

# Algonquin Sports Complex Expansion Master Plan

For the City of Indian Harbour Beach, FL

June 2022



Prepared by the East Central Florida Regional Planning Council  
and Presented to:

Mayor Scott Nickle  
The Indian Harbour Beach City Council  
City Manager Mark Ryan  
The People of the City of Indian Harbour Beach



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# Introduction

In the Summer of 2021, the City of Indian Harbour Beach completed a Memorandum of Understanding (MOU) with the East Central Florida Regional Planning Council (ECFRPC) to receive planning technical assistance for the expansion of the Algonquin Sports Complex. The Algonquin Sports Complex (hereby referred to as “the complex” or “the park”) is a 25-acre, city-owned park located in the northern portion of the City, along the boundary between the City and Satellite Beach, that is partially developed as depicted in the aerial image below. The developed portion hosts several recreational facilities that both Indian Harbour Beach residents and adjacent communities enjoy, including a baseball field, little league field, softball field, and soccer field. The complex has become a hub for local youth sports activities and recreation over the years , and many local youth sports teams use the park for play, practice, and sports games.





The City views the 9 acres of the yet-to-be-developed Sports Complex as a great opportunity to provide more park amenities to locals and park visitors. The Complex was like a blank canvas the City could use to take on that opportunity while also enhancing and expanding existing facilities at the park to better meet the needs of park users. When the Coronavirus pandemic hit in 2020, it solidified the importance of having accessible parks and open, green spaces both near and within communities. Parks and recreational amenities like the Sports Complex play a critical role in supporting and enhancing wellness and mental health for residents.

Parks not only provide a space for everyday “play” that residents need, they increase opportunities to be one with nature, to exercise, and to be engaged in one’s community by facilitating social interactions. Parks like the Complex that are smaller in scale and service more intimate neighborhood settings also have a greater influence on local Social Determinants of Health, and thus create numerous health and equity benefits, which include but are not limited to the following:

- **Enhanced natural environmental factors such as air and water quality**
- **Positive impacts on property values that help stabilize neighborhood quality**
- **Improved physical and mental health outcomes**
- **Optimized community connections and social context**
- **Increased opportunities to age in place**

This citizen-driven conceptual redevelopment plan is one of the steps the City is taking to fulfill its duty to provide residents with excellent recreational services. This plan provides strategies and recommendations developed by the ECFRPC to support the effective redevelopment of the undeveloped portion of the Sports Complex, while also meeting the City’s ultimate goal of enhancing the quality of life of residents by providing greater opportunities for families and the community to connect at the park. Recommendations and strategies provided are based on the planning process applied and as such are informed by the direction and feedback provided by the City, the public engagement activities conducted, and the research findings that were collected.

**Social determinants of health (SDOH) conditions in the places where people live, learn, work, and play that affect a wide range of health risks and outcomes.**

**- CDC**



# Project Purpose

Since the initial partial development of the Algonquin Sports Complex, the City has on numerous occasions considered how to best expand it into the undeveloped portion of the park to provide more park services to residents. The value of these park services magnified after the COVID-19 pandemic began in 2020 and brought on a series of shutdowns, public health mandates, and quarantines. These disruptions in daily living created a number of changes in how we live, work, and play, however many local governments took the change as an opportunity to maintain and even enhance their community's opportunities to "play" via their network of local parks and innovations in park planning.

For example, in New York City during the height of the COVID-19 pandemic in 2020, modifications were made to existing parks to ensure public health when demand for open green space was especially needed in urban areas. Domino Park is one example, which opened in 2018 along the waterfront in Queens. This private park installed white markings in the shape of circles to facilitate socially-distanced seating in the park while still maximizing capacity. These markings, while temporary, illustrate how cities faced and responded to the need for immediate changes as a result of the pandemic.



*Photo: Social distancing circles in Domino Park (Source: nypost.com)*

Similarly, the City of Indian Harbour Beach wished to use the Algonquin Sports Complex as a means to innovatively enhance its public park and recreational amenities, and subsequently partnered with the ECFRPC to plan for the park's expansion. When deliberating on the redevelopment of the Algonquin Sports Complex, City officials decided that the expansion of the Algonquin Sports Complex should be done using a public-facing, community-driven approach that made public engagement, including engaging the youth, a priority. Public engagement would include activities designed to involve local residents, including younger residents, in discussions on new park amenities and services. Activities include but are not limited to the implementation of a public survey, social media engagement, and on-site public workshops. This rigorous public engagement framework ensures that the redevelopment process equitably incorporates the needs and desires of all local residents.

Another interesting condition of the Sports Complex to note is that it is entirely surrounded by residential uses, majorly single-family homes with some multi-family residences lying at the eastern boundary where the park is undeveloped, as shown in the image below. The City recognizes this and supports the use of public engagement in planning new park amenities that will best mix with the existing neighborhood's structure, character, and aesthetic. The park itself is located less than a half-mile from the Atlantic Ocean and only about a mile away from the Indian River. Being a coastal community, the City recognizes the strong need to consider risks from climate change, such as hurricanes and coastal flooding, in all park and facility planning. As such, this Plan will be supplemented by a Vulnerability Assessment that will examine all potential threats the park may be susceptible to in both the short and long-term. This information will be used to develop recommendations for effective stormwater management and redesign of the park.



## **Goals of this Plan:**

**Goal 1** – Employ both in-person and online public engagement strategies to engage adults as well as youth in the redevelopment of the Algonquin Sports Complex.

**Goal 2** - Capture the recreational and open spaces needs and desires expressed by all ages of the Indian Harbour Beach community via a Public Engagement Activity Report that will be applied to this Master Plan.

**Goal 3** – Conduct a Vulnerability Assessment to review the park's vulnerability to risks like sea-level rise, storm surge, and coastal flooding to inform the planning and management of the park.

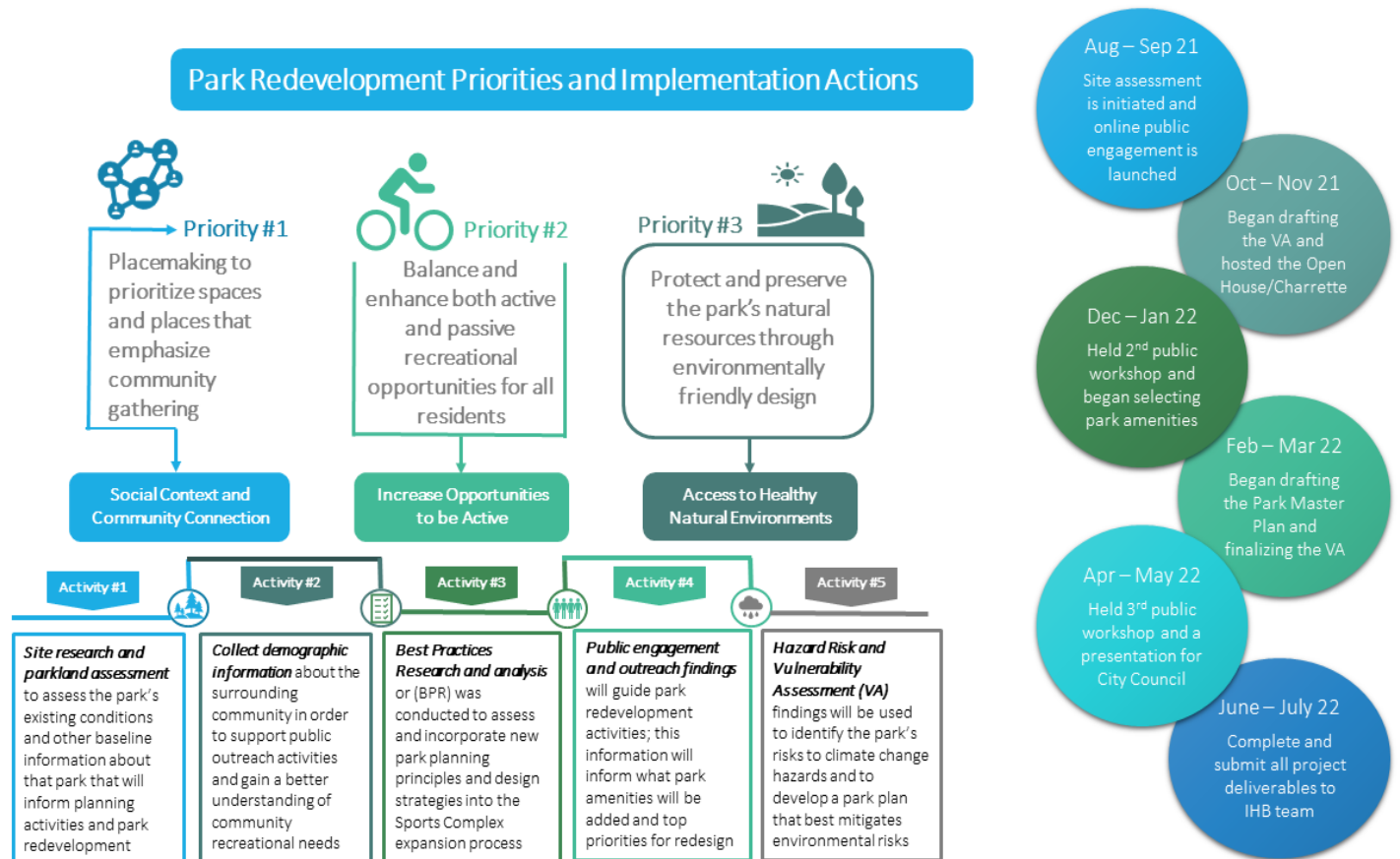
**Goal 4** – Incorporate environmentally sound practices and nature-based solutions for future park amenities to ensure the implementation of best practices in stormwater management.

**Goal 5** – Utilize community feedback, findings from the Vulnerability Assessment, and best practices research in park planning to develop recommendations for activities, amenities, and facilities for the Algonquin Sports Complex.



# Project Methodology and Timeline

The figure below summarizes the project priorities that helped to frame the conceptualization and implementation of this project. These priorities were expressed by the City Indian Harbour Beach at the forefront of the project and used as a guide to plan out project activities, research tasks, public engagement activities, and park redesign proposals. The timeline breaks down how and when tasks were completed and when project deliverables were provided to the City.

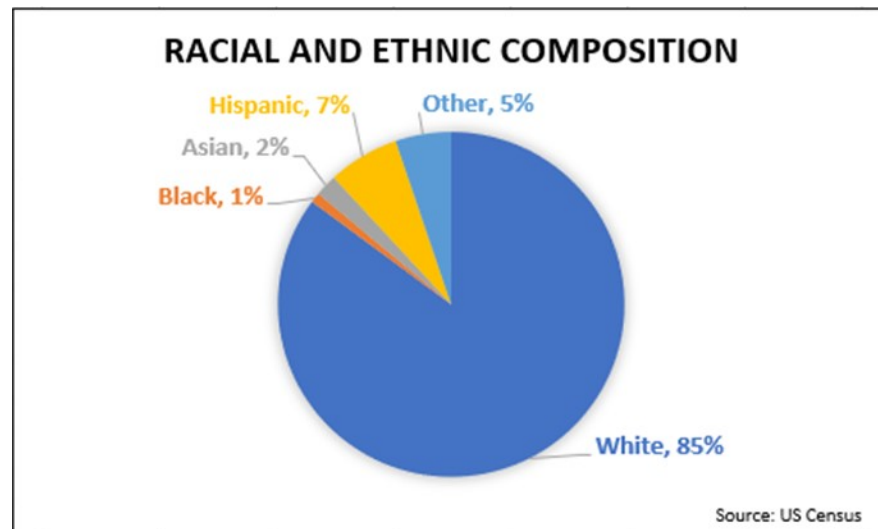


See Appendix for more information on the Public Engagement Activity Report, the Vulnerability Assessment Report, and the proposed project budget for the conceptual park redevelopment proposal.

# Indian Harbour Beach

## Demographic Profile

Demographics and population characteristics are important aspects of a city that can give useful insight into the needs and desires of communities within it. Assessing the population characteristics of Indian Harbour Beach assists in the development of the Algonquin Sports Complex expansion by defining the service population surrounding the park. Demographic information of the potential users for the improved Algonquin Sports Complex also supports to the identification of the new amenities that should be incorporated into the park expansion to best serve Harbour Beach residents.



*Figure 1.1: 2020 Racial and Ethnic Composition of Indian Harbour Beach*

The racial and ethnic composition of a community has an impact on consumption patterns as well as desired services by residents. Overall, Non-Hispanic Whites comprise the majority of Indian Harbour Beach's population at 85%. This is higher than Brevard County as a whole, which is 71% Non-Hispanic White. As a result, Indian Harbour Beach has a lower presence of minority groups compared to Brevard County. While Brevard County is 9% Non-Hispanic Black according to the 2020 Census, this group comprises just under 1% of Indian Harbour Beach. In addition, while Brevard County has a Hispanic population that is 11% of the total, about 7% of Indian Harbour Beach is considered Hispanic. The "Other" category as illustrated in the figure above includes Non-Hispanic American Indians, Non-Hispanic Other Race, and Non-Hispanic Two or More Races. In conclusion, Indian Harbour Beach has smaller minority populations compared to Brevard County, and the impact this has on desired services and amenities within the Sports Complex is minimal.

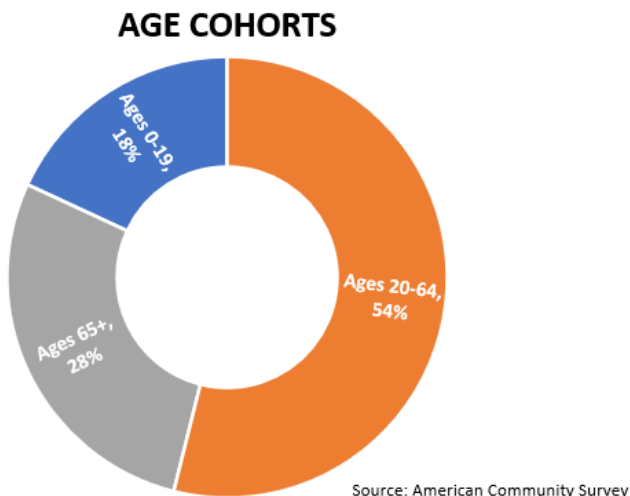
Age is another demographic factor that influences the demand for certain services and needs. In relation to the amenities planned for the Sports Complex, the age composition of Indian Harbour Beach can assist in the development of park structures and activities that better serve various age groups in the city and in nearby communities.

Figure 1.2 illustrates the age distribution of the Indian Harbour Beach community. Over half (54%) of Indian Harbour Beach residents are between the ages 20 and 64, which is the main working-age cohort. This age group is economically important because of their disposable income through wages which are spent on a wide variety of goods and services. While this age cohort comprises the majority of Indian Harbour Beach's population, comparing age cohort breakdowns to Brevard County and the state gives a more comprehensive overview of the age structure within the city.

In the 20 to 64 age cohort, the share of the total population is 56% for Brevard County and 58% for the State of Florida. This shows that Indian Harbour Beach has a higher dependency ratio. Dependent age cohorts include both young children and older adults who depend on family

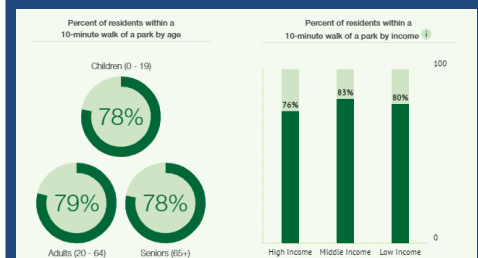
and social programs in order to meet their needs. However, only 18% of Indian Harbour Beach residents are ages 19 and younger. This compares to 20% and 22% for Brevard County and Florida, respectively. As a result, over 28% of Indian Harbour Beach residents are ages 65+. This is significantly higher than the Brevard County proportion at 23% and Florida's at 20%. While Florida is known as a popular destination for retirees, it is clear that Indian Harbour Beach is a community with a large retiree presence.

The large share of the 65+ age cohort in Indian Harbour Beach is supported by the median age of the City, which was 53.2 according to the 2015-2019 American Community Survey. Brevard County's median age is 47.3, and the State of Florida's is 42 years. Already, Brevard County's median age is 5 years older compared to the state. However, Indian Harbour Beach's median age is almost 6 years older than Brevard County. This statistic underlines the fact that Indian Harbour Beach's population has a higher prevalence of retirees and older adults. For these reasons, it is important that the redesign of the Sports Complex and the included amenities are compatible with the older age structure of the city. The park currently supports mostly athletic activities, especially for children, so careful consideration is needed to create a more multigenerational balance of park services that the whole community can enjoy.



*Figure 1.2: 2015-2019 American Community Survey Age Cohorts in Indian Harbour Beach*

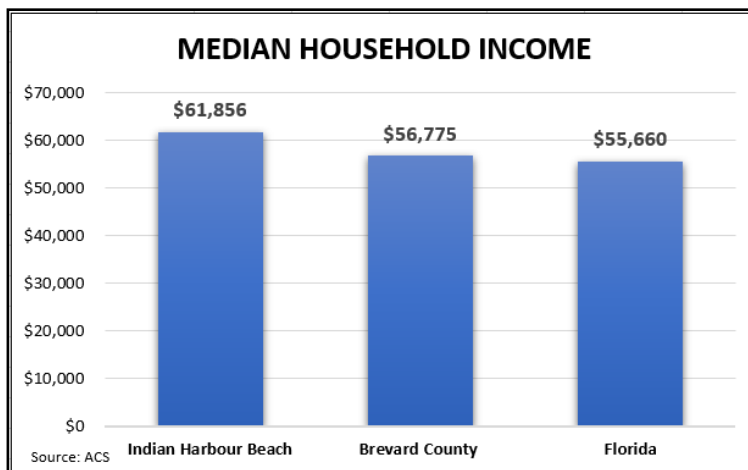
**According to the 2022 Park Scores released by the Trust for Public Land, 79% of Indian Harbour Beach residents live within a 10-minute walk of a park. It also shows that only 4% of the City's land is being used for parks and recreation, which is somewhat low and presents an opportunity to create more parks and recreational facilities for residents to enjoy.**



**Median Age:**  
**53.2**

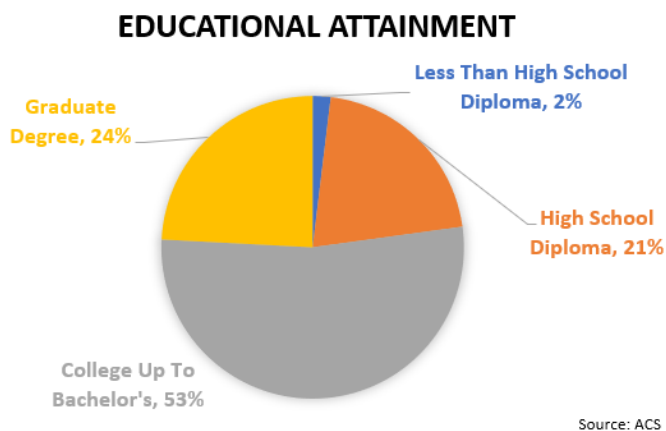
*Figure 1.3: 2015-2019 American Community Survey Median Age in Indian Harbour Beach*





*Figure 1.4: 2015-2019 Median Household Income in Indian Harbour Beach*

Median household income is another metric that has a large influence on the spending power of residents, the amount of free time they have for being active, and the activities and amenities they desire. Indian Harbour Beach boasts a median household income of \$61, 856 according to the 2015-2019 American Community Survey. This number is significantly higher compared to both Brevard County and Florida. With a median household income that is 9% higher compared to Brevard County, Indian Harbour Beach residents are more likely to have disposable income and additional time for activities that require investment. Children’s sports that are held at the Algonquin Sports Complex are examples of activities that require an initial investment to participate. In addition, incomes in the area support the inclusion of a pro shop, dog park, pump track, and other amenities in the expanded portion of the park that support an improved quality of life.



*Figure 1.5: 2015-2019 Educational Attainment in Indian Harbour Beach*

Figure 1.5 above shows the educational attainment of Indian Harbour Beach residents over the age of 25 according to the 2015-2019 American Community Survey. The majority of residents in Indian Harbour Beach have completed at least some college. While this is also true for Brevard County and the State , there are some major differences. While 24% of Indian Harbour Beach residents have a graduate degree, this is only the case for 11.5% of Brevard County and 11% of Florida. In addition, Indian Harbour Beach has a low proportion of people with less than a high school diploma. While only 2% of residents over the age of 25 haven’t received a high school diploma, this is the case for 8% of Brevard County and 11% of Florida as a whole. For these reasons, Indian Harbour Beach residents boast higher educational attainment compared to other jurisdictions.

# Park History and Site Assessment Summary

Before the park was sold to the City of Indian Harbour Beach from the School Board of Brevard County in 1965, the property was still being used for recreational purposes. The purchase was facilitated through a user agreement between both parties stated that the property will continue to be used to fulfill recreational and open space needs of the community. The City has maintained their end of the agreement, and the park has become a community hub for youth recreation and sports programming. This conceptual redevelopment plan for the park illustrates the City's commitment to its longtime effort to provide excellent parks, recreational amenities, and opportunities to be active for its citizens and stakeholders.

## Existing Site Conditions for the Park

The park entrance along its southern border at N Osceola Dr. hosts informal parking that needs to be redeveloped into a more suitable parking lot. In past years it was mainly used as parking for soccer games and other park events. The formal parking spaces near the West entrance of the park (via Crespino Ct.) currently hosts a total of 105 parking spaces. The City would like to double the available parking spaces at the Sports Complex by developing at least 100 new parking spaces at the N Osceola entrance. It will be improved with the expansion to provide enhanced park access and new parking spaces.

Existing infrastructure that includes a utility tower, storage lot, and warehouse must not be disturbed or moved for the park expansion. The infrastructure only occupies a small portion of the park: 15,600 sq. ft. (120 ft X 130 ft). A dirt trail that encircles the undeveloped portion of the park is used regularly by the City and also provides access to the stormwater drainage canal at the northern border of the site. The City expressed interest in seeing the unpaved trail be used as a base for a new multiuse path that encircles the entire Algonquin Sports Complex.



Further, several wildlife sightings have been made at the undeveloped portion of the park. Wildlife seen onsite mainly include bobcats, coyotes, and gopher tortoises. Because of the known history of this wildlife, the City is intending to pursue all methods of assessing the risks to local wildlife from the proposed redevelopment and strategies to protect and preserve any native species and their ecosystems. This especially goes for potentially endangered species sited at the park, such as the gopher tortoises already mentioned. Additionally, the park is surrounded entirely by residential uses, so considerations for limiting noise or light pollution from the park into residential land uses are needed.



**Existing Park Amenities:**

- Baseball Field**
- Little League Field**
- Softball Field**
- Soccer Field**
- Meeting Room**
- Concession Stand**





# Park Expansion Challenges and Opportunities

## Challenges

- Space and connectivity restrictions due to bordering jurisdictions
- Existing wildlife and protected species (Coyotes, gopher tortoise, etc.)
- Park infrastructure and facilities that must be incorporated into the expansion
- Need for more accessible parking
- Concerns over park safety and hours after dark near residential land uses
- Managing increases in lighting, noise, and traffic that may occur due to expansion
- Considering expressed concerns over homeless activity near the park

## Opportunities

- Almost 10 acres of undeveloped space to build on
- New recreational opportunities for residents of all types and ages
- Existing drainage canal available to facilitate drainage and mitigate flood risks
- Existing park features that are more active and help balance new passive amenities
- Proximity to residential spaces and potential park users
- Resident feedback from public engagement activities to help guide the park redevelopment process
- Proximity to City buildings and local schools



# Park Vulnerability Assessment Report Summary

## Introduction

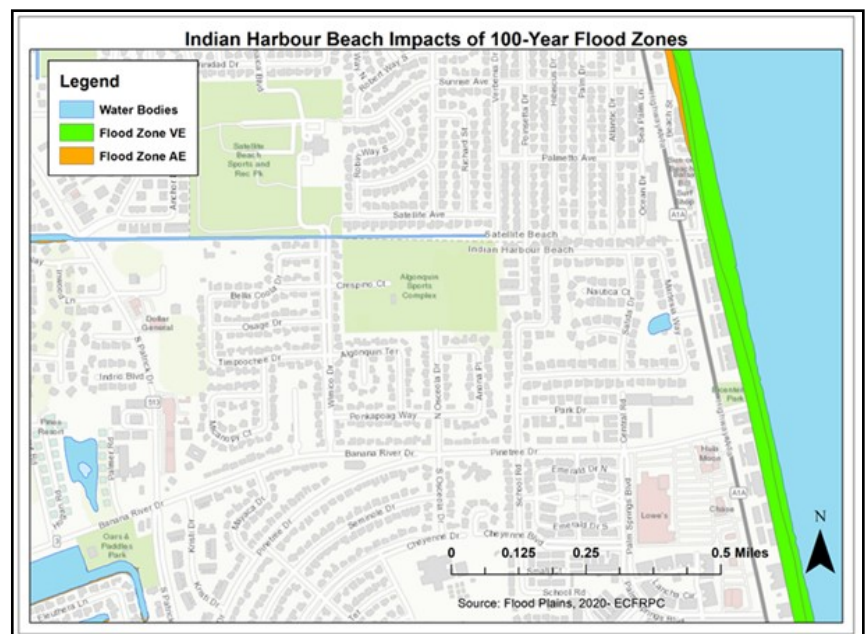
The Algonquin Sports Complex is located in Indian Harbour Beach, a city that is located on a barrier island, with the Atlantic Ocean to the east and the Indian River Lagoon to the west. The Algonquin Sports Complex is located roughly in the middle of the barrier island, and the main point of entry is on Wimico Drive.

As a coastal location, the Algonquin Sports Complex and surrounding vicinity are susceptible to tropical cyclones. These storms present multiple hazards which can amplify each other and have devastating effects on coastal communities. Heavy and consistent rainfall can put stress on drainage systems and can lead to flash flooding and river flooding. Specifically, in coastal communities like Indian Harbour Beach, storm surge is often the most destructive force as a result of these storms. It causes the temporary rise of sea level, floods low-lying areas, and places additional stress on drainage systems. This is especially important for the Algonquin Sports Complex, as storm surge may impact drainage which is already typically stressed in tropical storms. Anticipated sea-level rise will compound these issues further, increasing the impacts of storm surges and placing a greater strain on drainage systems. In the Vulnerability Assessment, the current possible storm surges by category are compared to potential storm surges in the area in 2040 with projected sea-level rise taken into account. In addition, sea-level rise projections for the years 2040 and 2060 is also examined. This analysis help assess the functional lifespan of the improved and expanded Sports Complex, and also provide recommendations to help reduce the impact of flooding events and increase resiliency to meet the challenges of the future.

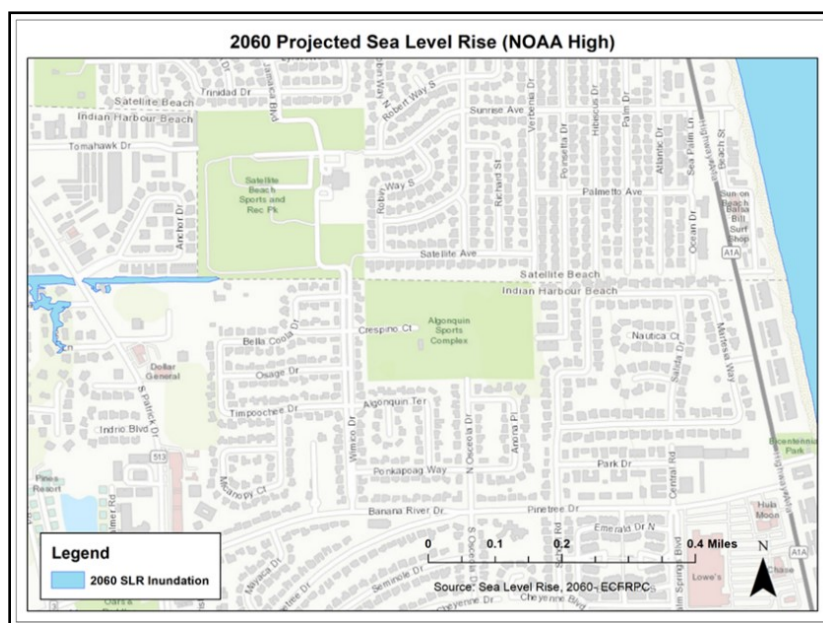
## GIS Analysis Findings

### Park Proximity to Flood

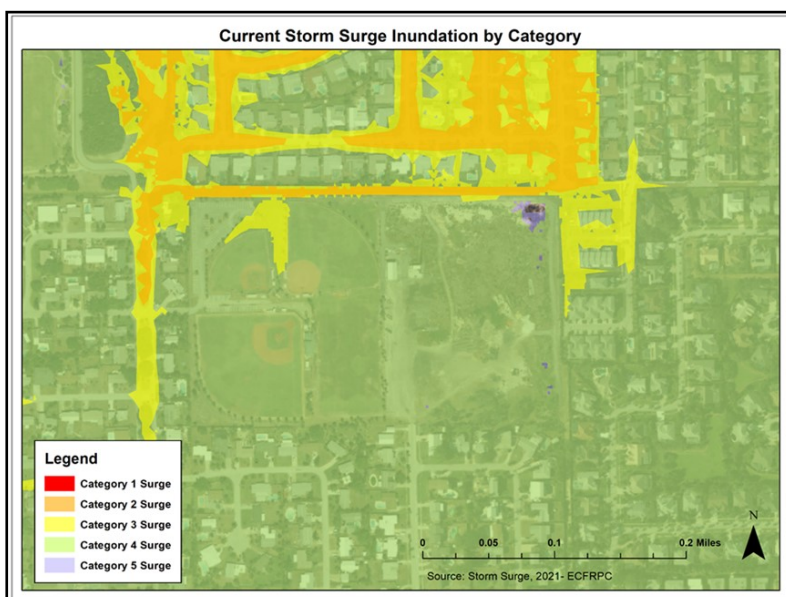
**Zones** — According to the map, the park lies outside of flood zones AE and VE. Parts of the park's drainage canal are within zone AE, however, it is limited to areas near the outlet of the canal at the Indian River Lagoon. While the canal isn't in a flood zone in the immediate area of the Sports Complex, flooding near the mouth of the canal can lower its efficiency. This may impact the park's ability to drain properly during significant flood events. Overall, the park will see minimal direct impacts from a 100-Year flood event, however, this does not rule out the possibility of flooding should a significant storm does occur.



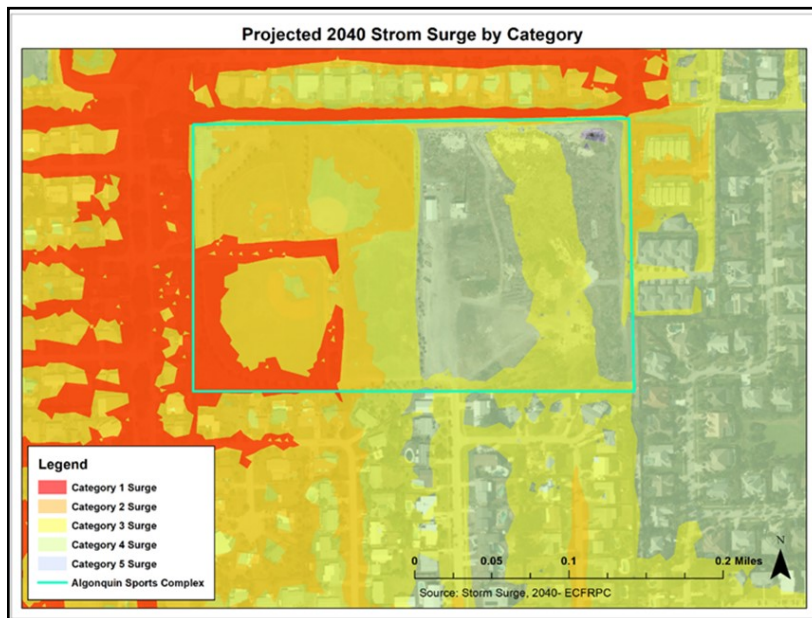
**Risks to Sea Level Rise** — By the year 2040, sea-level rise will have little to no impact on the park. Most of the surrounding areas of Indian Harbour Beach are also spared from direct inundation from sea-level rise alone. Although some minor inundation may be possible in the canal that provides drainage for the Sports Complex. However, the year 2060 depicts increased and more significant impacts to the park, as shown in the map below. While the Sports Complex will still be clear of direct inundation from sea level rise in 2060, more inundation of the drainage canal can be seen. This increasing water level of the canal also spills out onto residential streets adjacent to the canal, especially areas near the Indian River Lagoon shoreline.



**Current and Future Storm Surge Risks** — Storm surges are some of the most destructive forces that accompany tropical storms and hurricanes. Coastal communities like Indian Harbour Beach are especially susceptible to storm surge damages. Analysis shows that the Algonquin Sports Complex will remain free of direct flooding following either a category 1 or category 2 storm in today's conditions (see map below). See the map on the next page to see that the same is true for a category 1 storm in the year 2040 except that many residential areas to the north and west would begin to see flooding. This includes Wimico Drive and the current entrance to the Algonquin Sports Complex. The drainage canal directly north of the property would also begin to see flooding. Further GIS analysis confirmed that a category 3 as well as a level 2 hurricane in 2021 will have greater storm surge impacts directly on the park. In 2021 a category 4 storm would create storm surge impacts so powerful it would flood the entire park. Similarly, in 2040 a category 2 storm would flood half the park and a category 3 storm would flood all of the park.







Green infrastructure and Low Impact Development (LID) are planning strategies that seek to enhance the resilience of a site by utilizing and conserving its existing natural resources to mimic the natural drainage process of the site. This improves stormwater management without the creation of traditional infrastructure.

This creates a nature-based solution that mitigates a number of urban development issues for coastal communities like Indian Harbour Beach, such as coastal flooding, sea level rise, and coastline fortification.

Leading strategies to implementing green infrastructure and LID are:

- Use of natural features found on-site to support water storage, filtering, infiltration, and evaporation
- Maximize green spaces and pervious surfaces while minimizing impervious surfaces
- Utilize native plants, trees, and flowers that support local biodiversity
- Creation of tree canopy and ground cover to increase infiltration and mitigate heat
- Decentralize rainfall using effective site grading and vegetation, like trees and shrubs

Recognizing momentum in the resilience work across the region, the East Central Florida Regional Planning Council adopted a resolution in 2018, recommitting to regionalism and supporting a program to convene stakeholders to develop a structure and framework for a united resilience effort. Committees were formed and experts convened.

Three pillars were identified under the resilience umbrella; **(people)** Health + Equity, **(places)** Build Infrastructure + Natural Environment, and **(prosperity)** Economic Resilience. Throughout each pillar is a reduction of risks, vulnerabilities and the carbon footprint, and an increase in sustainability goals. Resilience to any disaster rests on the premise that all aspects of a community — its places, people, and prosperity — are strong, and we find that the Indian Harbour Beach community are not outside this premise. With the resiliency framework, best practice research findings, and Vulnerability Assessment results in mind, the following recommendations for the park expansion were developed.

## Park Resiliency Recommendations

**Recommendation #1:** Encourage installation and maintenance of native trees and shrubs.

**Recommendation #2:** Utilize permeable pavements in the Algonquin Sports Complex to reduce impervious surfaces, particularly near the drainage canal.

**Recommendation #3:** Strengthen canal clearing and maintenance programs.

**Recommendation #4:** Encourage the installation of Florida-friendly landscaping near drainage canal and other drainage structures.

**Recommendation #5:** Reduce excess grass clippings, fertilizers, and pesticides on the Algonquin Sports Complex property.

# Public Engagement Activity Report Summary

During the Summer of 2021 the City of Indian Harbour Beach entered into an agreement with the ECFRPC to develop a conceptual plan for the redevelopment of the Algonquin Sports Complex. Part of the park is already developed, while the other half of the park, about 9 acres of vacant parkland, has not yet been developed to provide recreational opportunities to park users. The existing portion that is developed hosts a number of athletic fields that local sports and City recreational programs enjoy, but following the Coronavirus Pandemic the City saw the need for new outdoor recreational amenities and opportunities for residents to be physically active.

City leadership desired that the park not only be expanded to provide for resident's recreational needs but also be expanded using an equitable, citizen-driven process. By doing so, the completed redeveloped park would be one residents felt more connected to because they were a part of the redevelopment process. Subsequently, the Park Master Plan for the complex is supported by a series of public engagement activities that will be summarized in this section. The full Public Engagement Activity Report, which details all of the public engagement activities and outcomes of this project may be found in the Appendix. Within the report you will find information for the following outreach activities: social media posts, City newsletter posts and distribution, public workshops, an extensive online survey, and City Council meetings.

## Outreach Activities and Outcomes

Following the lockdowns and shutdowns of 2020 in response to the Coronavirus Pandemic, many government agencies needed to be creative with the way they conducted public engagement to adhere to new safety guidelines. This project took a mixed approach in conducting public engagement by doing both traditional workshops as well as online public outreach, and a host of other outreach strategies. These include using both City and RPC social media pages, a robust online survey, City newsletters, announcements on the City's website, City meetings, and multiple workshops that were open to the public. Further, a variety of outreach materials were developed by both the RPC and the City to support public engagement activities. Materials developed include flyers, survey QR codes to attach to printed materials, postcards, posterboards, and charrette posters.



**Social Media Posts** — To reach the wider, online community of Indian Harbour Beach residents a number of social media posts were made and distributed via the City’s Facebook page. All City posts used the “tag” feature to tag the ECFRPC’s Facebook page so they would also appear on the RPC’s page and be visible to its regional audience. To date, a total of 28 Facebook posts and 4 event pages were created to raise awareness around public engagement activities for the park redevelopment.

**Newsletters** — To reach the community of Indian Harbour Beach residents that enjoy the City’s newsletter, the RPC worked with the City to ensure that various issues of the newsletter that were released during the project timeframe mentioned the expansion of the Algonquin Sports Complex. A total of 5 City newsletters that feature a story on the park redevelopment project were developed and distributed to City residents. In addition, the City’s website “News” section was updated with one post about the park expansion.

**Postcards, Flyers, City Merchandise** — In order to provide community stakeholders with informational resources about the park redevelopment project, both the ECFRPC and the City of Indian Harbour Beach developed materials that would help engage them. The ECFRPC developed a flyer and postcard design template that was used repeatedly throughout the project as new public engagement activities were planned. Additionally, the City created merchandise that was distributed at workshops as an incentive for attendees to participate, and included baggies and reusable water bottles featuring the City’s design and logo.

**City Meetings** — The RPC presented the Park Master Plan and a summary of the public engagement report at the May 10<sup>th</sup>, 2022 City Council Meeting.

### **Public Workshops**

#### ***November 6<sup>th</sup> Workshop***

This workshop, which was meant to be our first public workshop in the City, ended up being cancelled due to weather concerns. This event was intended to raise awareness around the online public survey that was being conducted for the park’s redevelopment.

#### ***November 20<sup>th</sup> Open House / Charrette***

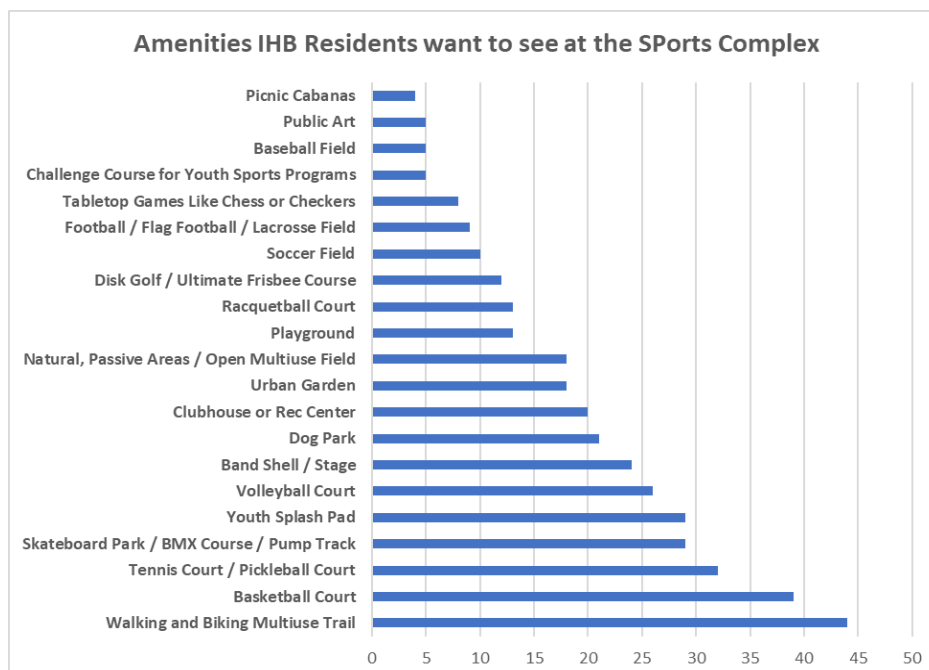
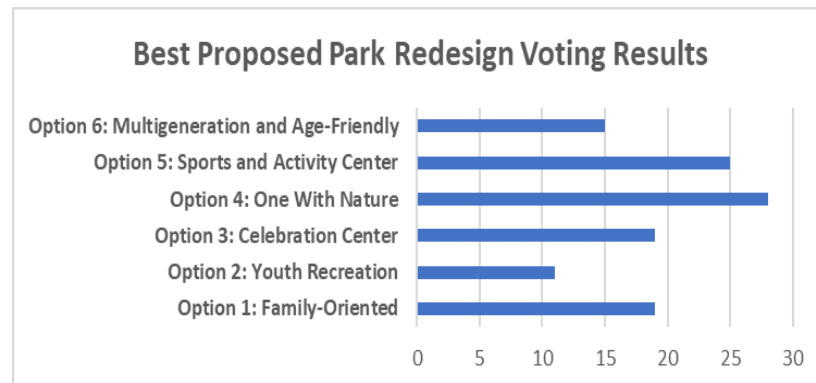
As a requirement of the project contract, the ECFRPC organized and held a Open House/ Charrette event in the City on Saturday, November 20<sup>th</sup> at the local Gleason Park during the City’s Arts and Crafts Festival from 11am to 2pm. The Open House was held inside the Recreation Center at the park while the festival went on outside and helped bring a great deal of foot traffic to the Open House. The Open House received around 100 participants. Those who attended the Open House had the opportunity to provide feedback on the following workshop activities:

- Park Amenity Dot Voting Station
- Park Events Dot Voting Station
- Best Proposed Park Redesign Theme Voting Station
- How to Improve Access to the Park Participant Station
- How to Improve Safety at the Park Participant Station





## Workshop Feedback:



### January 28<sup>th</sup> Workshop

After the online public survey closed after Thanksgiving in 2021, the project team wanted to use follow-up public engagement to hone in on what residents perceived as the best redesign approach for the park. From the different options they were provided at the November Open House, three park redesign proposals were derived from the feedback provided at the workshop and developed into full conceptual redesign proposals for the sports complex. On January 28<sup>th</sup>, the ECRPC held its second workshop with the help of City staff, and this time it was on-site at the park and in the afternoon, from 4pm to 6pm. At the workshop, the three proposals were displayed for residents to dot vote on to let us know which park concept they thought would best fit the sports complex expansion. The City did an excellent job of providing supporting attractions at the workshop to attract attendees, such as bounce houses and a food truck. The workshop received around 100 participants. Those who attended had the opportunity to provide feedback about the park expansion through the following workshop activities:

- Blank canvas for participants to “write out” their desired improvements for the park, including ideas for new park amenities and features
- Best Park Redesign Proposal Voting Station

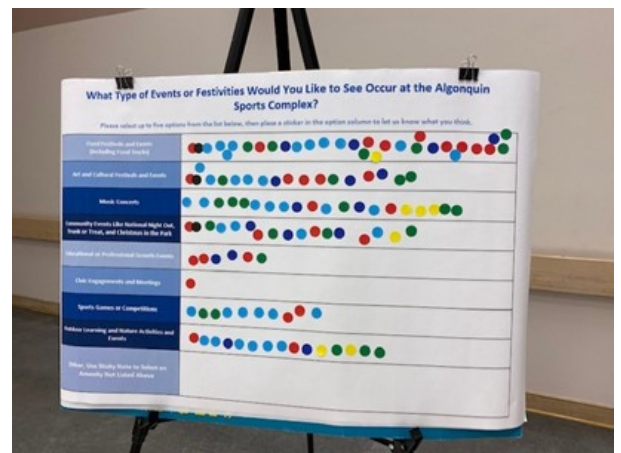
## April 5<sup>th</sup> Workshop

Due to a technicality with the City's newsletter which was not able to be distributed to the community before the date of the January workshop, the City wanted to host a workshop on its own for those residents who did not know about or get a chance to participate in the January workshop. The City essentially duplicated the January workshop using materials developed by the ECFRPC to give those participants a fair chance to vote on the future of the park. On April 5<sup>th</sup>, the City held this workshop at the Gleason Park Recreation Center with two workshop time frames to give residents two opportunities to participate: first from 9am to 11am and then again from 4pm to 6pm. At the workshop the three proposals were again provided for residents to dot vote on and express their desires for the park expansion. The workshop received over 100 participants according to City staff. Those who attended had the opportunity to provide feedback on the following workshop activities:

- Blank canvas for participants to "write out" their desired improvements for the park, including ideas for new park amenities and features
- Best Park Redesign Proposal Voting Station

### Workshop Feedback:

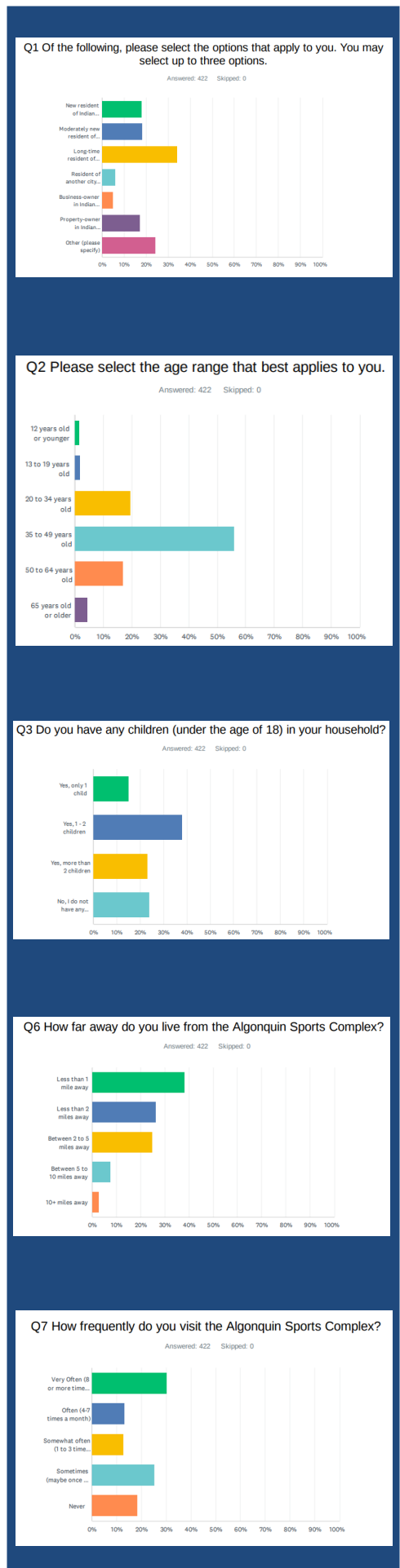
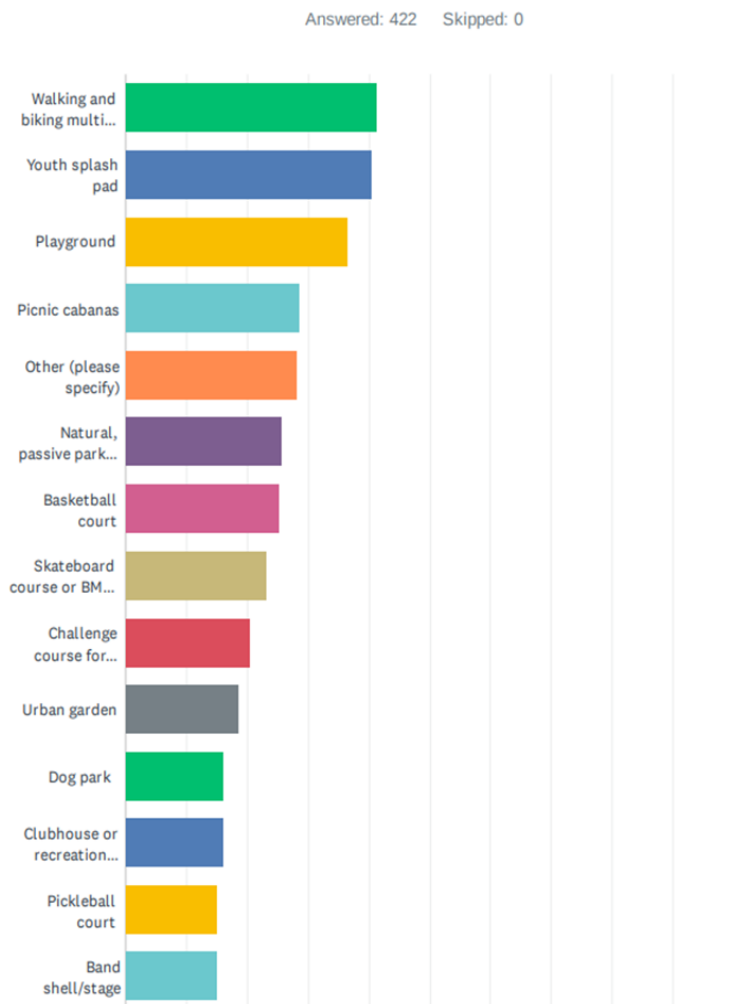
Workshop Voting Results			
Park Redesign Strategy	Jan. 28 <sup>th</sup> Workshop Results	April 5 <sup>th</sup> Workshop Results	Total Votes
<b>Sports-Oriented</b>	<b>25</b>	<b>68</b>	<b>93</b>
<b>Community-Oriented</b>	<b>31</b>	<b>59</b>	<b>90</b>
<b>Nature-Oriented</b>	<b>29</b>	<b>44</b>	<b>73</b>
<b>Totals</b>	<b>85</b>	<b>171</b>	<b>256</b>



**Online Public Survey** — An online survey was developed using Survey Monkey and was administered by the RPC to collect resident input on the expansion of the park. The survey was released in the Summer of 2021 and closed following the Thanksgiving holiday. Over 300 responses were collected through the survey. Survey questions were developed with the intent to collect information that would help inform a park redevelopment proposal that equitably provides for the needs of all potential park users.

Considerations for the types of park amenities to add, extra space, types of events to host at the park, ways to improve park safety and connectivity, and infrastructural improvements were made. Further, the survey was used to learn more about the community itself, such as household structure and leading transportation methods. See below for more information on the feedback received from the online survey or the Appendix for the full report on the survey responses.

Q15 Of the following, which amenities would you like to see added or improved at the Algonquin Sports Complex? Check all that apply.





# Public Engagement

## Feedback Highlights

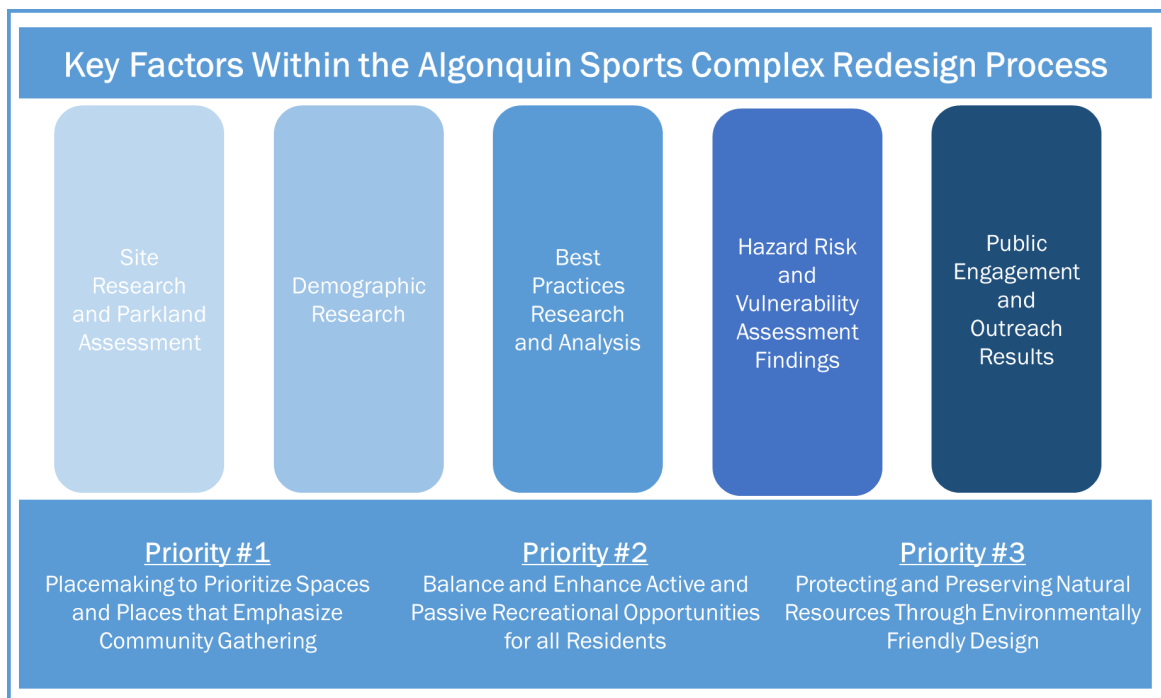
1. Majority of the feedback received appears to be from residents who live in close proximity to the park but also use it frequently, so the target audience who will be priority park users of the sports complex were engaged in the planning process.
2. Many residents expressed desires for new active sports amenities such as soccer fields, football fields, basketball courts, pickleball courts, and tennis courts.
3. A strong need for amenities that provide comfort from natural elements, such as shade trees, seating, and good lighting, was illustrated in resident feedback.
4. A new multiuse trail that can be used for walking, biking, roller-skating, etc. has come up in numerous exchanges with community stakeholders. The trail has value as both a passive and active recreational amenity, useful for both light walking to even supporting youth recreation such as track and field.
5. Many residents desire more natural elements within the park to increase opportunities to be one with nature.
6. Many families want playgrounds, splash pads, and traditional park amenities that support youth playtime and family engagement.
7. Many residents are concerned about increases in land values that may impact taxes, noise pollution from the park, and the incorporation of superfluous park amenities.
8. Due to the somewhat mixed voting results that were received at the January and April workshops as well as in the online survey, a hybrid of the three park redesign approaches will be developed. This will ensure that the park redevelopment proposal offers something for everyone.
9. Many residents, as well as City staff, are interested in design considerations that can be made regarding mitigating homelessness and enhancing park safety.
10. The large turnout that was received at each public workshop as well as the high number of survey responses received indicates the strong connection that exists between the community and the sports complex.



# Park Redevelopment Proposal and Redesign Recommendations

## Overview

The process used to develop the redevelopment proposal for the complex involved a number of steps with consideration to the findings of project activities (public engagement, site research, etc.) and the park redesign priorities set by the City. As illustrated in the graphic below, the three priority areas are fundamental for the redesign process while those project activities that are more concerned with research, data analysis, and building a strong baseline of information act as the pillars upon which this redesign process relies upon. As project tasks were completed and information about the park and its surrounding community was collected, the proposed plan for the park expansion changed to both incorporate new information and ensure that redevelopment would satisfy the underlying priority areas.



Chronologically speaking, project activities were not completed in a linear way. Site research, demographic research, and best practices research tasks were majorly conducted at the beginning of the process however, as the planning team began developing the Master Plan, the need for more information arose. Subsequently, new tasks for each research-intensive project activity were completed to support the development of the Plan. The redesign process for the complex was initiated by implementing site research on the park by conducting an assessment of the parkland it sits on and also collecting land use information on the park from both the City and online sources.

This involved observing key existing conditions of the park such as surrounding land uses, park size, entry points, land coverage and vegetation, parking, and other existing infrastructure and park amenities. Having a strong understanding of the makeup, opportunities, and constraints of the existing parkland was critical to the planning team in building a redevelopment proposal that would complement the existing and surrounding property. Demographic research and data analysis was done in conjunction with site research and assessment tasks to further build baseline information on the park as well as the primary population that will become users of the expanded park.

Project research activities served as a tool for enabling the planning process to adhere to our priority areas. Understanding the physical aspects of the park and the main users of the park facilitates more informed placemaking strategies at the park that lead to the creation of spaces that promote community gathering and connection. It also helps us understand and envision the space to best accommodate both existing and new park amenities, with an emphasis on the new amenities as those existing are key to established local recreation and sports programs. Both the City and residents desired new active as well as passive outdoor recreational amenities within the sports complex expansion that would meet the recreational needs of all types of residents. An investigation of existing best practices in park planning and park case studies helped in the process of identifying which new recreational amenities should be considered for the park expansion. Site information on the park informed the team's design decisions for new park amenities in regards to placement, accessibility, and connectivity therein.

As outlined in the project MOU, the ECFRPC conducted extensive public engagement for the park redevelopment and provided a summary of all findings via a Public Engagement Activity Report, as well as a Hazard Risk and Vulnerability Assessment of the park that assessed the park's risk to natural hazards into the year 2060. The Vulnerability Assessment took the lead in fulfilling our priority to develop a park redevelopment proposal that was environmentally friendly and observed the City's desires to enhance stormwater management and preserve natural resources at the park. This activity also helped inform park redesign because it identified those areas of the park that are most vulnerable to risks of climate change, such as flooding and other extreme weather events. Similarly, the public engagement conducted to support and inform this project was helpful in fulfilling each of our priority areas. The online survey and the public workshops that were facilitated connected the planning team with community stakeholders whose feedback informed the final selection of park amenities and the final approach taken to redesign the sports complex.





# Reimagining the Park From the First Vision to the Final Design

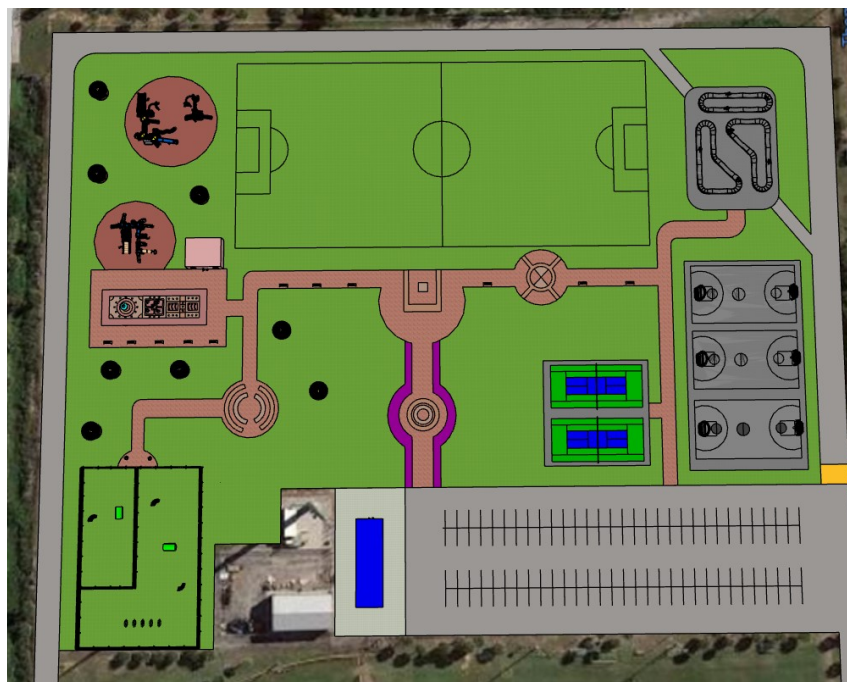
After the third public workshop was completed and participant feedback had been analyzed, the planning team found that residents desired a mix of the three park redesign approaches we promoted in our outreach materials and activities. These three approaches were: community-oriented, nature-oriented, and sports-oriented. To provide this mix the planning team decided to develop a hybrid park redevelopment proposal that would incorporate distinct features from each redesign approach. With support from the City, the following new amenities were proposed for the sports complex expansion:

- **Multiuse Athletic Field**
- **Multiuse Trail that Encircles the Entire Park**
- **Three Basketball Courts**
- **Two Tennis/Pickleball Courts**
- **Small Pump Track**
- **Eight Picnic Gazebos**
- **Splash Pad**
- **Two Playground Areas**
- **Dog Park**

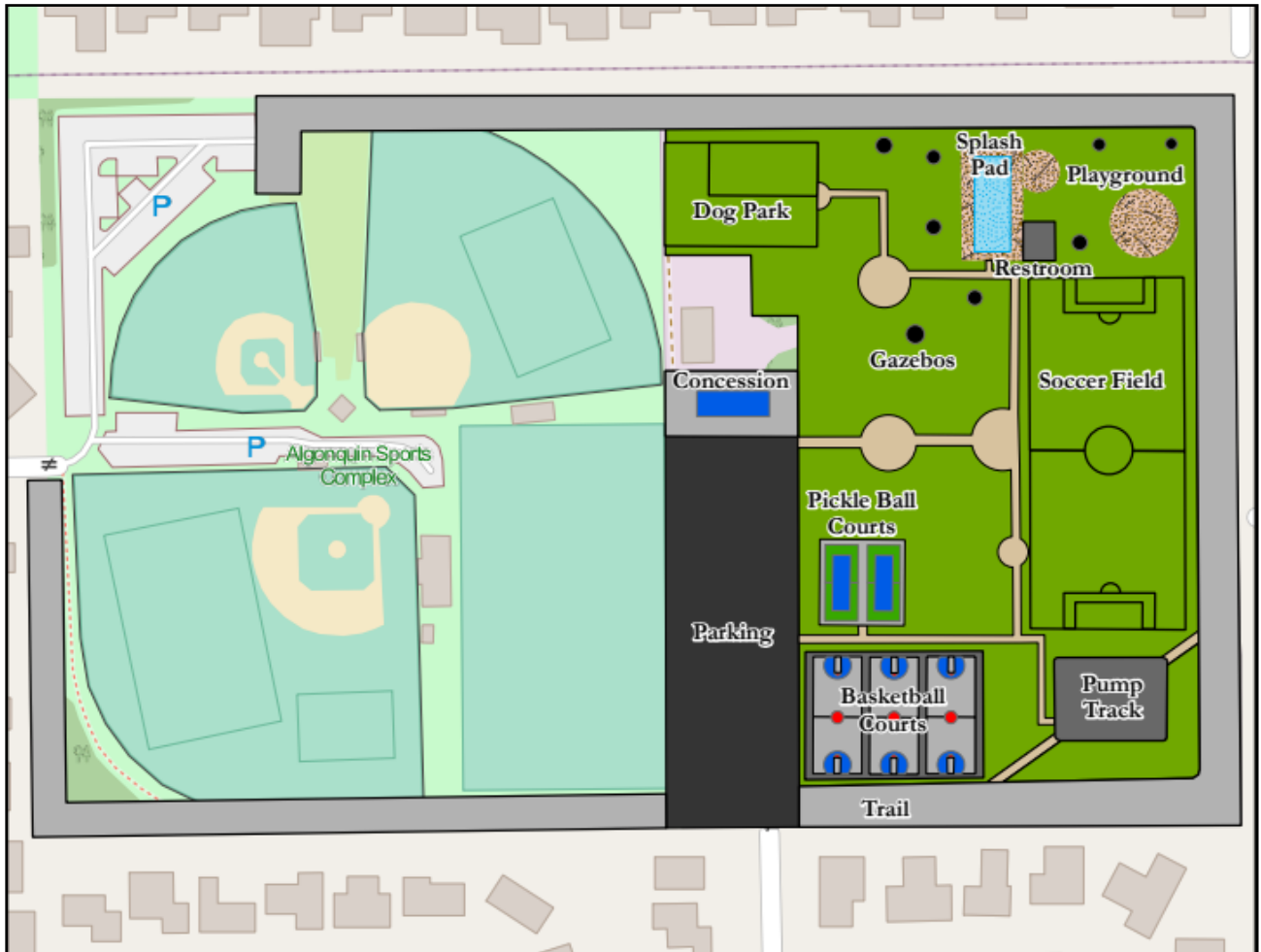
## BEFORE



## AFTER



# Proposed Park Redevelopment Plan for the Expansion of the Algonquin Sports Complex



## Indian Harbour Beach Algonquin Sports Complex Expansion Master Plan

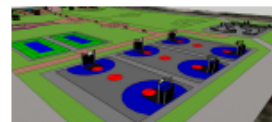


**Dog Park**



**Concession**

**Soccer Field**



**Soccer Field, Pickle Ball Court, & Trail**

**Splash Pad, Playground, Restroom, & Gazebo**



**Pump Track & Trail**

This map is intended to be used for planning purposes only and is not to be construed as a legal document. The GIS data available on this map may need field verification as it corresponds to regional scale representation. 186.803 Use of geographic information by governmental entities.-When state agencies, water management districts, regional planning councils, local governments, and other governmental entities use maps, including geographic information maps and other graphic information materials, as the source of data for planning or any other purposes, they must take into account that the accuracy and reliability of such maps and data may be limited by various factors, including the scale of the maps, the timeliness and accuracy of the underlying information, the availability of more accurate and the presence or absence of ground truthing or peer review of the underlying information contained in such maps and other graphic information. All Data created and/or reviewed by the ECFRPC.

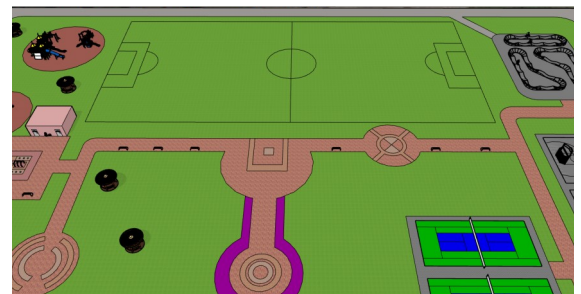
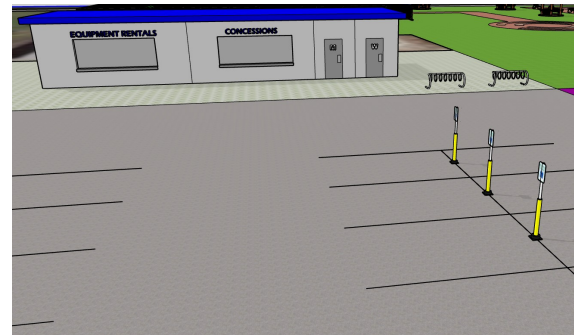
# Park Redevelopment Proposal Details

To meet the various design objectives underlined in the City's priorities, park resiliency recommendations, and public engagement outcomes, several different amenities and features have been incorporated into the final park redevelopment proposal. Many help to support the comfort of park users and to make it more accessible to residents of all ages and all physical ability types. For instance, all park amenities can be accessed by wheel-chair users and include restrooms featuring accessible toilets. This in turn makes the park friendlier to elderly users as well. Courtyards and adjoining pathways within the park help to enhance the flow of pedestrian traffic while providing centralized spaces that promote community or family gathering. Benches and shade trees lining these pathways make spending time at the park easier during times of high temperatures, which is frequent for east central Florida. Permeable paving for the trail and splash pad is highly recommended to improve park stormwater management, as well as the following ideas:

- Installation of trees or shrubs along the perimeter of park to act as a noise buffer, water runoff filtration system, and to provide shade along the multiuse trail
- Installment of passive, outdoor workout equipment along the multiuse trail
- Use of local plants, shrubs, trees, and flowers, especially at the entryway for the central courtyard. Use of flowers and effective landscaping will give the park a more natural feel
- Incorporating lighting near those park amenities that are desired and approved for use after the sun has gone down

## Key Park Amenities and Features

Amenity	Dimensions	Description
Parking	10 ft X 15 ft	120 parking spaces with 12 being handicapped spaces
Pro Shop	26 ft X 20 ft	Facility for providing sports equipment rentals
Park Facilities	<ul style="list-style-type: none"> <li>• Concession Stand: 25 ft X 20 ft</li> <li>• Pro Shop Restrooms: 18 ft X 20 ft</li> <li>• Splash Pad Restroom: 30 ft X 25 ft</li> </ul>	Includes a concession stand that can provide refreshments during games and other park events, and restroom facilities near both the parking lot and by the splash pad
Courtyards	Center courtyard: 70 ft X 65 ft	Pathways that connect to park amenities include one major courtyard and three minor courtyard spaces
Multiuse Trail	25 ft across, encircles entire park, a little under half a mile in distance (2600 ft)	Paved multiuse trail that can be used for walking, biking, etc.

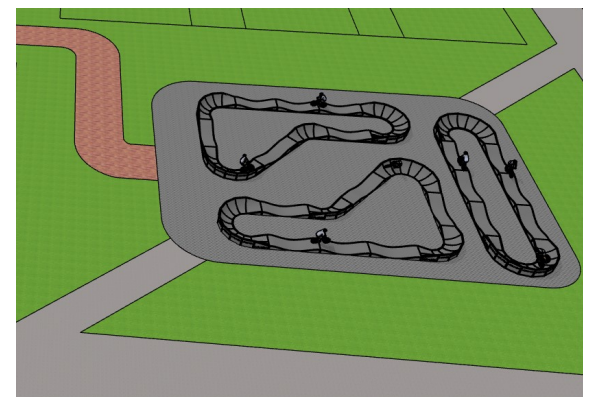
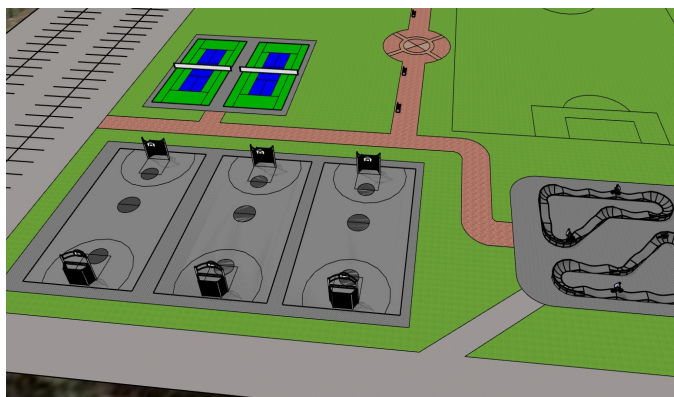
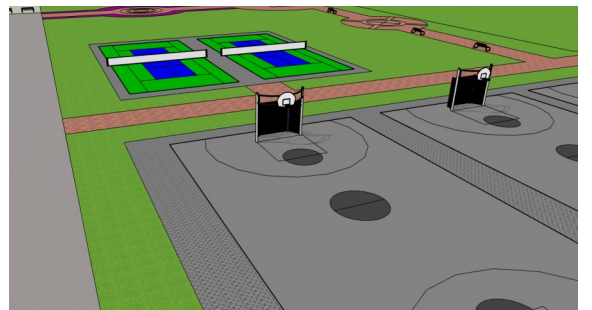
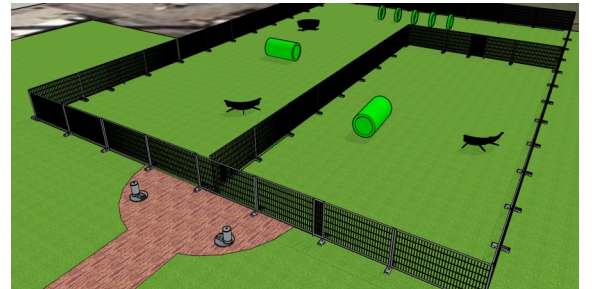




# Park Redevelopment Proposal Details

## Key Park Amenities and Features

Amenity	Dimensions	Description
Gazebos	16 ft Circ.	Provides shelter and gathering space for small parties
Splash Pad	30 ft X 90 ft	Splash pad that includes: multiple ground spray jets, a fun-brella that creates a curtain of falling water, splash cannons that blast water into the air, spray rings that splashes water when you go through them
Playground 1	70 ft Circ.	Playground adjoined to the splash pad for younger children
Playground 2	80 ft Circ.	Playground set that facilitates play for mid to older children
Dog Park	100 ft X 145 ft	Dog park with dog-sized water fountains, benches, and dog play amenities, section for big dogs, and another for smaller dogs
Multiuse Athletic Field	360 ft X 165 ft	Green, open, athletic field that may be used for multiple sports like soccer or football
Tennis / Pickleball Court	36 ft X 78 ft	Two athletic courts that can be used for either tennis or for pickleball
Basketball Courts	90 ft X 50 ft	Courtyard space that includes three full-sized basketball courts
Pump Track	110 ft X 380 ft	Small pump track for skateboarding, biking, etc.



# Park Redesign Priority Area #1:

## Placemaking to Prioritize Spaces and Places that Emphasize Community Gathering

### Redesign Proposal Elements that Support Priority Area #1

- Park pathways and attached courtyard space in the center for park events
- Dog park
- Picnic gazebos
- Playgrounds and splash pad
- Parking and bike parking amenities
- Park benches and shade trees



### Considerations from Best Practices Research that Should be Applied to Park Expansion to Promote Priority Area #1

- ⇒ Consider ways to design parking lot space to accommodate park events, such as festivals and food truck vendors
- ⇒ Consider Crime Prevention Through Environmental Design or CPTED principles to maximize feelings of safety at the park
- ⇒ Incorporate elements that increase user comfort, age-friendliness, and ADA accessibility
- ⇒ Bike parking and crosswalks at City street



# Takeaways From Best Practice Research

Planning the expansion of the Sports Complex to allow it to host community events helps it to be more multifunctional, which increases the value added to the community. Food trucks have increased in popularity in recent years, and help to draw attendees to park events. However, best practices for food trucks should be followed in order to ensure compatibility with the use of the park as well as the surrounding residential community. First, it is important to ensure that Indian Harbour Beach allows the placement of food trucks on public property through an ordinance. The City should also consider setting regulatory requirements to ensure restroom access, sanitation standards, as well as noise regulations.

The Institute of Justice recommends requiring food trucks to pick up and dispose of all trash produced by the truck, as well as providing a labeled receptacle for customer use. The Institute of Justice also recommends that food trucks not operate in a way that blocks or restricts the free movement of pedestrians on pathways and sidewalks. Looking to a local example, the City of St. Petersburg, Florida enacted regulations on food trucks in 2014. These restrictions include permission to operate in public rights-of-way, requiring toilet access for food truck employees when parked for more than three hours, and requiring a written agreement with a state-licensed facility for the proper disposal of grease and greywater. The City of Indian Harbour Beach should consider these regulations to ensure the healthy and enjoyable food truck related events in the Algonquin Sports Complex.



*Photo: Food truck best practices being displayed at Celebration Park in Naples, Florida.  
(Source: lifeinbonitasprings.com)*

Regulations involving the proper management of waste produced from food trucks and community events also help to advance sanitation goals for the Algonquin Sports Complex. Improved sanitation amenities have become a focus since the onset of the COVID-19 pandemic. The New Jersey Department of Health revised its Health and Safety Guidance for Indoor and Outdoor High-Touch Amusement and Recreation Activities in 2021. This guidance includes providing hand sanitizer stations throughout the facility. Proper ventilation inside buildings should also be ensured by opening windows and regularly maintaining HVAC and air filtration systems.



*Photo: Hand sanitizer station at Disney Springs (Source: DisneyFoodBlog.com)*

In terms of cleaning, New Jersey Health recommends maintaining daily cleaning and disinfection of commonly used surfaces. Exhaust fans in restrooms should also be checked for proper function regularly. Following these recommendations assist in preserving the health of park users as well as keeping the park facilities clean and functional. In cases of large gatherings such as community events, a "guest flow" plan should be established that manages lines and other pedestrian bottlenecks. This plan can help to reduce exposure to infectious diseases as well as improve the enjoyment of park facilities by ensuring personal space and freedom of movement.

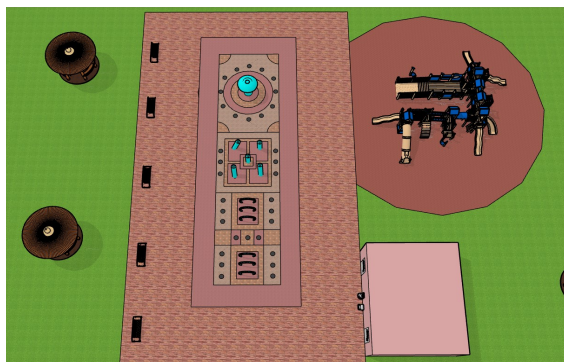
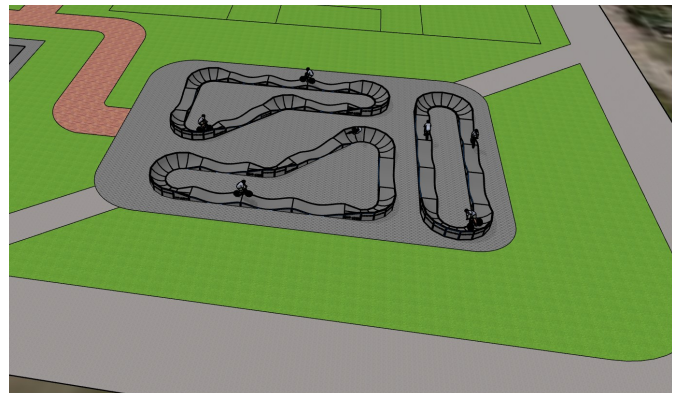
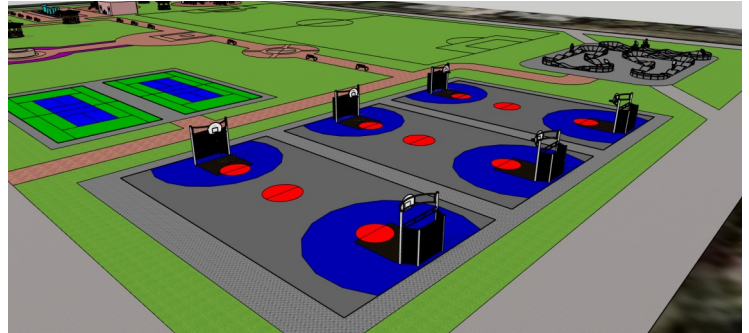


## **Park Redesign Priority Area #2:**

### **Balance and Enhance Active and Passive Recreational Opportunities for all Residents**

#### **Redesign Proposal Elements that Support Priority Area #2**

- Combination of and easy access between both types of recreational opportunities
- Proposed multifunctional open space that increases recreational options
- Park design that separates active amenities from passive amenities
- Proposed sports equipment rental facility to support a diverse range of outdoor hobbies
- Friendly to all ages and all physical abilities with all amenities being wheel-chair accessible



#### **Considerations from Best Practices Research that Should be Applied to Park Expansion to Promote Priority Area #2**

- ⇒ Regularly consider adding or removing park amenities so the park can best meet the recreational needs of the community
- ⇒ Stay abreast of innovations in park design and in newer recreational amenities types that may better serve residents
- ⇒ Assess and identify ways that the park can support park related programming or sports programming being facilitated by

# Takeaways From Best Practice Research

Pump tracks are another type of park amenity that was popular among survey respondents. These tracks include graded features and turns that bikers use to create momentum without pedaling. Proper design and maintenance of these facilities are crucial for preserving the safety of users and the structural integrity of the pump track. The City of Missoula, Montana created a Bicycle Skill Park Conceptual Design Report, which was prepared by the International Mountain Bicycling Association. This report includes the site and design considerations for pump tracks. From this report, it is determined that pump tracks can be placed on small parcels, as long as the shape of the track has a regular shape. Loam is the ideal soil type for pump tracks, however, clay can be added to sandy soils to achieve a similar consistency.

Shade should be provided over the pump track, to provide relief for users as well as preserve needed moisture in the soil. Soil moisture is itself an important aspect of pump track function and maintenance. Once the soils of the track become too dry, it becomes difficult to hold their shape. Hence, an irrigation system to maintain the ideal moisture of the pump track should be considered. Signage is also essential to educate the public on the purpose, directions, and safety concerns of the pump track.



*Photo: Watering a pump track to maintain ideal moisture. (Source: cobramtb.com)*

As one of the most popular amenities identified through the public participation process, splash pads would be a well-utilized addition to the Algonquin Sports Complex. Due to the nature of splash pads, best practices should be followed to ensure the function and health of the facility and its users. Lauren Broom, B.S., R.S. presented the challenges associated with splash pads and the best practices that promote the safe operation of these amenities at the 2020 Florida Recreation & Park Association Conference. Recommendations from this presentation include proper siting and fencing to prevent animals and associated waste from coming in contact with the splash pad.



*Photo: An example of splash pad rules signage in Enid, Oklahoma. (Source: enid.org)*

In terms of splash pad design, an adequately sized water reservoir should be utilized, as well as providing sufficient filtration in the circulating system. Chlorination should be kept at a minimum of 2 ppm, and secondary forms of disinfection such as UV or ozone is encouraged. In terms of operations, best practices for splash pads include daily flushing of the pad surface, regular inspections and sanitation, and routine water testing. Installation of proper signage educating the public about not drinking the water, showering before pad use, and barring use for people with current digestive upset.

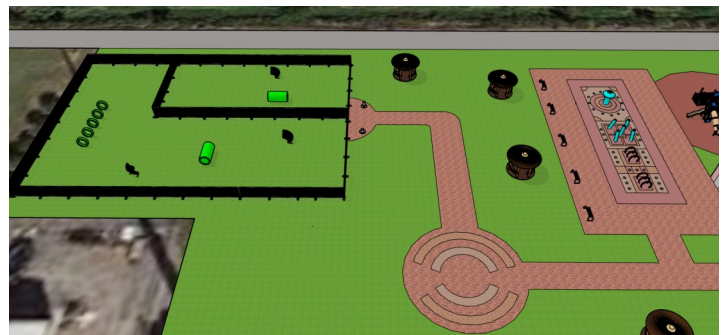
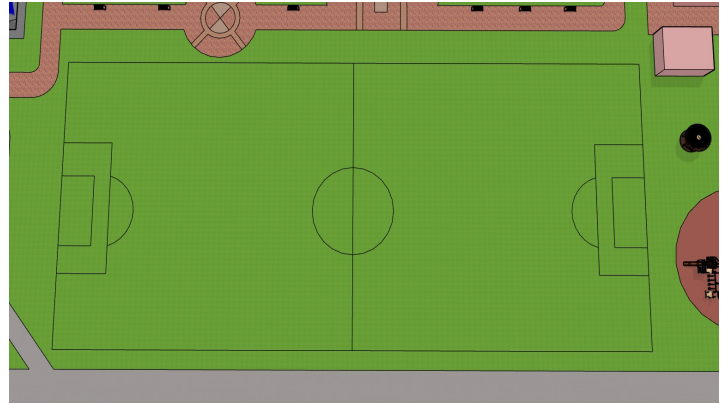


# **Park Redesign Priority Area #3:**

## **Protecting and Preserving Natural Resources Through Environmentally Friendly Design**

### **Redesign Proposal Elements that Support Priority Area #3**

- Native plants/trees to beautify park, increase comfort, and enhance water drainage and filtration
- Maximized green space and minimized paving on park property
- Placement of park amenities to avoid the unnecessary inundation of the park's drainage canal
- Use of pervious pavement for the shared walking/biking trail
- Low-Impact Development inspired design to align with the character of the existing community and promote effective stormwater management



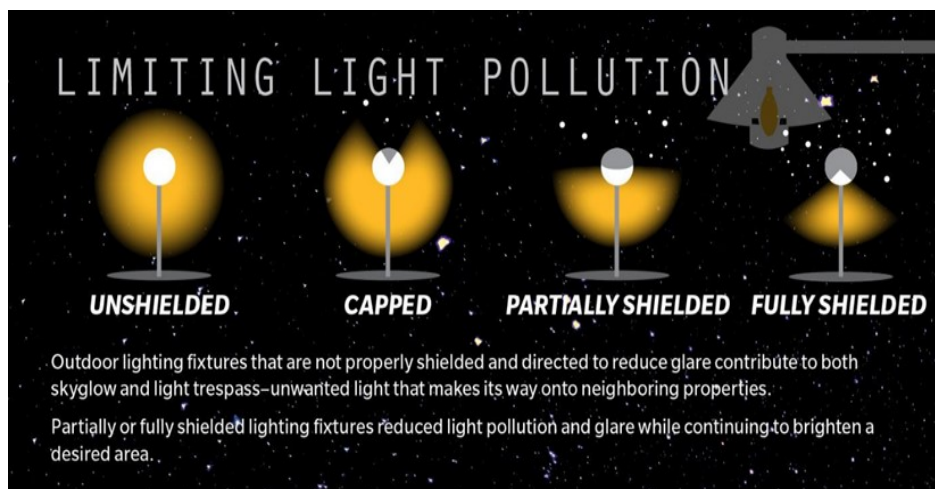
### **Considerations from Best Practices Research that Should be Applied to Park Expansion to Promote Priority Area #3**

- ⇒ Incorporate native trees that provide shade and minimizes the heat island effect for the community
- ⇒ Assess and implement strategies and partnerships as needed to protect local wildlife and existing ecosystems
- ⇒ Work with City staff or ECFRPC as needed to consider ways to increase the park's resiliency to environmental risks brought on by climate change
- ⇒ Stay abreast of development strategies for parks that help improve stormwater management and park quality, such as green infrastructure.

# Takeaways From Best Practice Research

Noise and light pollution are both examples of human impacts that can prevent the full enjoyment of natural spaces. Noise pollution often comes from cars, trucks, and planes. Light pollution can come from a variety of sources, including street lights, vehicles, and homes. These types of pollution are especially apparent in urban areas where there is a heavy presence of human infrastructure. As a center of activity, the Algonquin Sports Complex will inevitably create noise and light pollution within the park and surrounding area. However, strategies can help reduce the impacts of light and sound on the park. According to the International Dark-Sky Association, strategies for reducing light pollution include using warm-colored bulbs, timed light dimmers, and avoiding blue lights at night. In addition, light fixtures should shield the light source which can help reduce glare and help decrease the amount of light directed to undesired areas.

The National Park Service also provides recommendations for improving soundscapes on park property. Maintenance and landscaping tools often produce significant noise. Hence, park operators should utilize quieter tools, such as a handsaw instead of a chain saw. The use of noisy equipment should be limited to times when the least disruption to activities will be caused. The operating hours of the park can also be adjusted to reduce the amount of noise produced from park activities on the surrounding residential area.



*Photo: Illustrating the purpose and need for shielded lighting. (Source: groveland-fl.gov)*

A walking and multi-use trail is an important aspect of the new amenities included in the proposal for the Algonquin Sports Complex redevelopment. The National Park Service created Sustainable Trail Guidelines for the Cuyahoga Valley National Park in 2012, with guidelines available for a wide variety of trail types regardless of location. As a developed trail with a multi-purpose use, the National Park Service recommends a trail wide enough to facilitate two-way traffic. The material of the trail should be asphalt or another hardened surface.



*Photo: An example of multi-use trail best practices being displayed at Orlando Urban Trail (Source: Orlando.gov)*

Further, grade changes should be minimal, with no direct obstructions in the path of the trail. Ideally, drainage structures should be included to prevent pooling on the trail. The trail should also be ADA compliant to allow for all users to access the trail. In terms of maintenance, these types of developed trails should be inspected 2 to 3 times annually. Repairs should be made when issues involving the safety of the trail are discovered.



# Final Park Redesign

## Recommendations

- 1.** To make the park more accessible to the community, consider adding in amenities such as crosswalks, bike lanes, and other Complete Streets elements to corridors used primarily to access the park in order to increase connectivity.
- 2.** Preserve the stormwater canal at the edge of the park in by using park design elements that enhance stormwater management. These include employing approaches such as green infrastructure or low-impact development.
- 3.** Increase the resiliency of the park and its ability “jump back” from extreme weather events by incorporating elements that mitigate environmental risks, such as reducing pavement at the park or using alternate paving that can better drain and filter rainwater.
- 4.** For the natural elements of the park that will be used for aesthetic or enhancing park use, such as shade trees, prioritize the installation of native plants that better support the local ecosystem.
- 5.** Enhance park safety using principles from Community Prevention Through Environmental Design (CPTED) and the establishment of park hours that best fit the needs of the adjacent community.
- 6.** Use concepts from best practices in placemaking to incorporate elements that support community events and festivals, social gatherings, and making new connections.
- 7.** Consider existing and forthcoming programs being led by the City’s Parks and Recreation department when determining how to layout and connect new park amenities so the park is easier to use for City functions.
- 8.** Incorporate elements that increase the comfort of using the park, such as shade trees, benches, food concessions, and water features like fountains.
- 9.** Study innovations in outdoor elements that were used as COVID precautions to support sanitation and prevent the spread of viruses like COVID-19.
- 10.** Recognize the importance of building an equitable and age-friendly community space that is both multigenerational and accessible to all ability types so that all residents can feel comfortable there.

# Appendix:

## References

- U.S. Census Bureau (2020). Race/Ethnicity Totals. Retrieved from [data.mysidewalk.com].
- US Census Bureau. American Community Survey (ACS) 5-Year Estimates. (2022). 2016-2020 Age Totals. Retrieved from [data.mysidewalk.com].
- US Census Bureau. American Community Survey (ACS) 5-Year Estimates (2020). 2015-2019 Median Age. Retrieved from [data.mysidewalk.com].
- US Census Bureau. American Community Survey (ACS) 5-Year Estimates (2020). 2015-2019 Median Household Income. Retrieved from [data.mysidewalk.com].
- US Census Bureau. American Community Survey (ACS) 5-Year Estimates (2020). 2015-2019 Educational Attainment. Retrieved from [data.mysidewalk.com].
- Broom, Lauren, B.S., R.S. (2020). Splash Pads: Understanding Risks and Creating Best Practices. Presentation.
- City of Enid, Oklahoma. City Parks. (n.d.). Retrieved May 27, 2022, from <https://www.enid.org/Home/Components/FacilityDirectory/FacilityDirectory/65/110>
- *Dark Sky Initiatives: Bright solutions to light pollution*. Dark Sky Initiatives | Groveland, FL - Official Website. (n.d.). Retrieved May 7, 2022, from <http://groveland-fl.gov/534/Dark-Sky-Initiatives>
- Gall, B., & Frommer, R. (2021, December 16). *Food-Truck Freedom*. Institute for Justice. Retrieved May 27, 2022, from <https://ij.org/report/food-truck-freedom/>
- Gano, K. (2022, January 6). *Three reasons you should seriously consider bringing your own hand sanitizer on your next Disney Trip!* the disney food blog. Retrieved May 27, 2022, from <https://www.disneyfoodblog.com/2020/08/20/three-reasons-you-should-seriously-consider-bringing-your-own-hand-sanitizer-on-your-next-disney-trip/>
- Griffith, A. (2019, January 23). *Celebration - the food truck park naples fl*. Lifeinbonitasprings.com. Retrieved May 27, 2022, from <https://www.lifeinbonitasprings.com/blog/celebration-food-truck-park-naples-fl/>
- International Mountain Bicycling Association. (2016, July 20). Document center • city of missoula • civicengage. Retrieved May 12, 2022, from <https://www.ci.missoula.mt.us/DocumentCenter>
- Kussin, Z., Martinka, P., & Marsh, J. (2020, May 16). *Human 'parking spots' seen at Domino Park for social distancing*. New York Post. Retrieved May 27, 2022, from <https://nypost.com/2020/05/15/human-parking-spots-spotted-at-domino-park-for-social-distancing/>

# References, Cont.

- Light pollution solutions. International Dark-Sky Association. (2018, October 10). Retrieved May 12, 2022, from <https://www.darksky.org/light-pollution/light-pollution-solutions/>
- National Park Service. (2021, January). Cuyahoga Valley National Park - Sustainable Trail Guidelines. Cuyahoga Valley National Park - Sustainable Trail Guidelines - American Trails. Retrieved May 15, 2022, from <https://www.americantrails.org/resources/cuyahoga-valley-national-park-sustainable-trail-guidelines>
- New Jersey Department of Health. (2021, May 28). "Health and Safety Guidance for Indoor and Outdoor High-Touch Amusement and Recreation Activities". Retrieved May 3, 2022 from <https://www.nj.gov/health/legal/covid19/HighTouchGuidance.pdf>.
- Orlando Urban trail. City of Orlando. (n.d.). Retrieved May 27, 2022, from <https://www.orlando.gov/Parks-the-Environment/Directory/Orlando-Urban-Trail>
- St. Petersburg (Florida), City of, Development Review Commission. (2014, May 7). "LDR 2013-05: Text Amendment to Formally Recognize, Classify and Regulate Mobile Food Trucks Within the City Code." Retrieved April 25, 2022.
- Pump track brings out high school volunteers - corbambt.com. Cobramtb. (2011, January 24). Retrieved May 27, 2022, from <http://www.corbambt.com/news/2011/01/24/pump-track-raising/>
- U.S. Department of the Interior. (2020, December 14). Improving soundscapes. National Parks Service. Retrieved May 27, 2022, from <https://www.nps.gov/subjects/sound/improvingsoundscapes.htm#:~:text=The%20NPS%20works%20to%20improve,hear%20and%20communicate%20for%20survival.>
- Centers for Disease Control and Prevention. (2021, September 30). Social Determinants of Health: Know What Affects Health. Retrieved May 23, 2022, from <https://www.cdc.gov/socialdeterminants/index.htm>
- Trust for Public Land. (May 2022). Indian Harbour Beach, FL. Retrieved May 23, 2022, from <https://www.tpl.org/city/indian-harbour-beach-florida>

# Redevelopment Proposal

## Budget Estimate

Algonquin Sports Complex Conceptual Master Plan Proposed Budget Estimate	
New Park Amenities and Cost Estimates	
New Park Amenity	Cost Estimate
New Parking Lot and Spaces	\$110,000
Pro Shop and Concession Stand	\$82,000
Restrooms X2	\$70,000
Courtyards	\$65,000
Multiuse Trail	\$550,000
Multiuse Athletic Field	\$95,000
Basketball Court X3	\$75,000
Tennis/Pickleball Court X2	\$20,000
Small Pump Track	\$90,000
Picnic Gazebos X8	\$130,000
Splash Pad	\$45,000
Playground Areas X2	\$45,000
Dog Park	\$18,000
Park Benches X16	\$4,500
Bike Parking	\$1,500
Tree Plantings	\$5,000
Water Fountains X 2	\$2,400
Lighting	\$180,000
Fencing	\$80,000
Grass and Irrigation	\$54,000
Total Budget Estimate:	\$1,722,400

### Budget Sources:

<https://playgroundsandshade.com/costs-of-commercial-playground-equipment/>

[https://www.in.gov/indot/files/INDOT\\_TrailsCostCalculator\\_Memo.pdf](https://www.in.gov/indot/files/INDOT_TrailsCostCalculator_Memo.pdf)

<https://www.fdot.gov/programmanagement/estimates/documents/costpermilemodels>

<https://www.splashpadsusa.com/splash-pad-cost/>



# **Algonquin Sports Complex Master Plan**

## **Vulnerability Assessment**

### **City of Indian Harbour Beach**



Prepared by:

East Central Florida Regional Planning Council

June 2022

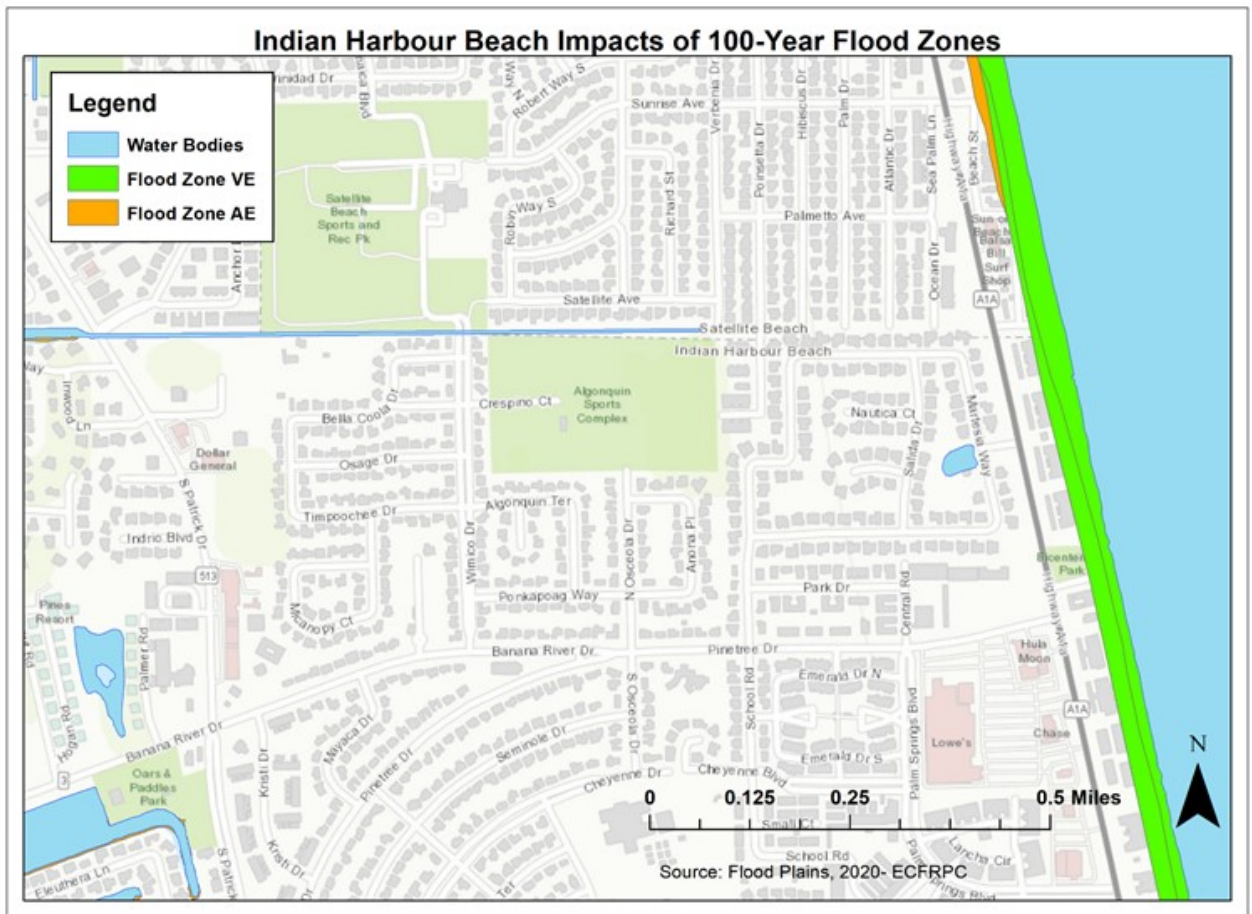
## **Introduction**

The Algonquin Sports Complex is located in the City of Indian Harbour Beach in Brevard County. The city is situated on a barrier island with the Atlantic Ocean to the east and the Indian River Lagoon to the west. The Algonquin Sports Complex is located roughly in the middle of the barrier island, and the main point of entry is on Wimico Drive. The Algonquin Sports Complex is provided drainage through a canal located on the north side of the property. This canal then drains west into the Indian River Lagoon.

As a coastal location, the Algonquin Sports Complex and surrounding vicinity are susceptible to tropical cyclones. These storms present multiple hazards which can amplify each other and have devastating effects on coastal communities. Heavy and consistent rainfall can put stress on drainage systems and can lead to flash flooding and river flooding. Specifically, in coastal communities like Indian Harbour Beach, storm surge is often the most destructive force as a result of these storms. It causes the temporary rise of sea level, floods low-lying areas, and places additional stress on drainage systems. This is especially important for the Algonquin Sports Complex, as storm surge may impact drainage which is already typically stressed in tropical storms.

Anticipated sea-level rise will compound these issues further, increasing the impacts of storm surges and placing a greater strain on drainage systems. While there are several projections for sea-level rise through 2100, the East Central Florida region has created a standard regional approach to sea-level rise using a range of 8.5 feet by 2100 (NOAA 2017 High) and 5.4 feet (USACE 2013 High). The City of Indian Harbour Beach conducted a sea-level rise vulnerability assessment in 2020 consistent with this regional approach using the NOAA High projections. The vulnerability assessment of the Algonquin Sports Complex redevelopment plans is reflective of this approach and continues to advance the city's resilience efforts. In this analysis, the current possible storm surges by category will be compared to potential storm surges in the area in 2040 with projected sea-level rise taken into account. In addition, sea-level rise projections for the years 2040 and 2060 will also be examined. This analysis will help determine the functional lifespan of the improved Algonquin Sports Complex as well as provide recommendations to reduce the impact of flooding events and increase resiliency to meet the challenges of the future.

## Flood Zones

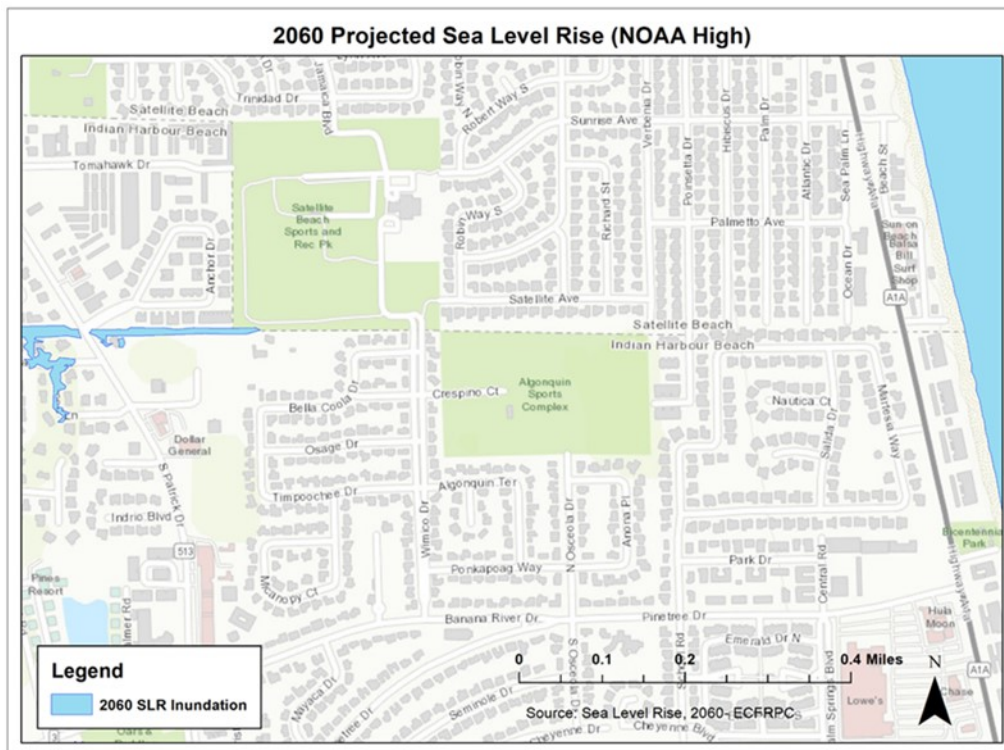
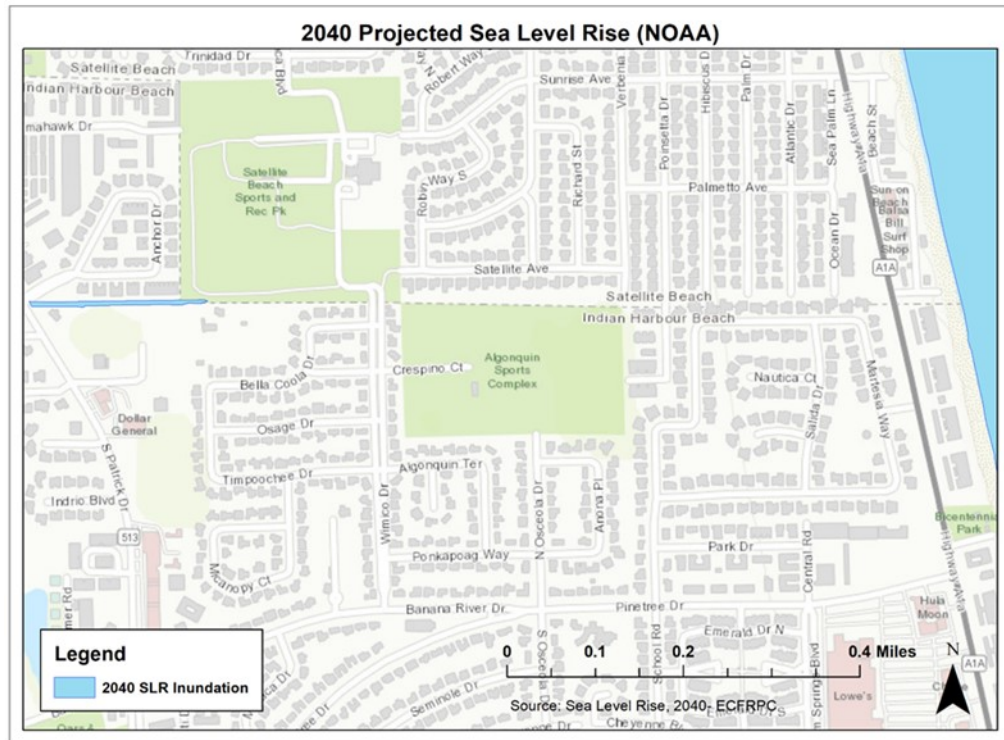


The map above illustrates areas in Indian Harbour Beach that fall within the 100-Year flood zone. These are areas that would be inundated by floodwaters in an event that has a 1 in 100 chance (1%) of occurring in any given year. Both flood zones AE and VE describe this theoretical 100-year flood event. Flood zone AE has a 1% annual chance of flooding and a 26% chance throughout the life of a 30-year mortgage. Flood zone VE also has a 1% annual chance of flooding, but also with additional hazards due to storm-induced wave action. This explains why flood zone VE is present on the beach facing side of Indian Harbour which sees the most direct impacts of wave action from tropical cyclones arriving onshore.

Based on the map, the Algonquin Sports Complex lies completely outside of zones AE and VE. Parts of the canal that drain the complex are within zone AE, however, it is limited to areas near the outlet of the canal at the Indian River Lagoon. While the canal isn't in a flood zone in the immediate area of the Algonquin Sports Complex, flooding near the mouth of the canal can affect the canal's ability to convey water and lower the efficiency of the canal. This may impact the Algonquin Sports Complex's ability to drain properly during significant flood events. In addition, while the 100-Year flood zones are representative of a potential storm, it does not include all areas susceptible to flooding. This is because the extent and depth of flooding will depend on multiple factors including rainfall, wind, tides, and storm surge. Every flood is unique and is unlikely to match the flood zone determined precisely, even during a 100-Year event. Overall, the Algonquin Sports Complex will see minimal direct impacts from a 100-Year flood event, however, this does not rule out the possibility of flooding.



## Sea Level Rise



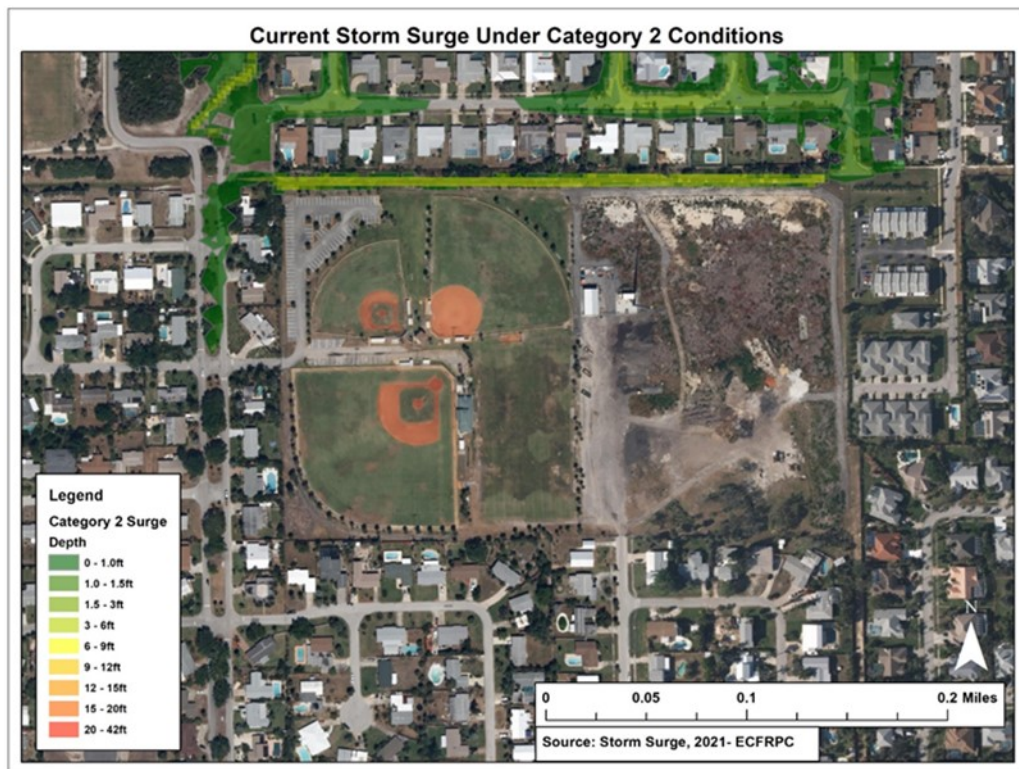
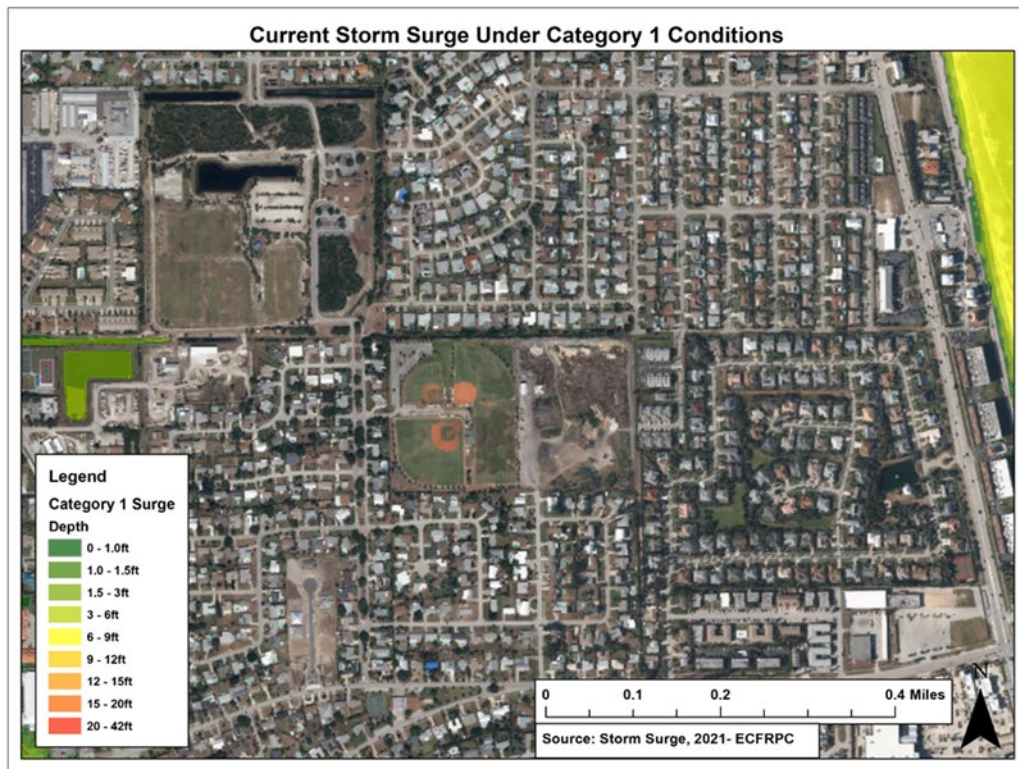
The two maps shown above illustrate the potential inundation caused by sea-level rise alone for the years 2040 and 2060. Sea level rise is a global concern and threatens coastal areas, especially low-lying areas found in coastal areas throughout Florida. The risks of sea-level rise in Indian Harbour Beach are great, as both sides of the barrier island will be impacted. The projections for sea-level rise provided in this assessment are determined by the National Oceanic and Atmospheric Administration (NOAA). The high scenario is used as it reflects the regional approach to examining impacts from sea level rise and is consistent with the citywide vulnerability analysis.

By the year 2040, sea-level rise will have little to no impact on the Algonquin Sports Complex. Most of the surrounding areas of Indian Harbour Beach are also spared from direct inundation from sea-level rise alone. Most properties along the Atlantic shore and the Indian River Lagoon shore are also relatively unaffected by direct inundation. However, some minor inundation may be possible in the canal that provides drainage for the Algonquin Sports Complex. This canal, which drains to the Indian River Lagoon, shows an indication of slight inundation from sea level rise in 2040. While the extent of inundation stays within the canal and doesn't overtop it, higher water levels will create challenges relating to the canal's ability to convey stormwater out to the Indian River Lagoon, thus residual impacts from rainfall and surge may occur.

The second map, which shows the high scenario for sea-level rise in the year 2060 depicts increasing and more significant impacts. While the Algonquin Sports Complex will still be clear of direct inundation from sea level rise in 2060, more inundation of the drainage canal can be seen. This increasing water level of the canal also spills out onto residential streets adjacent to the canal, especially areas near the Indian River Lagoon shoreline. This greater increase in sea level by 2060 will only further intensify challenges to stormwater drainage and other infrastructure. Despite these significant and intensifying issues, the Algonquin Sports Complex will likely be free of direct inundation from sea level rise alone for at least the next 40 years. However, projections and scenarios provided by NOAA are subject to change as data and modeling improve in the future.



## Existing Storm Surge Impacts





Current Storm Surge Under Category 3 Conditions

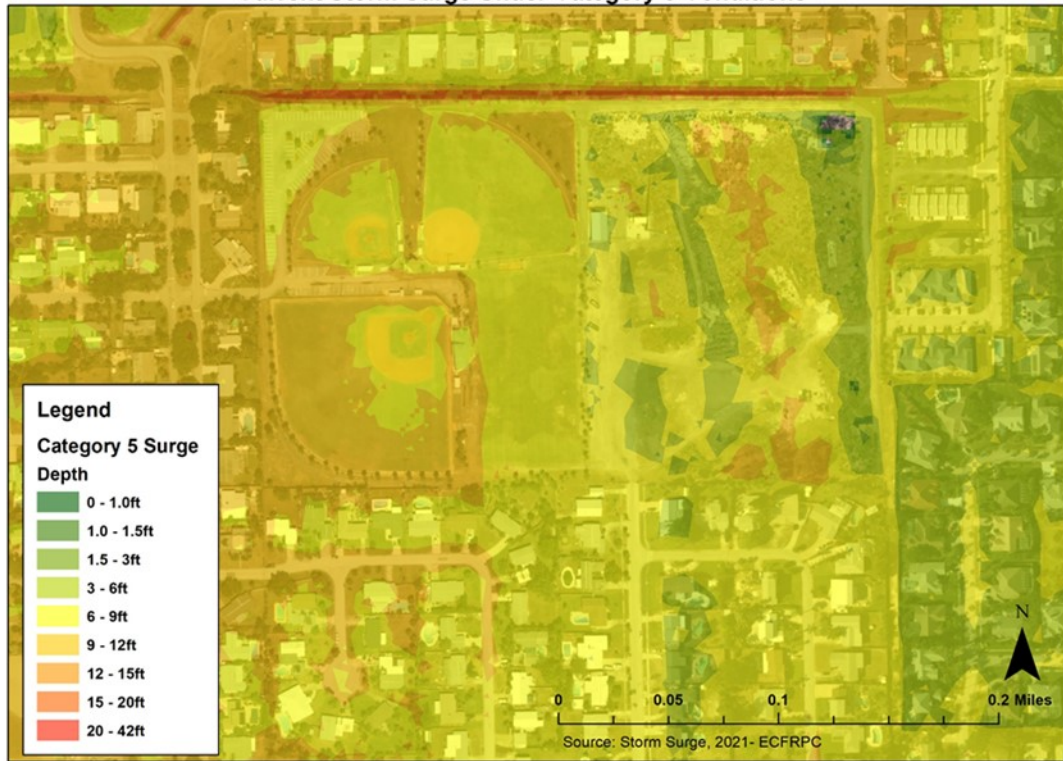


Current Storm Surge Under Category 4 Conditions

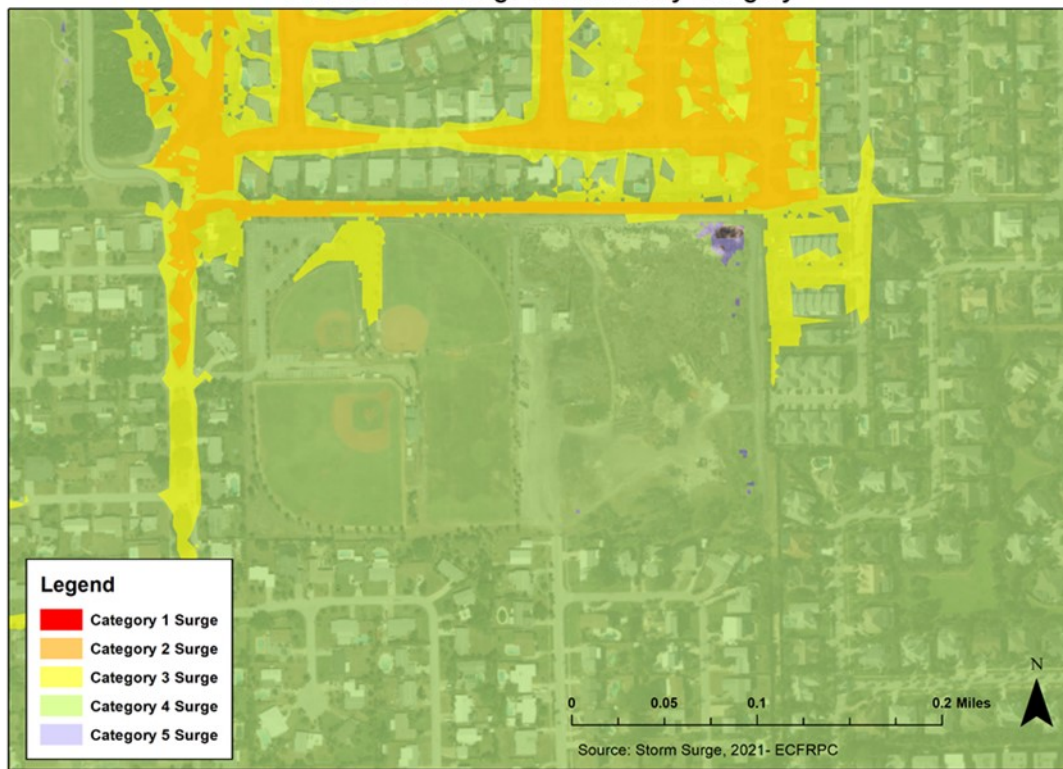




Current Storm Surge Under Category 5 Conditions



Current Storm Surge Inundation by Category



Storm surges are some of the most destructive forces that accompany tropical storms and hurricanes. Low-lying and coastal communities like Indian Harbour Beach are especially susceptible to storm surge damages. The height of storm surge is determined by several factors including tides and storm strength. In this analysis, the impacts of storm surge in the vicinity surrounding the Algonquin Sports Complex will be examined by each hurricane category.

Under usual category 1 storm surge conditions, the Algonquin Sports Complex is largely free of inundation when considering storm surge alone. The portion of the drainage canal directly north of the complex is also free of storm surges. However, some amount of surge up to 1 foot in depth can be seen at the lower reaches of the drainage canal where it empties into the Indian River Lagoon. While the Algonquin Sports Complex avoids direct inundation from storm surge if a category 1 storm struck today, the potential 1 ft storm surge at the lower reaches of the canal that drains the Algonquin Sports Complex may interfere with the canal's ability to drain and convey stormwater.

If a category 2 storm were to strike the Algonquin Sports Complex today, more flooding of the drainage canal will be seen. While flooding in the canal in a category 2 event would be limited to the areas surrounding the mouth of the canal, there is potential for flooding of the canal directly north of the Algonquin Sports Complex up to 3-6 feet. Wimico Drive also begins to see some shallow flooding, although the entrance to the park remains dry. As mentioned previously, the impacts of the canal flooding on drainage should be considered, and the impacts on the ability of the canal to convey stormwater are further restricted in a category 2 event. Despite this, the Algonquin Sports Complex will remain free of direct flooding on the property due to a category 2 storm in today's conditions.

In a category 3 storm under current conditions, the Algonquin Sports Complex begins to experience direct inundation up to 1.5-3 feet. However, the flooding is mostly limited to the northern section of the complex between the two fields. Further flooding of the drainage canal is expected. Wimico Drive would also experience more flooding compared to a category 2, with the entrance to the Algonquin Sports Complex now flooded. Inundation of residential streets also becomes an issue in the areas to the east and north, in addition to the streets to the west of the complex with a category 3 storm surge under today's conditions.

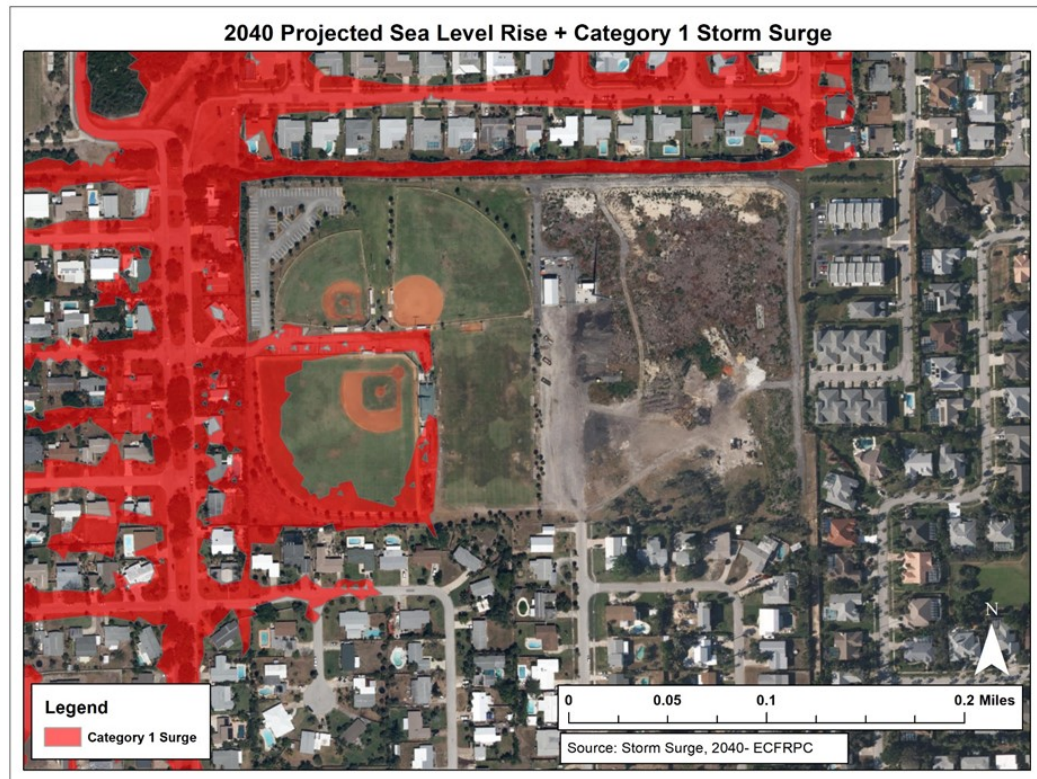
The situation becomes much more dire under category 4 conditions if a storm were to hit today. By this point, almost the entire Algonquin Sports Complex would have some depth of flooding, except for a very small area in the extreme northeast portion of the property. The maximum depth of flooding in a category 4 storm in the complex would be between 9 and 12 feet. Inundation in the drainage canal could reach between 12 and 15 feet. While the Algonquin Sports Complex would be almost completely flooded under a category 4, the surrounding residential areas would also be inundated by storm surges.

As a category 4 storm would cause an almost complete inundation of the Algonquin Sports Complex, so would a category 5 storm surge. Under category 5 surge, there will remain a very small mound in the northeast portion of the park that remains above the waterline. Otherwise, the entire complex and surrounding vicinity would be covered by the surge; flood depths in the Algonquin Sports Complex could reach between 12 and 15 feet, and in the drainage canal, there could be inundation between 15 and 20 feet deep.

Examining the map with all current storm surges by category shows the large difference in impacts between these categories. Under categories 1 and 2, direct inundation of the Algonquin Sports Complex is unlikely, although impacts to the surrounding areas and on drainage cannot be ruled out. Even a category 3 storm surge would only inundate small portions of the park at shallow flood depths. However, this quickly changes during category 4 or 5 storm surges. Starting with a category 4 surge, almost the entire Algonquin Sports Complex would see some level of inundation, and flood depths would be even deeper during a category 5 event.



## 2040 Projected Storm Surge





2040 Projected Sea Level Rise + Category 3 Storm Surge



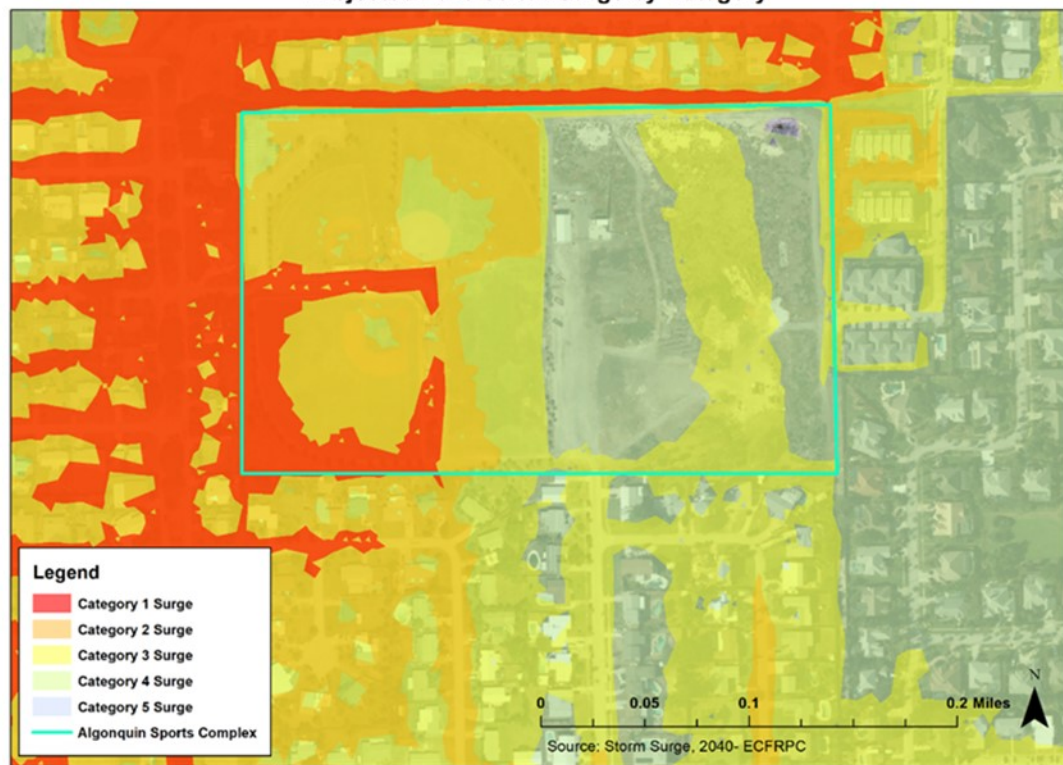
2040 Projected Sea Level Rise + Category 4 Storm Surge



2040 Projected Sea Level Rise + Category 5 Storm Surge



Projected 2040 Storm Surge by Category





The maps provided above illustrate the potential storm surge coverage for each tropical cyclone category in the year 2040, slightly less than 20 years from now. As opposed to the storm surge maps created to describe present-day surges, these maps take sea-level rise risks in the year 2040 into account. While storm surge is a temporary and localized increase in sea level as a result of hurricane forces, the sustained and global effects of sea-level rise increase the likelihood, intensity, depth, and extent of storm surge in a given area.

In the year 2040, if a storm surge associated with a category 1 hurricane struck the Algonquin Sports Complex and surrounding area of Indian Harbour Beach, many residential areas to the north and west would begin to see some amount of flooding, especially on streets. This includes Wimico Drive as well as the current entrance to the Algonquin Sports Complex. The length of the drainage canal directly north of the property would begin to see flooding. As for direct impacts to the Algonquin Sports Complex, the majority of the property would remain dry, including the entirety of the eastern portion of the park slated for redevelopment in the Master Plan. However, flooding is possible in the southwest portion of the park, surrounding the baseball field. This includes the entrance road leading into and inside the Algonquin Sports Complex.

If a category 2 storm were to strike Indian Harbour Beach in the year 2040, more direct impacts to the Algonquin Sports Complex will be felt. In this scenario, most of the currently developed western portion of the complex will see some level of flooding, except for isolated portions of the parking lot and the center of the sports fields while the eastern portion of the Algonquin Sports Complex currently planned for development in the Master Plan will remain above water. As more flooding will be seen in the residential areas surrounding the Algonquin Sports Complex, the proposed new entrance to the Sports Complex on N Osceola Drive will remain free of flooding.

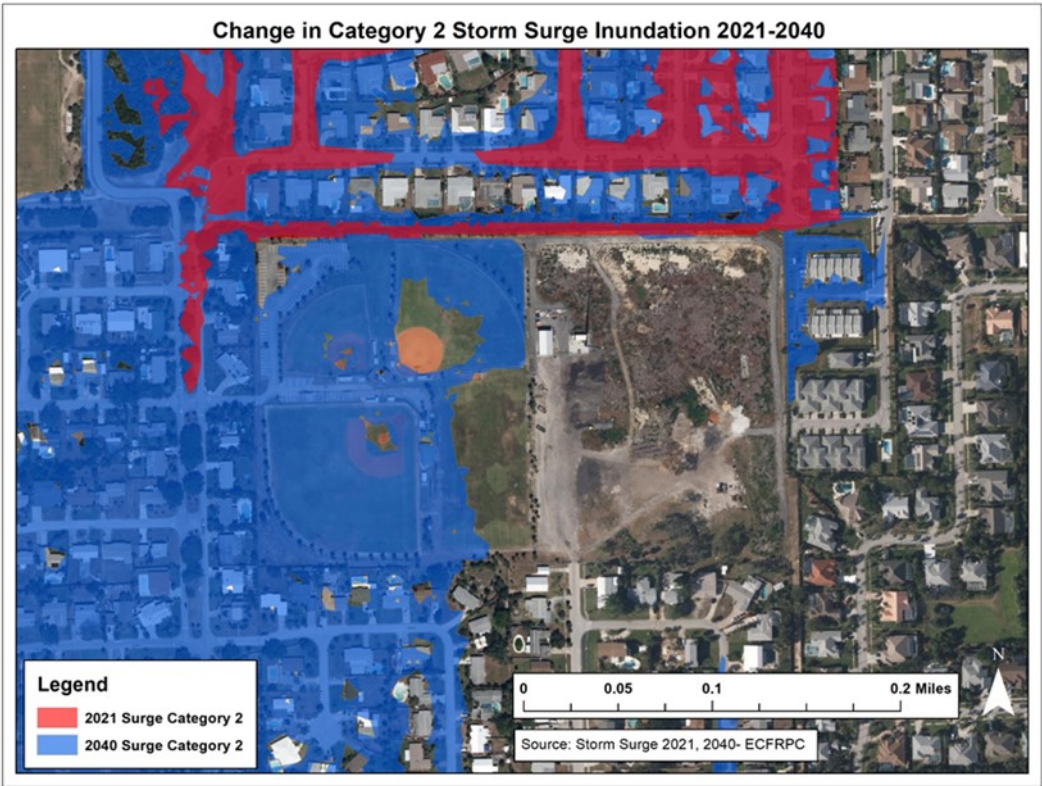
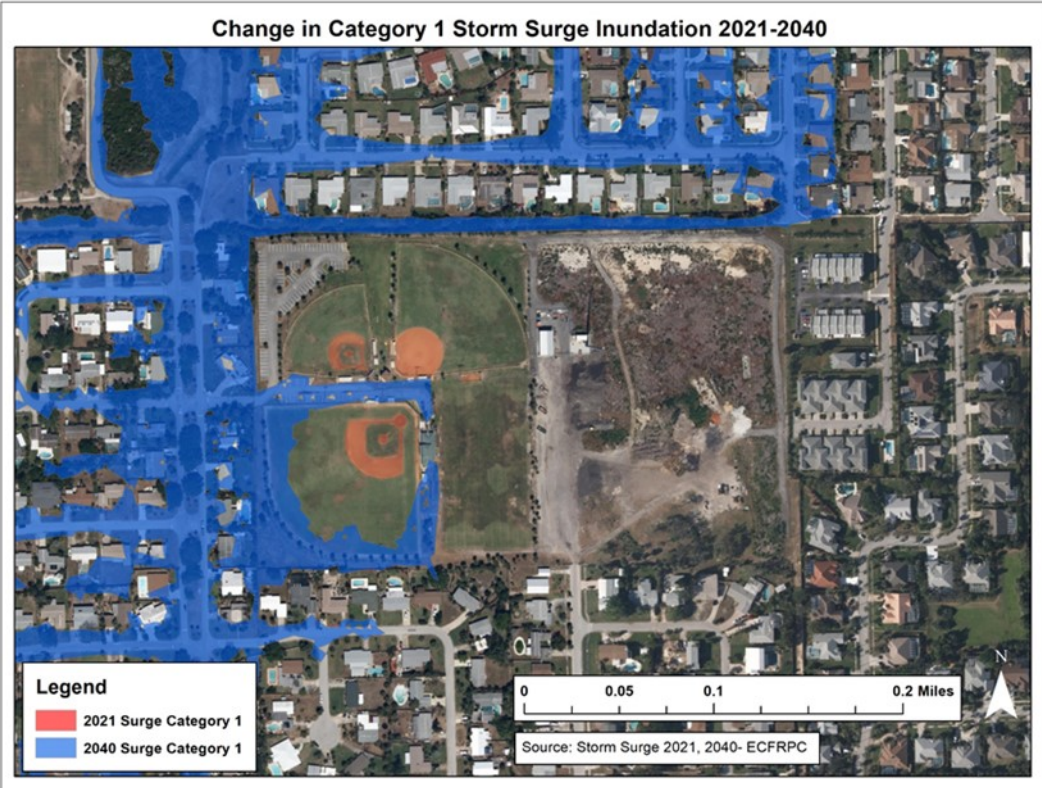
More significant impacts to the Algonquin Sports Complex could be seen during a category 3 storm surge in the year 2040. If a storm of this magnitude struck Indian Harbour Beach, the entire western portion of the complex will be inundated by the surge including a portion of the undeveloped portion of the complex. However, areas of the expansion with slightly higher elevations will likely remain above the waterline. In general, floodwaters begin to surround the Algonquin Sports Complex during a category 3 event in 2040. Both entrances to the Algonquin Sports Complex, including the planned access point on N Osceola Drive, would be inundated by storm surge.

If a category 4 tropical cyclone struck the Algonquin Sports Complex and surrounding area, complete inundation of the complex would be likely. The entire property would see some amount of storm surge, except potentially a very small mound of land located in the most northeastern point of the complex. The surrounding residential areas will also be completely inundated by storm surge from a potential category 4 storm in 2040. A similar pattern will likely occur with a category 5 storm surge in 2040, with complete inundation of the Algonquin Sports Complex and the surrounding community. While flood depths for future projections taking sea-level rise into account are difficult to ascertain and not included in this analysis, the depth of flooding in the complex will certainly be greater in a category 5 event compared to a category 4 surge in 2040.

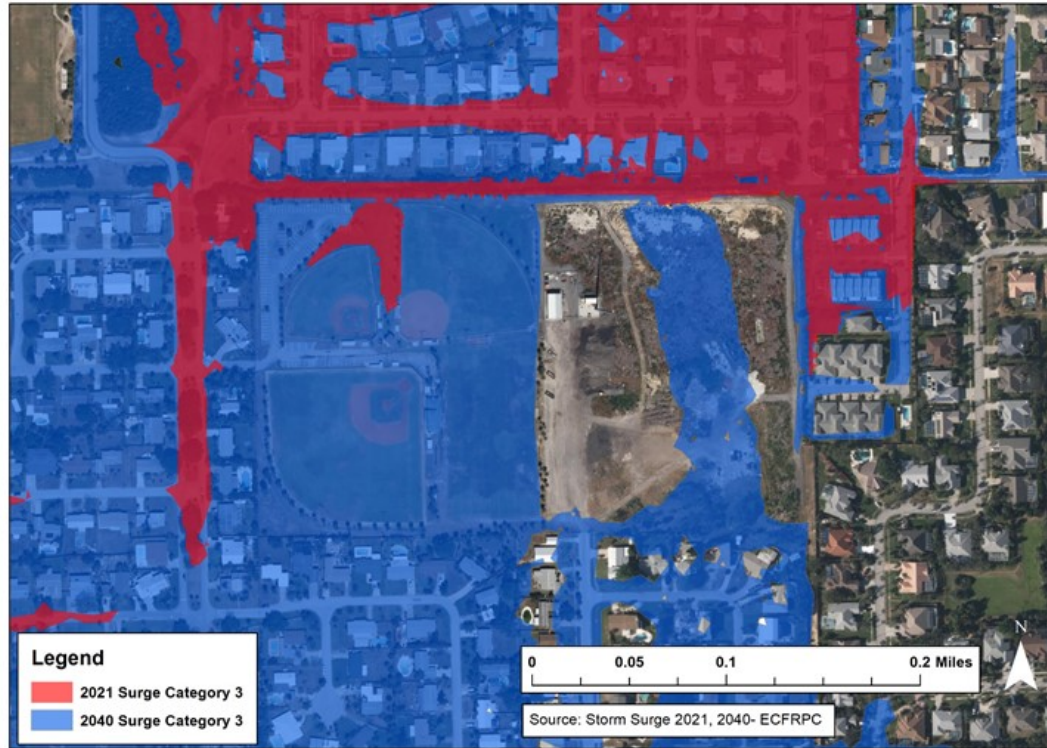
While examining the storm surge impacts in 2040 with categories overlaid, interesting patterns can be seen. In 2040, even a category 1 hurricane could produce enough storm surge to begin flooding portions of the Algonquin Sports Complex. In the case of a category 2 storm surge, most of the currently developed portions of the complex will be inundated. The majority of the property would see some amount of flooding with storm surge associated with a category 3 event.



Storm Surge Comparisons



Change in Category 3 Storm Surge Inundation 2021-2040



Change in Category 4 Storm Surge Inundation 2021-2040





The maps presented above under “Surge comparisons” were created to better visualize the difference in storm surge impacts each category of storm surge would cause to the Algonquin Sports Complex and surroundings between the present day and in 2040. One of the largest influences on the changes in storm surge inundation in the future is sea-level rise. If the ambient sea level rises, then the effects of a tropical cyclone and associated surge could be intensified. Even when examining the storm surge effects of a category 1 hurricane, significant differences can be seen between this magnitude of storm surge today and in 2040. The drastic increase in storm surge flooding is also apparent under category 2 conditions.

Overall, the impacts of a major hurricane (category 4 or 5) storm surge on the Algonquin Sports Complex would differ little between today and 2040, as complete inundation in both events would be likely. Despite this, the most significant differences in storm surge between today and 2040 can be seen in the lower categories (1 to 3). While these storms are less intense, they occur with much greater frequency than larger storms. Hence, it is a concern that a destructive storm surge would threaten the Algonquin Sports Complex with less intense storms than would be required to flood the property today.

### **Recommendations**

Based on the analysis and findings of the vulnerability assessment, several recommendations can be made to increase the long-term resiliency of the Algonquin Sports Complex. Within the next 20 years, the most pressing and imminent threat to the Algonquin Sports Complex is the increasing risk of storm surge. Also, flooding due to extreme rainfall and the susceptibility of the current drainage system as a result of increased storm surges is another significant concern. While sea-level rise is certainly a threat in the long term, the Algonquin Sports Complex is expected to be free of direct inundation as a result of sea-level rise until the year 2060. Hence, the recommendations made in this report focus on strengthening stormwater infrastructure and conveyance to mitigate the risk of storm surges in the Algonquin Sports Complex and extend the useful life of the property.

#### **Recommendation #1: Encourage installation and maintenance of Florida friendly trees and shrubs.**

The addition of numerous street and landscaping trees in the Algonquin Sports Complex serves to increase tree coverage over time as the trees become mature. While mature trees provide multiple benefits including providing shade for users and reducing temperatures, trees can also increase water infiltration into the ground as well as release significant amounts of water through transpiration. These processes can help reduce the amount of runoff after storms.

**Recommendation #2: Utilize permeable pavements in the Algonquin Sports Complex to reduce impervious surfaces, particularly near the drainage canal.**

Permeable pavements include a variety of materials including permeable asphalt, concrete, and concrete grid pavers. Increasing impervious surfaces on a property prevents the infiltration of stormwater into the ground, increasing the amount of water that needs to be conveyed through constructed stormwater infrastructure. While permeable pavements have higher initial costs, the ability to infiltrate water through the surface allows for lower stormwater system maintenance over the long term. Permeable pavements can also reduce the volume and speed of stormwater entering the drainage canal and the Indian River Lagoon.

**Recommendation #3: Strengthen canal clearing and maintenance programs.**

As drainage of the Algonquin Sports Complex relies on a drainage canal on the north side of the property, the proper maintenance of this canal that drains into the Indian River Lagoon is crucial for the conveyance of stormwater from the property. Sediment buildup should be dredged and foreign objects removed to ensure the movement of water from the Algonquin Sports Complex.

**Recommendation #4: Encourage installation of Florida-friendly landscaping near drainage canal and other drainage structures.**

Appropriately installed plants and shrubs assist to hold stormwater on site. These installations may help with the infiltration of water into the ground, reducing the volume of water released into stormwater drainage systems. In addition, selected plants can help reduce the nutrient levels in stormwater as well as other pollutants, reducing the impacts on local waterways and the Indian River Lagoon. Appropriately grading landscaped areas and the Algonquin Sports Complex overall will assist in the effective onsite storage and drainage of stormwater on the property.

**Recommendation #5: Reduce excess grass clippings, fertilizers, and pesticides on the Algonquin Sports Complex property.**

Conservative use of fertilizers and pesticides on park property reduces costs to the municipality as well as lowers the total amount of these substances that are flushed out in stormwater infrastructure during storms. When mixed with stormwater, these chemicals make their way to the Indian River Lagoon, contributing to the pollution and wildlife challenges the waterway already faces. In addition, extensive mowing and the resulting cuttings find their way into stormwater if not properly collected and disposed of. Grass cuttings also contribute to high nutrient levels in local waterways.



# Public Engagement Activity Report for the Expansion of the Algonquin Sports Complex

## Background

During the Summer of 2021 the East Central Florida Regional Planning Council (ECFRPC) entered into an agreement with the City of Indian Harbour Beach to develop a Master Plan to propose the redevelopment of one of its local parks. The Algonquin Sports Complex, hereby referred to as the sports complex, is a 25-acre, city-owned park located in the northern portion of the City, along the boundary between the City and Satellite Beach. However, half of the park, about 9 acres, has not yet been developed to provide recreational opportunities to park users. The existing portion that is developed hosts a number of athletic fields that local sports and City recreational programs enjoy, but following the Coronavirus Pandemic the City saw the need for new outdoor recreational amenities and opportunities for residents to be physically active.

City leadership desired that the park not only be expanded to provide for resident's recreational needs but also be expanded using an equitable, citizen-driven process. By doing so, the completed redeveloped park would be a reflection of what the community wanted, and one they felt more connected to because they were a part of the redevelopment process. Subsequently, the Park Master Plan for the complex is supported by this Public Engagement Report, which details all of the public engagement activities and outcomes of this project. Within this report you will find summarized information for the following outreach activities: social media posts, City newsletter posts and distribution, public workshops, an extensive online survey, and City Council meetings.



# Public Engagement

## Feedback Highlights

1. Majority of the feedback received appears to be from residents who live in close proximity to the park but also use it frequently, so the target audience who will be priority park users of the sports complex were engaged in the planning process.
2. Many residents expressed desires for new active sports amenities such as soccer fields, football fields, basketball courts, pickleball courts, and tennis courts.
3. A strong need for amenities that provide comfort from natural elements, such as shade trees, seating, and good lighting, was illustrated in resident feedback.
4. A new multiuse trail that can be used for walking, biking, roller-skating, etc. has come up in numerous exchanges with community stakeholders. The trail has value as both a passive and active recreational amenity, useful for both light walking to even supporting youth recreation such as track and field.
5. Many residents desire more natural elements within the park to increase opportunities to be one with nature.
6. Many families want playgrounds, splash pads, and traditional park amenities that support youth playtime and family engagement.
7. Many residents are concerned about increases in land values that may impact taxes, noise pollution from the park, and the incorporation of superfluous park amenities.
8. Due to the somewhat mixed voting results that were received at the January and April workshops as well as in the online survey, a hybrid of the three park redesign approaches will be developed. This will ensure that the park redevelopment proposal offers something for everyone.
9. Many residents, as well as City staff, are interested in design considerations that can be made regarding mitigating homelessness and enhancing park safety.
10. The large turnout that was received at each public workshop as well as the high number of survey responses received indicates the strong connection that exists between the community and the sports complex.



## **Public Engagement Strategies and Outcomes**

Following the lockdowns and shutdowns of 2020 in response to the Coronavirus Pandemic, many government agencies needed to be creative or make changes to the way they conducted public engagement to adhere to new safety guidelines. This project took a mixed approach in conducting public engagement by doing both traditional workshops as well as online public outreach, and a host of other outreach strategies. These include using both the City's and the ECFRPC's social media pages, a robust online survey, City newsletters, announcements on the City's website, City meetings, and multiple workshops that were open to the public and community stakeholders for the park. Further, a variety of outreach materials were developed by both the RPC and the City to support public engagement activities. Materials developed include flyers, survey QR codes to attach to printed materials, postcards, posterboards, and charrette posters.

### **Facebook Posts**

To reach the wider, online community of Indian Harbour Beach residents a number of social media posts were made and distributed via the City's Facebook page and by its Parks and Recreation Facebook page. Each post was tagged to include the east Central Florida Regional Planning Council's Facebook page so that it's social media followers were also provided with notifications about the progress of the planning process.

<b>Posts for General Project Updates</b>	<b>Posts for Online Survey</b>	<b>Posts for November Public Workshop</b>	<b>Posts for January Public Workshop</b>	<b>Posts for April Public Workshop</b>	<b>Posts for City Council Presentation</b>
2	2	8	14	1	1
Total Posts to Date: 28					

### **Newsletters**

To reach the community of Indian Harbour Beach residents that enjoy the City's newsletter, the ECFRPC worked with the City to ensure that various issues of the newsletter that were released during the project timeframe mentioned the expansion of the park.

<b>Newsletter Issue</b>	<b>Newsletter Piece Description</b>
September/October	Announcement and background information for the park expansion plan, update on online public survey and notice for upcoming workshops
November/December	Update on November public workshops and on the online public survey
January/February	Announcement for January workshop and update on park planning process
March/April	Announcement for April workshop and update on park planning process
May/June	Announcement for May City Council presentation on the Park Master Plan and redevelopment proposal
Total Newsletter Pieces to Date: 5	



## City Meetings

The ECFRPC presented an overview of the Park Master Plan and a summary of the public engagement report at the May 10<sup>th</sup>, 2022 City Council Meeting.

## Workshops

### November 6<sup>th</sup> Workshop

This workshop, which was meant to be our first public workshop in the City, ended up being cancelled due to weather concerns. This event was intended to raise awareness around the online public survey that was being conducted for the park's redevelopment.

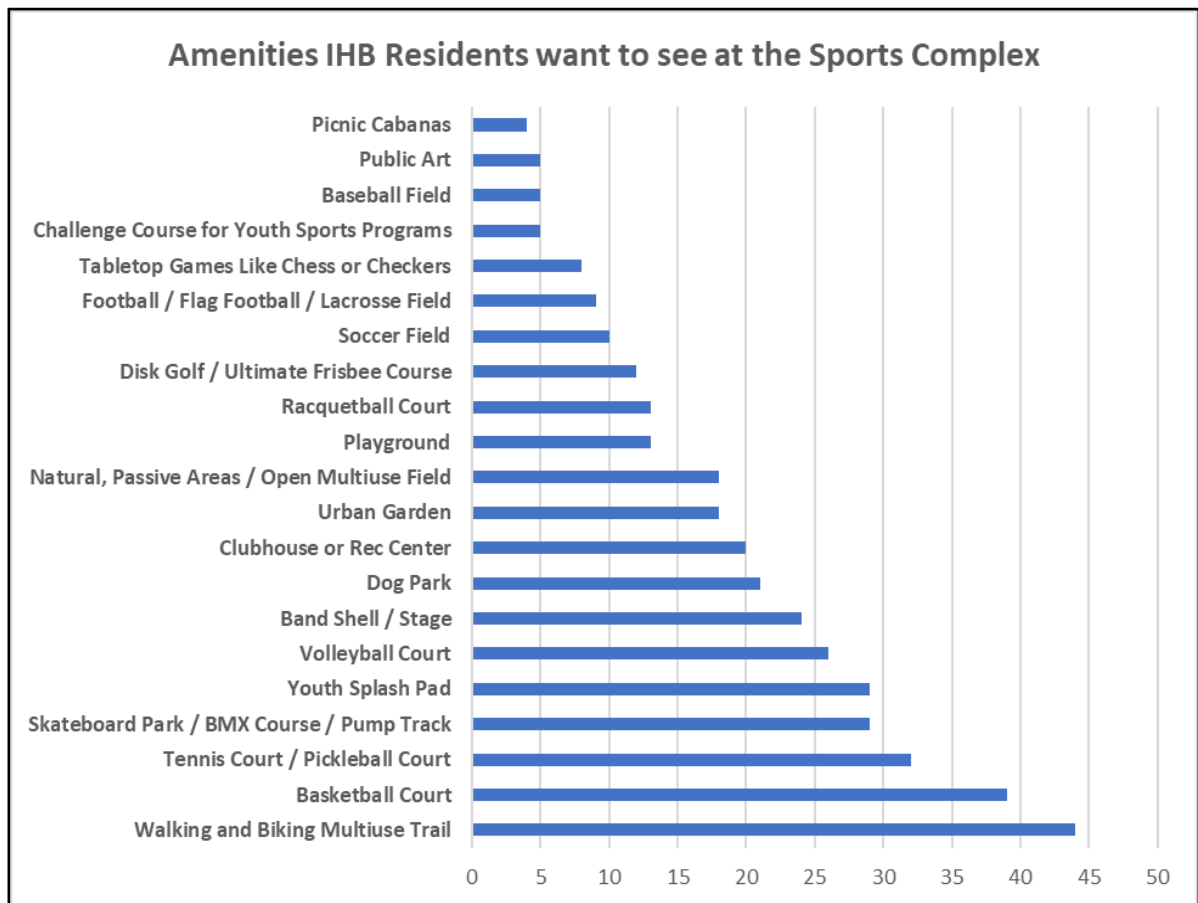
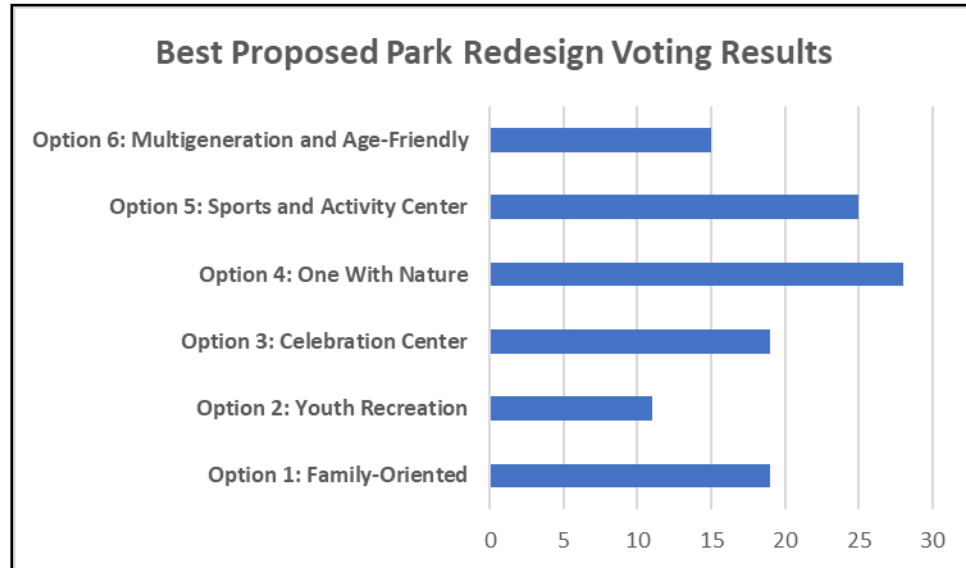
### November 20<sup>th</sup> Open House / Charrette

As a requirement of the project contract, the ECFRPC organized and held a Open House/ Charrette event in the City on Saturday, November 20<sup>th</sup> at the local Gleason Park during the City's Arts and Crafts Festival from 11am to 2pm. The Open House was held inside the Recreation Center at the park while the festival went on outside and helped bring a great deal of foot traffic to the Open House. The Open House received around 100 participants. Those who attended the Open House had the opportunity to provide feedback on the following workshop activities:

- Park Amenity Dot Voting Station
- Park Events Dot Voting Station
- Best Proposed Park Redesign Theme Voting Station
- How to Improve Access to the Park Participant Station
- How to Improve Safety at the Park Participant Station

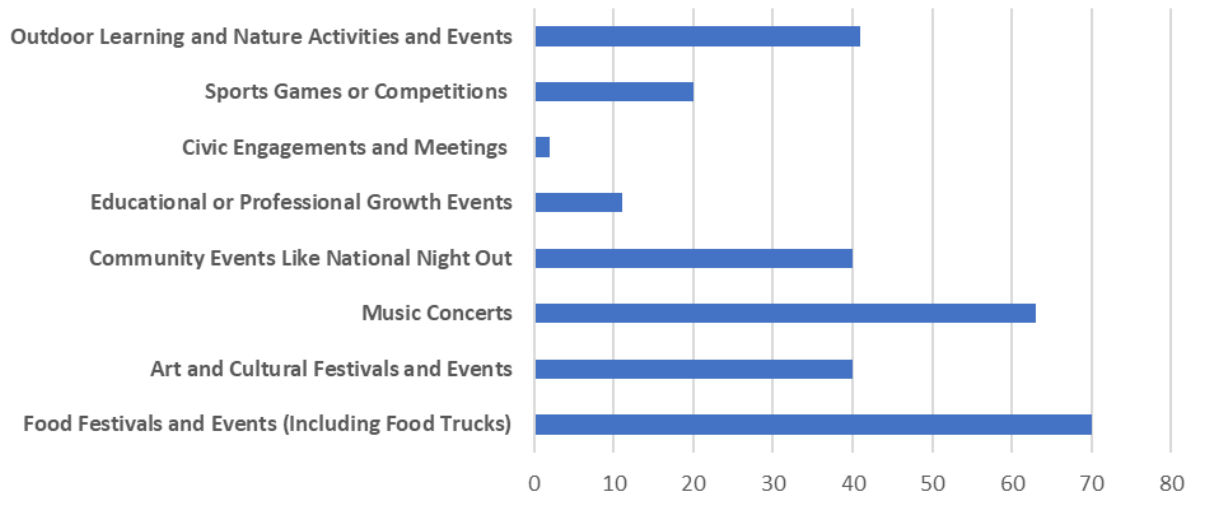


## Feedback Summary:

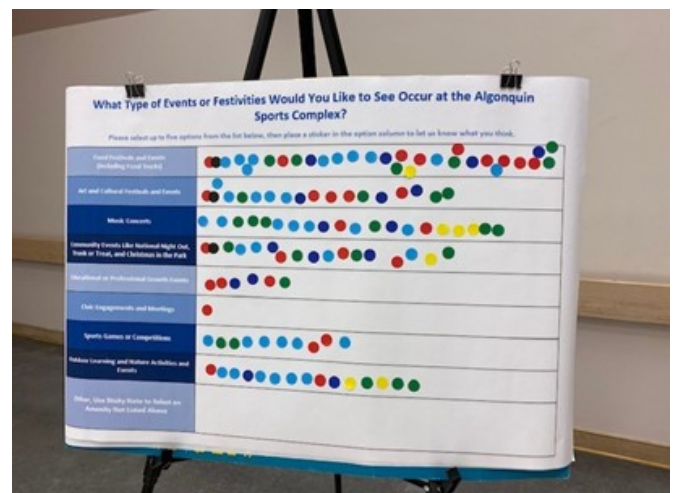


Workshop results show that the majority of participants desired a “One with Nature” approach to the redesign or expansion of the Algonquin Sports Complex. Many also desired a more sports-oriented redesign approach, as can be seen in responses to the types of amenities they would like to see included in the park expansion. Many expressed interest in a multiuse trail, basketball courts, and other athletic amenities.

## Events IHB Residents want at the Sports Complex



When asked what kind of events they would like to see held at the expanded Sports Complex, many preferred the idea of food-related events, concerts, and also those that support outdoor learning and nature.







### How Can Safety Be Improved at The Algonquin Sports Complex?

Please utilize sticky notes to write or illustrate your suggestions for improvement.



### “How to Improve Safety at the Park” Participant Station Findings

Repave path!!! It's in terrible shape!
Don't disturb wildlife! And turtles
Sidewalks & lights
Have cameras and lighting
Lights/Sidewalks
Sidewalks
Sidewalks?
Sidewalks
Cameras, Sidewalks
Beach Volleyball courts with lights.
Courts @ paradise don't have lights b/c of sea turtles and time change
Lights for at night b/c of time change
Lights
Yes, lights!
Street lighting, walk paths-lit
Sidewalk, cameras
Sidewalks with lights, cameras
Parking area
Walking path
Lights
Sidewalks
Lights to see



### How Can Accessibility To The Algonquin Sports Complex Be Improved?

Please utilize sticky notes to write or illustrate your suggestions for improvement.



### “How to Improve Access to the Park” Participant Station Findings

Gate open to access
Open gates for access (comment made 3 more times)
More access from different areas of park
Multiple entrances
Have people quit parking in bike lane
Walking path
More paved ways for easy access from multiple streets
Always clear line of sight for youth areas
Good seating for parents
More entrance sites
More areas to enter via walking
Gates open
Entrance from Verbenia Dr
Entrance from Verbenia Dr

## January 28<sup>th</sup> Workshop

After the online public survey closed after Thanksgiving in 2021, the project team wanted to use follow-up public engagement to hone in on what residents perceived as the best redesign approach for the park. So, from the 6 different options they were provided at the November Open House, three park redesign proposals were derived from the feedback provided at the workshop and developed into full conceptual redesign proposals for the sports complex. On January 28<sup>th</sup>, the ECRPC held its second workshop with the help of City staff, and this time it was on-site at the park and in the afternoon, from 4pm to 6pm. At the workshop, the three proposals were displayed for residents to dot vote on to let us know which park concept they thought would best fit the sports complex expansion. The City did an excellent job of providing supporting attractions at the workshop to attract attendees, such as bouncy houses and a food truck. The workshop received around 100 participants. Those who attended had the opportunity to provide feedback on the following workshop activities:

- Blank canvas for participants to “write out” their desired improvements for the park, including ideas for new park amenities and features
- Best Park Redesign Proposal Voting Station

### *Feedback Summary:*

Workshop Voting Results	
Sports-Oriented	25
Community-Oriented	31
Nature-Oriented	29

## April 5<sup>th</sup> Workshop

Due to a technicality with the City’s newsletter which was not able to be distributed to the community before the date of the January workshop, the City wanted to host a workshop on its own for those residents who did not know about or get a chance to participate in the January workshop. The City essentially duplicated the January workshop using materials developed by the ECFRPC to give those participants a fair chance to vote on the future of the park. On April 5<sup>th</sup>, the City held this workshop at the Gleason Park Recreation Center with two workshop time frames to give residents two opportunities to participate: first from 9am to 11am and then again from 4pm to 6pm. At the workshop the three proposals were again provided for residents to dot vote on and express their desires for the park expansion. The workshop received over 100 participants according to City staff. Those who attended had the opportunity to provide feedback on the following workshop activities:

- Blank canvas for participants to “write out” their desired improvements for the park, including ideas for new park amenities and features
- Best Park Redesign Proposal Voting Station

### Feedback Summary:

Workshop Voting Results			
Park Redesign Strategy	Jan. 28 <sup>th</sup> Workshop Results	April 5 <sup>th</sup> Workshop Results	Total Votes
Sports-Oriented	25	68	93
Community-Oriented	31	59	90
Nature-Oriented	29	44	73
Totals	85	171	256

### Online Public Survey

An online survey was developed using Survey Monkey and was administered by the RPC to collect resident input on the expansion of the park. The survey was released in the Summer of 2021 and closed following the Thanksgiving holiday. A total of 422 responses were collected through the survey. See the attached report from Survey Monkey for more information on the outcomes of the online survey.

### Postcards, Flyers, and Event Merchandise

In order to provide community stakeholders with informational resources about the park redevelopment project, both the ECFRPC and the City of Indian Harbour Beach developed materials that would help them. The ECFRPC developed a flyer and postcard design template that was used repeatedly throughout the project as new public engagement activities were planned. For instance, the original flyer and postcard that was developed for the first public workshop in November was updated to feature the new information for the following workshop that was held in January, and so on. Additionally, the City created merchandise that was distributed at workshops as an incentive for attendees to participate, and included baggies and reusable water bottles featuring the City's design and logo.





## Conclusion

The amount of feedback received from both online and in-person public outreach activities illustrate the devotion that Indian Harbour Beach and other community stakeholders have to the park. That fact that the two public workshops received over 250 participants proves this, as well as the high response rate for the online survey. Further, the response to social media notifications for the park were also impressive. Workshop related social media posts received a great deal of comments and shares, which helped raise awareness of the project even more. The desire to be included in the redevelopment process and to voice concerns about impacts the park has on the community were reflected in the online survey results and in the public workshop feedback.

However, after analyzing public feedback and comments, it was evident that there were a mix of desires presented for the park expansion. For instance, at the January public workshop, participants voted the most for the “Community-Oriented” park redesign approach, then in April, the “Sports-Oriented” approach was the lead. This is contrary to the initial feedback received in the November Open House, where the “One with Nature” approach was voted on the most by participants. Similarly, the survey received comments showing residents desired a range of park amenities, from passive, to active, to nature-oriented. This information was vital to the project team and allowed for the development of a type of hybrid park redevelopment proposal that would combine the most desired features from each of the three park redesign approaches to provide a proposal that would suit the expressed needs of entire Indian Harbour Beach Community.







# ALGONQUIN SPORTS COMPLEX

## *REDEVELOPMENT* PROJECT



***THE PARK IS BEING EXPANDED!***

DO YOU WANT TO SEE A WALKING TRAIL? A  
PICKLEBALL FIELD?  
A PLAYGROUND? ALL OF THE ABOVE & MORE?

***THE CITY, WITH ECFRPC, WILL BE CONDUCTING  
CITIZEN SURVEYS ONSITE AND ONLINE***

NOVEMBER 6TH @ THE ALGONQUIN COMPLEX  
"IT'S YOUR PARK, LETS PLAN IT TOGETHER!"

NOVEMBER 20TH @ GLEASON PARK  
"THE ART FESTIVAL"

ONLINE SURVEY  
[HTTPS://WWW.SURVEYMONKEY.COM/R/MKRWGFG](https://www.surveymonkey.com/r/mkrwgfg)

VISIT THE CITY'S FACEBOOK PAGE FOR MORE EVENT DETAILS



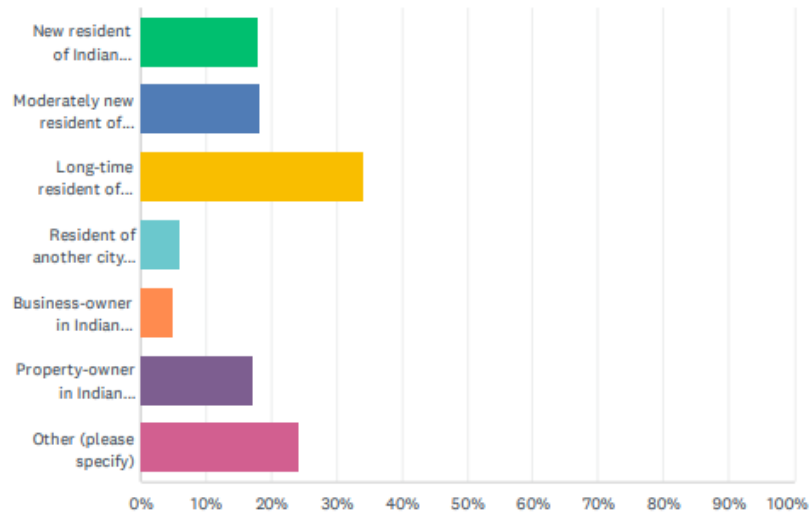
PROJECT IN PARTNERSHIP WITH THE  
EAST CENTRAL FLORIDA REGIONAL PLANNING COUNCIL  
VISIT [HTTPS://WWW.ECFRPC.ORG](https://www.ecfrpc.org) TO LEARN MORE



### Attachment #3: Online Survey Response Summary

**Q1** Of the following, please select the options that apply to you. You may select up to three options.

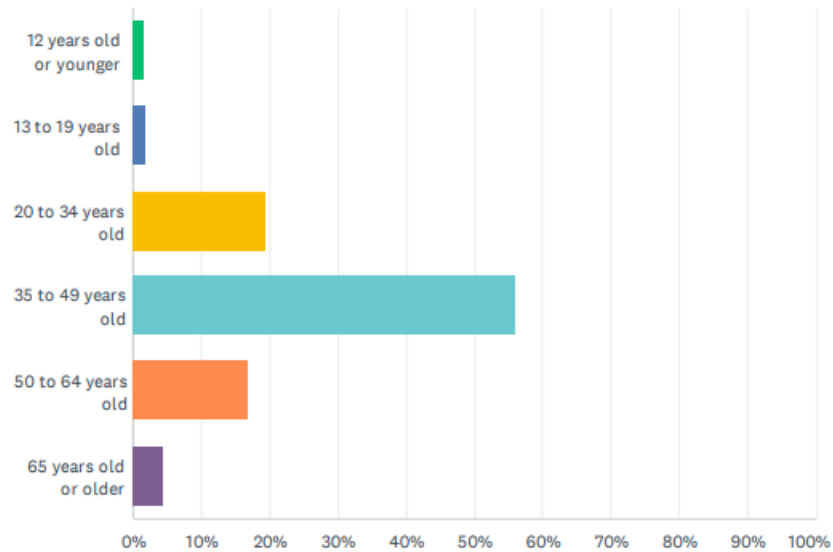
Answered: 422 Skipped: 0



ANSWER CHOICES	RESPONSES	
New resident of Indian Harbour Beach (less than 5 years)	18.01%	76
Moderately new resident of Indian Harbour Beach (5 - 9 years)	18.25%	77
Long-time resident of Indian Harbour Beach (10+ years)	34.12%	144
Resident of another city or town who works in Indian Harbour Beach	5.92%	25
Business-owner in Indian Harbour Beach	4.98%	21
Property-owner in Indian Harbour Beach	17.06%	72
Other (please specify)	24.41%	103
Total Respondents: 422		

## Q2 Please select the age range that best applies to you.

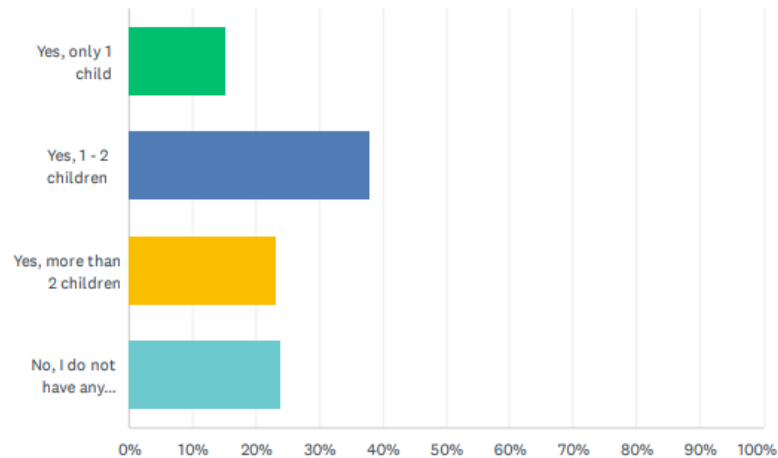
Answered: 422 Skipped: 0



ANSWER CHOICES	RESPONSES	
12 years old or younger	1.42%	6
13 to 19 years old	1.90%	8
20 to 34 years old	19.43%	82
35 to 49 years old	55.92%	236
50 to 64 years old	16.82%	71
65 years old or older	4.50%	19
TOTAL		422

### Q3 Do you have any children (under the age of 18) in your household?

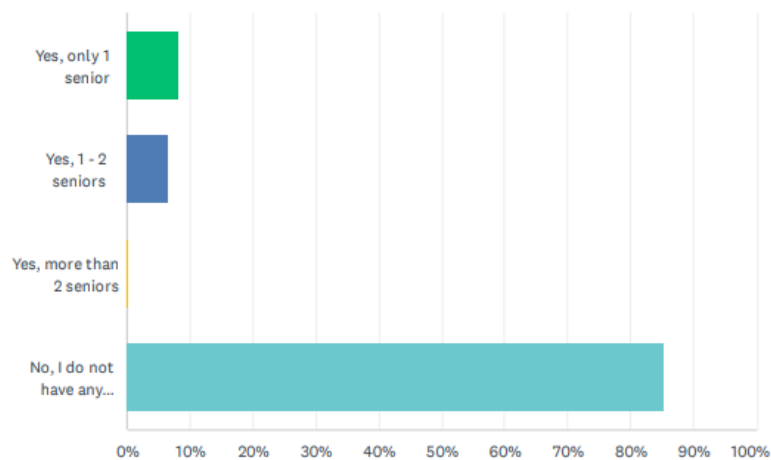
Answered: 422 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes, only 1 child	15.17%	64
Yes, 1 - 2 children	37.91%	160
Yes, more than 2 children	22.99%	97
No, I do not have any children in my household	23.93%	101
<b>TOTAL</b>		<b>422</b>

### Q4 Do you have any seniors (65-years-old or older) in your household?

Answered: 422 Skipped: 0

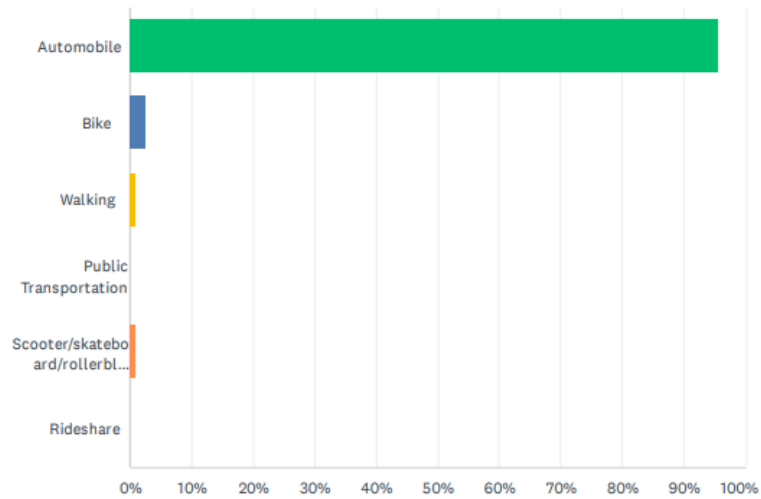


ANSWER CHOICES	RESPONSES	
Yes, only 1 senior	8.06%	34
Yes, 1 - 2 seniors	6.40%	27
Yes, more than 2 seniors	0.24%	1
No, I do not have any seniors in my household	85.31%	360
<b>TOTAL</b>		<b>422</b>



## Q5 What is your primary form of transportation?

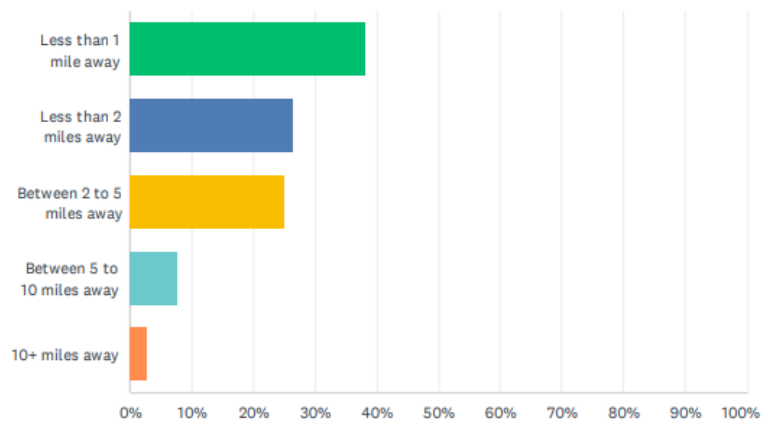
Answered: 422 Skipped: 0



ANSWER CHOICES	RESPONSES	
Automobile	95.50%	403
Bike	2.61%	11
Walking	0.95%	4
Public Transportation	0.00%	0
Scooter/skateboard/rollerblading	0.95%	4
Rideshare	0.00%	0
TOTAL		422

## Q6 How far away do you live from the Algonquin Sports Complex?

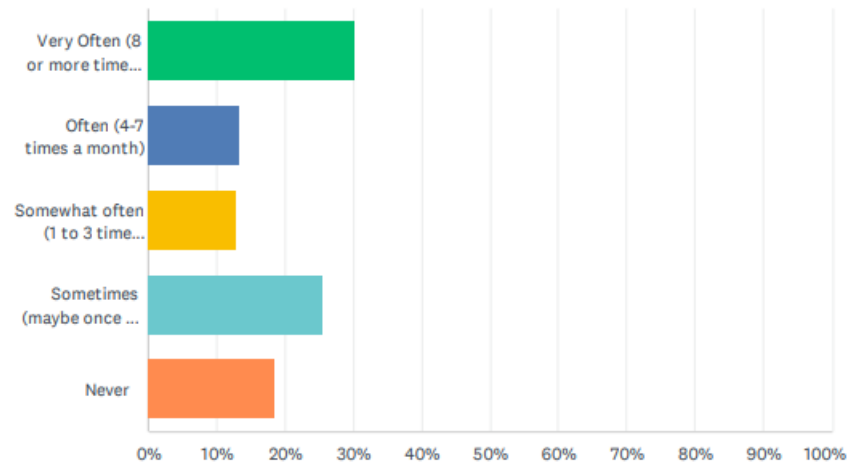
Answered: 422 Skipped: 0



ANSWER CHOICES	RESPONSES	
Less than 1 mile away	38.15%	161
Less than 2 miles away	26.54%	112
Between 2 to 5 miles away	24.88%	105
Between 5 to 10 miles away	7.58%	32
10+ miles away	2.84%	12
TOTAL		422

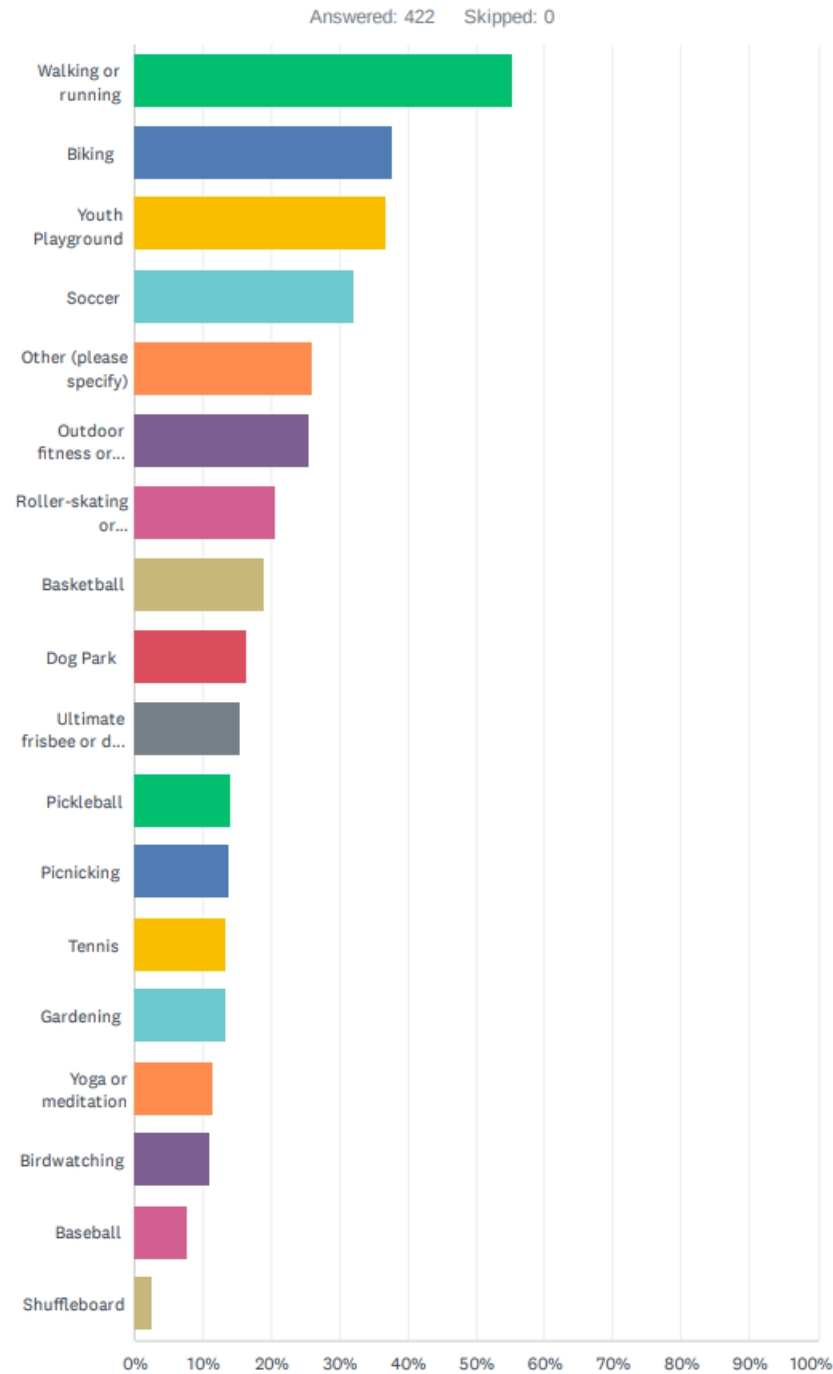
## Q7 How frequently do you visit the Algonquin Sports Complex?

Answered: 422 Skipped: 0



ANSWER CHOICES	RESPONSES	
Very Often (8 or more times a month)	30.33%	128
Often (4-7 times a month)	13.27%	56
Somewhat often (1 to 3 times a month)	12.80%	54
Sometimes (maybe once a month or just for events)	25.36%	107
Never	18.25%	77
<b>TOTAL</b>		<b>422</b>

Q8 Of the following outdoor activities, what are your favorite outdoor hobbies that could be incorporated into enhancements at the undeveloped portion of the park? You may select up to five options.

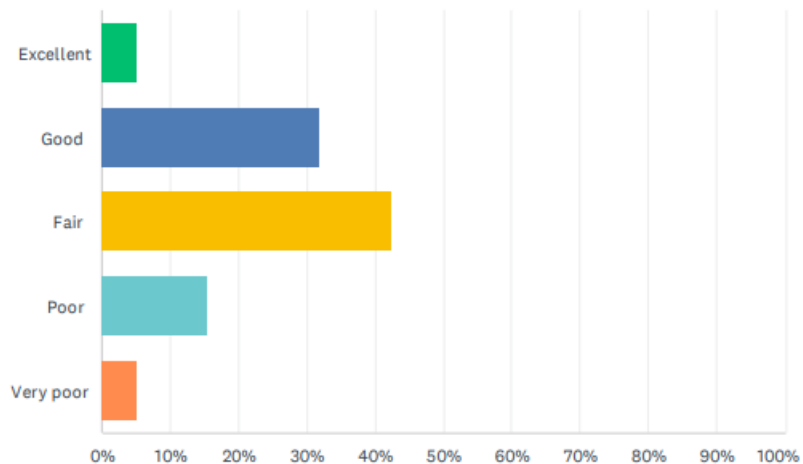




ANSWER CHOICES	RESPONSES	
Walking or running	55.21%	233
Biking	37.68%	159
Youth Playground	36.73%	155
Soccer	31.99%	135
Other (please specify)	26.07%	110
Outdoor fitness or workouts	25.36%	107
Roller-skating or skateboarding	20.38%	86
Basketball	18.96%	80
Dog Park	16.35%	69
Ultimate frisbee or disk golf	15.40%	65
Pickleball	13.98%	59
Picnicking	13.74%	58
Tennis	13.27%	56
Gardening	13.27%	56
Yoga or meditation	11.61%	49
Birdwatching	10.90%	46
Baseball	7.58%	32
Shuffleboard	2.61%	11
Total Respondents: 422		

## Q9 As it is now, how would you rate the user-friendliness of the Algonquin Sports Complex?

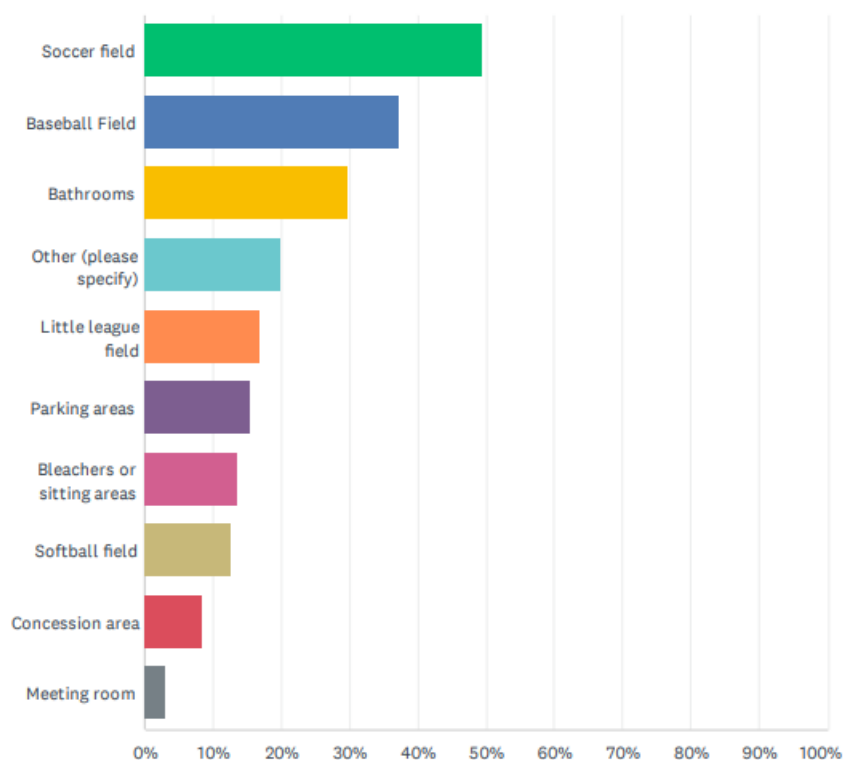
Answered: 422 Skipped: 0



ANSWER CHOICES	RESPONSES	
Excellent	5.21%	22
Good	31.75%	134
Fair	42.42%	179
Poor	15.40%	65
Very poor	5.21%	22
<b>TOTAL</b>		<b>422</b>

## Q10 Of the following, what are the top three features you like most about the Algonquin Sports Complex?

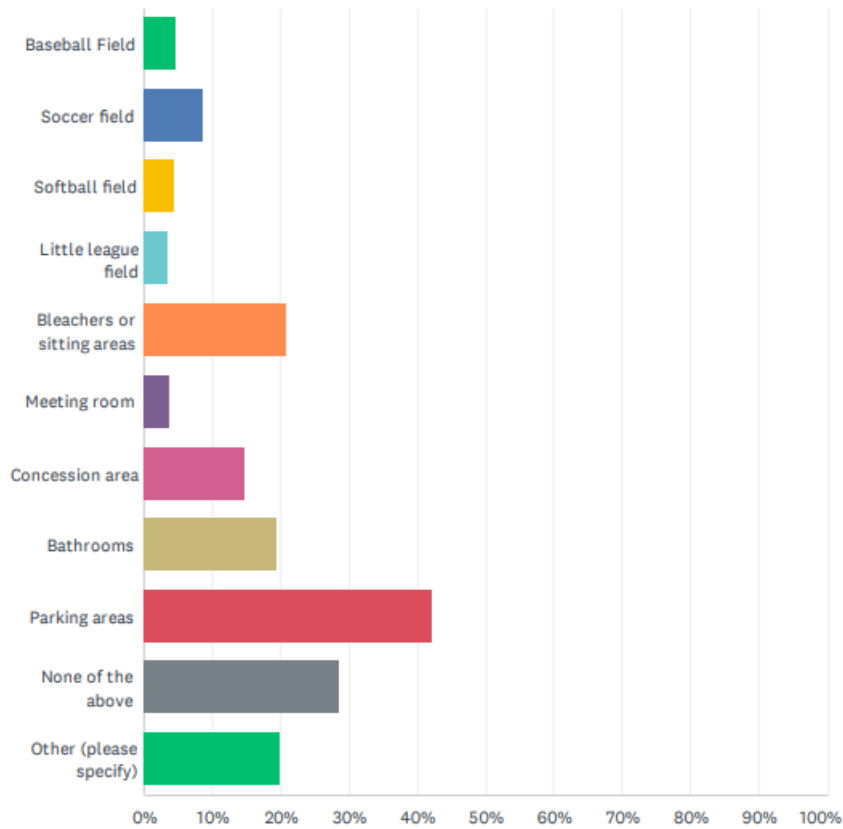
Answered: 422 Skipped: 0



ANSWER CHOICES	RESPONSES	
Soccer field	49.53%	209
Baseball Field	37.20%	157
Bathrooms	29.62%	125
Other (please specify)	19.91%	84
Little league field	16.82%	71
Parking areas	15.40%	65
Bleachers or sitting areas	13.51%	57
Softball field	12.56%	53
Concession area	8.29%	35
Meeting room	3.08%	13
Total Respondents: 422		

## Q11 Of the following, what are the top three features you dislike about the Algonquin Sports Complex?

Answered: 422 Skipped: 0

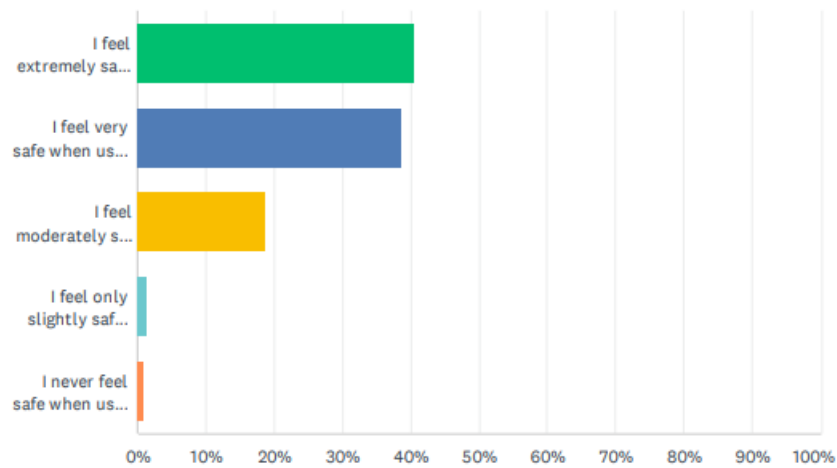


ANSWER CHOICES	RESPONSES	
Baseball Field	4.74%	20
Soccer field	8.53%	36
Softball field	4.50%	19
Little league field	3.32%	14
Bleachers or sitting areas	20.85%	88
Meeting room	3.55%	15
Concession area	14.69%	62
Bathrooms	19.43%	82
Parking areas	42.18%	178
None of the above	28.67%	121
Other (please specify)	19.91%	84
Total Respondents: 422		



## Q12 Please rate how safe you feel when participating in events at or using the Algonquin Sports Complex.

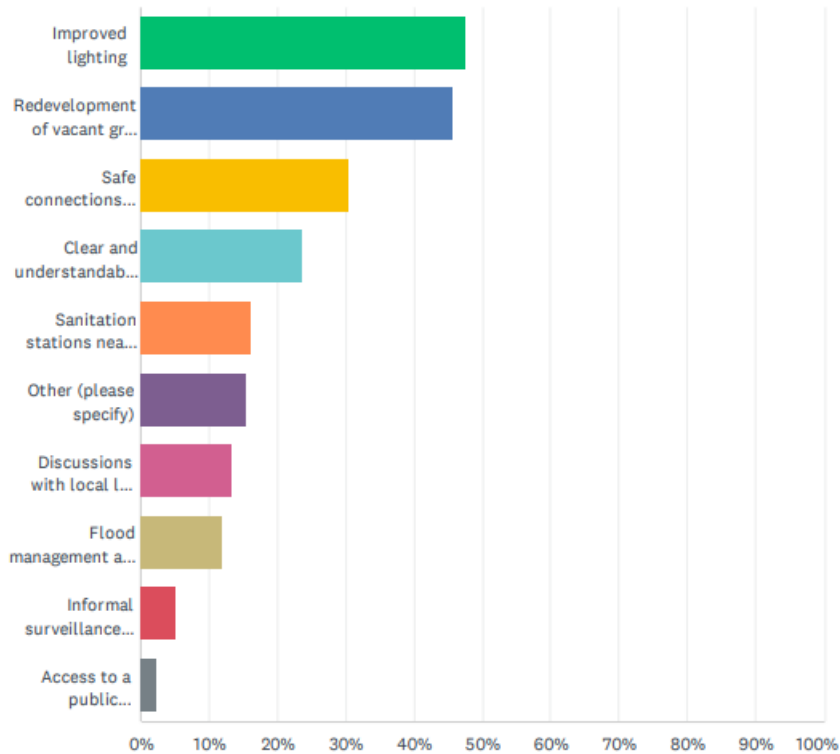
Answered: 422 Skipped: 0



ANSWER CHOICES	RESPONSES	
I feel extremely safe when using the park	40.52%	171
I feel very safe when using the park	38.63%	163
I feel moderately safe when using the park	18.72%	79
I feel only slightly safe when using the park	1.18%	5
I never feel safe when using the park	0.95%	4
TOTAL		422

**Q13 Of the following options, which do you believe will best help improve perceptions of safety, comfort, and quality at the Algonquin Sports Complex? You may select up to three options.**

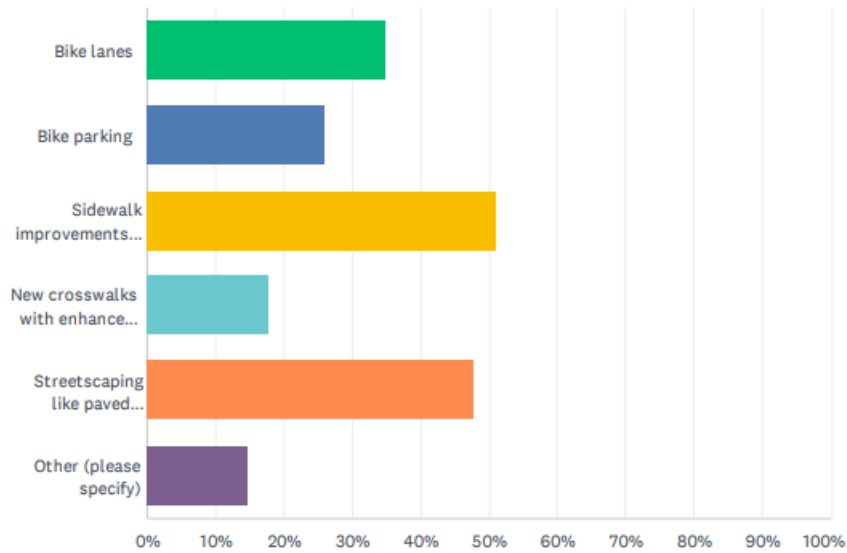
Answered: 422 Skipped: 0



ANSWER CHOICES	RESPONSES	
Improved lighting	47.63%	201
Redevelopment of vacant green spaces	45.73%	193
Safe connections (such as crosswalks) to and from the park	30.57%	129
Clear and understandable signage to help direct visitors	23.70%	100
Sanitation stations near concessions and sitting areas	16.11%	68
Other (please specify)	15.40%	65
Discussions with local law enforcement on how to enhance traffic enforcement near and around the park	13.27%	56
Flood management and stormwater improvements	11.85%	50
Informal surveillance tactics such as creating a "Park Watch" group	5.21%	22
Access to a public telephone	2.37%	10
Total Respondents: 422		

**Q14 Which of the following improvements or strategies do you think would best improve connectivity and accessibility in and near the Algonquin Sports Complex? You may select up to three options.**

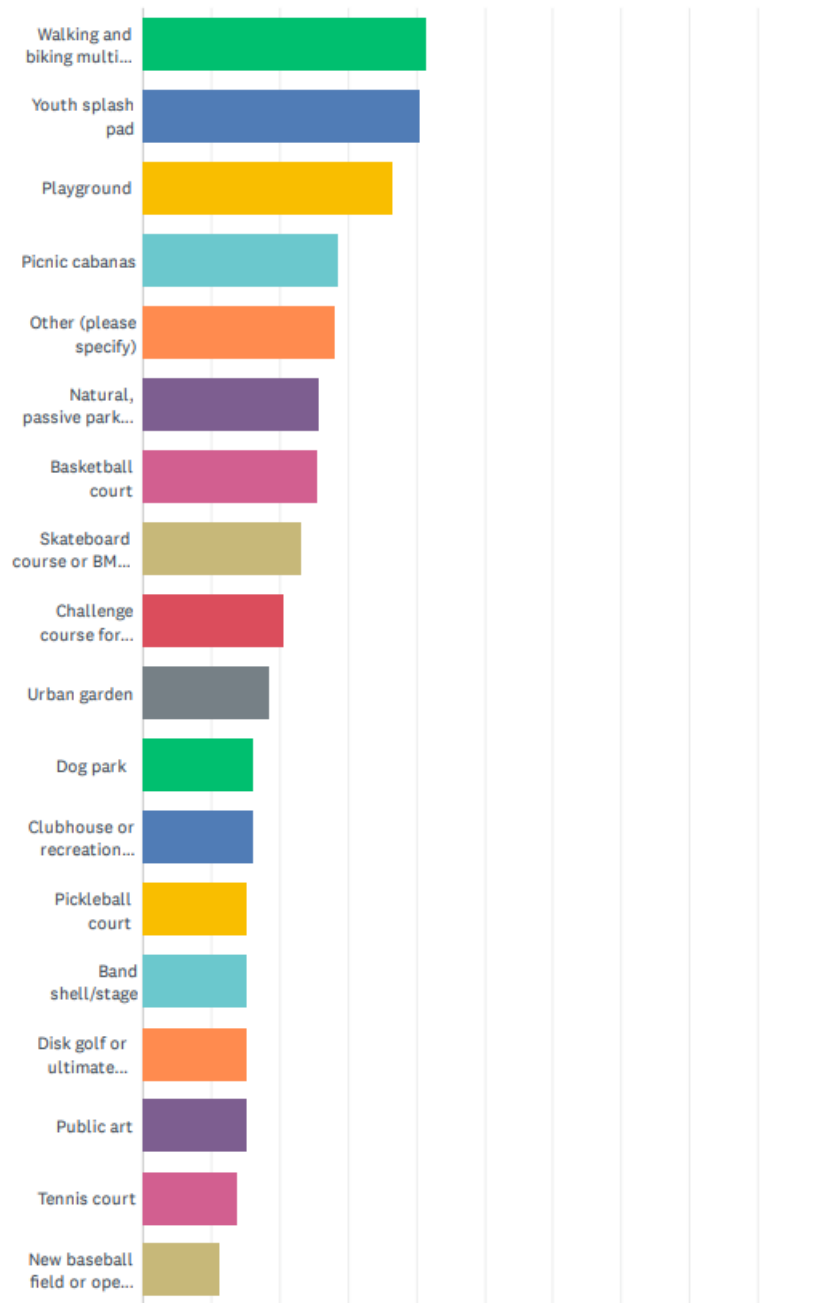
Answered: 422 Skipped: 0



ANSWER CHOICES	RESPONSES	
Bike lanes	34.83%	147
Bike parking	26.07%	110
Sidewalk improvements or new sidewalks	50.95%	215
New crosswalks with enhanced pedestrian signals on major adjacent roadways	17.77%	75
Streetscaping like paved shoulders, street medians, shade trees, and raised crosswalks	47.87%	202
Other (please specify)	14.69%	62
Total Respondents: 422		

Q15 Of the following, which amenities would you like to see added or improved at the Algonquin Sports Complex? Check all that apply.

Answered: 422 Skipped: 0

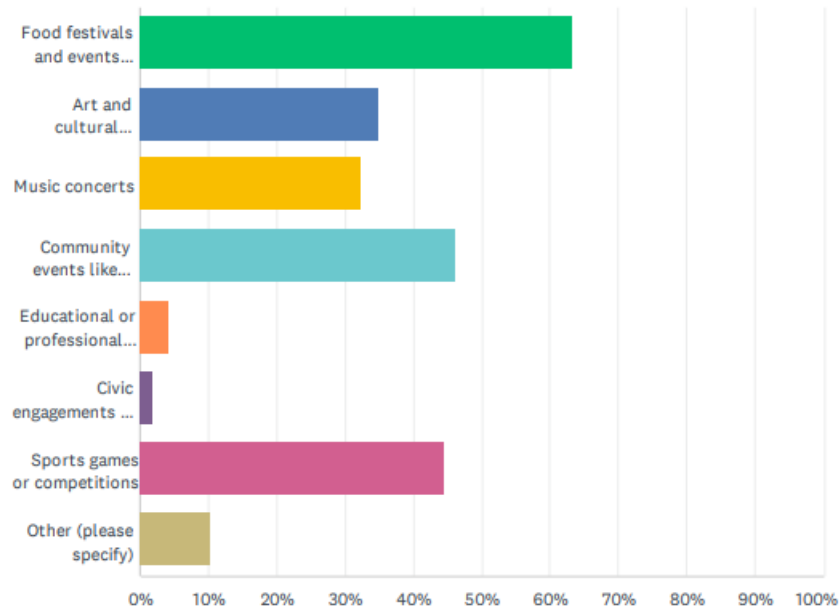




ANSWER CHOICES	RESPONSES	
Walking and biking multiuse trail	41.47%	175
Youth splash pad	40.52%	171
Playground	36.49%	154
Picnic cabanas	28.67%	121
Other (please specify)	28.20%	119
Natural, passive park areas	25.83%	109
Basketball court	25.36%	107
Skateboard course or BMX course	23.22%	98
Challenge course for youth sports programs	20.38%	86
Urban garden	18.48%	78
Dog park	16.11%	68
Clubhouse or recreation center	16.11%	68
Pickleball court	15.17%	64
Band shell/stage	15.17%	64
Disk golf or ultimate frisbee course	15.17%	64
Public art	15.17%	64
Tennis court	13.74%	58
New baseball field or open sports field	11.37%	48
Tabletop games (chess, checkers, etc.)	7.58%	32
Shuffleboard court	3.79%	16
Total Respondents: 422		

**Q16 Of the following, which activities would you like to see occur at the Algonquin Sports Complex? You may select up to three options.**

Answered: 422 Skipped: 0



ANSWER CHOICES	RESPONSES	
Food festivals and events (including food trucks)	63.03%	266
Art and cultural festivals and events	34.83%	147
Music concerts	32.23%	136
Community events like National Night Out, Trunk or Treat, and Christmas in the Park	45.97%	194
Educational or professional growth events	4.03%	17
Civic engagements and meetings	1.66%	7
Sports games or competitions	44.55%	188
Other (please specify)	10.19%	43
Total Respondents: 422		

Q17 When considering the features and amenities of the Algonquin Sports Complex, what would you say is the top area of improvement that would make the park more user-friendly?

pump track multiple games trees N time great going Make IHB kids Currently  
 shaded areas options Dog park baseball pedestrian old trails don't paved  
 baseball fields Paved parking Basketball courts Accessibility east side shade  
 Keep parking area youth Better parking friendly events Improved  
 open facilities lighting Something soccer football sports lot  
 soccer fields Concession fields residents access features  
 areas See Parking families Better Seating  
 activities walkways use locked playground walking bike  
 sidewalks accessible needs DeSoto parking lot one bike play  
 space clean walking trail Build walking golf cart signage green space  
 bathrooms Football fields running Improved Parking children gates sides covered  
 Additional entrances Splash pad drive paths nature safe variety community live add  
 users car lanes Na walking path

Q18 In your opinion, what features, amenities, or themes could be incorporated into the park redevelopment to support or enhance the existing character of the City? Examples include playgrounds, urban gardening, natural green spaces and trails, or public art highlighting the history/culture of the City.

walking biking trails beach volleyball courts bike trails better parking Green spaces  
 Running trail picnic tennis courts added incorporated also skateboarding Na town see outdoor  
 walking trail animals bike Yes Community think N education Beach many trees  
 history local fitness pump track enjoy art good garden keep kids space  
 park Football field Urban gardening Basketball courts  
 trails friendly area play Playground walking  
 Natural green spaces family  
 Splash pad amazing green spaces trails  
 shade trees public art disc golf course  
 Playground splash pad things natural place shaded  
 activities soccer fields Gleason need skate park great little nice children  
 walking paths nature city help events seating fields along sports theme courts  
 something path lighted lot love Football Satellite Beach native plants children play dog park  
 walking running trail public

Q19 When considering the health and wellness of your community, what amenities or features do you think could be incorporated into the park redevelopment to support improved community health and quality of life? Please explain.

large provides Running lagoon options close green space friendly track Skatepark  
 Walking Biking recreational Gleason Park Maybe places walking biking paths  
 nice workout stations splash pad urban garden See Picnic area Biking children  
 Exercise equipment adults families benches great healthier need  
 natural play kids good local sports lighted exercise desoto  
 shade shaded areas N exercise trail Walking path native  
 trails access park Make area Workout  
 Walking trails something community skate park  
 activities Bike trails walking None field public space  
 garden fitness clean Na encourage playground residents  
 bathrooms indoor pump track Sidewalks ages Football outdoor  
 Satellite Beach also Bike paths stations Walking running biking trees water  
 equipment paths sure allow Water fountains bicycles Walking biking trails use  
 health Hand sports fields signs improved small help facilities

Q20 In your own words, please tell us anything else you think is significant about the park or needs to be considered during the redevelopment of the Algonquin Sports Complex.

improvements increase natural Incorporating time team sports complex festivals lighting  
 will space walk love s additional trees consider basketball courts nice day residents  
 younger splash pad games playground Keep Please consider lot open near  
 complex already see shade Thank football field Na really make training  
 use facilities kids activities N think fields one area Build  
 park parking lot need features sports IHB  
 soccer fields traffic community library soccer  
 improve parking good Better parking add etc Please many place art  
 safe development access cooling play safety children program None current  
 bathrooms field lights ages new amenities families public Currently lived without also  
 practices much people great football events center help enjoy