

South Bethany Tidal Resiliency Survey Results

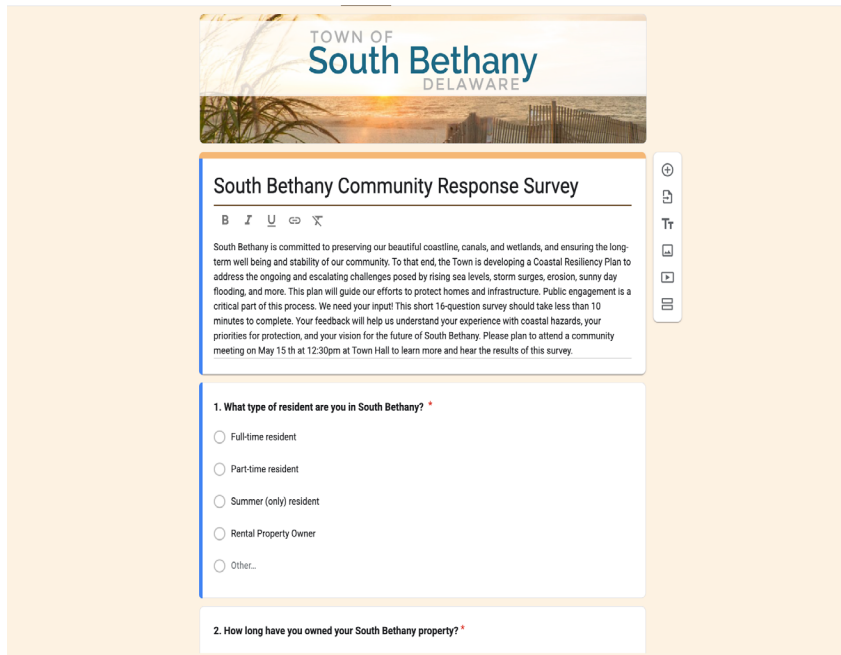
University of Delaware
Institute for Public Administration

Background Research

- We looked into a variety of past coastal planning and research conducted in South Bethany to determine common issues:
 - Poor flood management capacities
 - Water quality issues in the canals
 - Beach and Dune Erosion
- GMB: Resiliency Implementation produced in 2023
 - Utilized recommendations from this report to form survey questions regarding potential policy plans



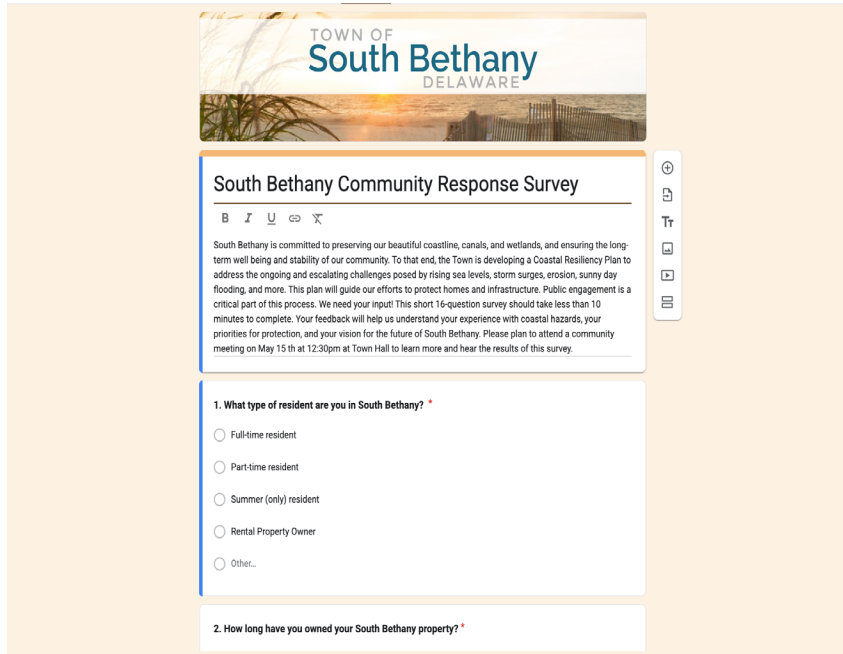
Survey Overview



The screenshot shows a web-based survey titled "South Bethany Community Response Survey" for the Town of South Bethany, Delaware. The header features a banner with a coastal scene and the town's name. Below the title, there is a paragraph explaining the survey's purpose: to gather input for a Coastal Resiliency Plan to address challenges like rising sea levels and storm surges. The survey is described as a 16-question form taking less than 10 minutes. The first question, "1. What type of resident are you in South Bethany?", has five radio button options: Full-time resident, Part-time resident, Summer (only) resident, Rental Property Owner, and Other... The second question, "2. How long have you owned your South Bethany property?", is partially visible at the bottom. A right-hand sidebar contains icons for navigation and editing.

- 422 total responses
- Survey gathered:
 - Basic geographical information about resident
 - Opinions on potential policy plans for the community based on a 1 (Do not use this strategy) to 5 (I would encourage use of this strategy)
- **The goal of the survey:** Gain an understanding of what the South Bethany Community would like to accomplish through a new Coastal Resiliency Plan

Survey Overview



The screenshot shows a web-based survey form for the Town of South Bethany, Delaware. The header features the town's name and a scenic image of a beach at sunset. The survey title is "South Bethany Community Response Survey". Below the title is a paragraph explaining the town's commitment to preserving its coastline and the purpose of the survey. The first question is "1. What type of resident are you in South Bethany?" with five radio button options: Full-time resident, Part-time resident, Summer (only) resident, Rental Property Owner, and Other... The second question is "2. How long have you owned your South Bethany property?" and is partially visible at the bottom of the form.

TOWN OF
South Bethany
DELAWARE

South Bethany Community Response Survey

B I U

South Bethany is committed to preserving our beautiful coastline, canals, and wetlands, and ensuring the long-term well being and stability of our community. To that end, the Town is developing a Coastal Resiliency Plan to address the ongoing and escalating challenges posed by rising sea levels, storm surges, erosion, sunny day flooding, and more. This plan will guide our efforts to protect homes and infrastructure. Public engagement is a critical part of this process. We need your input! This short 16-question survey should take less than 10 minutes to complete. Your feedback will help us understand your experience with coastal hazards, your priorities for protection, and your vision for the future of South Bethany. Please plan to attend a community meeting on May 15 th at 12:30pm at Town Hall to learn more and hear the results of this survey.

1. What type of resident are you in South Bethany? *

☐ Full-time resident

☐ Part-time resident

☐ Summer (only) resident

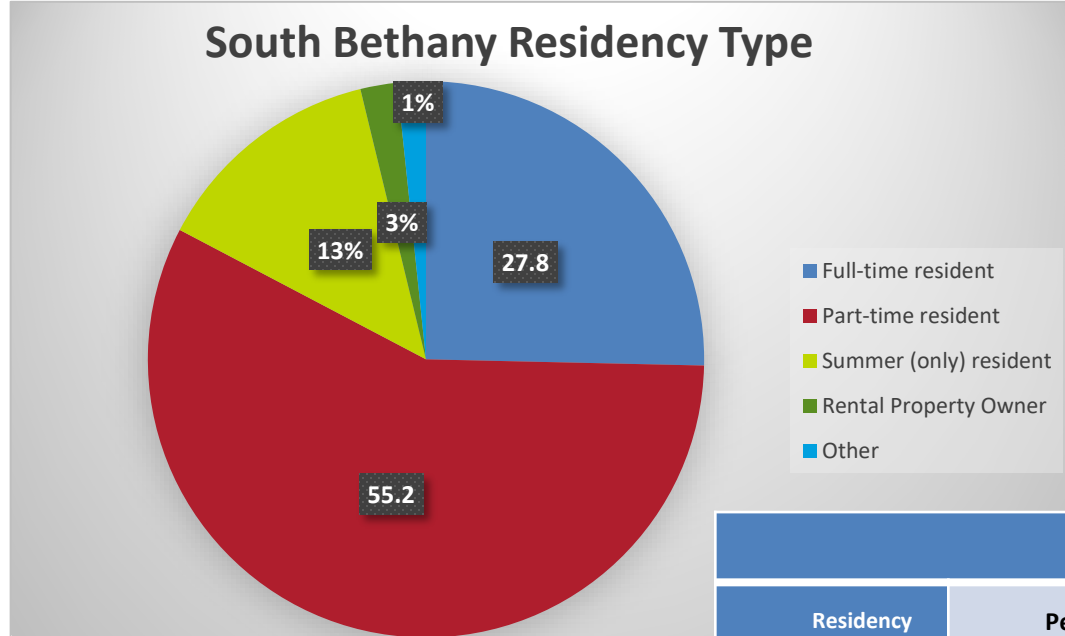
☐ Rental Property Owner

☐ Other...

2. How long have you owned your South Bethany property? *

- Unsure of likely response rate
- Unsure of how far down the data could be parsed
- **Perhaps a bit too open ended** with some questions, but a little extra elbow grease did yield results.

Survey Respondents: Resident Type



Residency	Percentage	Approximate Responses
Part-time	55.21	233
Full-time	27.73	117
Rental	2.84%	12
Summer	13.03%	55
Other	1.18	5

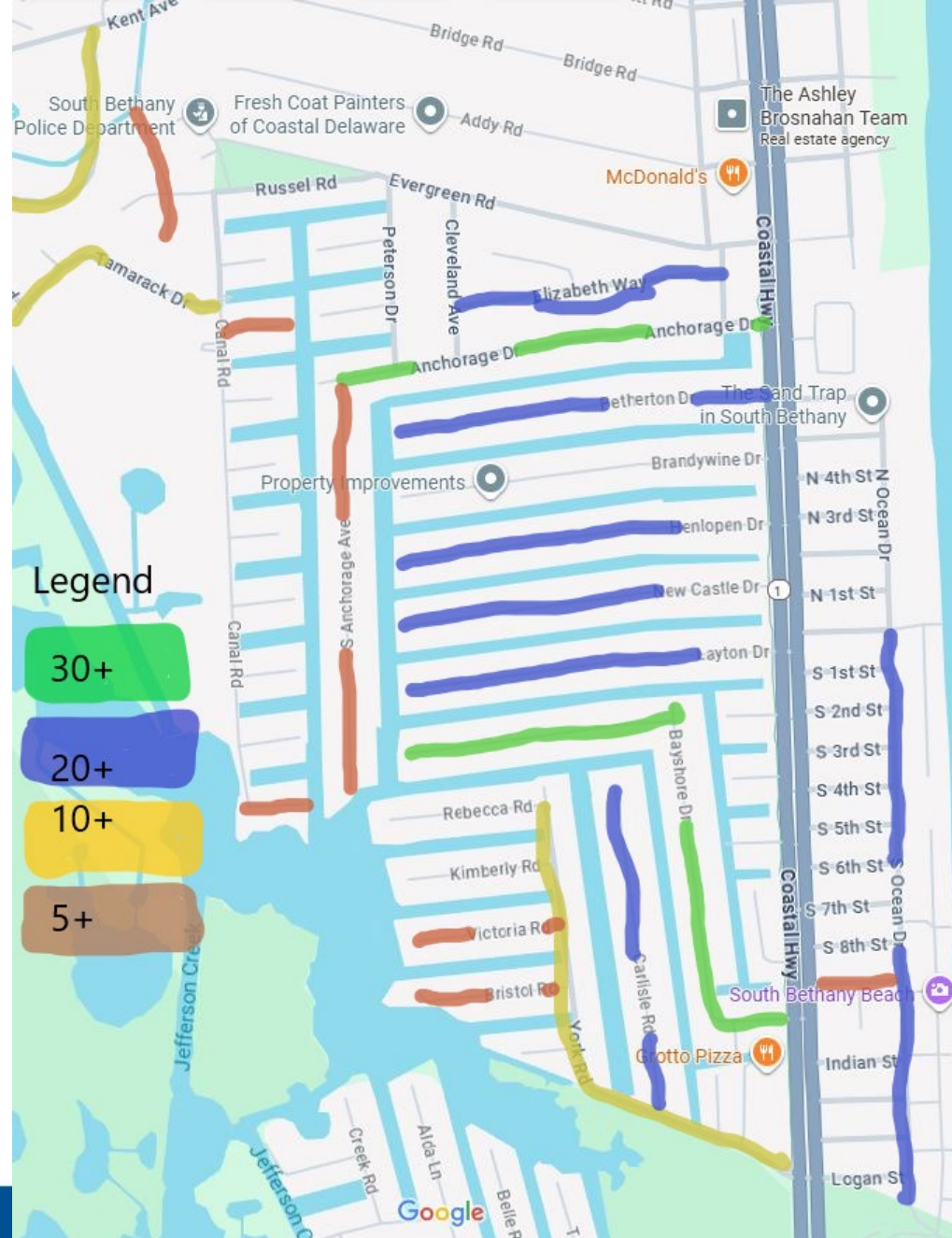
Survey Respondents: How Long Have You Owned?

- Average length of ownership
 - 21.5 years
- Median
 - 20 years
- Most common response
 - 5 years

Survey tends towards conservative figures. Many respondents indicated family had owned for decades, but that they took personal ownership recently. At least [X-Number] of years....

What street do you live on?

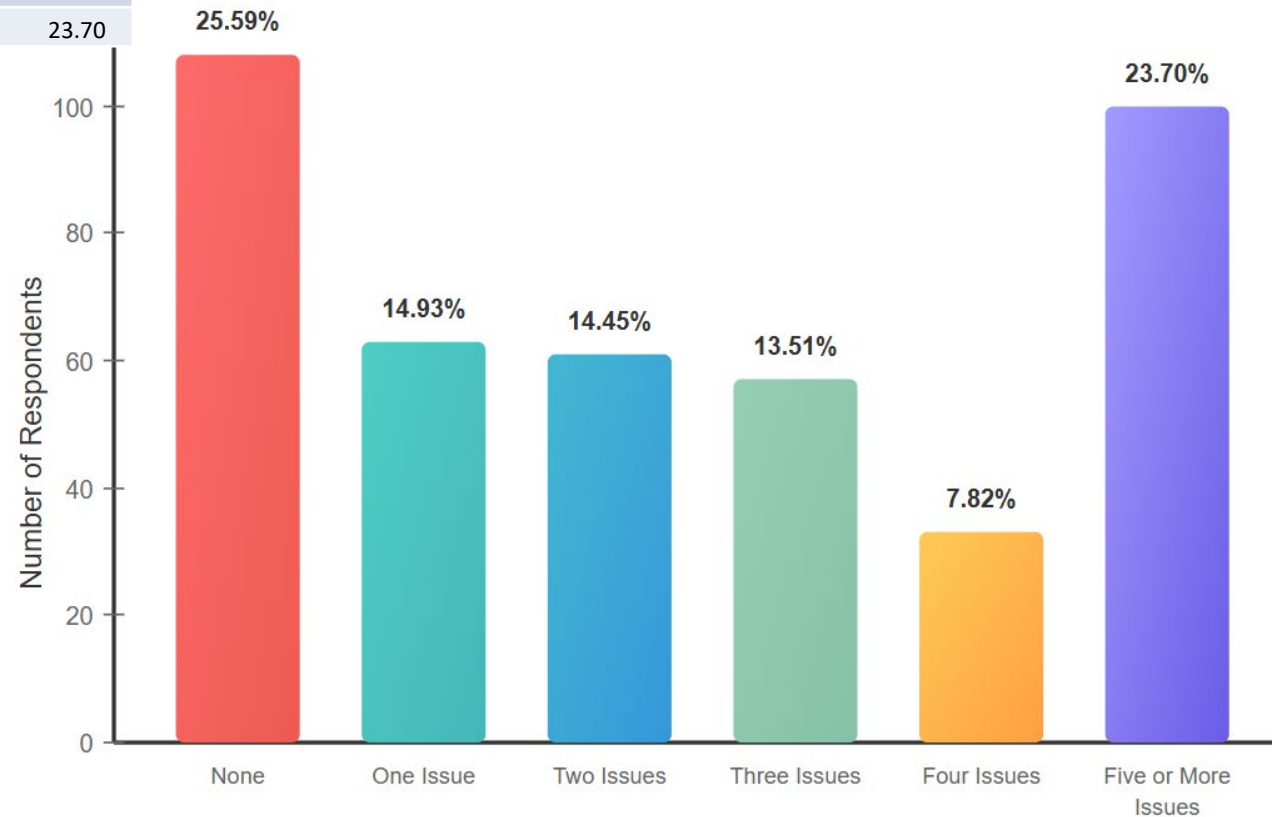
Street Name	Frequency	Percentage
Anchorage	34	8.90%
Bayshore	33	8.60%
Tamarack	25	6.50%
Black Gum	22	5.70%
York	21	5.50%
Layton	18	4.70%
Elizabeth	17	4.40%
Petherton	15	3.90%
Henlopen	14	3.60%
New Castle	13	3.40%
South Ocean	13	3.40%
Carlisle	10	2.60%
Periwinkle	9	2.30%
Victoria	9	2.30%
West 1st	7	1.80%
South 9th	6	1.60%
Bristol	6	1.60%
Cattail	5	1.30%
S. Anchorage	5	1.30%
West 8th	5	1.30%
Other	76	20.94%
Total	363	100%



Number of Coastal/Back Bay Issues

Number of Issues Reported	#	%
None	108	25.59
One Issue	63	14.93
Two Issues	61	14.45
Three Issues	57	13.51
Four Issues	33	7.82
Five or More	100	23.70

Number of Issues Reported by Respondents

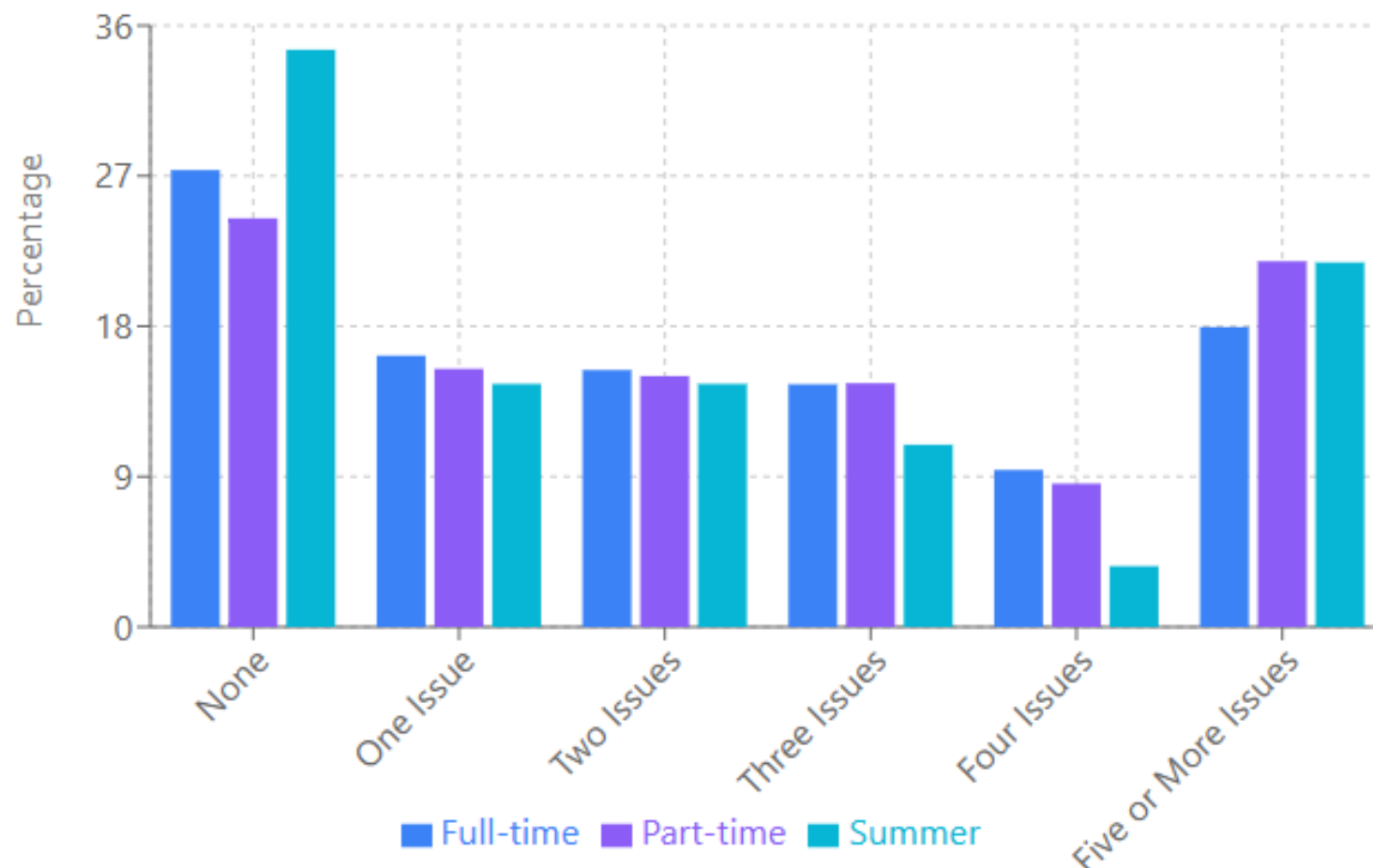


of Coastal/Back Bay Issues by Residency Type

Resident	# of Issues	#r of Respondents	Percentage (%)
Full-time			
	None	32	27.35
	One Issue	19	16.24
	Two Issues	18	15.38
	Three Issues	17	14.53
	Four Issues	11	9.40
	Five or More	21	17.95
Par-time			
	None	57	24.46
	One Issue	36	15.45
	Two Issues	35	15.02
	Three Issues	34	14.59
	Four Issues	20	8.58
	Five or More Issues	51	21.89
Summer			
	None	19	34.55
	One Issue	8	14.55
	Two Issues	6	14.55
	Three Issues	6	10.91
	Four Issues	2	3.64
	Five or More	12	21.82

of Coastal/Back Bay Issues by Residency Type

Residency Type Comparison by Issue Level (%)

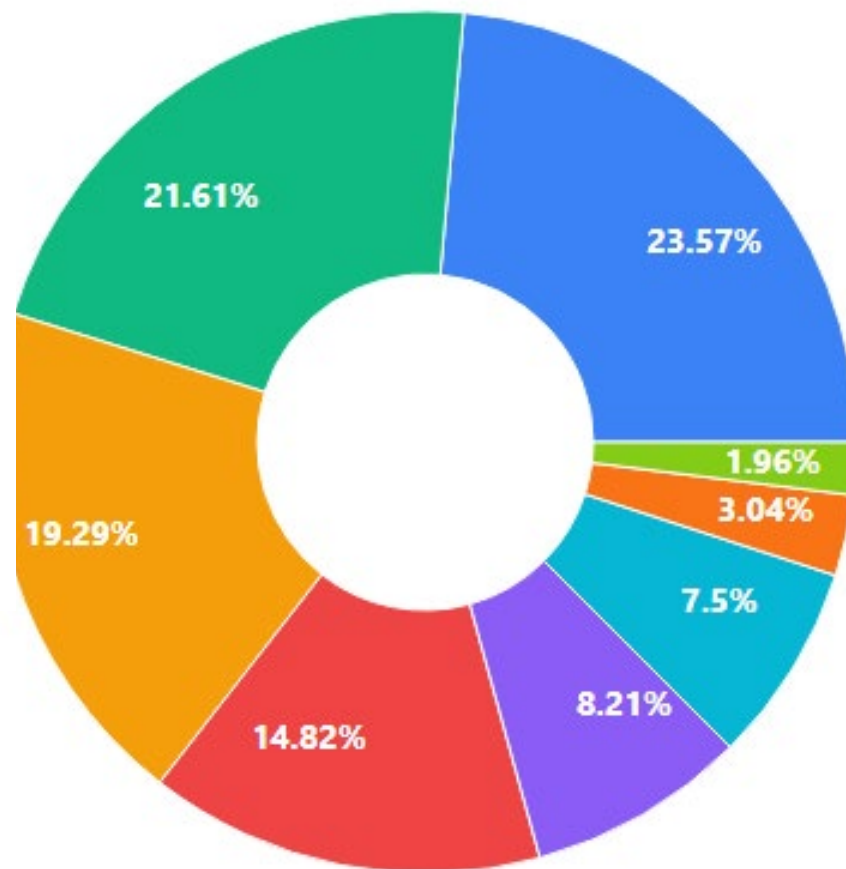


Coastal/Back Bay Issues Encountered

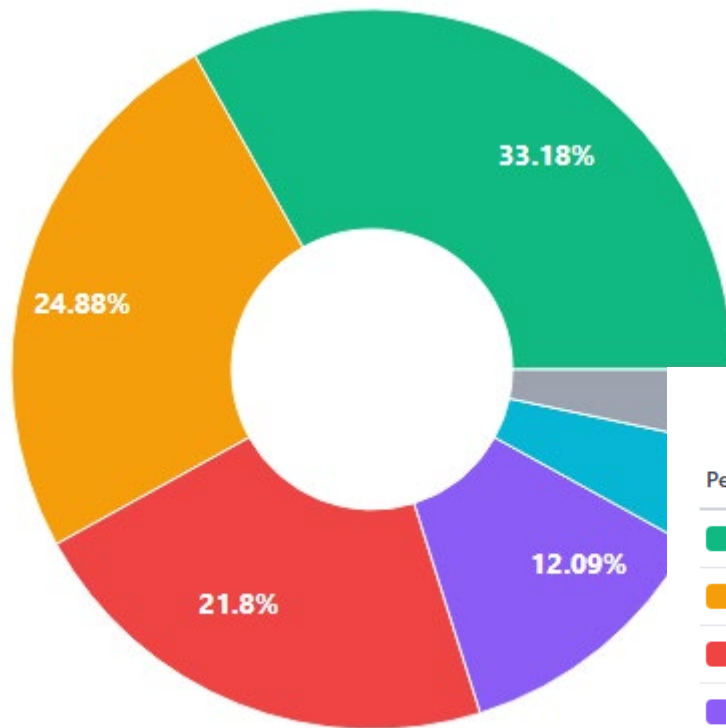
Flooding Issues Survey Results

Issue Type	Count	Percentage
Increased roadway flooding	132	23.57%
Increased property flooding	121	21.61%
None	108	19.29%
Overtopping of bulkheads	83	14.82%
Storm surges	46	8.21%
Sea level rise	42	7.5%
Damage to infrastructure	17	3.04%
Other	11	1.96%
Total	560	100.00%

Note: 422 valid responses analyzed. Multiple selections allowed per respondent. Percentages based on total responses (560), not number of respondents (422).



Geographic Scope of effects



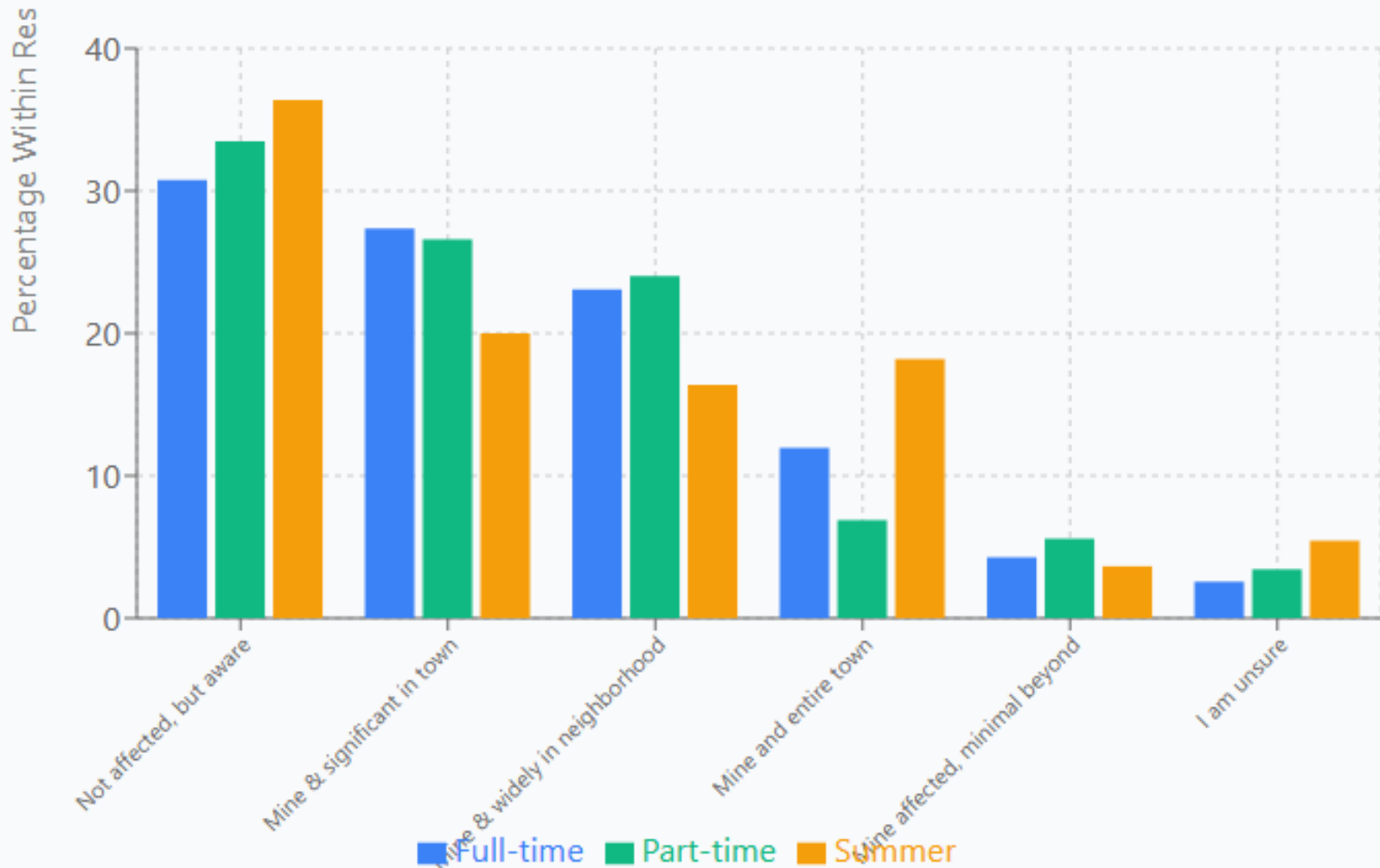
Perceived Scope of Coastal/Back Bay Issues

Perceived Impact Scope	Count (%)
■ Not affected but aware	140 (33.18%)
■ Affected - town-wide impact	105 (24.88%)
■ Affected - neighborhood impact	92 (21.8%)
■ Affected - entire town	51 (12.09%)
■ Affected - minimal impact	20 (4.74%)
■ Unsure	14 (3.32%)
Total	422 (100.0%)

Note: 422 valid responses analyzed. Single response per respondent.
Percentages based on total respondents.

Geographic Scope by Residency

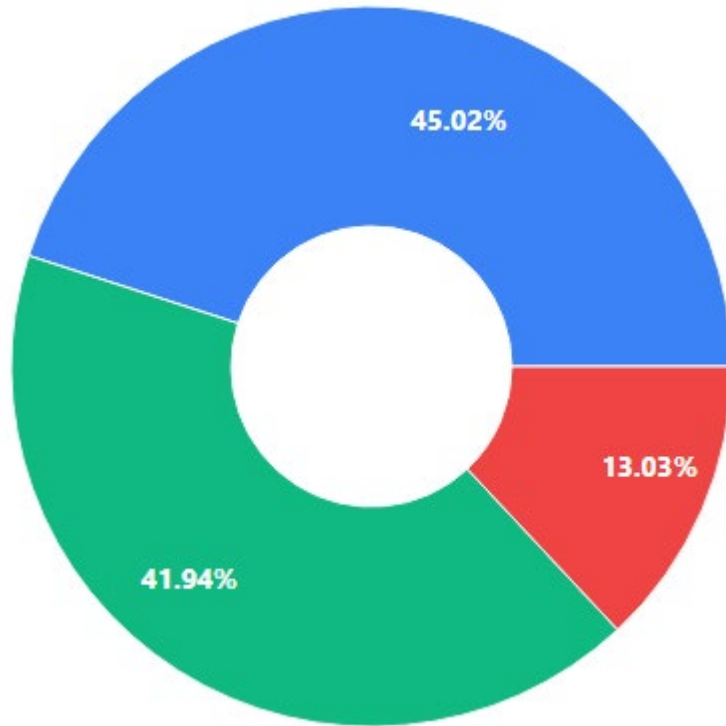
Percentage Distribution Within Each Residency Type



Geographic Scope by Residency - 2

Response Category	Full-time %	Part-time %	Summer %
Not affected, but aware	30.8%	33.5%	36.4%
Mine & significant in town	27.4%	26.6%	20.0%
Mine & widely in neighborhood	23.1%	24.0%	16.4%
Mine and entire town	12.0%	6.9%	18.2%
Mine affected, minimal beyond	4.3%	5.6%	3.6%
I am unsure	2.6%	3.4%	5.5%

Flooding severe enough to hinder access



Perceived Frequency of Access-Impeding Flooding

Frequency	Count (%)
 Less than 10 times per year	190 (45.02%)
 Never	177 (41.94%)
 More than 10 times per year	55 (13.03%)
Total	422 (100.0%)

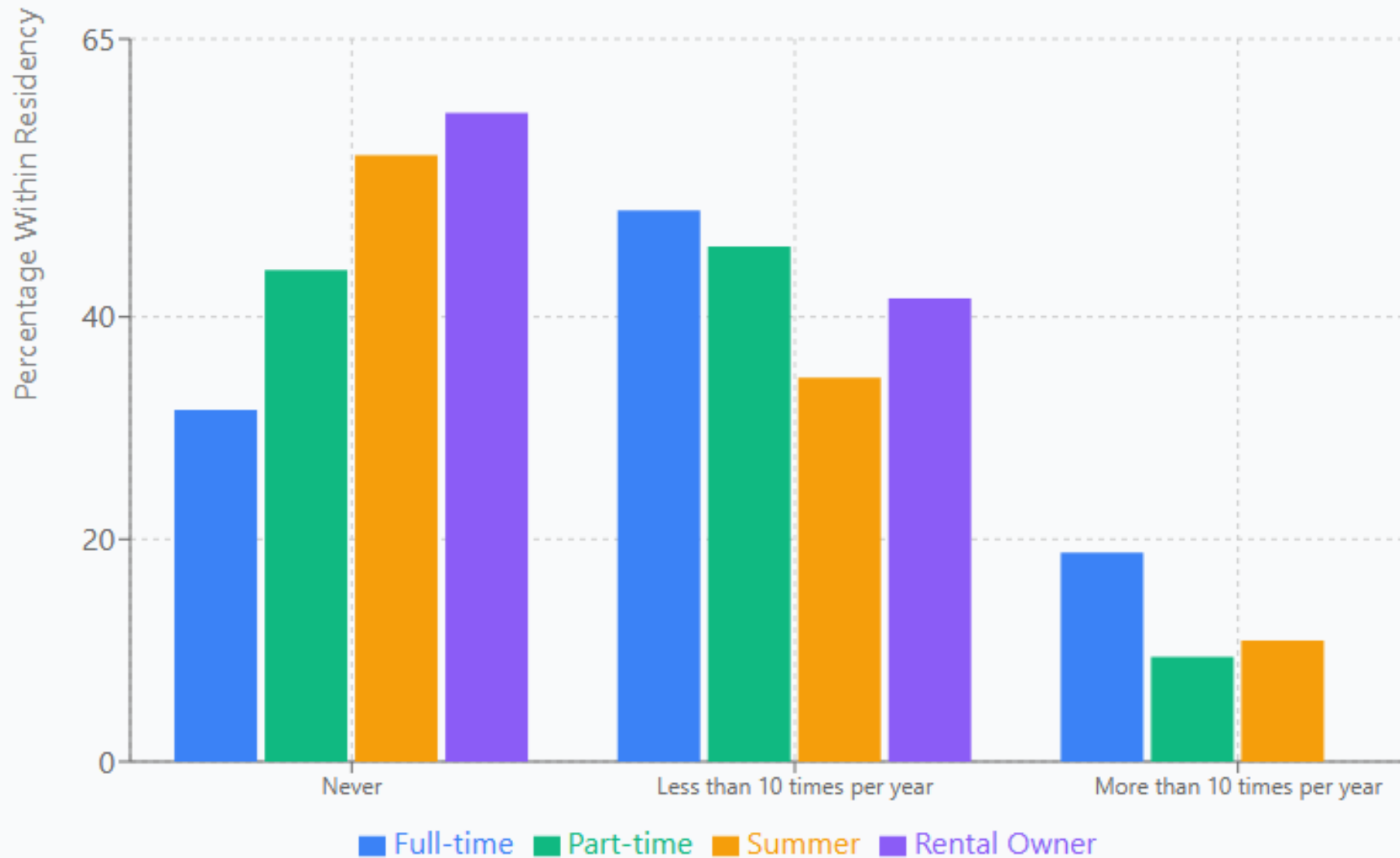
Note: 422 valid responses analyzed. Single response per respondent.
Access-impeding flooding refers to flooding that blocks or impedes access to property.

Flooding severe enough to hinder access by Residency

Residency Type	Flooding Frequency	Number of Respondents	Percentage (%)
Full-time resident			
	Never	37	31.62
	Less than 10 times per year	58	49.57
	More than 10 times per year	22	18.80
Part-time resident			
	Never	103	44.21
	Less than 10 times per year	108	46.35
	More than 10 times per year	22	9.44
Summer (only) resident			
	Never	30	54.55
	Less than 10 times per year	19	34.55
	More than 10 times per year	6	10.91
Rental Property Owner			
	Never	7	58.33
	Less than 10 times per year	5	41.67
	More than 10 times per year	0	0.00

Flooding severe enough to hinder access by

Residency - 2



Info source for flooding and emergencies?

Information Source	Number of Mentions	Percentage (%)
South Bethany Website/Communications	297	64.57
NOAA/Weather Services	108	23.48
DNREC's I-ADAPT Tool	12	2.61
Local News (TV, Radio, Newspapers)	8	1.74
Neighbors/Word of Mouth	5	1.09
FEMA	2	0.43
Other	16	3.48
None	12	2.61
Total Mentions	460	100.00

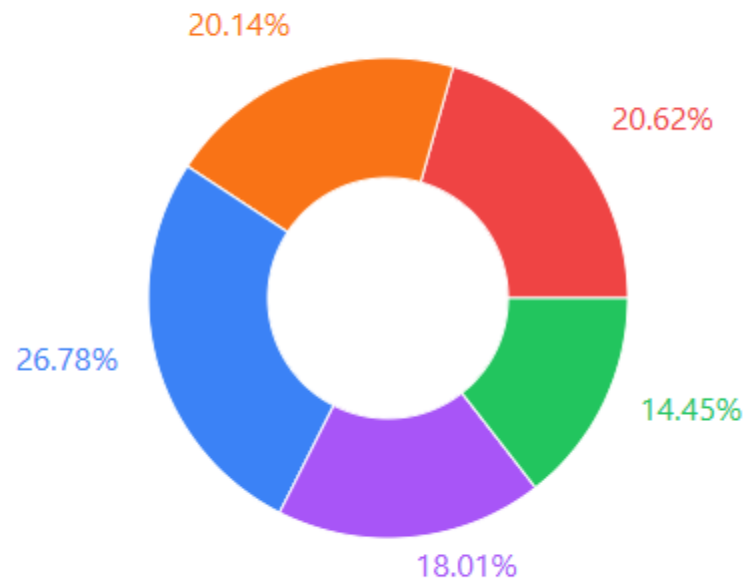
Like the most about South Bethany?

Feature Liked Most About South Bethany	#	%
Quiet/Peaceful Atmosphere	174	41.23
Small Town Feel/Quaint	107	25.36
Beach/Ocean Access	105	24.88
Friendly Neighbors/Community	80	18.96
Canals/Bay/Water Access	62	14.69
Family-Oriented Atmosphere	39	9.24
Lack of Commercialization	25	5.92
Natural Environment/Wildlife	24	5.69
Proximity to Amenities (e.g., restaurants, shops)	12	2.84
Cleanliness/Well-Maintained	11	2.61
Safety	9	2.13
Low Taxes	4	0.95
Limited Parking/Controlled Access	4	0.95
Other	20	4.74
Total Mentions	676	160.19

Familiarity with “Coastal Resilience”

Familiarity Rating Distribution

Scale: 1 = Least Familiar, 5 = Most Familiar (n = 422)



■ 1 (Least Familiar): 87 respondents ■ 2: 85 respondents ■ 3: 113 respondents ■ 4: 76 respondents
■ 5 (Most Familiar): 61 respondents

Initiative Support Overall and by residency

Coastal Resilience Measure	Overall Mean	Full-time Mean	Part-time Mean	Summer (only) Mean
Limiting Impervious Surfaces (Question 10)	4.05	4.11	4.02	4.03
Offering Incentives for Planting Trees/Native Plants (Question 14)	4.01	4.06	3.98	4.02
Creation of a Reserve Fund (Question 11)	3.97	4.01	3.95	3.91
Permitting Owners to Raise Bulkheads (Question 13)	3.94	3.98	3.92	3.84
Requiring Freeboard in New Construction/Redevelopment (Question 12)	3.89	3.93	3.87	3.84
Raising the Height of Vulnerable Roadways (Question 15)	3.83	3.91	3.79	3.84

What other resiliency and/or flood prevention methods could be considered?



The more common the answer was listed the larger the response became within the word cloud: Wetland restoration, living shorelines, sea walls, etc. were among the most common responses

**Thank you for listening to our
presentation!**

**Any Questions? Comments?
Concerns?**