIES FOR RESILIENCY PLANNING, DESIGN, AND IMPLEMENTATION

*There are various funding opportunities available at the state level and through the SWFWMD. A few national programs with funding specifically targeted at resiliency are described below. Each of these has a focus area or program that offers funding for resiliency planning, as well as design, permitting, and construction.*

### **FEMA Hazard Mitigation Assistance (HMA) Grants**

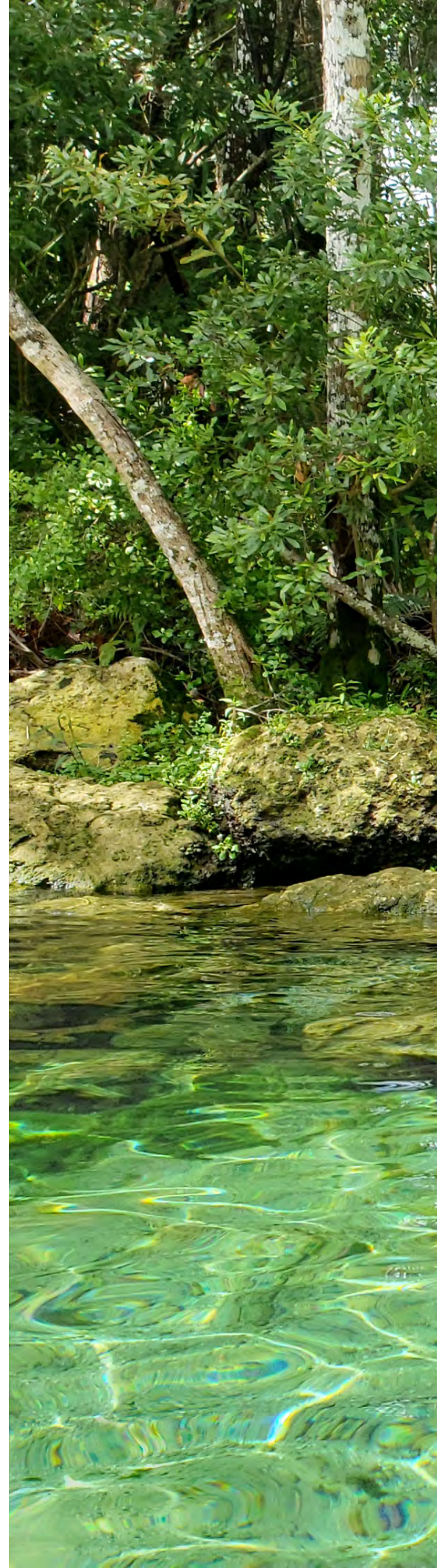
*HMA grants funded through the following programs are relevant for Crystal River: (1) Pre-Disaster Mitigation (PDM) Program, (2) Flood Mitigation Assistance (FMA) Program and (3) Building Resilient Infrastructure and Communities (BRIC) Program. PDM provides funds annually for hazard mitigation planning and projects, FMA provides funds for planning and projects to reduce or eliminate risk of flood damage to buildings that are insured annually under the National Flood Insurance Program, and BRIC provides support for states, local communities, tribes and territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards.* The BRIC program was new in 2020, and it offered \$500 million in available funding nationwide.

<https://www.fema.gov/grants/mitigation>

### **National Coastal Resilience Fund (NCRF)**

*National Fish and Wildlife Foundation (NFWF) administers the NCRF to provide grant funding to restore, increase and strengthen natural infrastructure to protect coastal communities while also enhancing habitats for fish and wildlife. In 2021, NFWF will invest approximately \$34 million in grants to create, expand and restore natural systems in areas that will both increase protection for communities from coastal storms, sea- and lake-level changes, inundation, and coastal erosion, while also improving valuable habitats for fish and wildlife species.* NFWF invests in four main focus areas: (1) Community Capacity Building and Planning, (2) Project Site Assessment and Preliminary Design, (3) Project Final Design and Permitting, and (4) Project Restoration and Monitoring.

<https://www.nfwf.org/programs/national-coastal-resilience-fund?activeTab=tab-3>







## Civic Toolkit:

# STORMWATER & SUSTAINABILITY

### STORMWATER REQUIREMENTS IN CRYSTAL RIVER

Depending on the development project, permits or other requirements may be needed from the Southwest Florida Water Management District (SWFWMD), Florida Department of Environmental Protection (FDEP), and/or U.S. Army Corps of Engineers (ACOE).

*The City’s ordinance for land development (Appendix A; Chapter 3) specifies that developments require an Environmental Resource Permit (ERP) from SWFWMD. However, a single-family dwelling unit, duplex, triplex, or quadruplex that is not part of a larger common plan of development or sales, and does not involve wetlands or other surface waters, is exempt from the ERP requirement.* SWFWMD has design requirements for stormwater treatment and management systems for water quality and quantity outlined in the 2018 version of “Environmental Resource Permit Applicant’s Handbook, Volume II.” A few examples of requirements are described in the next section.

### SUMMARY OF NATIONAL STORMWATER REQUIREMENTS

*Nationwide, stormwater requirements for municipalities are regulated under the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit, which is managed at the state level in Florida by FDEP. These often have more stringent and specific stormwater management requirements, including addressing water quality and implementing appropriate best management practices (BMPs).*

There are two classes of MS4s – Phase I and Phase II. Phase I regulations were established in 1990 to address medium and large cities or counties with populations of 100,000 or more. Phase II regulations were established in 1999 to address small cities or counties in defined urbanized areas per the U.S. Census Bureau, as well as some public universities, departments of transportation, hospitals and prisons. In Citrus County, there are zero Phase I MS4s and three Phase II MS4s – Citrus County, City of Inverness, and FDOT District 7. *Crystal River is situated outside of the urbanized area boundary for “Homosassa Springs-Beverly Hills-Citrus Springs,” so they are not required to follow the NPDES MS4 Permit criteria.*

### THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

The Southwest Florida Water Management District (SWFWMD) manages the water resources for west-central Florida as directed by state law. SWFWMD was established in 1961 as a flood protection agency. Since then, its responsibilities have grown to include managing the water supply, protecting water quality and preserving natural systems that serve important water-related functions. SWFWMD permits require new developments to capture and treat polluted stormwater before it is released.

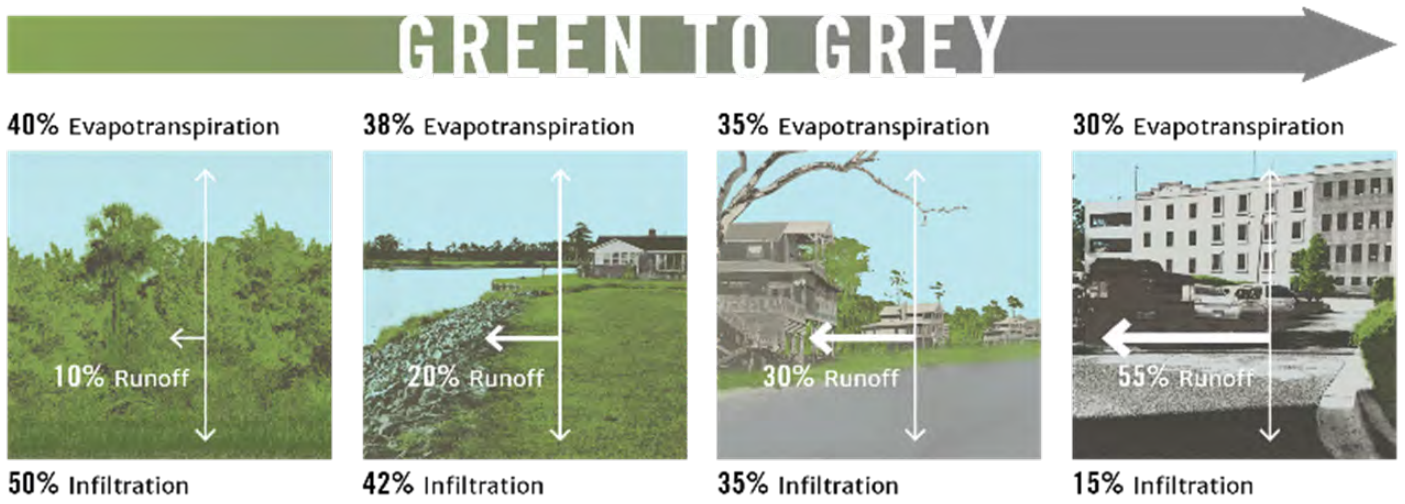
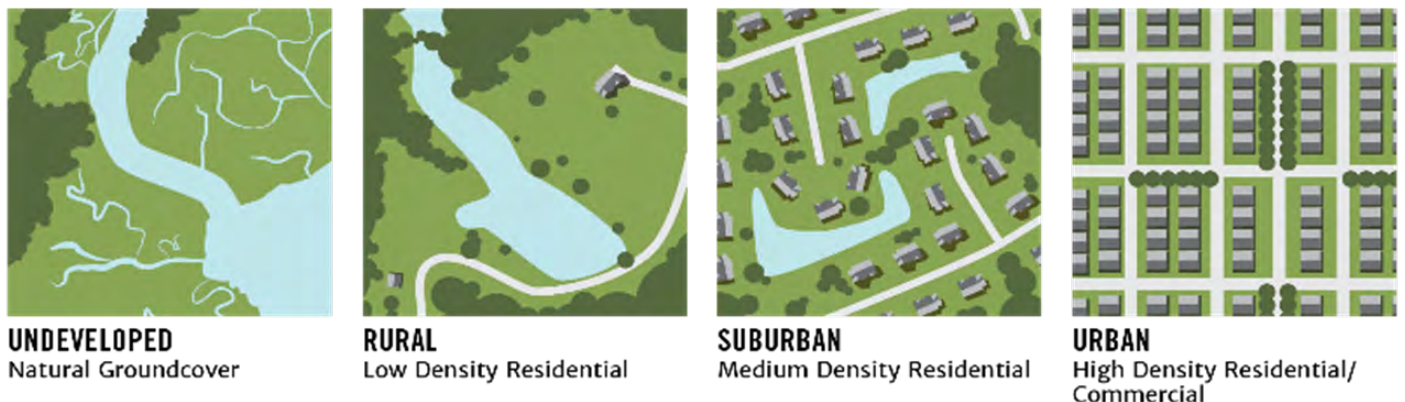
Among SWFWMD’s precious water resources are the more than 200 documented springs and the rivers, bays, and estuaries that are fed by them. SWFWMD’s Springs Management Plan is focused on understanding natural variability while mitigating impacts caused by human activities where practical. Through strategic investments and partnerships, SWFWMD is implementing projects to conserve and restore the ecological balance of the spring systems, supporting regional economies and quality of life.



## INTRODUCTION TO LID

*Low impact development (LID), or green infrastructure, uses vegetation, soils, and natural processes to manage stormwater and create healthier built environments with fewer negative impacts on surrounding green space and wildlife habitat. LID mimics nature by soaking up, storing, facilitating evapotranspiration, and infiltrating stormwater close to its source.* This in effect reduces the frequency of nuisance flooding and the demand on drainage infrastructure. The goal of LID is to restore the stormwater flow pattern on a site to a state that is similar to the predevelopment condition.

*The most common LID practice types include: bioretention, bioswales, permeable pavement, green roofs, cisterns, and constructed stormwater wetlands. Research studies have shown that LID practices have higher removal rates of nitrogen, phosphorus, heavy metals, and fecal coliform than traditional stormwater management practices such as detention and retention ponds.* The additional water quality benefits of LID are especially important for Crystal River to consider because the entire City drains to surface water classified as “Outstanding Florida Waters.”



Graphic Source: University of Georgia, Marine Extension and Georgia Sea Grant, Stormwater Program.





## LID TOOLKIT

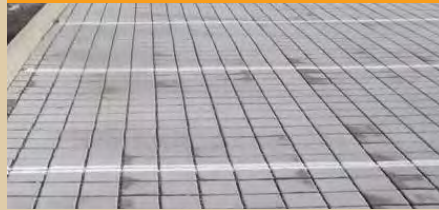
# Low Impact Development

### SOURCE: ORIGIN OF RUNOFF

PARKING



HARDSCAPE



STRUCTURE RUNOFF



### METHOD: STORMWATER TREATMENT THROUGH LID

FILTER



INFILTRATE

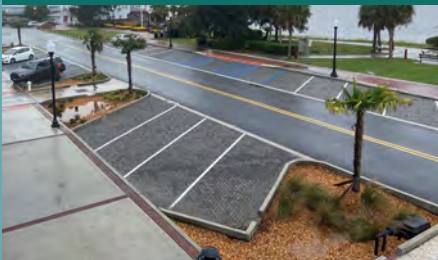


EVAPOTRANSPIRATION



### TOOLS: MANAGEMENT DEVICES

GREEN STREET



VEGETATED SWALE



BIORETENTION



TREE PLANTING



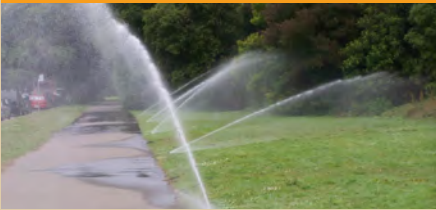
INFILTRATION AREA



GREEN ROOF



**LANDSCAPE AREA**



**ROOFTOPS**



**ALTERNATE SOURCES**



**CONVEY**



**STORE/REUSE**



**PERMEABLE PAVING**



**CONSTRUCTED WETLAND**



**STORMWATER TREE SYSTEM**



**RAIN HARVESTING**



**APPROPRIATE DESIGN**





# LOW IMPACT DEVELOPMENT FOR CRYSTAL RIVER

## SITE CONSTRAINTS

Coastal environments typically have sandier underlying soils which are great for promoting infiltration and runoff reduction. However, these areas sometimes have shallower water tables. A shallow water table negatively impacts infiltration rates. *Typical design recommendations are to allow at least one or two feet of separation between the bottom elevation of the infiltrating surface and seasonally-high water table. Due to a shallower vertical profile, permeable pavement can be implemented when the water table is closer to the surface than bioretention systems.*

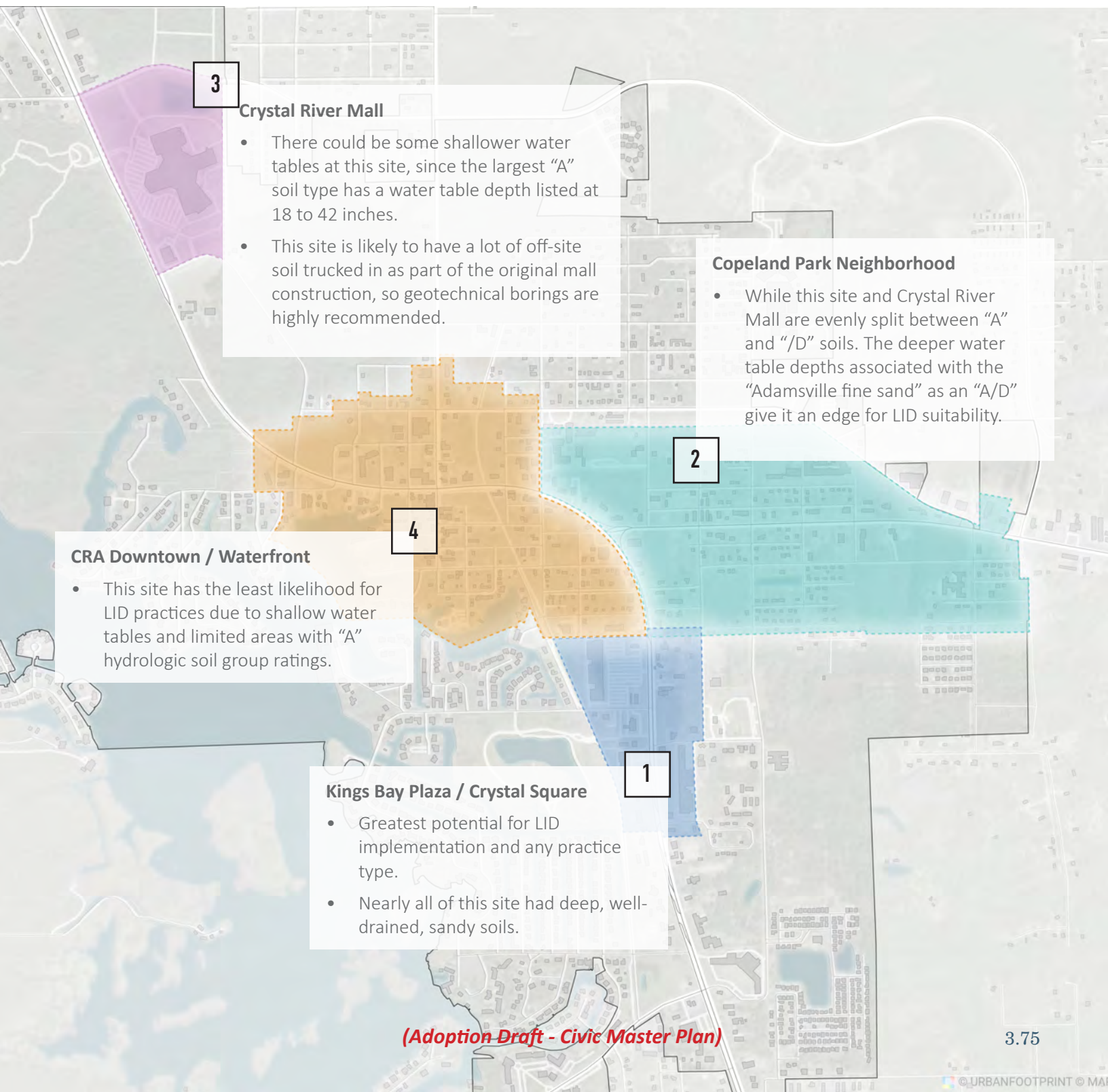
*Another local/regional constraint is “karst” geology, which is the presence of limestone (or dolostone). Due to the chemical composition, acidic water from rainfall and runoff can cause dissolution of limestone which then creates sinkholes. One benefit of pervious concrete and permeable interlocking pavement is that they have a basic pH (8 to 9.5), so dissolution would not be expected.* However, a licensed professional should evaluate any site-specific design to determine if infiltrating LID practice can be used or if it would require an impermeable liner.

## SOIL REVIEW AND APPLICABILITY EVALUATION

The USDA-NRCS Web Soil Survey was used as a preliminary tool to explore areas suitable for infiltration-based LID practices. This preliminary analysis included identifying depth to water table and the hydrologic soil group (HSG) for each soil series and establishing ratings for each based on typical design guidance. *HSG is a characteristic that describes runoff potential for a soil, and subsequently infiltration potential. “A” has the highest infiltration potential, and “D” has the lowest. When a HSG rating ends in “/D,” this indicates that the depth to the water table is shallow and often less than one foot. A general summary of each geographic study area is described to the right, and detailed maps of hydrologic soil groups and water table depth are included in Appendix A and B.*

For any construction project, soil borings are recommended to determine depth to water table, presence of limestone bedrock, and soil texture (e.g., presence of sandy soils). The City had geotechnical boring data available from a project called “Indian Waters, Phase 1,” which is located around NW 22<sup>nd</sup> Street. The NRCS soils data listed that “Matlacha, Limestone substratum-Urban Land Complex” as the soil series present. This soil series is expected to have a water table depth of 2 to 3 feet and limestone bedrock between 3.5 and 5 feet. Out of 22 soil borings, half found limestone bedrock between 2 and 6 feet, and half had a water table depth exceeding 6.5 feet. This result shows how the NRCS soils can be a good indicator because many of the borings found limestone bedrock in a similar depth range. *It is also an example that LID suitability could be better than predicted from the NRCS soils data because the actual water table depths were far greater than expected for many of the borings.*

**RANKING THE OVERALL SUITABILITY FOR LID BY GEOGRAPHIC AREA FROM 1 TO 4 WITH 1 BEING THE BEST**



**3**

**Crystal River Mall**

- There could be some shallower water tables at this site, since the largest “A” soil type has a water table depth listed at 18 to 42 inches.
- This site is likely to have a lot of off-site soil trucked in as part of the original mall construction, so geotechnical borings are highly recommended.

**Copeland Park Neighborhood**

- While this site and Crystal River Mall are evenly split between “A” and “/D” soils. The deeper water table depths associated with the “Adamsville fine sand” as an “A/D” give it an edge for LID suitability.

**2**

**4**

**CRA Downtown / Waterfront**

- This site has the least likelihood for LID practices due to shallow water tables and limited areas with “A” hydrologic soil group ratings.

**1**

**Kings Bay Plaza / Crystal Square**

- Greatest potential for LID implementation and any practice type.
- Nearly all of this site had deep, well-drained, sandy soils.



# STORMWATER MANAGEMENT CONSIDERATIONS

## REQUIREMENTS IN CRYSTAL RIVER

Depending on the BMP selected or the size of the drainage area, Section 4 of the SWFWMD’s ERP Applicant’s Handbook, specifies that either one-half inch or one inch of runoff must be treated for water quality. In addition, projects discharging directly into Outstanding Florida Waters (OFW) are required to treat a volume that is 50% greater than the standard mentioned earlier.

There was some concern raised for how to address stormwater treatment with redevelopment in areas that do not have sufficient space or suitable conditions (e.g., water table depth and soil type). *SWFWMD’s ERP Applicant’s Handbook describes a process called*

*“compensating stormwater treatment” in Section 4.8.*

- *The first method is “overtreatment,” which involves treating runoff that is captured to a greater extent than required by the rule to make up for lack of treatment at other portions of the project.*
- *The second method is “off-site compensation,” which involves providing treatment for an off-site area that is not currently being treated and is within the same watershed to benefit the same receiving water body.*

*Other communities utilize similar approaches as the described one for “compensating stormwater treatment.”*

## INNOVATIVE APPROACHES TO STORMWATER MANAGEMENT

*It is recommended for the city to further explore alternatives to find the approach that best fits their needs, regulatory requirements, and Master Plan goals. Having multiple tools and options could help to facilitate redevelopment.*

### 1 Overtreatment and Redevelopment Criteria

Examples of “Redevelopment Criteria” from the City of Tybee Island’s Code of Ordinances and the City of Savannah’s Local Design Manual are presented in Appendix C. Both specify that reducing impervious percentage by 20% is one option and another is to provide off-site stormwater management.

### 2 Off-site Stormwater Management

Conditions for the off-site stormwater management option for City of Tybee Island is also included in Appendix C, but an important component is that it specifies that the structure has to be installed within the same drainage basin.

### 3 In-Lieu Fee System

The City of Savannah also offers a unique program that includes a stormwater mitigation program, or an “LID Bank,” where developers can pay an “in-lieu fee” to construct LID practices within the City right-of-way or on City-owned property based on a set market price for construction. Savannah has implemented several permeable pavement street sections in the downtown historic district through this program.

### 4 Comprehensive Stormwater Master Plan

If an in-lieu fee system or off-site stormwater management approach is implemented by the City, a comprehensive stormwater master plan would be beneficial in that it would identify flooding hot spots, drainage capital improvement projects, and suitable locations for regional stormwater systems and LID practices on City-owned property or City rights-of-ways.

### 5 Stormwater Utility Fee

Another recommendation is to establish a stormwater utility fee, or enterprise fund, to create a regular funding source for constructing drainage improvement projects. Unincorporated Citrus County is currently working to establish a stormwater utility to fund drainage projects.

### 6 Single-Family Residences - Impervious Surface Reduction

While most redevelopment criteria are tied to commercial development and larger residential developments, the City of Tybee Island has an ordinance for these plus single-family residences that addresses newly-constructed driveways and replacements that are more than 50% of the existing driveway to promote infiltration and water quality treatment. The City should consider a similar approach to promote permeable pavement and more permeable approaches for driveways.

*Civic Toolkit:***PARKS, SQUARES & OPEN SPACE**

*Public spaces of all sizes and types, ranging from pocket parks, to squares, to large preserves are essential to a high quality of life and a functioning ecosystem (and the natural services it provides). Public open space amenities and innovative design can help enable healthier lifestyles, offer recreational opportunities, and help manage stormwater and storm surges.*

**Yeomans Park**

Connect Yeomans Park to downtown by extending the Crosstown Trail to the existing developed area of the park. Formalize a network of nature trails and kayak trails for recreation and to showcase the Crystal River ecosystem. Implement proposed plans for the Cutler Spur Pet Park on portions of the park.

**Hunter Springs Park**

Hunter Springs Park provides the only public beach access to Kings Bay in downtown and is very heavily used. The City should expand Hunter Springs Park to the east with additional beach access and natural coastline. Additional impervious surfaces besides pavilions and trails should be avoided.

**Copeland Park**

Copeland Park is the neighborhood park the Copeland Community, named after a lifelong resident of Crystal River who earned many accomplishments as an Army Veteran, educator, businessman and a community activist. The plan for Copeland Park improvements include a walking trail along the park's southern boundary, a bridge that provides access across the pond and fishing opportunities, a small climbing wall, a 100-foot long zip line, and new plantings.

**Town Square Park Expansion**

Natural wetlands are a defining feature of the Crystal River landscape. The wetlands adjacent to the Town Square should be integrated into the park through a network of nature trails and boardwalks to highlight the importance and function of wetlands.

**New Parks in Neighborhood Centers**

Each new neighborhood center proposed in this plan includes open space in the form of parks, squares and plazas. The addition of green space into what are today highly impervious sites provides ecological and stormwater benefits as well as a needed amenity for the future residents and visitors of these centers.



Proposed plan for pet park at Yeomans Park



Example of boardwalk through wetlands in Crystal River.

