UNIVERSITY OF GEORGIA
Carl Vinson Institute of Government

Designing to Restore a Vital Shoreline

Helen Cooper Floyd Park Visitor Survey Report

August 2025

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Executive Summary

In 2021, the North Florida Transportation Planning Organization determined that the Helen Cooper Floyd Park shoreline, located along the St. Johns River in northeast Florida, was at-risk for coastal flooding and erosion. This assessment specifically focused on threats to Florida State Road A1A, a critical corridor running parallel to the shoreline. In an effort to counter threats of coastal erosion in this area, the University of Georgia Defense Community Resilience Program, with funding from the National Fish and Wildlife Foundation and the United States Department of Defense's Readiness and Environmental Protection Integration Program, collaborated with survey researchers at the University of Georgia Carl Vinson Institute of Government to administer a survey to community members of Mayport, FL. The 32-item survey solicited feedback from respondents to understand their experiences with and thoughts about the Helen Cooper Floyd Park shoreline, their level of concern regarding coastal erosion, and their level of support or opposition to various coastal erosion protection strategies.

Between November 15, 2024, and June 23, 2025, project team members collected survey data utilizing in-person recruitment of visitors along the shoreline; door-to-door recruitment of residents of the Mayport Village neighborhood, a waterfront community off State Road A1A; and postcard invitations to Mayport Village residents as well as to residents of a nearby subdivision, Mayport Landing. Eighty-five (N=85) respondents completed the survey – 48% resided in the Mayport Village neighborhood.

Results reveal high frequency of visitation to the shoreline among respondents, as well as frequent usage of the State Road A1A corridor. Most respondents expressed concern about coastal erosion along the shoreline. When rating coastal erosion protection interventions,

respondents were likely to favor nature-based strategies that restore vegetation and build up the beach area, while also favoring structural strategies like groin structures and rock armoring that promote marine life habitation and do not hinder recreational activities. In total, the results in this report provide evidence of community support for strategies that are conducive to ecological preservation, while maintaining human access to the shoreline.

Summary of Major Findings

Shoreline Visitation Patterns

- 65% of respondents reported visiting the shoreline at least once a month
    - A plurality (31%) reported visiting several times a week
- The most frequent activities reported on the shoreline include fishing and spending time with others (48% for both)
- 58% of respondents reported traveling on State Road A1A near the shoreline every day for purposes other than visiting Helen Cooper Floyd Park

Perceptions of Shoreline

- 80% of respondents rated the water at the shoreline to be at least somewhat safe
    - Only 39% rated the water as very or extremely safe
- 78% agreed or strongly agreed that the shoreline is a family-friendly space
- Regarding satisfaction with the environmental characteristics of the shoreline, respondents were most satisfied with the natural beauty or scenery (69%)
    - Respondents were most *dissatisfied* with the cleanliness of the shoreline (51%)

Awareness and Concern About Coastal Erosion

- 84% of respondents were at least somewhat concerned about coastal erosion
- Concern about coastal erosion increased for 69% of respondents in the past five years
- 85% of respondents reported an increase in concern about coastal erosion in the area after viewing two Google Street View™ images of the shoreline from 2013 and 2024
- Respondents reported being equally concerned about coastal erosion damaging both the roads and the shoreline (60%)
    - Slightly more respondents reported greater concern about damage to the shoreline (25%) compared to damage to the roads (15%)
- 60% of Mayport Village respondents reported being very concerned about coastal erosion affecting their ability to get to and from their homes

Support for Coastal Resiliency Strategies

- For nature-based interventions, respondents primarily supported efforts to restore vegetation to the shoreline (93%) and to bring in sand to build up the beach and dunes (81%)
- Regarding structural interventions, respondents reported the greatest support for groin structures (83%) and rock armoring (64%).
    - Support for seawalls or retaining walls (42%) was only slightly higher than the opposition for these structures (37%)
- Most respondents believed it is very important that any implemented structures provide habitats for marine life (69%) and blend in with the natural environment (55%)

Introduction

In response to increased risk of rising sea level, severe flooding, and coastal erosion on the banks of the St. Johns River in northeast Florida, particularly along the shoreline of the Helen Cooper Floyd Park (also known locally as "Little Jetties"), the University of Georgia Defense Community Resilience Program (UGA-DCRP) proposed a plan to evaluate engineering designs that may be implemented in order to stabilize up to 2,000 feet of this shoreline. In addition to shoreline restoration and stabilization, UGA-DCRP's other objective was to protect access to Florida State Road A1A, which runs parallel to the shoreline of interest. State Road A1A is a critical road to accessing Naval Station Mayport and Mayport Village, a historic working waterfront community that includes commercial and residential locations. The Mayport Resiliency Assessment, conducted by the North Florida Transportation Planning Organization, identified the segment of State Road A1A closest to the area of interest as the most significant concern of all road segments assessed surrounding Naval Station Mayport.[1]

Funded by the National Fish and Wildlife Foundation (NFWF) and the United States Department of Defense's Readiness and Environmental Protection Integration (REPI) Program, the current planning and design project was intended to identify the most resilient approaches to stabilize the Helen Cooper Floyd Park shoreline. A foundational goal in this stabilization effort was to protect State Road A1A from wave and water current energy, while also encouraging biodiversity by restoring appropriate vegetation communities and habitats. As part of this initiative, the project team believed community engagement would be essential to its planning. The UGA-DCRP collaborated with researchers at the University of Georgia Carl Vinson Institute

[1] North Florida Transportation Planning Organization, *Mayport Resiliency Assessment*, retrieved from https://storymaps.arcgis.com/stories/29175996c2074fa1ab48a296831d6722

of Government (Institute of Government) to design a survey instrument to administer to residents of Mayport Village as well as to active visitors to the Helen Cooper Floyd Park shoreline with the intent to understand how community members utilize and value the shoreline area and their perception of prospective design alternatives.

Methodology

Project team members designed a 32-item survey to administer to Mayport Village residents and users of the Helen Cooper Floyd Park shoreline. Items on the instrument primarily addressed themes related to 1) shoreline visitation patterns, 2) perceptions of the shoreline, 3) awareness and concern about coastal erosion, and 4) support for different coastal resiliency strategies. Due to the survey's length and use of numerous design images included in the survey, the project team opted to program the instrument utilizing the Qualtrics® online survey software. The complete survey instrument is located in Appendix A.

Because the population of interest included both residents of Mayport Village as well as non-residents that frequented the shoreline, project team members implemented two survey recruitment and administration methods. First, to recruit potential non-residents of Mayport Village on the shoreline, survey administration included the use of an intercept method. In this approach, members of the project team set up a survey administration station on the shoreline to recruit passing visitors as well as walking the shore to engage with visitors. Prospective respondents could choose whether to complete the online survey immediately using a provided electronic tablet or could complete the survey later by accessing a custom URL or QR code linking to the survey. Visitors were encouraged to take a paper flyer, which included the QR code and survey URL, to share with others.

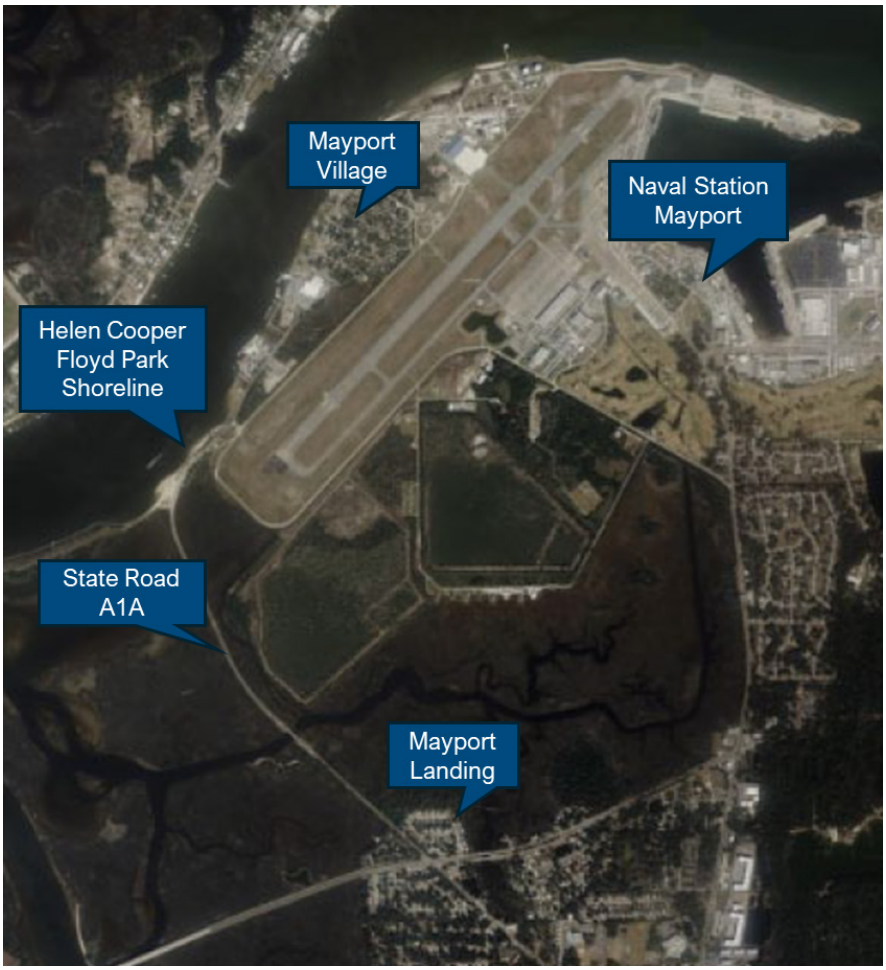
To recruit residents of Mayport Village, project team members compiled a list of 112 street addresses comprising Mayport Village's residential households, then assigned each household a four-digit access code to allow project members to track responses. Members of the project team conducted in-person, door-to-door survey administration for each residential location, offering residents the ability to complete the survey at the time of intercept using a provided electronic tablet or to take a flyer and complete it later.

Data collection began November 15, 2024, with two project team members visiting the Helen Cooper Floyd Park shoreline to recruit respondents. On November 23, 2024, two additional project team members visited the Mayport Village residential subdivision using the door-to-door recruitment method. During this same wave of data collection, project members visited the Helen Cooper Floyd Park shoreline for additional recruitment and distributed flyers to two local food establishments near the shoreline. By the end of the 2024 calendar year, 38 respondents had completed the survey. To intercept more shoreline visitors during warmer months and to comply with emerging orders regarding projects utilizing federal funds, the project team postponed additional data collection until spring 2025. In the intermediary time, the Mayport Waterfront Partnership included the survey URL in their newsletter sent to members of the Mayport Village community. On April 12, 2025, in-person data collection resumed with two project team members returning to the Helen Cooper Floyd Park shore for recruitment.

To supplement in-person intercept recruitment, the project team designed survey invitation postcards to mail to Mayport Village households who had not yet responded to the survey. To further boost response rates, project team members included two additional residential subdivisions from the Mayport Landing neighborhood to the recruitment sample. Mayport Landing is located near the shoreline along State Road A1A and is host to 357 residential

households (Figure 1). On April 18, 2025, project team members sent postcards to all 357 Mayport Landing households and to 80 Mayport Village households that had not yet completed the survey. Residents from Mayport Village and Mayport Landing received a second wave of postcards mailed May 23, 2025, reminding them to complete the survey. Project team members officially ended data collection on June 23, 2025.

Figure 1: Map of Mayport area near shoreline



Survey Response

By the survey close date, 77 respondents had completed the survey. An additional 28 respondents partially completed the survey, bringing the initial total of all respondents to 105. From the postcard mailings, 17 postcards addressed to Mayport Village households and 37 addressed to households in Mayport Landing could not be delivered, resulting in an adjusted total of 95 Mayport Village households and 320 Mayport Landing households. By survey close, 28 Mayport Village households and 21 Mayport Landing households had responded to the survey. Three households (two from Mayport Village and one from Mayport Landing) had two survey responses each, possibly denoting multiple occupants of the same household completing the survey. In total, the final response rates are 30% for Mayport Village households and 7% for Mayport Landing households. After accounting for partially completed surveys that contained insufficient data, the final adjusted response total for the survey was 85 respondents. Most responses (62%) resulted from door-to-door canvassing or postcard recruitment.

Item Non-Response

The total sample for this study is reported as N=85. However, this total may not be represented in every question or variable displayed in this report. Some respondents who completed the survey may have chosen not to answer specific questions, resulting in item non-response. In such cases, the total response reported will be less than the total sample (i.e., N=85). Thus, each table and figure provided in this report includes the total number of responses per item.

Survey Findings

The following sections present the full results from the survey. This report groups survey findings into themes based on survey item content. Numerical values, where shown, are rounded to the nearest whole number – due to this rounding, some percentages in this report may not total 100%. All tables and figures in this report are accompanied by the number of survey respondents answering that survey item. Data tables for each survey item are presented in Appendix B.

Respondent Demographics

The primary population of interest for this project included residents of the Mayport Village neighborhood as well as visitors to the Helen Cooper Floyd Park shoreline. Of the 85 total survey respondents, 69 (81%) provided a ZIP code or other address-based information for their primary residence. Of these, the majority (86%) resided in Atlantic Beach, FL, the postal district encompassing Mayport (Table 1).

Regarding Mayport residence, 54% of all respondents reported living in the Mayport Village neighborhood at the time of data collection. However, this percentage did not align with other data, particularly assigned household access codes. To address this inconsistency, project team members reviewed responses from participants recruited via postcards and door-to-door outreach, using the access codes to verify neighborhood classification. Based on this review, the team determined that 48% of respondents actually resided in Mayport Village, as defined by the project team (Figure 2; Table 2). This discrepancy likely reflects a difference between how local residents conceptualize the boundaries of Mayport Village and the definition used by the project team.

The correction to the responses mentioned above also required a correction for the subsequent survey item, which asked Mayport Village residents to indicate the length of their

residency in the neighborhood. Five responses were removed from this item after it was determined that those respondents had provided access codes corresponding to Mayport Landing rather than Mayport Village. Among those validated as Mayport Village residents, 68% reported residing in Mayport Village for 10 years or less, while almost a quarter (24%) have lived there for over 20 years (Figure 3; Table 3). Among non-residents of Mayport Village, six (19%) reported previously living in Mayport Village, with half (50%, *N*=3) reporting they have not lived in Mayport Village for over 20 years (Tables 4 & 5). Overall, residents and non-residents alike primarily refer to the shoreline of interest as "Little Jetties" (89%) (Table 6).

Figure 2: Percentage of respondents residing in Mayport Village (*N*=85)

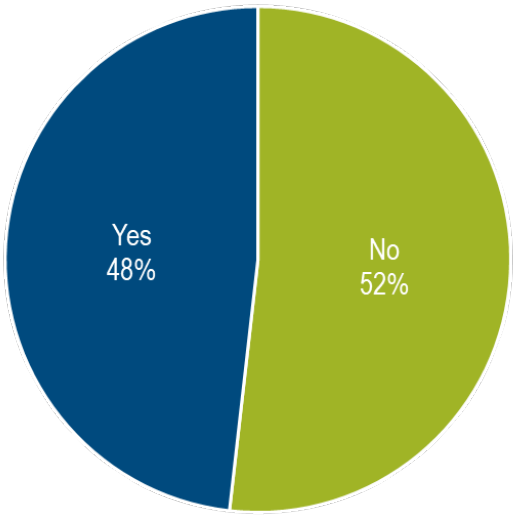
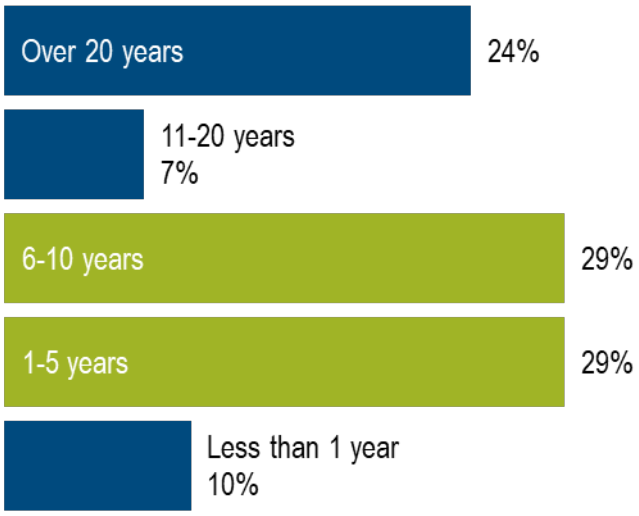


Figure 3: Length of residency in Mayport Village (*N*=41)



Note: Only respondents reporting they currently live in Mayport Village responded to this survey item

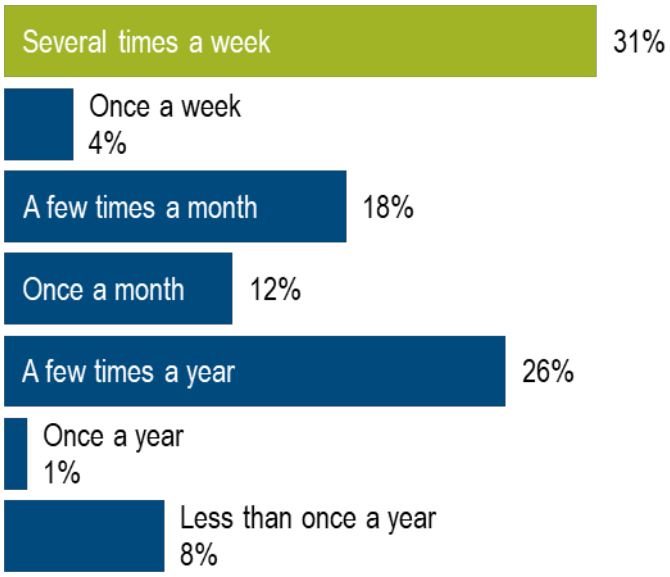
Given the project area's proximity to Naval Station Mayport, the project team was interested in the number of active service members participating in the survey. While 13 respondents (25%) reported being a military veteran, only four respondents (5%) reported currently serving in the military; of the four, only one respondent reported being stationed at Naval Station Mayport (Tables 7 & 8). Therefore, the findings in this report overwhelmingly reflect the perspective of civilians in the Mayport area.

Additional survey items gathered further demographic information about respondents. Specifically, respondents provided information about their age, race/ethnicity, and gender identity. Overall, respondents were primarily White (86%), aged 55 and older (51%), and evenly split between men (47%) and women (45%) (Tables 9, 10, & 11).

Shoreline Visitation Patterns

This section presents findings from survey items measuring respondents' patterns of behavior and activities while visiting the Helen Cooper Floyd Park shoreline. First, the frequency of visitation varied across respondents, with a plurality (31%) reporting they visit the shoreline several times a week. Overall, most respondents (65%) visit the shoreline at least once a month (Figure 4; Table 12). Analyses showed no statistically significant difference in visitation frequency between individuals that lived in either Mayport Village or Mayport Landing and those that did not.

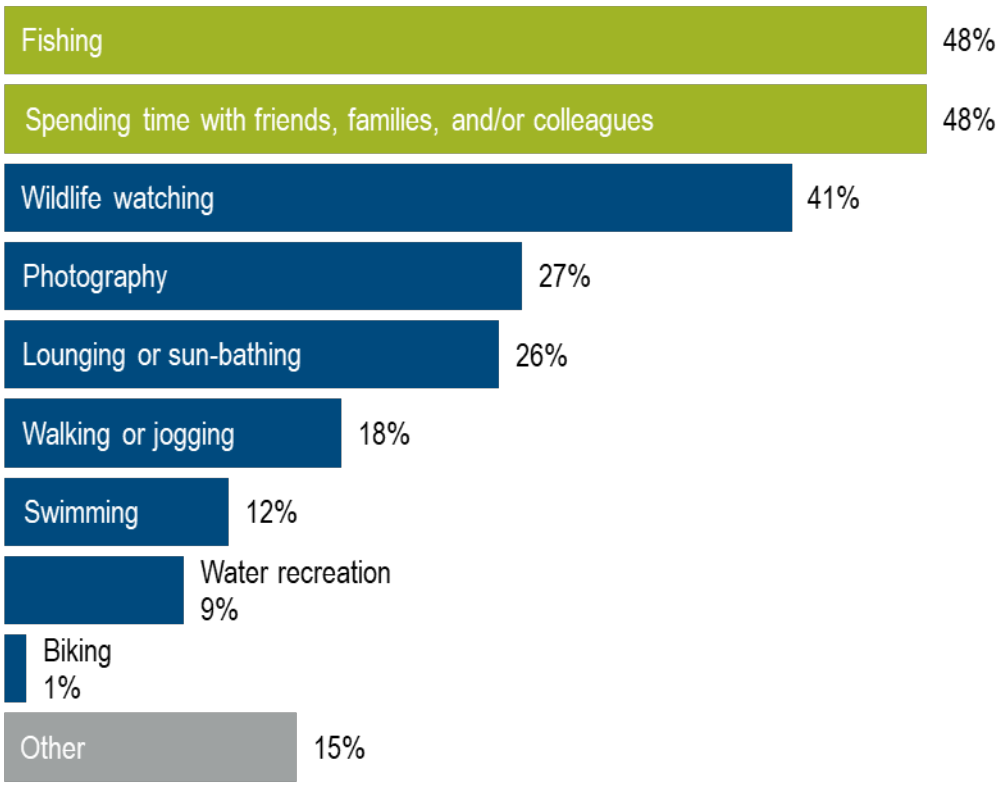
Figure 4: Frequency of visiting the shoreline (*N*=84)



The Helen Cooper Floyd Park offers many different opportunities for recreational activities on its shoreline. Survey respondents reported primarily visiting the shore to fish (48%) or to spend time with others (48%) (Figure 5; Table 13). A chi-square analysis revealed that men were more likely to report visiting the shore to fish (72%) compared to women (24%) ($\chi^2 = 16.60$, $p<.001$); relatively equal numbers of men (47%) and women (41%) reported visiting the shore to spend time with others. Thirteen respondents (15%) reported engaging in other activities

not listed. Of these, 12 provided written responses to the question, with answers including driving near the shore, watching sunsets, and bringing their dogs. When visiting the shore to engage in their preferred activities, equal numbers of respondents reported engaging in the activity with either one other person (44%) or within a group of two or more people (44%); only 13% of respondents prefer visiting the shoreline alone (Table 14).

Figure 5: Preferred activities while visiting the shoreline (*N*=85)

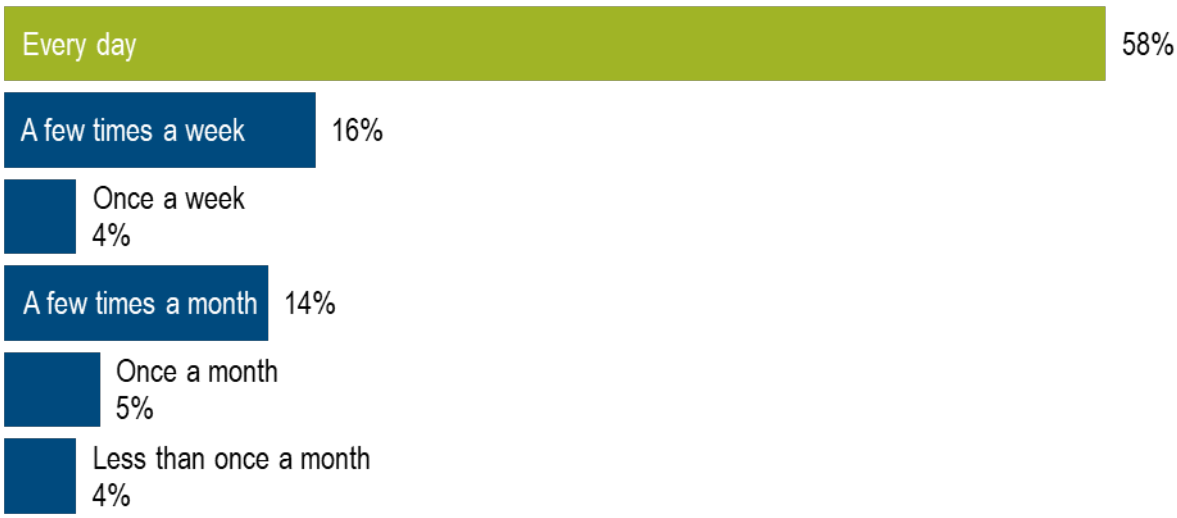


Note: Percentages do not equal 100% due to respondents' ability to select up to three activities

As stated earlier, a second goal for the project team was to implement protective measures on the shore to protect State Road A1A, which runs along the shoreline. Respondents reported their frequency of travel along this road past the shoreline for reasons other than visiting the shore. More than three-quarters (78%) of respondents reported traveling on State Road A1A at least once a week, with 58% reporting they travel along the road every day (Figure 6; Table

15). These findings suggest that many respondents are not only familiar with the shoreline but also rely on State Road A1A as part of their regular travel, highlighting a potential stake in the preservation and protection of this corridor.

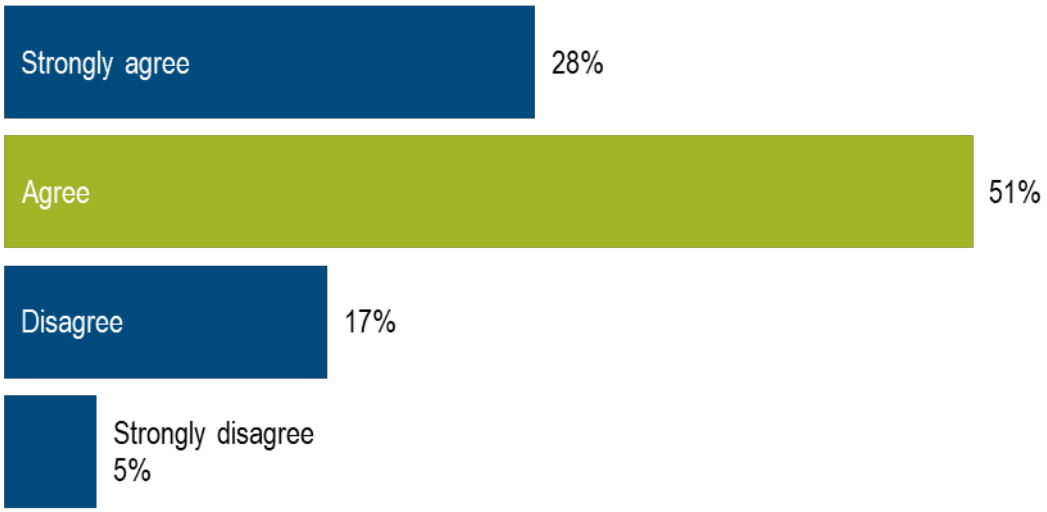
Figure 6: Frequency of travel on State Road A1A near the shoreline (*N*=80)



Perceptions of Shoreline

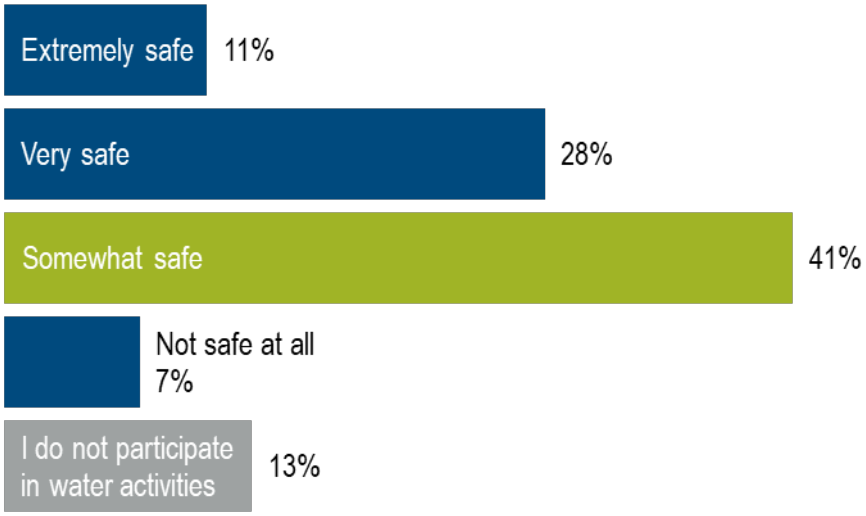
Three survey items allowed respondents to provide their feedback on the perceived safety and overall satisfaction of the shoreline. Overall, 79% of respondents agree or strongly agree the Helen Cooper Floyd Park shoreline is a family-friendly location (Figure 7; Table 16).

Figure 7: Level of agreement that the shoreline is family-friendly (*N*=83)



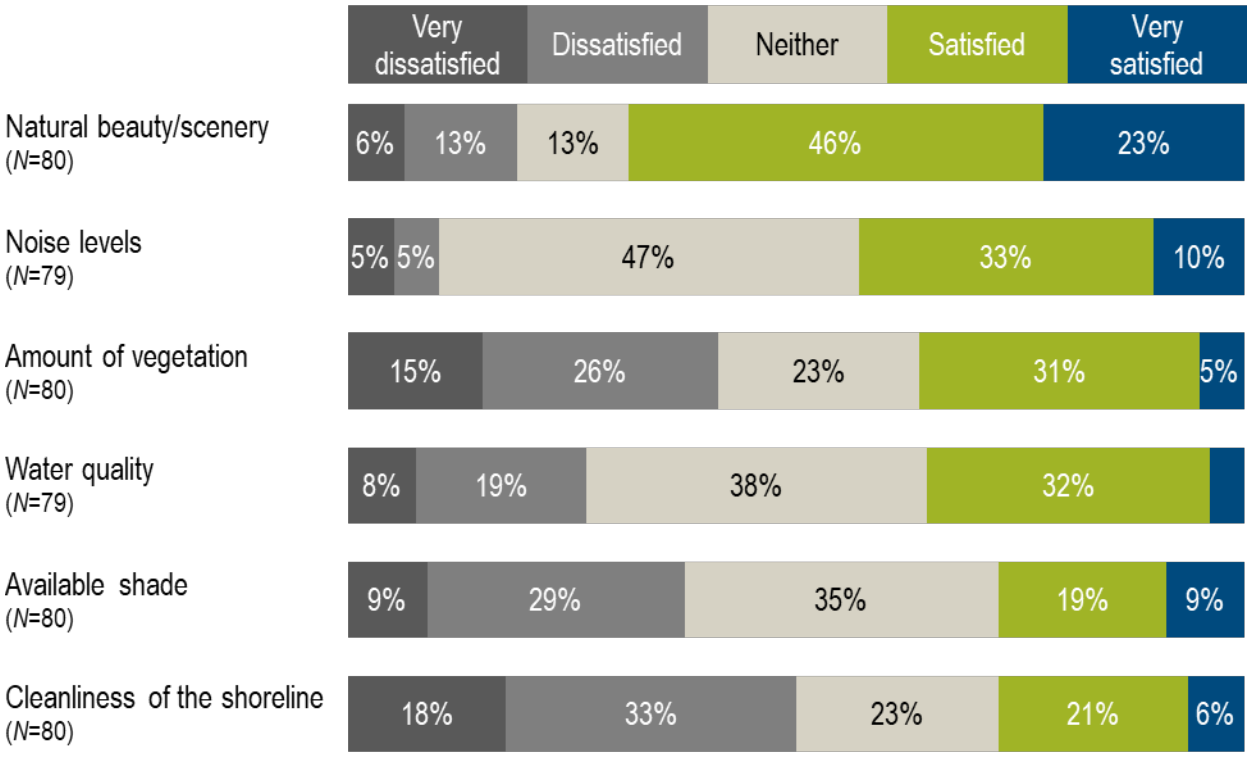
Regarding their perception of water safety, 80% of respondents reported feeling at least somewhat safe when participating in water-based recreation at the shore; however, respondents were less likely to report feeling very safe (28%) or extremely safe (11%) (Figure 8; Table 17). These results highlight at least modest concern about the depth, clarity, and/or current of the water of this shoreline.

Figure 8: Perceived safety of participating in water-based activities at the shoreline (*N*=85)



Similar to the findings mentioned above, when rating their satisfaction or dissatisfaction with six environmental features of the shoreline, only 36% of respondents reported being satisfied or very satisfied with the water quality (Figure 9; Table 18). The only feature rated satisfactorily by a majority of respondents was the natural beauty/scenery of the shoreline (69%). Fewer than 50% of respondents rated the remaining five features as satisfied or very satisfied. Respondents rated the cleanliness of the shoreline least satisfactorily (27%), with about half of respondents (51%) reporting being either dissatisfied or very dissatisfied with the cleanliness. While maintenance and upkeep efforts may be used to address issues of cleanliness, respondents' dissatisfaction with the amount of vegetation (41%), the availability of shade (38%), and the water quality (27%) of the shoreline may imply receptiveness to coastal resiliency interventions that address these concerns.

Figure 9: Level of satisfaction with environmental features of the shoreline



Awareness and Concern About Coastal Erosion

Prior to having respondents provide their feedback about various coastal resiliency strategies, individuals were asked about their awareness of and level of concern about coastal erosion, both generally and as it specifically relates to the Helen Cooper Floyd Park shoreline. Overall, respondents reported having at least moderate understanding of coastal erosion, with 50% reporting they could at least explain the concept; however, only four percent (4%) of respondents believe they are an expert on the subject (Figure 10; Table 19). When providing the source of their information about coastal erosion, respondents overwhelmingly identified their personal experience and observations as their primary source of information about coastal erosion (58%) (Figure 11; Table 20). For five respondents, written answers for the sources of their information regarding coastal erosion included school and internet searches.

Figure 10: Familiarity with coastal erosion (*N*=80)

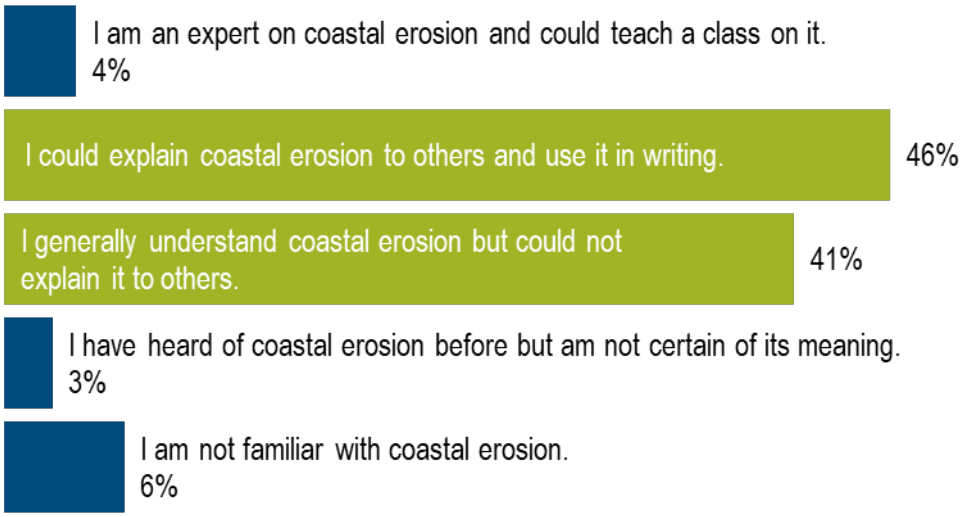
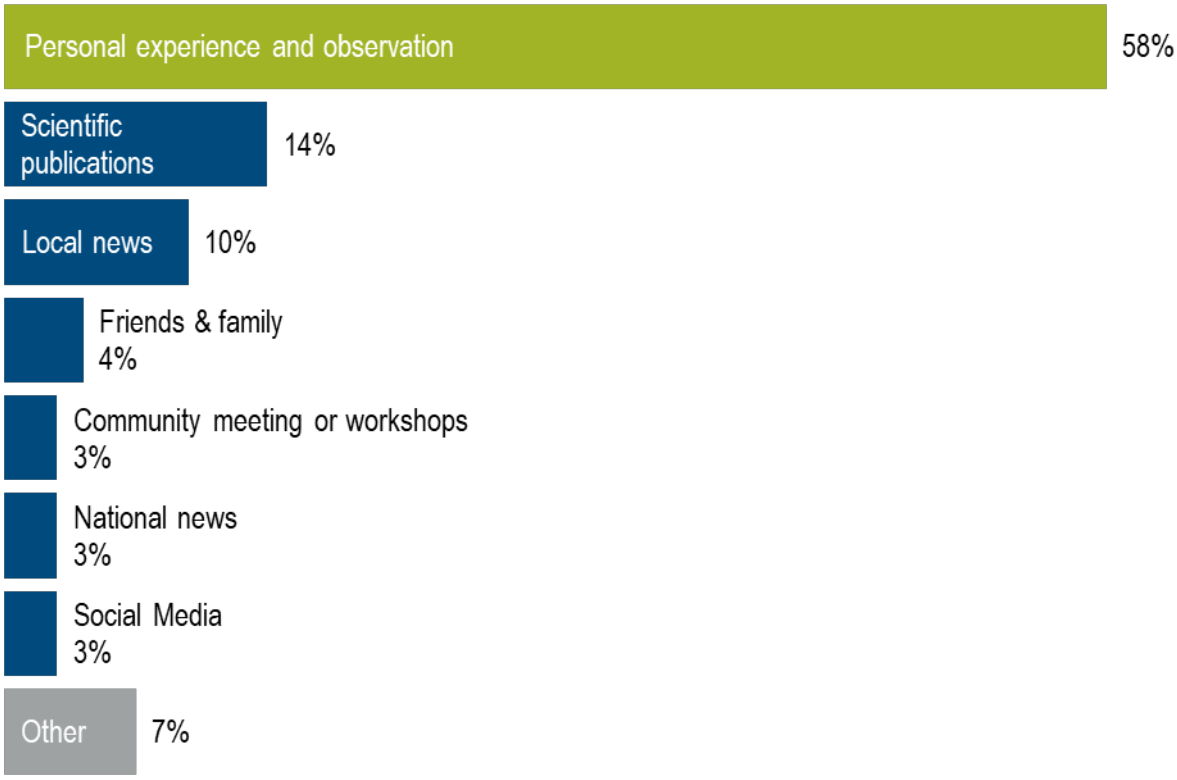


Figure 11: Primary source of information about coastal erosion (*N*=73)



Respondents answered a series of questions to assess their concern about coastal erosion along the Helen Cooper Floyd Park shoreline specifically. Overall, most respondents (84%) reported being at least somewhat concerned about coastal erosion along the project shoreline (Figure 12; Table 21). For most respondents (69%), this concern has increased in the past five years, with 42% reporting their concern has increased significantly in that time (Figure 13; Table 22).

Figure 12: Level of concern about coastal erosion along the shoreline (*N*=80)

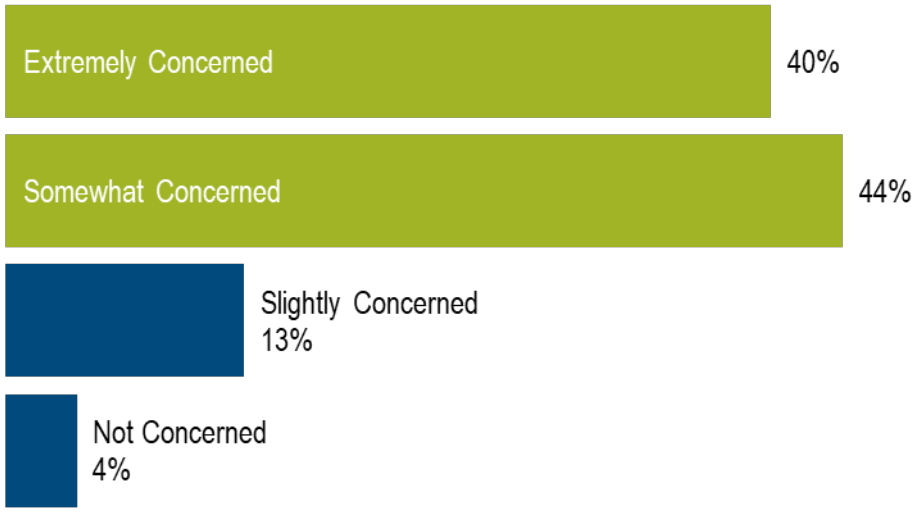
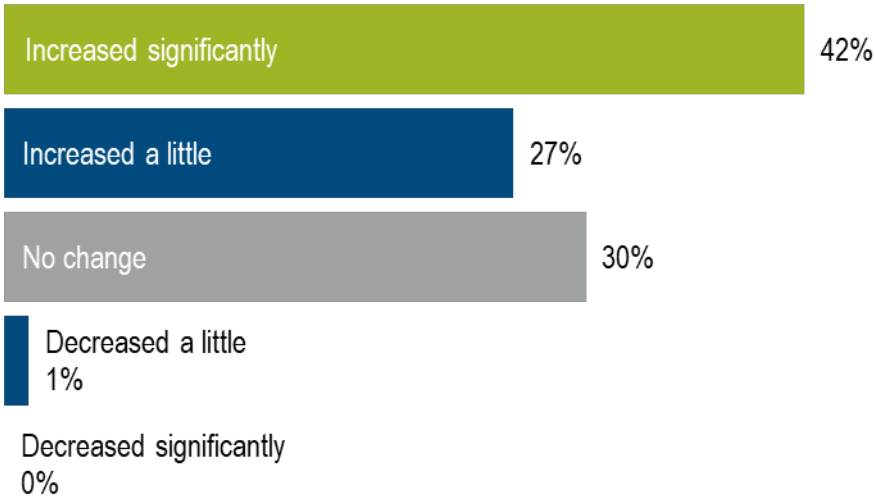


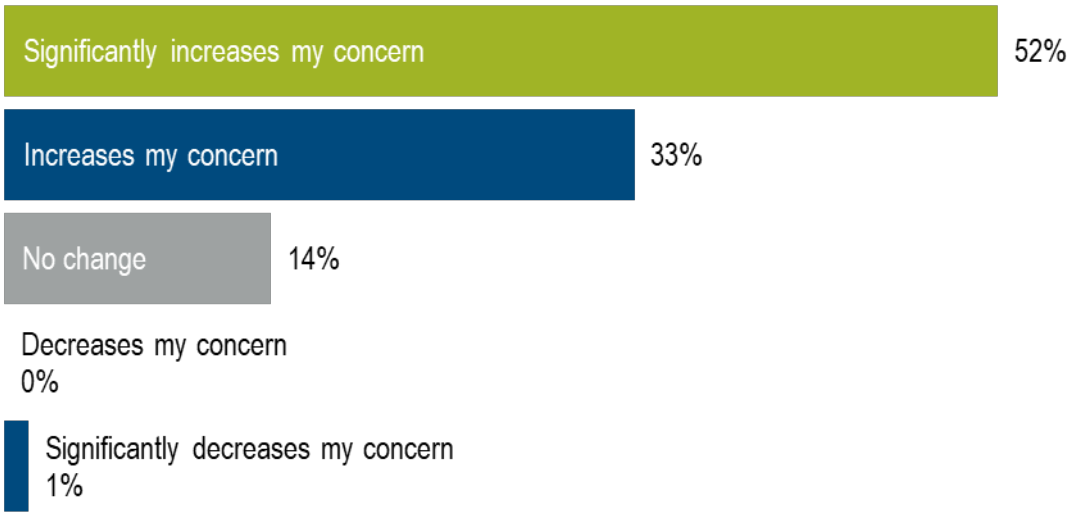
Figure 13: Change in concern about coastal erosion over past 5 years (*N*=79)



To further measure respondents' level of concern about erosion along the Helen Cooper Floyd Park shoreline, the survey presented two Google Street View™ images of the shoreline captured in 2013 and 2024 from State Road A1A (Figure 14). The images highlighted the change in vegetation and land. After viewing the images, 85% of respondents reported an increase in concern regarding coastal erosion along the shoreline, with 52% reporting that the images significantly increased their concern (Figure 15; Table 23).

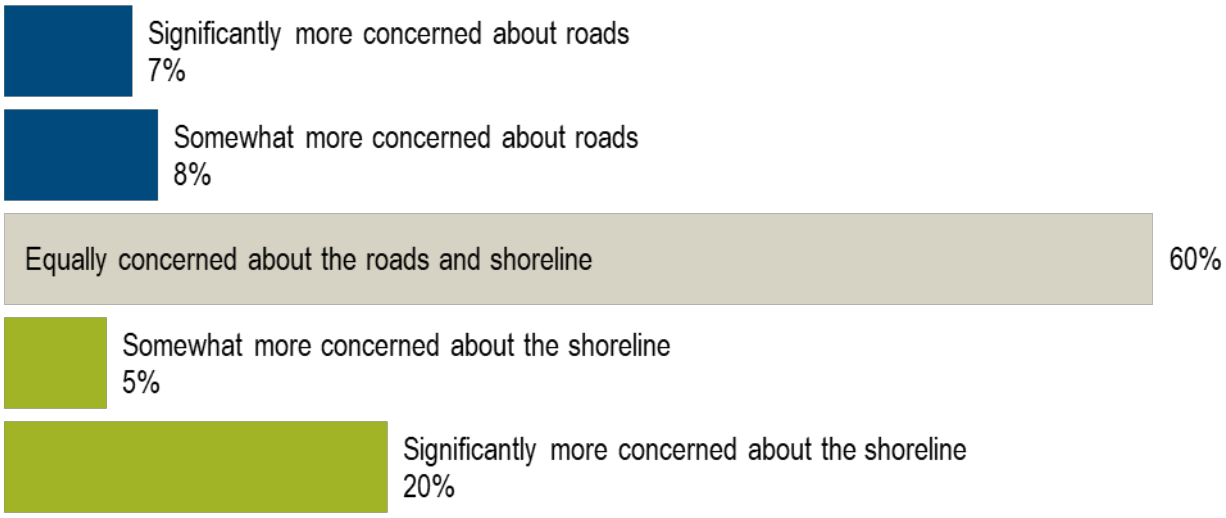
Figure 14: Google Street View™ images displaying shoreline in 2013 (top) & 2024 (bottom)

Figure 15: Change in concern about coastal erosion after viewing images of shoreline (*N*=79)



Two survey items asked respondents about their concern regarding coastal erosion and its impact on the roadway. First, respondents answered whether they were more concerned about coastal erosion damaging the roads versus damaging the shoreline. Figure 16 shows that most respondents (60%) were equally concerned about damage to both the roads and the shoreline (Table 24). For respondents that reported greater concern for one over the other, more respondents (25%) expressed greater concern for damage to the shoreline compared to damage to the roads (15%). These findings suggest that while intervention strategies should protect both the shoreline and the roads, if resources are limited, Mayport community members may prefer prioritizing shoreline stabilization slightly over the roads.

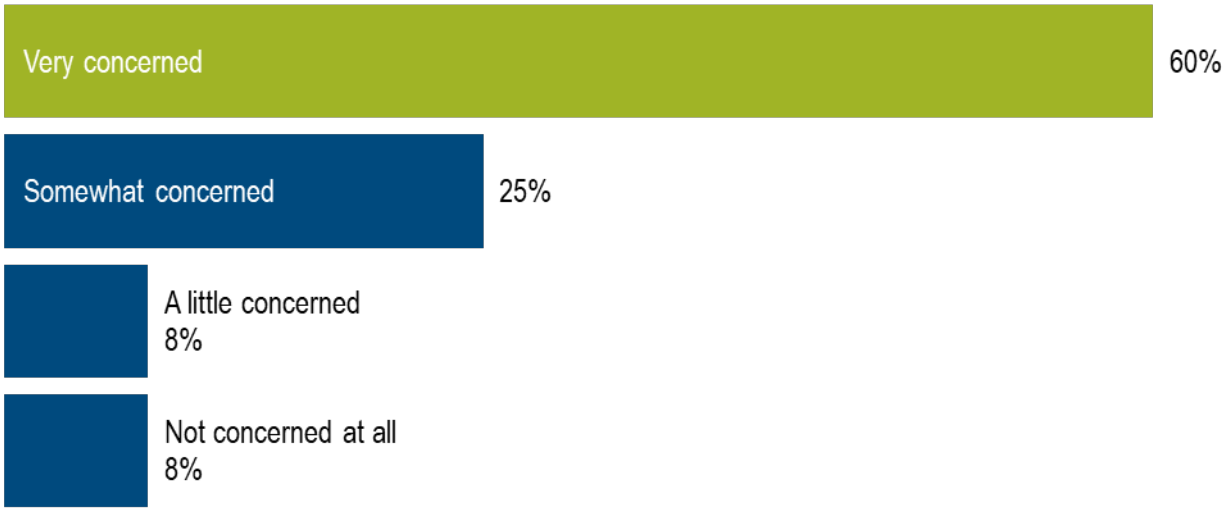
Figure 16: Concern about coastal erosion damaging roads versus damaging the shoreline (*N*=75)



Next, because Mayport Village residents must travel past the Helen Cooper Floyd Park shoreline along State Road A1A to access their homes, these individuals, specifically, answered a survey item measuring their concern about their ability to get to and from their homes. Overall, 92% of Mayport Village residents reported having some level of concern about coastal erosion impacting their ability to access their homes, with most residents (60%) being very concerned

(Figure 17; Table 25). This finding illustrates potentially higher vested interest among Mayport Village residents for intervening remedies to coastal erosion along the shoreline.

Figure 17: Degree of concern about coastal erosion impacting Mayport Village residential access (*N*=40)



Support for Coastal Resiliency Strategies

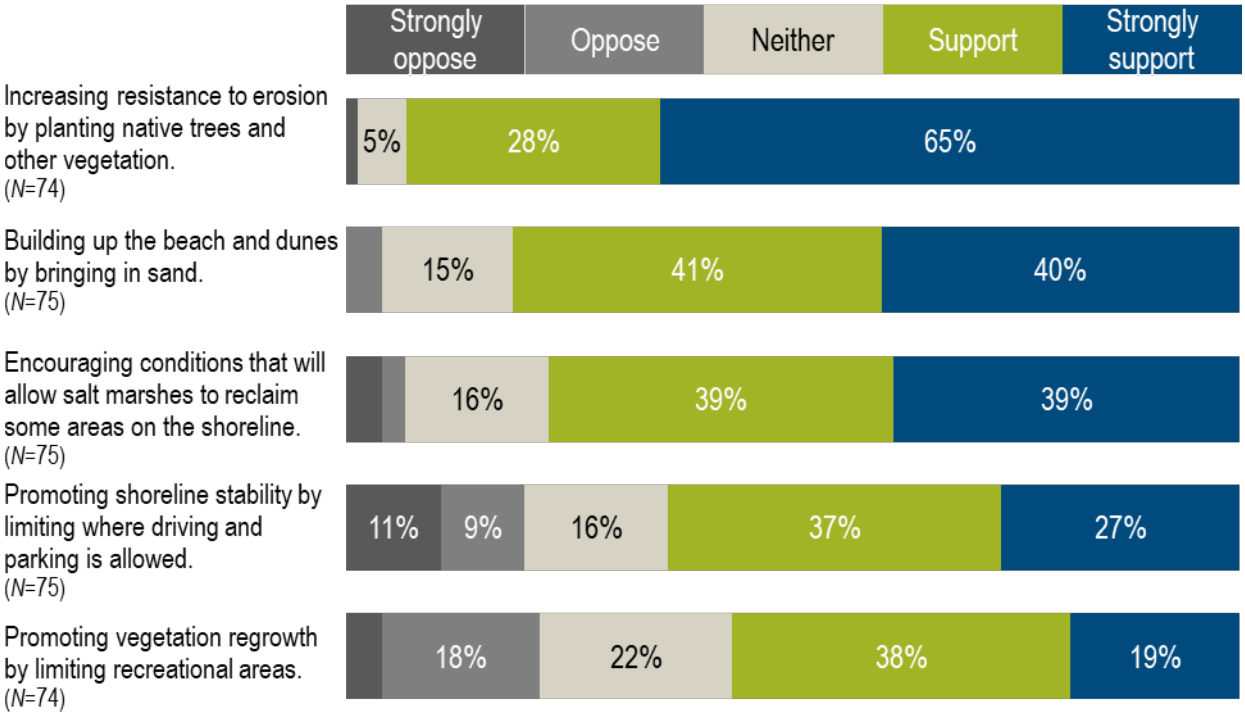
The previous section covered respondents' awareness and concerns related to coastal erosion. The following sections focus on respondents' level of support for various coastal resiliency interventions, both nature-based and structural.

Nature-based Interventions

Respondents rated the extent of their support or opposition for five various nature-based interventions to counter coastal erosion. As seen in Figure 18, respondents expressed overall support for each of the five strategies, with the strategy of planting native trees and other vegetation receiving the greatest support (93%) (Table 26). This strategy was the only one of the five to have a majority of respondents indicate strong support. A high number of respondents also supported other landscaping interventions such as bringing in sand to build up the beach (81%)

and allowing salt marshes to reclaim some of the shoreline (78%). While most respondents indicated support for all five strategies, this support was relatively lower for proposals that would limit certain behaviors on the shoreline, such as limiting where visitors could drive and park (64%) and limiting recreational areas (57%). Strategies limiting behaviors on the shoreline also received more prominent opposition, with 20% opposing limitations to where visitors could park and drive and 21% opposing limitations to recreational areas.

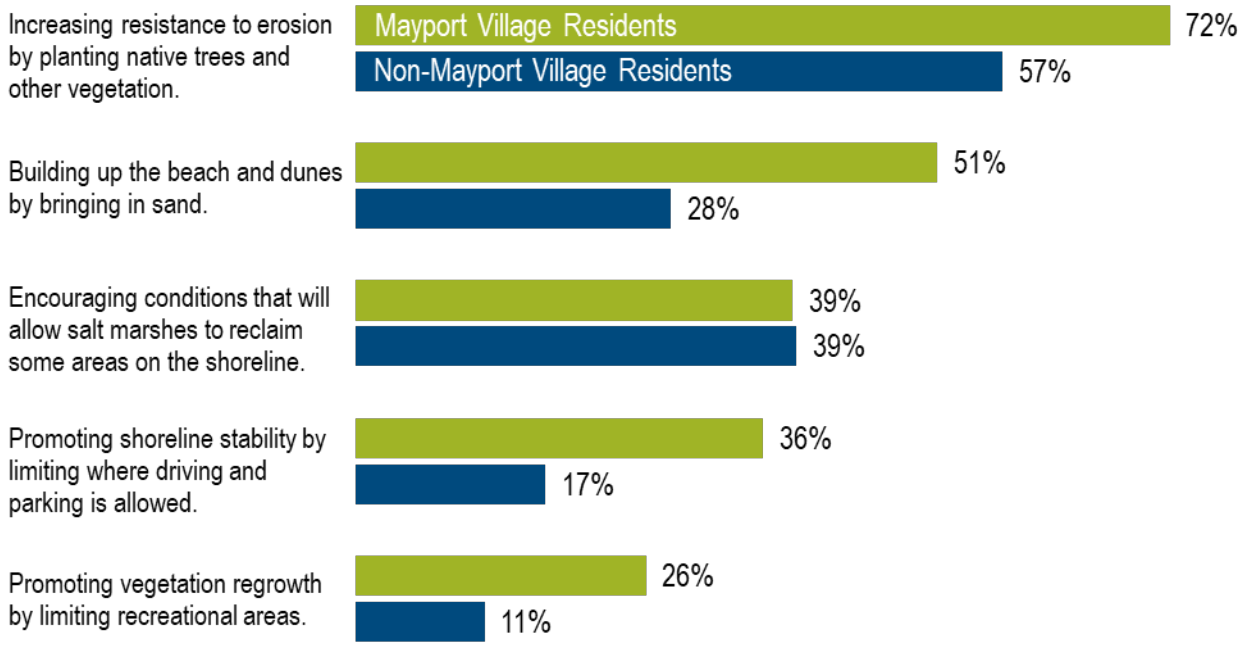
Figure 18: Level of support for nature-based interventions



Overall support for each strategy did not largely differ between Mayport Village residents and non-residents. That is, relatively equal numbers of Mayport Village residents and non-residents selected either support or strongly support as their response for each strategy. However, data did show a slight difference in the *strength* of support for four of the five strategies; a higher percentage of Mayport Village residents rated their support as strongly support compared to non-

residents (Figure 19). Additional analyses revealed only one statistically significant finding: Mayport Village residents rated their support for limiting where visitors drive and park on the shoreline (M=3.87, SD=1.17) higher than non-residents (M=3.31, SD=1.33) (t (73) = -1.96, p=.05, Cohen's d= -0.45, 95% CI [-1.14, 0.01]). This finding may reflect a difference in support due to the proximity and ease of access to the shoreline by Mayport Village residents compared to individuals that reside farther away. Overall, these findings indicate that while many in the Mayport community are supportive of the nature-based strategies presented, community buy-in may be easier for residents of Mayport Village than those that reside in other parts of the community.

Figure 19: Percentage of respondents strongly supporting nature-based strategies by residency



Note: Mayport Village Residents (N=39); Non-Residents (N=36)

Structural Interventions

In addition to nature-based interventions, respondents reported their level of support for or opposition to various engineering structures to counter erosion on the shoreline. Respondents rated their support or opposition for four different structure types (groin structures, breakwater structures, seawall/retaining wall/bulkhead structures, and rock armoring/revetments) along with a sample image and brief description of the structure including additional information regarding potential benefits and consequences (see Appendix A).

Most respondents supported four of the five structural interventions, with groin structures overwhelmingly receiving the greatest support (83%) (Figure 20; Table 27). Only 42% of respondents supported implementing a seawall; however, neither the seawall structure nor any other structure received majority opposition. Mayport Village residents generally reported stronger support than non-residents for three of the four structures, though this was not statistically significant (Figure 21).

Figure 20: Level of support for structural interventions

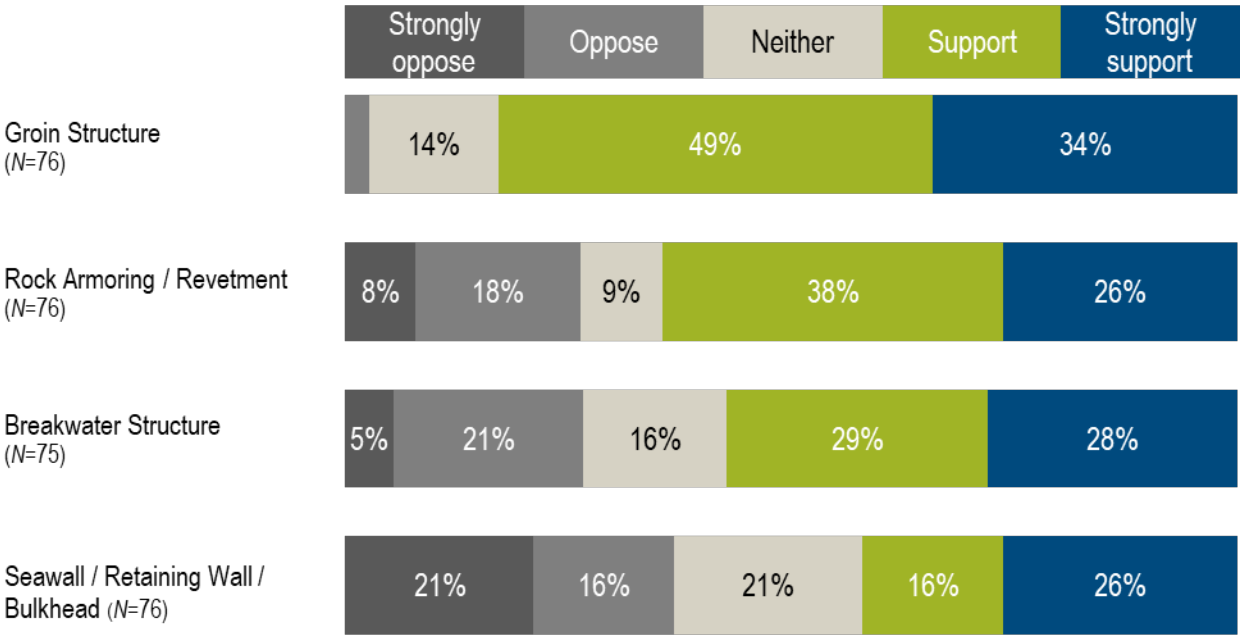
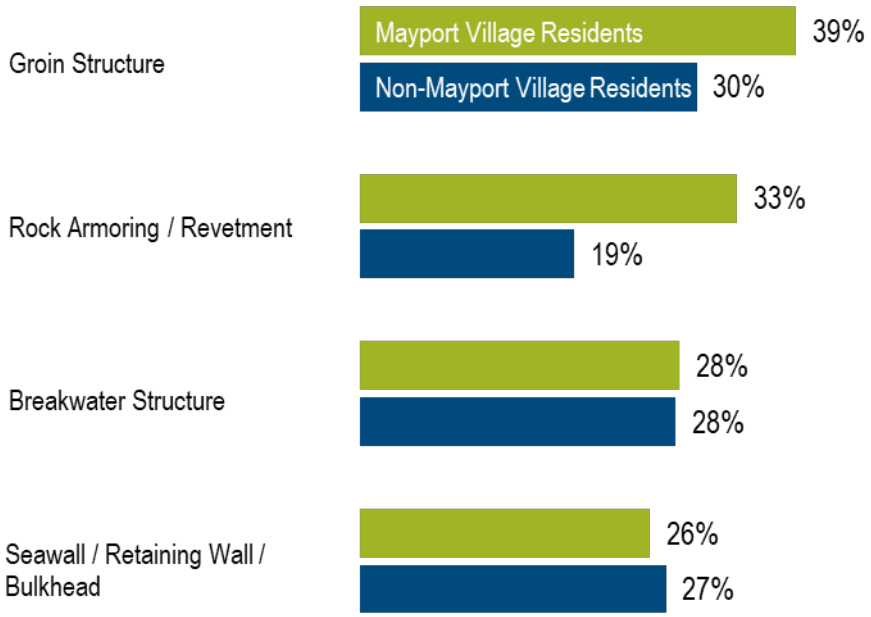


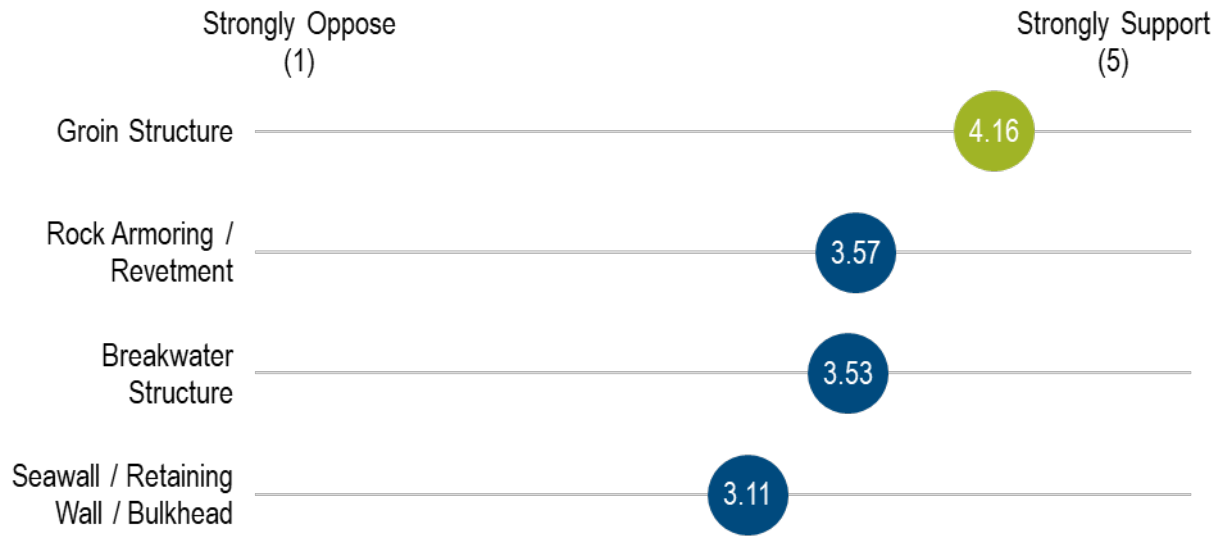
Figure 21: Percentage of respondents strongly supporting structural strategies by residency



Note: Mayport Village Residents (N=39); Non-Residents (N=37)

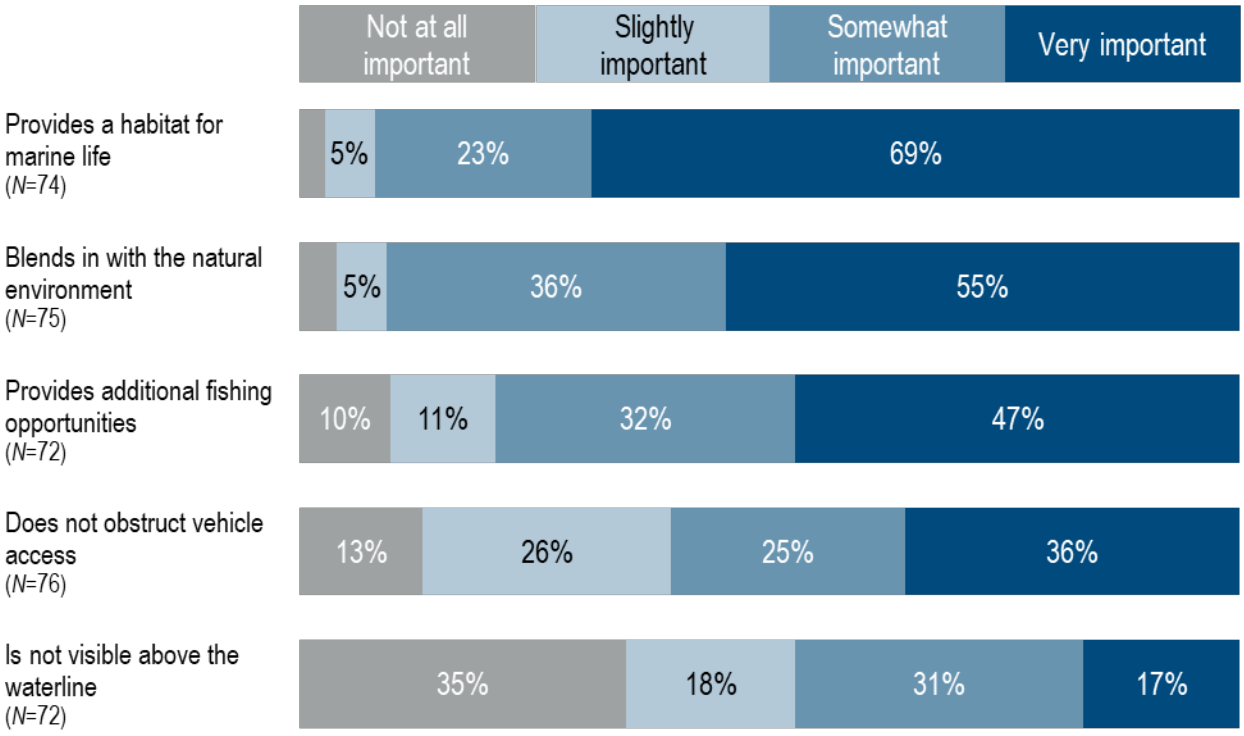
Project team members conducted a repeated measures analysis of variance (ANOVA) to compare differences in respondents' average support ratings across the four shoreline protection structures. The ANOVA revealed significantly greater support for groin structures (M=4.16, SD=0.75) compared to the other three structures (Λ =.57, $F(3, 72) = 18.34$, p = <.001, η^2 =.43) (Figure 22; Table 28). That is, respondents' support for groin structures was stronger than their support for rock armoring (M=3.57, SD=1.29), breakwater structures (M=3.53, SD=1.26), and seawalls (M=3.11, SD=1.50); there were no statistically significant differences in respondent support ratings when comparing these latter three structures to one another. Consistent with respondents' support for nature-based strategies, respondents appear more likely to support structural strategies that will not impede their access to the shoreline or interfere with recreation. Additionally, respondents may perceive groin structures and rock armoring to have a more natural aesthetic.

Figure 22: Average support ratings for structural interventions (*N*=75)



To assess the perceived importance of specific design features in structural interventions, respondents rated five key attributes. As shown in Figure 23, most respondents rated each of the five attributes as being at least slightly important for any new structures (Table 29). Results suggest respondents placed greater importance on ecological benefits of structural interventions, such as providing a habitat for marine life (97%) and ensuring the structure blends in with the natural environment (96%); these two attributes were the only features that a majority of respondents rated as very important. Fewer respondents placed importance on the structures being invisible above the waterline (65%), with 35% stating this was not at all important.

Figure 23: Level of importance for design features for structural interventions



While most respondents (87%) reported it is important that structures not obstruct vehicle access on the shoreline, there was a statistically significant difference in reported importance for this feature between Mayport Village residents compared to non-residents. As noted earlier, Mayport Village residents were relatively more supportive of limiting where driving and parking is allowed on the shoreline compared to non-residents (Figure 19). Similarly, current analysis shows that non-Mayport Village residents believe it is significantly more important that structures do not block vehicle access (M=3.38, SD=0.86) compared to Mayport Village residents (M=2.31, SD=0.98) ($t(74)=5.06$, $p<.001$, Cohen's d=1.16, 95% CI [0.67, 1.64]).

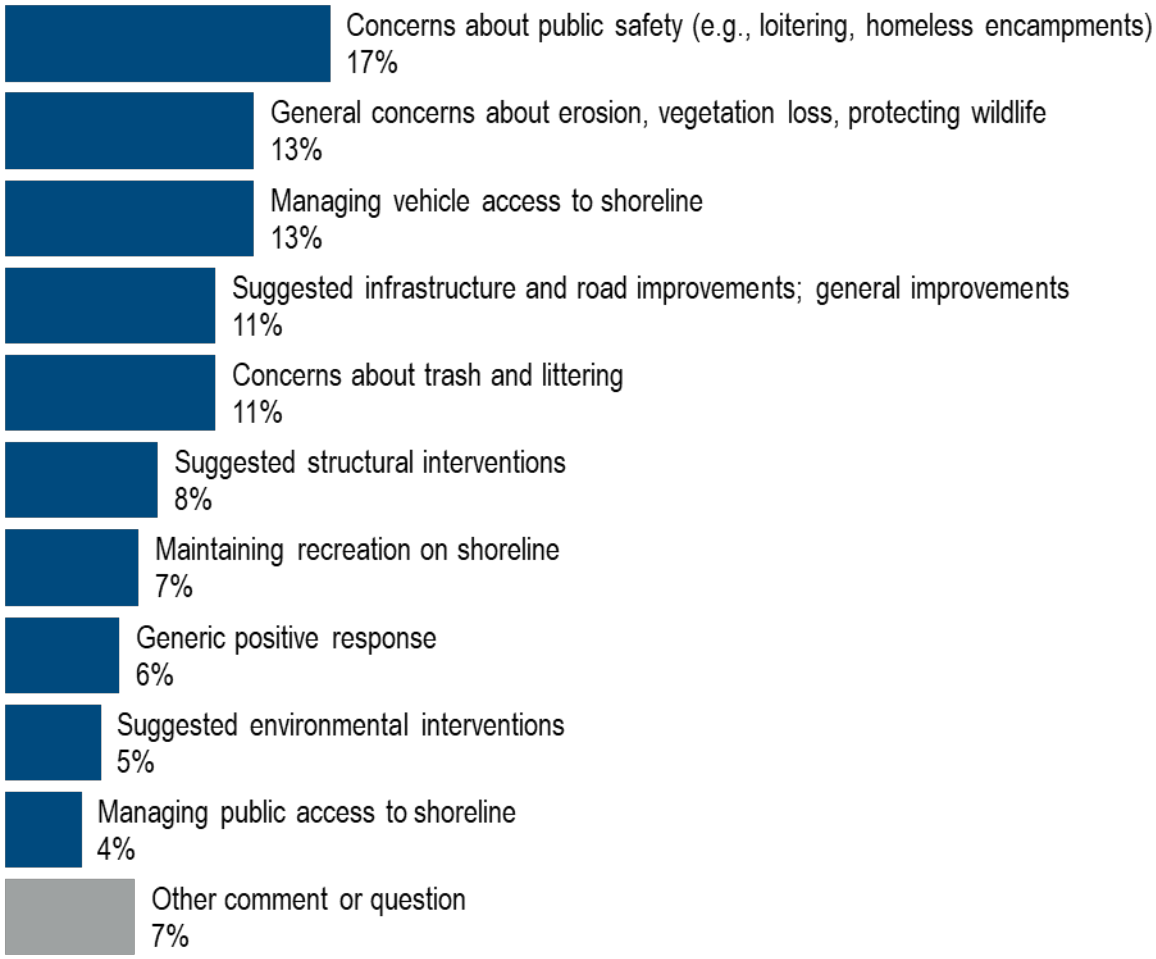
Taken together, ratings for structural interventions suggest respondents primarily support structures that are easily integrated into the natural environment of the shoreline, blending in with the environment and providing habitats for marine life. Overall, results show a prioritization

of structures that will not impede access to the shoreline or to recreational activities. Considering that many respondents visit the Helen Cooper Floyd Park shoreline to fish (48%), support for groins and revetments may be higher due to these structures often doubling as fishing access points and not hindering vehicle access. Regarding physical access to the shoreline, while residents of Mayport Village are relatively less concerned with limiting vehicle access, non-residents may have greater opposition to such structures or policies.

Additional Feedback

The final survey item allowed respondents to provide any additional comments or thoughts about the shoreline, state road, or coastal erosion generally. Respondents' comments most frequently referenced public safety-related issues such as numerous homeless encampments on the shoreline and other unenforced gatherings (17%) (Figure 24; Table 30). Many respondents associated these encampments with another concern: high volumes of trash and littering on the shoreline (11%). A number of responses expressed general concern regarding erosion along the shoreline (13%), with many providing their suggestions for structural (8%) and environmental interventions (5%). Some commenters placed blame for erosion along the shoreline on actions related to a previous dredging of the St. Johns River. Appendix C contains all verbatim responses.

Figure 24: Respondents' open-ended feedback (*N*=103 coded statements)



Conclusion

Survey respondents (*N*=85) provided feedback on their concerns for coastal erosion, their experiences on and thoughts about the Helen Cooper Floyd Park shoreline, and their input regarding various options to preserve the shoreline and State Road A1A. All respondents were residents of the Mayport area or nearby communities, with nearly half (48%) residing in the Mayport Village neighborhood, just past the shoreline. Most respondents (65%) visit the Helen Cooper Floyd Park shoreline at least once a month, with many (35%) visiting at least once a week. Further, a majority of respondents (58%) reported traveling on State Road A1A past the shoreline every day.

Residing near and frequently visiting the shoreline potentially illustrates high investment among respondents regarding erosion control efforts. Indeed, results show that respondents are concerned about coastal erosion along the shoreline, with a majority (69%) reporting an increase in their concern over the past five years. Most respondents (60%) express equal concern about coastal erosion damaging the roads as well as the shoreline. However, slightly more respondents expressed greater concern about damage to the shoreline (25%) compared to the roads (15%). This finding may suggest that for some respondents, damage to the shoreline may seem more irreversible or more costly compared to repairing road infrastructure.

To assess potential coastal erosion interventions, respondents rated their level of support or opposition to various nature-based and structural interventions. Regarding nature-based interventions, respondents were more supportive of active measures that could help restore natural habitats such as planting native trees and vegetation (93%), bringing in sand to build up the beach (81%), and allowing salt marshes to reclaim certain areas of the shoreline (77%). Policy-based solutions such as those limiting where visitors may drive and park vehicles (64%)

and recreate (57%) received slightly less support and relatively more opposition (20% and 22% opposition, respectively). These findings suggest a need to balance solutions that encourage ecological sustainability without hindering access and activities along the shoreline.

This balance is also represented in respondents' ratings for structural interventions. Of the four structural interventions presented in the survey, respondents indicated significantly greater support for groin structures (83%), followed by rock armoring and revetments (64%). Respondents may have favored these options due to the structures' ability to help promote ecological growth and marine life, while also supporting popular recreational activities along the shoreline such as fishing. Respondents rated structures such as breakwaters (57%) and, particularly, seawalls (42%) lower than the previous structures, possibly due to the perceived impediment these structures may cause on recreating – breakwaters may impact boating activity on the St. Johns River, while seawalls and bulkheads may restrict visitor access along the shoreline, particularly vehicle access.

Respondents' ratings of structural design features indicate a greater importance on structures that provide habitats for marine life (97%) and ones that blend in with the natural environment (96%). Most respondents also wanted structures that provided additional fishing opportunities (90%) and did not obstruct vehicle access to the shoreline (87%). These findings all support the assessment previously presented in this conclusion that coastal erosion interventions should be rooted in ecological principles of sustainability and wildlife preservation, while also encouraging, or at least not hindering, recreational activity along the shoreline.

Overall, the findings suggest that Mayport community members are highly invested in the preservation of the Helen Cooper Floyd Park shoreline. The frequency of visitation as well as the daily travel along State Road A1A underlines the importance of preserving both the shoreline

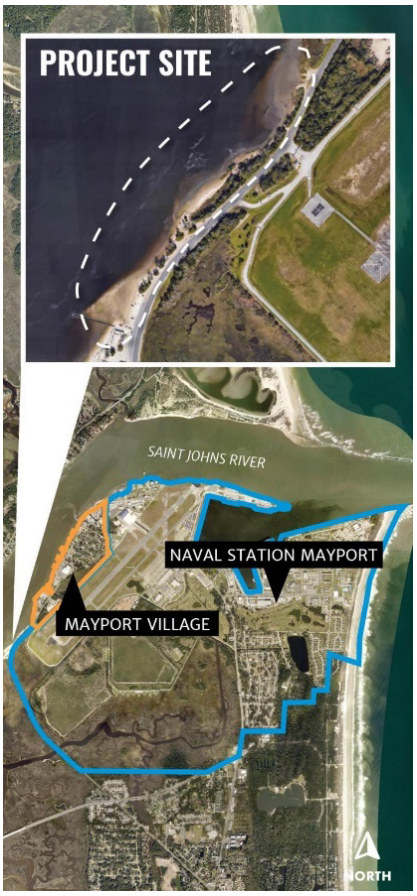
area and road corridor due to their integral role in community members' daily lives. Respondents' preferences indicate strong support for erosion control strategies that balance ecological restoration with continued public access and use. The emphasis on habitat creation, natural aesthetics, and fishing access highlights a preference for interventions that enhance, rather than restrict, the ways community members interact with the shoreline. Policies that restrict certain behaviors such as driving and parking on the shoreline may gain easier support for those living closer to the shoreline (i.e., Mayport Village residents) than those that may travel longer distances to visit. In conclusion, the insights the survey results provide can help guide future planning efforts that are both environmentally sustainable and community centered.

Appendix A: Survey Instrument

A project supported by the US Navy, the City of Jacksonville, and the Mayport Waterfront Partnership is considering design alternatives to help protect this area of shoreline from further erosion while supporting its value for public enjoyment and as a habitat for marine life. The ideal design will balance effectiveness at stabilizing the shoreline, durability, constructability, and alignment with community values. Your responses will help us better understand community priorities and guide the development of a design that meets both environmental and recreational needs.

Please enter your access code to continue: _____

This project focuses on the shoreline highlighted below as the Project Site.



Q1 How do you typically refer to this shoreline?

- ○ Helen Cooper Floyd Park (1)
- ○ Little Jetties (2)
- ○ Other, please specify: (97) _____

Q2 Do you live in Mayport Village?

- ○ Yes (1)
- ○ No (0)

Q3 [If Q2=1] How long have you lived in Mayport Village?

- ○ Less than 1 year (1)
- ○ 1-5 years (2)
- ○ 6-10 years (3)
- ○ 11-20 years (4)
- ○ Over 20 years (5)

Q4 On average, how often do you visit this shoreline?

- ○ Less than once a year (1)
- ○ Once a year (2)
- ○ A few times a year (3)
- ○ Once a month (4)
- ○ A few times a month (5)
- ○ Once a week (6)
- ○ Several times a week (7)

Q5 Which of the following activities do you primarily engage in when visiting this shoreline? (Select up to three)

- ▢ Biking (1)
- ▢ Fishing (2)
- ▢ Lounging or sun-bathing (3)
- ▢ Photography (4)
- ▢ Spending time with friends, families, and/or colleagues (5)
- ▢ Swimming (6)
- ▢ Walking or jogging (7)
- ▢ Water recreation (e.g., boating, jet-skiing, kayaking, etc.) (8)
- ▢ Wildlife watching (9)
- ▢ Other, please specify: (97) _____

Q6 Who would you primarily participate in these activities with?

- ○ No one (i.e., do activities alone) (1)
- ○ One other person (2)
- ○ A group (2 or more people) (3)

Q7 Considering water depth, clarity, and current, how safe do you typically feel doing activities in the water here?

- ○ Not safe at all (1)
- ○ Somewhat safe (2)
- ○ Very safe (3)
- ○ Extremely safe (4)
- ○ I do not participate in water activities (99)

Q8 To what extent do you agree or disagree with the following statement: This shoreline is a family friendly space.

- ○ Strongly disagree (1)
- ○ Disagree (2)
- ○ Agree (3)
- ○ Strongly agree (4)

Q9 Please rate the extent to which you are satisfied or dissatisfied with the following on the shoreline:

	Very dissatisfied (1)	Dissatisfied (2)	Neither satisfied nor dissatisfied (3)	Satisfied (4)	Very satisfied (5)
Amount of vegetation (Q9_1)	○	○	○	○	○
Available shade (Q9_2)	○	○	○	○	○
Natural beauty/scenery (Q9_3)	○	○	○	○	○
Cleanliness of the shoreline (Q9_4)	○	○	○	○	○
Water quality (Q9_5)	○	○	○	○	○
Noise levels (Q9_6)	○	○	○	○	○

Q10 How often do you travel on State Road A1A past this area for reasons other than visiting this shoreline?

- Less than once a month (1)
- Once a month (2)
- A few times a month (3)
- Once a week (4)
- A few times a week (5)
- Everyday (6)

Q11 How familiar are you with the topic of coastal erosion?

- I am not familiar with coastal erosion. (1)
- I have heard of coastal erosion before but am not certain of its meaning. (2)
- I generally understand coastal erosion but could not explain it to others. (3)
- I could explain coastal erosion to others and use it in writing. (4)
- I am an expert on coastal erosion and could teach a class on it. (5)

Q12 [If Q11=3, 4, or 5] What is your primary source for information about coastal erosion?

- Personal experience and observation (1)
- Community meeting or workshops (2)
- Friends & family (3)
- Local news (4)
- National news (5)
- Scientific publications (6)
- Social Media (7)
- Other, please specify: (97) _____

Q13 Coastal erosion is the process of wearing down and losing land along the coast to the ocean. How worried are you about coastal erosion along this shoreline?

- **Not Concerned**: I do not believe it is an issue of concern for the community. (1)
- **Slightly Concerned**: I am aware of the issue but do not see it affecting the community directly. (2)
- **Somewhat Concerned**: I recognize it as a problem that could have significant effects on the community in the future. (3)
- **Extremely Concerned**: I am worried about the severe and immediate effects on our community and environment. (4)

Q14 How has your concern about coastal erosion changed in the past 5 years?

- ○ Decreased significantly (1)
- ○ Decreased a little (2)
- ○ No change (3)
- ○ Increased a little (4)
- ○ Increased significantly (5)

Q15 The above Google Street View™ photos show Little Jetties in 2013 (top) and again in 2024 (bottom). Note the change in vegetation and land over this time. How does seeing these images affect your level of concern regarding coastal erosion along this shoreline?

- ○ Significantly decreases my concern (1)
- ○ Decreases my concern (2)
- ○ No change (3)
- ○ Increases my concern (4)
- ○ Significantly increases my concern (5)

Q16 [If Q13≠1 OR Q15= 4 or 5] Regarding coastal erosion, are you more concerned about potential damage to the roads or damage to the shoreline?

- ○ Significantly more concerned about **roads** (1)
- ○ Somewhat more concerned about **roads** (2)
- ○ Equally concerned about the roads and shoreline (3)
- ○ Somewhat more concerned about the **shoreline** (4)
- ○ Significantly more concerned about the **shoreline** (5)

Q17 [If Q2=1] As a resident of Mayport Village, how concerned are you about coastal erosion affecting your ability to get to and from your home?

- ○ Not concerned at all (1)
- ○ A little concerned (2)
- ○ Somewhat concerned (3)
- ○ Very concerned (4)

Q18 To what extent would you support or oppose the following methods of preventing coastal erosion in this area?

	Strongly oppose (1)	Oppose (2)	Neither support nor oppose (3)	Support (4)	Strongly support (5)
Building up the beach and dunes by bringing in sand. (Q18_1)	○	○	○	○	○
Promoting vegetation regrowth by limiting recreational areas. (Q18_2)	○	○	○	○	○
Increasing resistance to erosion by planting native trees and other vegetation. (Q18_3)	○	○	○	○	○
Promoting shoreline stability by limiting where driving and parking is allowed. (Q18_4)	○	○	○	○	○
Encouraging conditions that will allow salt marshes to reclaim some areas on the shoreline. (Q18_5)	○	○	○	○	○

Groin Structure

Structures connected and running perpendicular to the shoreline used to reduce wave impact and trap sand

- Built to catch and hold sand by slowing the current near shore
- Typically made of rock
- Can include features that provide habitat for fish and other marine life

Q19 To what extent do you support or oppose the use of groin structures to reduce erosion on the shoreline?

- ○ Strongly oppose (1)
- ○ Somewhat oppose (2)
- ○ Neither support nor oppose (3)
- ○ Somewhat support (4)
- ○ Strongly support (5)

Breakwater Structure

Barriers in the water running parallel to the shore that reduce wave impact and trap sand

- Reduces the energy that causes erosion of the shoreline by breaking waves further from shore
- Can be made of rock or concrete structures
- Can include features that provide habitat for fish and other marine life

Q20 To what extent do you support or oppose the use of breakwater structures to reduce erosion on the shoreline?

- ○ Strongly oppose (1)
- ○ Somewhat oppose (2)
- ○ Neither support nor oppose (3)
- ○ Somewhat support (4)
- ○ Strongly support (5)

Seawall / Retaining Wall / Bulkhead

Vertical, wall-like structures along the upper shoreline, designed to prevent land loss

- Infrastructure like roads and paths
- Designed to retain soil on the landward side the wall
- Can cause scouring and loss of sediment on the waterward side of the wall

Q21 To what extent do you support or oppose the use of seawalls/retaining walls to reduce erosion on the shoreline?

- ○ Strongly oppose (1)
- ○ Somewhat oppose (2)
- ○ Neither support nor oppose (3)
- ○ Somewhat support (4)
- ○ Strongly support (5)

Rock Armoring / Revetment

Rock Structures along the upper shoreline, designed to prevent land loss

- Protect infrastructure like roads and paths
- Larger rocks are used for sites with bigger waves and smaller rocks for sites with smaller waves
- Require access structures, like boardwalks, to get pedestrians safely across rocks

Q22 To what extent do you support or oppose the use of rock armoring to reduce erosion on the shoreline?

- ○ Strongly oppose (1)
- ○ Somewhat oppose (2)
- ○ Neither support nor oppose (3)
- ○ Somewhat support (4)
- ○ Strongly support (5)

Q23 Imagine one of the previous structures were built along the shoreline. How important is it that the structure has the following traits?

	Not at all important (1)	Slightly important (2)	Somewhat important (3)	Very important (4)
Provides a habitat for marine life (Q23_1)	○	○	○	○
Blends in with the natural environment (Q23_2)	○	○	○	○
Is not visible above the waterline (Q23_3)	○	○	○	○
Does not obstruct vehicle access (Q23_4)	○	○	○	○
Provides additional fishing opportunities (Q23_5)	○	○	○	○

Q24 Please share any additional comments or thoughts you may have about this shoreline, State Road A1A, or coastal erosion.

_____

_____

_____

The following questions will ask you to provide personal information about yourself. The information you provide will help us make sure we hear from as many people throughout the community and the surrounding areas as possible.

Q25 [If Q2=0] Have you ever lived in Mayport Village?

- ○ Yes (1)
- ○ No (0)

Q26 [If Q25=1] About how long ago did you live in Mayport Village?

- ○ Less than 1 year ago (1)
- ○ 1-5 years ago (2)
- ○ 6-10 years ago (3)
- ○ 11-20 years ago (4)
- ○ Over 20 years ago (5)

Q27 [If Q2=0] What is the ZIP code of your primary address?

_____

Q28 Which of the following military affiliations best describes you?

- ○ Active duty, stationed at Naval Station Mayport (1)
- ○ Active duty, NOT stationed at Naval Station Mayport (2)
- ○ Reserve/National Guard (3)
- ○ Military spouse/partner (4)
- ○ Military dependent (5)
- ○ Civilian, working at Naval Station Mayport (6)
- ○ Civilian, NOT working at Naval Station Mayport (7)

Q29 [If Q28≠1 or 2] Are you a military veteran?

- ○ Yes (1)
- ○ No (0)

Q30 What is your age?

- ○ Under 18 (1)
- ○ 18-24 (2)
- ○ 25-34 (3)
- ○ 35-44 (4)
- ○ 45-54 (5)
- ○ 55-64 (6)
- ○ Over 65 (7)

Q31 Which option best describes the racial-ethnic group you identify with?

- ○ Asian (1)
- ○ Black (2)
- ○ Hispanic/Latino (3)
- ○ Multiple races/ethnicities (4)
- ○ Native Hawaiian or Pacific Islander (5)
- ○ Middle Eastern or North African (6)
- ○ White (7)
- ○ Other, please specify: (97) _____
- ○ Prefer not to say (99)

Q32 Which best describes your gender identity?

- ○ Woman (1)
- ○ Man (2)
- ○ Non-binary (3)
- ○ Prefer not to say (99)
- ○ Other, please specify: (97) _____

Appendix B: Data Tables

Table 1: Respondents' city of residence (based on reported ZIP code)

	N	*%*
Atlantic Beach, FL	59	86%
Jacksonville Beach, FL	5	7%
Jacksonville, FL	3	4%
Fleming Island, FL	1	1%
Neptune Beach, FL	1	1%
Total	69	100%

Table 2: Do you live in Mayport Village?

	N	*%*
No	44	52%
Yes	41	48%
Total	85	100%

Table 3: How long have you lived in Mayport Village?

	N	*%*
Over 20 years	10	24%
11-20 years	3	7%
6-10 years	12	29%
1-5 years	12	29%
Less than 1 year	4	10%
Total	41	100%

Table 4: Have you ever lived in Mayport Village?

	N	*%*
No	26	81%
Yes	6	19%
Total	32	100%

Table 5: About how long ago did you live in Mayport Village?

	N	*%*
Over 20 years ago	3	50%
11-20 years ago	0	0%
6-10 years ago	1	17%
1-5 years ago	2	33%
Less than 1 year ago	0	0%
Total	6	100%

Table 6: How do you typically refer to this shoreline?

	N	*%*
Little Jetties	76	89%
Helen Cooper Floyd Park	2	2%
Other	7	8%
Total	85	100%

Table 7: Which of the following military affiliations best describes you?

	N	*%*
Active duty, stationed at Naval Station Mayport	1	1%
Reserve/National Guard	3	4%
Military spouse/partner	3	4%
Military dependent	3	4%
Civilian, working at Naval Station Mayport	1	1%
Civilian, NOT working at Naval Station Mayport	65	86%
Total	76	100%

Table 8: Are you a military veteran?

	N	*%*
No	39	75%
Yes	13	25%
Total	52	100%

Table 9: Which option best describes the racial-ethnic group you identify with?

	N	*%*
White	65	86%
Asian	1	1%
Hispanic/Latino	1	1%
Multiple races/ethnicities	1	1%
Native Hawaiian or Pacific Islander	1	1%
Black	0	0%
Middle Eastern or North African	0	0%
Other	1	1%
Prefer not to say	6	8%
Total	76	100%

Table 10: What is your age?

	N	*%*
Over 65	20	26%
55-64	19	25%
45-54	15	20%
35-44	8	11%
25-34	11	14%
18-24	3	4%
Total	76	100%

Table 11: Which best describes your gender identity?

	N	*%*
Man	36	47%
Woman	34	45%
Non-binary	0	0%
Other	3	4%
Prefer not to say	3	4%
Total	76	4%

Table 12: How often do you visit this shoreline?

	N	*%*
Several times a week	26	31%
Once a week	3	4%
A few times a month	15	18%
Once a month	10	12%
A few times a year	22	26%
Once a year	1	1%
Less than once a year	7	8%
Total	84	100%

Table 13: Which of the following activities do you primarily engage in when visiting this shoreline?

	N	*%*
Fishing	41	48%
Spending time with friends, families, and/or colleagues	41	48%
Wildlife watching	35	41%
Photography	23	27%
Lounging or sun-bathing	22	26%
Walking or jogging	15	18%
Swimming	10	12%
Water recreation	8	9%
Biking	1	1%
Other	13	15%
Total	85	100%

Table 14: Who would you primarily participate in these activities with?

	N	*%*
A group (2 or more people)	37	44%
One other person	37	44%
No one (i.e., do activities alone)	11	13%
Total	85	100%

Table 15: How often do you travel on State Road A1A past this area for reasons other than visiting this shoreline?

	N	*%*
Every day	46	58%
A few times a week	13	16%
Once a week	3	4%
A few times a month	11	14%
Once a month	4	5%
Less than once a month	3	4%
Total	80	100%

Table 16: To what extent do you agree or disagree with the following statement: This shoreline is a family friendly space.

	N	*%*
Strongly agree	23	28%
Agree	42	51%
Disagree	14	17%
Strongly disagree	4	5%
Total	83	100%

Table 17: Considering water depth, clarity, and current, how safe do you typically feel doing activities in the water here?

	N	*%*
Extremely safe	9	11%
Very safe	24	28%
Somewhat safe	35	41%
Not safe at all	6	7%
I do not participate in water activities	11	13%
Total	85	100%

Table 18: Please rate the extent to which you are satisfied or dissatisfied with the following on the shoreline:

	Very dissatisfied		Dissatisfied		Neither satisfied nor dissatisfied		Satisfied		Very satisfied		Total
	N	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*
Natural beauty/ scenery	5	6%	10	13%	10	13%	37	46%	18	23%	80
Noise levels	4	5%	4	5%	37	47%	26	33%	8	10%	79
Amount of vegetation	12	15%	21	26%	18	23%	25	31%	4	5%	80
Water quality	6	8%	15	19%	30	38%	25	32%	3	4%	79
Available shade	7	9%	23	29%	28	35%	15	19%	7	9%	80
Cleanliness of the shoreline	14	18%	26	33%	18	23%	17	21%	5	6%	80

Table 19: How familiar are you with the topic of coastal erosion?

	N	*%*
I am an expert on coastal erosion and could teach a class on it.	3	4%
I could explain coastal erosion to others and use it in writing.	37	46%
I generally understand coastal erosion but could not explain it to others.	33	41%
I have heard of coastal erosion before but am not certain of its meaning.	2	3%
I am not familiar with coastal erosion.	5	6%
Total	80	100%

Table 20: What is your primary source for information about coastal erosion?

	N	*%*
Personal experience and observation	42	58%
Scientific publications	10	14%
Local news	7	10%
Friends & family	3	4%
Community meeting or workshops	2	3%
National news	2	3%
Social Media	2	3%
Other	5	7%
Total	73	100%

Table 21: How worried are you about coastal erosion along this shoreline?

	N	*%*
Extremely Concerned: I am worried about the severe and immediate effects on our community and environment.	32	40%
Somewhat Concerned: I recognize it as a problem that could have significant effects on the community in the future.	35	44%
Slightly Concerned: I am aware of the issue but do not see it affecting the community directly.	10	13%
Not Concerned: I do not believe it is an issue of concern for the community.	3	4%
Total	80	100%

Table 22: How has your concern about coastal erosion changed in the past 5 years?

	N	*%*
Increased significantly	33	42%
Increased a little	21	27%
No change	24	30%
Decreased a little	1	1%
Decreased significantly	0	0%
Total	79	100%

Table 23: How does seeing these images affect your level of concern regarding coastal erosion along this shoreline?

	N	*%*
Significantly increases my concern	41	52%
Increases my concern	26	33%
No change	11	14%
Decreases my concern	0	0%
Significantly decreases my concern	1	1%
Total	79	100%

Table 24: Regarding coastal erosion, are you more concerned about potential damage to the roads or damage to the shoreline?

	N	*%*
Significantly more concerned about roads	5	7%
Somewhat more concerned about roads	6	8%
Equally concerned about the roads and shoreline	45	60%
Somewhat more concerned about the shoreline	4	5%
Significantly more concerned about the shoreline	15	20%
Total	75	100%

Table 25: As a resident of Mayport Village, how concerned are you about coastal erosion affecting your ability to get to and from your home?

	N	*%*
Very concerned	24	60%
Somewhat concerned	10	25%
A little concerned	3	8%
Not concerned at all	3	8%
Total	40	100%

Table 26: To what extent would you support or oppose the following methods of preventing coastal erosion in this area?

	Strongly oppose		Oppose		Neither support nor oppose		Support		Strongly support		Total
	N	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*
Increasing resistance to erosion by planting native trees and other vegetation.	1	1%	0	0%	4	5%	21	28%	48	65%	74
Building up the beach and dunes by bringing in sand.	0	0%	3	4%	11	15%	31	41%	30	40%	75
Encouraging conditions that will allow salt marshes to reclaim some areas on the shoreline.	3	4%	2	3%	12	16%	29	39%	29	39%	75
Promoting shoreline stability by limiting where driving and parking is allowed.	8	11%	7	9%	12	16%	28	37%	20	27%	75
Promoting vegetation regrowth by limiting recreational areas.	3	4%	13	18%	16	22%	28	38%	14	19%	74

Table 27: To what extent do you support or oppose the use of [structure type] to reduce erosion on the shoreline?

	Strongly oppose		Oppose		Neither support nor oppose		Support		Strongly support		Total
	N	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*
Groin Structure	0	0%	2	3%	11	14%	37	49%	26	34%	76
Rock Armoring / Revetment	6	8%	14	18%	7	9%	29	38%	20	26%	76
Breakwater Structure	4	5%	16	21%	12	16%	22	29%	21	28%	75
Seawall / Retaining Wall / Bulkhead	16	21%	12	16%	16	21%	12	16%	20	26%	76

Table 28: Average support ratings for structural interventions

	N	*M*	*SD*
Groin Structure	75	4.16	0.75
Rock Armoring / Revetment	75	3.57	1.29
Breakwater Structure	75	3.53	1.26
Seawall / Retaining Wall / Bulkhead	75	3.11	1.50

Table 29: How important is it that the structure has the following traits?

	Not at all important		Slightly important		Somewhat important		Very important		Total
	N	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*
Provides a habitat for marine life	2	3%	4	5%	17	23%	51	69%	74
Blends in with the natural environment	3	4%	4	5%	27	36%	41	55%	75
Provides additional fishing opportunities	7	10%	8	11%	23	32%	34	47%	72
Does not obstruct vehicle access	10	13%	20	26%	19	25%	27	36%	76
Is not visible above the waterline	25	35%	13	18%	22	31%	12	17%	72

Table 30: Please share any additional comments or thoughts you may have about this shoreline, State Road A1A, or coastal erosion. (Coded Themes)

Themes	*N*	*%*
Concerns about public safety (e.g., loitering, homeless encampments)	17	17%
General concerns about erosion, vegetation loss, protecting wildlife	13	13%
Managing vehicle access to shoreline	13	13%
Suggested infrastructure and road improvements; general improvements	11	11%
Concerns about trash and littering	11	11%
Suggested structural interventions	8	8%
Maintaining recreation on shoreline	7	7%
Generic positive response	6	6%
Suggested environmental interventions	5	5%
Managing public access to shoreline	4	4%
Other comment or question	7	7%
N/A	1	1%
Total coded statements	103	100%

Appendix C: Verbatim Responses

How do you typically refer to this shoreline? - Other, please specify:

- *Beach*
- *Idk I don't come here often*
- *Mayport*
- *Mayport beach*
- *Mayport Beach*
- *We just moved here and didn't know it had a name*
- *You have the Naval Station, Mayport Village, & a section of A1A highlighted. Helen Cooper Floyd Park, (the Little Jetty), is not in the areas outlined.*

Which of the following activities do you primarily engage in when visiting this shoreline? - Other, please specify:

- *Dog walking*
- *Driving by enjoying the view and on the way to frequenting Mayport business*
- *Driving on the beach for sunsets*
- *Going to seafood market*
- *I live next to the proposed project. Bayshore dr. N*
- *Just enjoying the beach*
- *Picking up trash*
- *Take golf carts and let dogs play, watch sunset.*
- *Watch sunsets*
- *Watching ships/ fishing*
- *Watching the sunset*
- *We don't go there as it seems as if unsavory activity occurs there*

What is your primary source for information about coastal erosion? - Other, please specify:

- *Education and personal experience*
- *Internet and news articles*
- *Internet search*
- *School*
- *School, news articles*

Which option best describes the racial-ethnic group you identify with? – Other, please specify:

- *Creek Indian*

Which best describes your gender identity? - Other, please specify:

- *Beast*
- *Couple*
- *Frog*

Please share any additional comments or thoughts you may have about this shoreline, State Road A1A, or coastal erosion.

- *Access to the beach is fantastic, but I would love to see enhancements that bring both beauty and functionality to this historic area of Jacksonville. Stronger measures should be implemented to deter and penalize illegal dumping, which remains a concern. Adding a sidewalk or wider, safer bike lanes on the east side of the road would significantly improve pedestrian and cyclist safety. Additionally, addressing homelessness in and around the main beach area is essential, as it appears to be a contributing factor to the trash problem.*
- *Action needs to be taken quickly to expand the beach area and prevent further erosion. The tides are already encroaching on the road, and it's clear that the little jetty beach has shrunk. I fully support implementing any hard structures that can help reduce erosion. Ideally, these structures could also incorporate a recreational aspect. While I'm less concerned about vehicles driving on the beach, I do believe that rules should be established and enforced to prevent misuse.*
- *Bring vegetation back. Repair the shoreline. The roads? Figure it out a road can be removed, moved, rebuilt. This used to be a great lil park, and now the spit is closed off and it's hard to find shade*
- *Ever since the dredging of the river the erosion and the loss of vegetation has gotten exponential. All the cedars and oaks from the Wonderwood bridge to Mayport along A1A have fallen and died or are doing so. As well as the scrub vegetation. There's no question why the little jetties and A1A is falling into river, the sides of the river are fallen apart and desalination is wiping out vegetation. Again, this all started with the river dredging.*
- *Get the crackheads out*
- *Homeless people and others have pretty much taken over a1a from Wonderwood.*
- *I do not want public access restricted but maintained in a manner conducive to safe family enjoyment.*

- *I don't want to see the jetties disappear, I would much rather people no longer have access to this space. I was born and raised in Mayport village along with the rest of my family. I hate the crackheads that live in the Jettie.*
- *I go here often to watch sunsets and fish. It's great to see families enjoying the area, too. It's been an important part of the upper Atlantic Beach and Mayport communities for a long time.*
- *I live at A1A and Wonderwood. Erosion worries me. I can see the water increasing all the time. Especially when I come over the Wonderwood bridge. Watching the water level in the salt marsh. Seems to be growing Hodges every year. More blue les green marsh grass. Just saying*
- *I sent an email to the Army Corp of Engineers over 10 years ago on the erosion along A1A as presented in your photographs. I never received a response. I contacted the DOT who said it was not their issue. I would like to see significant action taken to minimize the coastal erosion, reduce the shoreline vehicular traffic, reduce extended camping, and re-open the park to allow access to the fishing pier.*
- *I think a bulkhead and back fill it so people can have a place to fish .and enjoy the area*
- *I think by adding sand and some of the other natural ways is the best bet. Driving on the beach at this park for sunsets is the single best thing of living in this community. I think there is a way to balance both. I think we should build upon the natural beauty. Also I think it would be great to try and do a beach clean up here and preserve it. Unfortunately lots of the people that come to this area don't even live in the area or are homeless. I think majority of the people who live in this area want to keep it clean, I think there are a lot of other things we can do on that side like adding trash cans and organizing clean ups. I know lots of people who would be interested in helping plant native plants and do what we can to preserve this area.*
- *I think if you do allow vehicles in the little jetties, they should be limited to one area to avoid additional damage to the land. Also on the suggestion for protecting the sand loss, I would like more information on how the structure would affect the surrounding areas and wildlife. Thank you*
- *I would like to see the boulders and rocks alternative.*
- *I would love to spend more time at the jetties but it is treated like a garbage dump. I would love to see more trash cans available since people can't seem to walk more than 2 feet to throw something away. Also, enforcing fines for littering/dumping could help.*
- *I'm all for building it back up like it was I like that you can pull in anywhere I like the fact you can park in the trees for peace and privacy like your personal space I been going here since I was a small child 60 years .it needs to loved a lil more .it is and remains my favorite spot ever .so please don't change just help it a lil for our wild life and our children*
- *I'm a huge believer that nature-based solutions (like living shorelines) will be crucial for the road's future*

- *It's navy property. I don't know why it isn't patrolled or manned on the weekends. Especially at night. People party there every single weekend and leave it trashed. Ongoing problem for years! Restrict or limit vehicle access and have a presence from the navy on the weekends. This would help prevent it from being the dumping ground that it is. Furniture, mattresses, pallets, tires...everything is dumped because it's wide open. Every other park has limited hours and accessibility. Homeless camps are an issue. Again, baffled why the navy/JSO allow it. Make Mayport Great Again!*
- *Limit driving on the sides of the jetties to prevent further erosion. Control the Homeless camps from being set up there and the constant non residents that come and leave burned pallets with nails on the beach. Repair the fishing dock that's been abandoned for many years.*
- *My concerns are more about the people who are using this park as a meeting place for questionable activities. I also am concerned about the homeless who use this area as a campsite. I have almost been run off the road by meth heads speeding recklessly around the bends and by homeless people not watching where they are going. Who patrols this area? Why is this behavior tolerated? I say fix up the shoreline and protect it from vehicle use and partying behavior. Leave it for fishing and birding enthusiasts.*
- *None.*
- *People drive cars, litter, create fires all on the shore. People constantly drive through the greenery and sleep overnight in vehicle driven up the dunes. City need to protect why people want to move here*
- *Police homeless individuals*
- *Replace sand vegetation that was lost due to dredging and removing half the Jetty it changed the flow and is eating at the bank on this side and build rock walls perpendicular to the shoreline to catch sand*
- *Something needs to be done that is going to work. It is frustrating to see something done and just wash away. It would be more important to us to see something effective even if it limits vehicle access. It would be important to us to preserve access to people and for marine life to continue.*
- *The dredging of the channel is the source of the beach erosion. The breakwater idea is on the right track.*
- *The homeless squatting issue along this area needs to be enforced by JSO and Navy police... the whole waterfront needs improvement from the boat ramp to the inter-coastal to Sherman creek. The city saw an opportunity to scoop up property to make big bucks, but when there was push back from the community they left it to sit. This scenic piece of Mayport needs to be protected and utilized as a recreation spot for the community and visitors.*
- *The Little Jetties are a staple for the local community. We play, fish, socialize, and get exercise here. However, the litter and improper disposal of fishing gear (line, hooks, weights, etc.) is problematic. Everyone has a right to respectfully enjoy the park. I don't*

want to see extreme government overreach regarding this local treasure. IF the local community and government could work together to improve and stabilize the Little Jetties that would be great. Personally, the only issues I have are the litter, vehicles being disrespectful and doing donuts/tearing up the beach, and sometimes overly loud music. Aside from that, people are welcoming and friendly. I enjoy taking my dogs to walk and swim here, and definitely don't want to lose the opportunity to do that. Limiting where people can drive will help vegetation to grow again, but putting up an asphalt or cement parking lot is not a good answer. I'd be happy to help with this within the local community. The Little Jetties are a treasure, whether for sunbathing, fishing, playing with dogs, or watching a sunset. [identifiable information redacted]

- *The naval base could grant the county an easement to widen parts of the road or find an additional point of entry to the base. It's not right to the businesses and residents of Mayport Village to have to be in naval base traffic, just to get home in the morning. Other than that, please prioritize protecting the environment/ecosystem over all else. We need the road, and we need nature.*
- *The St Johns River has been rerouted many times by the Navy base and dredging companies The bit of space that has no vegetation is where the road went under during one of the hurricanes and they had to bring more sand in to help in that erosion. They will continue to have to bring more sand in every year unless they build some kind of retaining wall along that area*
- *There are homeless shelters all the way from Wonderwood Rd to A1A toward Mayport Village. They keep getting broken up. The jetties beach is full. Most of time that road floods at real high tide. It is the last little area that has not been disturbed here. What are your thoughts? Anything would help here. [identifiable information redacted]*
- *There has been a severe problem with homeless activities. They are trashing the shoreline and burning vegetation. Leaving behind piles and piles of trash/rubbish*
- *There is no care on the beauty of this area. Trash everywhere, homeless people camping and people not taking care of it, no regulations at all! This is making an impact in its environment. We have to keep our nature safe from erosion and mankind nonsense. I do like going and park there to be able to walk it and fish, but maybe there could be designated spots for cars to help that. I do want to preserve the beauty of the river and the nature. Adding a plan for erosion and regulations will preserve this area and make it even prettier*
- *There needs to be a parallel jetty built of large jetty rock from Coast Guard Station going south all the way back to existing jetty on the Helen Cooper Floyd Park South of the Old Drain Pipe pilings. This needs to built further out from existing shore line. It needs filtration barrier cloth or of equal mesh "to hold back filled sand and rock" and filled up to back side of jetty just below or at edge of jetty. This project must allow access to water front all along this structure for recreational purposes. Hundreds of people, everyday frequent this property. Even us local folks have a detail of people who clean up this park*

several times a week. It includes people picking up trash and disposing of it at our expense. We ask for nothing but to preserve this area from erosion, for the residents of our area to enjoy as we have for decades and into the future. It must provide ample parking and access to the water front. Building the jetty parallel as stated or similar will fix the problem permanently. It is not fair to us tax players to keep putting million dollar Band-Aids on this problem. Fix it once and get it done. Do not try to block off people from this waterfront property by adding a jetty up next to roadway. It will create a huge backlash in the community and they will speak out against this project. You must understand this, residents have been fishing here commercially and recreationally for over a hundred years. As a commercial fisherman and life long resident of Mayport Fishing Village, for 8 family generations, I support the building of a jetty but only a parallel jetty built out far enough and high enough that supports the community in recreational use of the waterfront. It can not cut off the community to this waterfront. Thank you, [identifiable information redacted]

- *This is such a beautiful area since I was a little girl on so many levels.*
- *This might not be a popular opinion but since this is the only beach in Mayport Village, it's very important to preserve it in whatever way is necessary — even if it means people can no longer drive right to the shoreline.*
- *Would like to be able to enjoy this shoreline for years to come. One of the best spots in Jax for sunset viewing!*
- *Would like to know when you have meetings about this.*
- *Would like to see more native plants, small pier or boardwalk to watch the ships go by. Park benches*
- *Would like to see some agency take charge of the area to help clean it up, the homeless people are trashing the park*