

# **FISCAL IMPACT ANALYSIS**

**DAUPHIN ISLAND, AL**

PREPARED FOR THE MOBILE BAY NATIONAL ESTUARY  
PROGRAM

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## Introduction

This fiscal impact assessment examines the relative costs and benefits generated by the West End of Dauphin Island. The western four-fifths of the island is considered a simple barrier island, indicating a low and narrow sandy landform dominated by overwash and alongshore transport. This part of the Island is highly susceptible to storm impacts due to its low elevation (around 5 feet above sea level), narrow width, and lack of substantial dune features. For example, when Hurricane Katrina made landfall in August 2005, 450 of the 500 homes on the West End were damaged when the West End was completely covered with water [7]. Sea-level rise is projected to make the Island more susceptible to storm events, flooding, overtopping, and erosion, and threatens the sustainability of infrastructure on the West End.

The purpose of this fiscal impact assessment is to determine if the West End properties represent a net benefit to the Island—that is to say, if they bring in more in tax revenues than they cost to maintain. A better understanding of these costs and benefits is necessary in order to make recommendations for the Island’s long-term sustainability. The analysis focuses on the Town’s revenues in terms of property taxes, lodging taxes, and sales taxes, in comparison to the costs of providing local services and storm cleanup. In addition, we evaluated the future costs in the face of projected storm and flooding damages. The fiscal impact analysis examined property classification and ownership on the Island to better understand the short-term rental market at the heart of the Island’s economy.

## Project Background

Dauphin Island is a small island off the coast of Southern Alabama, connected to the mainland by a 3.4-mile bridge. It is approximately a 45-minute drive from Mobile and is also accessible by ferry. Like many Gulf Coast communities, Dauphin Island boasts miles of pristine coastline. Unlike nearby Gulf Shores, however, Dauphin Island is less developed commercially.

As a barrier island, Dauphin Island has a naturally changing landscape. A barrier island forms as waves deposit sediment parallel to the shoreline, forming an elongated strip of unconsolidated sediment<sup>1</sup>, constantly changing in response to wave and storm action [6][16]. Their dynamic structures allow them to buffer and protect the ecological systems on their landward side and the mainland beyond. Beaches and sand dune systems will form facing the ocean, while the landward side often includes ecological habitats such as marshland, tidal flats, and maritime forests<sup>2</sup>. However, barrier islands are unstable and depend heavily on the dunes for protection and longevity<sup>3</sup>. Dauphin Island demonstrates the dynamic, shifting nature<sup>4</sup> of these lands, as it has migrated landward in recent history, been cut and reformed by major storms, and yet sustains a small population and settlement despite these conditions.

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<sup>1</sup> <https://www.floridaocean.org/sites/default/files/documents/PDFS/barrier-islands.pdf>

<sup>2</sup> <https://oceanservice.noaa.gov/facts/barrier-islands.html>

<sup>3</sup> <https://oceanservice.noaa.gov/facts/barrier-islands.html>

<sup>4</sup> <https://www.floridaocean.org/sites/default/files/documents/PDFS/barrier-islands.pdf>

Dauphin Island is a small community with just over 1,700 full-time residents in 2021<sup>5</sup>. This small population, however, is steadily growing (7% growth from 2010 to 2019), especially in comparison to Mobile County at large (1% growth from 2010 to 2019)<sup>6</sup>. According to the recent Aloe Bay Master Plan [8], Island residents are also older than those of Mobile County and enjoy a higher median income. Basic demographic trends for the Island are presented in Table 1 below.

*Table 1: Demographic Trends for Mobile County and Dauphin Island, 2019. Source: Randal Gross Development Economics, collected for the Aloe Bay Master Plan, 2021*

<b>Trends (2019 data)</b>	<b>Mobile County</b>	<b>Dauphin Island</b>
Population (Full-time residents)	413,210	1,324
Population Growth 2010 to 2019	1%	7%
Percentage of Residents over Age 65	17%	36% (up 71% since 2010)
Households	155,946	585
Median Household Income	\$49,639	\$87,596 (up 32% since 2010)

Home prices on the Island are also higher than in the County. According to Zillow, the average price for a home on Dauphin Island is \$405,423—almost three times the median home value of Mobile County (\$163,031). In addition, Island home values rose 23.7% in the past year<sup>7</sup>. According to data from the mayor’s office, there has been a recent building surge on the Island, with an average of 61 new homes permitted each year. On an island with just over 2,000 homes total, this represents a significant growth.

Development on the Island has shifted significantly through its history. The first homes on the Island were built on the East End behind the protection of the sand dunes and maritime forest [20]. In the 1950s, the Island had approximately 250 residents [17]. However, with the construction of the original bridge in 1954-55 and the platting of the Island into marketable parcels (both efforts undertaken by the Mobile Chamber of Commerce), the Island began to see increased development, including development of the narrow, low lying West End [17].

In 1979, Hurricane Frederic destroyed many of the West End homes and the bridge. The newly created Federal Emergency Management Agency (FEMA) used Alabama as a test in the wake of this 1979 hurricane [7]. The new Agency pledged \$200 million (1979 dollars) to Alabama’s recovery—including spending \$40 million (approximately \$135 million in today’s dollars) on the construction of a new bridge to Dauphin Island [7]. Since then, building on the Island has steadily increased, with homes on the West End becoming increasingly larger and more extravagant [20]. In the wake of the decimating effects of Hurricane Katrina in 2005, which destroyed 90% of the West End, rebuilding resumed [20].

West End properties are largely second homes and rental properties and, even without hurricanes and major storms, cost the Town a significant amount to maintain. The purpose of this fiscal impact assessment is to determine if the West End properties represent a net benefit or cost to the Island. This

<sup>5</sup> According to Town officials

<sup>6</sup> Randall Gross / Development Economics from the Aloe Bay Master Plan 2021

<sup>7</sup> <https://www.zillow.com/dauphin-island-al/home-values/>

analysis aims to examine not only the patterns of land use, development, and ownership on the Island but also the fiscal impacts of that development.

## Fiscal Impact Assessment (FIA)

Local governments, planners, and residents often use a fiscal impact analysis (FIA) to determine the impacts of local policy decisions [8,11,5]. FIAs can be used for multiple purposes; however, one primary purpose is to help local communities with development and land use decisions [10]. FIAs are typically applied to land use issues such as developing new properties (e.g., for residential or commercial development), rezoning existing properties, or conserving land. [3, 13,] These assessments were originally developed to determine tax and spending impacts to local governments and economies [21]. For example, a town considering whether to develop a new shopping center or apartment complex will want to weigh the fiscal benefits of a development (e.g., increased sales and property taxes) with the costs of providing local services (e.g., police, fire, road maintenance) [10,11, 5].

Unlike other economic reports, FIAs focus on the fiscal (revenue minus cost) impacts of any local decision.

**Revenues:** The primary sources of local revenues are typically taxes and user fees related to the new development or change in land usage. For example, a new shopping center would generate sales taxes as well as property taxes for the local community.

**Costs:** New policies and development also typically have service costs associated with them. A new shopping center may require alterations to existing traffic or require additional police and fire services. New residential developments generally lead to new residents, which require additional Town services (schools, fire, etc.).

**Intergovernmental Transfers:** Most FIAs also consider intergovernmental transfers in one way or another (e.g., if school fees are paid by State government). For this study the primary intergovernmental transfer examined are federal funds (from FEMA, USACE, NOAA, and other sources) related to storm resilience and disaster recovery efforts.

Economists and planners incorporate models and assumptions into FIAs to most accurately predict local impacts given the available data. As with any economic or planning model, data is limited, and the assumptions applied in any FIA should accurately reflect the key tradeoffs in the community. The analysis conducted for the Dauphin Island Watershed Management Plan contains a number of standard assumptions, some based on experts' insights on the Island, which will be discussed in more detail below.

Although FIAs have been used for many decades [10], scientists, economists, and planners have incorporated more detailed geospatial modelling in the past decade as availability of computer software and geospatial databases have increased dramatically [13]. Geospatial planning models have several advantages:

- Property tax revenues are one of the main sources of revenue for most local communities. Since property taxes are levied on land (and improvements to the land, such as home construction) a geospatial analysis can help improve understanding of this revenue source.

- Many local decisions involve zoning or other ordinances with a geographic component.
- Certain impacts (e.g., hurricanes and other storms) have a strong geospatial element.

This study incorporates the latest geospatial methods to provide an analysis of geographical development patterns on the Island and the impacts of that development on Dauphin Island's fiscal sustainability. Specifically, it attempts to examine the relative costs and contributions of different areas of the Island, including consideration of high costs of storm prevention measures as well as maintenance of roads and other infrastructure after sustaining storm damages. As detailed later, these costs are not distributed evenly across the Island but tend to be focused on specific areas subject to severe storms.

In part, this study seeks to help the Island determine how best to spend its limited tax revenues particularly concerning storm maintenance and adaptation across the Island. Allocating their limited resources is a critical issue for local officials, especially in regards to preparing for storm events. This FIA will address several issues for the Town of Dauphin Island, including:

- a) Does the Town have sufficient revenues to sustain the Island given future expected storms?
- b) What impacts of current land use policies affect the Island's fiscal situation?
- c) Can current land-use policies on Dauphin Island be sustained?
- d) How can the Town increase local revenues considering answers to questions a and b above?

Some FIAs also include an analysis of how tax burdens are distributed across residents of varying income levels (vertical equity) or how taxes are distributed among residents with similar incomes (horizontal equity). While the scope of this study does not include this consideration, the analysis does include an in-depth assessment of property ownership on the Island, including a significant portion of parcels belonging to out-of-state owners.

## Data Sources

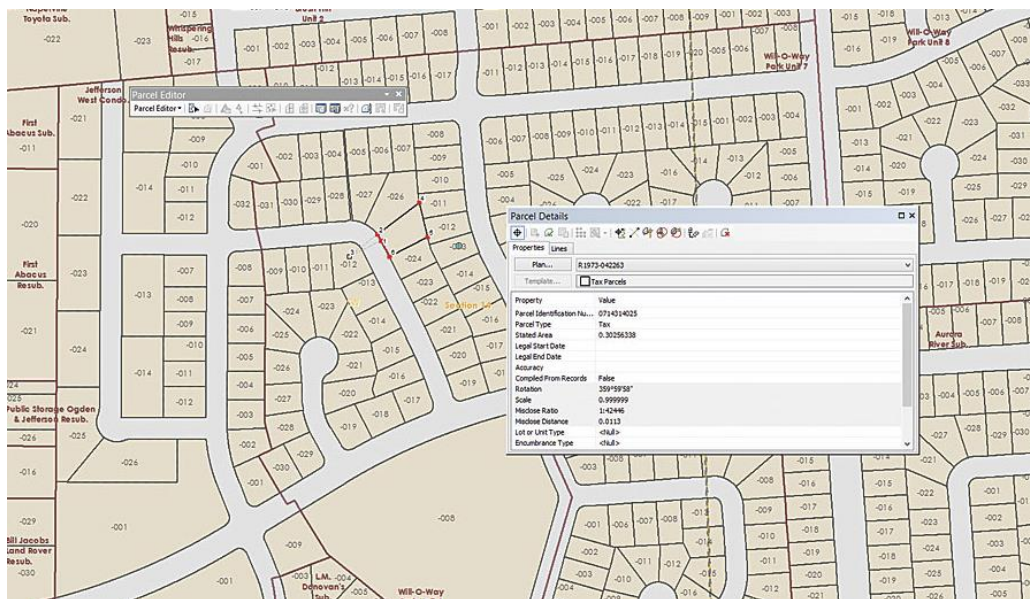
Table 2 summarizes the data sources which are described in more detail in the following sections.

*Table 2: Data Sources for Fiscal Impact Analysis*

Estimate	Data Source
Residential Property	Mobile County Parcel Data
Vacant Land	Mobile County Parcel Data
Property Tax Revenue	Mobile County Parcel Data
Property Classification	Mobile County Parcel Data
Rental Property	Mobile County Parcel Data, Expert Input, Sensitivity Analysis
Town Revenues	Town Budget, Expert Input
Town Expenditures	Town Budget, Expert Input on Town Budget
Federal Expenditures	Past Reports, FEMA data unavailable for this FIA
Storm Impacts (Economic Damages)	NOAA Economic Impact Assessment, FEMA Hazus Model, Parcel Data

## Parcel data

This FIA began with an analysis of parcel data, collected from the Mobile County Department of Revenue. Figure 1 below presents a sample image of parcel data (not on Dauphin Island). In the diagram below, each area delineated by dark lines represent a distinct parcel.



*Figure 1: Typical Parcel Data Map (<https://www.esri.com/about/newsroom/arcnews/making-local-parcel-data-open-at-state-national-levels/>)*



In the United States, these parcels are typically owned by either private citizens (e.g., residential property or business), a public agency (e.g., national or local parks, police stations), or a non-profit organization (e.g., church) often not subject to property taxes. The parcels denote the ownership and lot line boundaries.

Private residences and businesses are generally assessed on the value of both land and “improvements” to property—typically structures (e.g., a home or business)<sup>8</sup>. County Assessor’s offices, including the Mobile County assessor’s office, base this assessment on the value of the land and its improvements. Aside from levying property taxes, assessor’s offices track current property values, creating parcel data. As the housing market fluctuates or properties are developed, these values change. Coastal properties in the U.S. have seen higher price appreciation than more inland properties [11]. This study, however, does not use temporal parcel data, as predictions of future home values are highly unstable and historical data is not relevant to the goals of this FIA.

By using state of the art geospatial modeling to render parcel data, one can incorporate the following:

- The specific geospatial location of every parcel including land boundaries. Given sufficient resources, the location of specific buildings can also be incorporated (e.g., to examine vulnerability to flooding).
- The property tax classification, and the assessed value of land and improvements.
- FEMA flood modeling.
- Other relevant data (e.g., Zillow for home prices).
- Regional designations.

Since property taxes have traditionally been a source of local revenue, the County Assessor’s data allow one to easily analyze the geospatial distribution of property tax revenues alongside these additional components

## Town Budget Data

### Revenues

We obtained data from the Town of Dauphin Island’s current budget (available [online](#)). In 2020-2021, the total budget was just under \$4 million. Dauphin Island’s chief sources of revenue (discussed in more detail below) are sales taxes (32.5% of the Island’s budget at \$1.3 million), lodging taxes (\$1.1 million) and ad valorem (property) taxes (\$500,000). Updated 2020-21 budget data was obtained from Town officials in October of 2021, and indicated total revenues of \$4,032,647, sales tax collection of \$1,617,242, and lodging tax revenues of \$1,500,771<sup>9</sup>.

As noted above, data on each parcel on Dauphin Island and the property taxes garnered to the County and Town were obtained. This rich dataset included not only the assessed value, but also the property value, the property tax classification (discussed in more detail below), and detailed ownership information. Using geospatial software (ArcGIS from ESRI), the geospatial distribution of property taxes across the Island were mapped, and property tax revenues from specific areas were estimated.

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<sup>8</sup> For the purposes of this study, any parcel with “improvements” is considered developed. Developed parcels, for this analysis, are treated as “homes.”

<sup>9</sup> Obtained via correspondence with the Town Clerk and members of Council.

Although exact breakdown of lodging taxes was not obtained, several people associated with the local real estate industry offered perceptions. As discussed in detail below, this analysis followed common practice in obtaining expert information to inform the assumptions and alleviate gaps in available data.

The Town's budget information was limited but provided us year-end numbers for total revenues and expenditures. In particular, this data illustrated the relatively high importance of the Island's rental market and lack of other significant revenue sources.

### *Expenses*

The annual budget data included the full year of expenses as projected. For expenses, Dauphin Island's budget is focused on categories such as "salaries" and "insurance" rather than specific service sectors. While this data provided initial estimates, it did not contain the detail necessary for a full analysis. Furthermore, the annual budgets for specific departments within the Town—such as Public Works or the Police—were not available. To obtain more detail, Town officials were consulted and provided a breakdown of Town services by type and location

### *Storm Modeling Data—NOAA and FEMA's HAZUS Model*

In addition to the analysis of the current fiscal situation on the Island, this FIA endeavors to provide insight into the Island's fiscal sustainability, particularly in the case of storm resilience. In order to do so, researchers from the Harte Research Institute for Gulf of Mexico Studies at Texas A&M and the National Centers for Coastal Ocean Science/NOAA National Ocean Service supplied modeling results of storm impacts in the Northern Gulf of Mexico. This research provided regional-scale Economic Impact Assessments.

Impact damages to specific features of the Northern Gulf of Mexico (NGOM) region were modeled under five scenarios. The features included buildings, vehicles, infrastructure, crops, and humans (in terms of shelter and displacement). For this FIA, only the data on building damage were used.

The model determines building damage costs based on FEMA's HAZUS model, a nationally standardized risk modelling methodology<sup>10</sup>. HAZUS does not, however, use precise building data. Rather, it determines damage at the census block level and uses estimates of what buildings within that block are likely to be worth. Thus, the model cannot be matched parcel for parcel but rather by census block. Damages within census blocks are determined using "depth damage curves," such that the percentage damaged in a particular storm event or sea-level rise scenario results in an associated cost [9,18]. In applying these curves, the HAZUS model operates under the assumption that building stock is consistently distributed throughout the census block [18].

For this analysis, geospatial data at the census block level were used. For two storm conditions—100-year and 500-year—and five sea-level rise scenarios, researchers projected the number of buildings exposed to damage, the number of "substantially damaged residential buildings<sup>11</sup>", and the percentage of buildings damaged, among other results.

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<sup>10</sup> FEMA Hazus Factsheet

<sup>11</sup> Defined as greater than 50% damage, such that the structure would likely be replaced.

## Data Limitations

As noted above, this study, like any other similar study, faces data limitations. Overall, fewer records were readily available than anticipated, and, as a result, models and assumptions were used to best capture the current and future fiscal situation on the Island. For each type of data obtained, this section discusses the limitations and possible improvements for future studies.

**Parcel data:** Of all the tax data used for this study, the parcel data were the most complete. However, the data obtained from the Mobile County Assessor's office presented numerous challenges (e.g., "Dauphin" misspelled or "deleted parcels" present in the dataset). The parcel data was "cleaned" to eliminate many of these discrepancies. One other feature common to parcel data is that the assessed value provided by the County is often very different from the actual market value. This discrepancy is particularly acute on older properties and in markets where prices have changed rapidly, as has been the case with Dauphin Island and other coastal areas. In such instances, commercially available services like Zillow can provide more up to date property price information.

In addition, the parcel data did not align with the storm damage data. The storm modeling was performed with what appeared to be 2010 census blocks, which did not accurately fit the 2021 shape of the Island, which had changed as is common with barrier islands. This is in part due to the shifting of sand on the Island, but also the differences in scale. The federal data was modeled on a regional scale, with the finest level being census blocks. While there are many small census blocks on Dauphin Island, it took considerable effort to realign these blocks with parcel boundaries and map the NOAA Environmental Impact Assessment (EIA) dataset onto the up-to-date parcel data. In the future, as geospatial models progress, federal data will hopefully come into better agreement with local data to more accurately reflect the realities at a community and parcel-specific level.

**Sales tax data:** Sales tax data was only available in the aggregate for one year. In many FIAs, it is common to assume new residents will spend, on average, the same as existing residents. However, a breakdown of sales tax data by sector, common in FIAs, is ideal. The Island's sales tax revenues are fairly substantial given its small population and very limited retail environment. Some on the Island expressed beliefs that sales taxes on boating (fuel) were a significant contributor to sales tax revenues for the Island. Any future studies should examine the role that boating/gas taxes play, since many boat owners do not live on Dauphin Island.

**Lodging Tax Data:** Lodging tax data was only available in the aggregate for one year. Furthermore, information on specific rental locations and permits was not available, only the overall lodging tax collection. However, these data were supplemented with interviews with real estate agents and other local experts on the Island. Public portals such as Airbnb and VRBO were examined to determine where short-term rentals (STRs) are advertised. Although many people on the Island perceive that most STRs are on the West End of the Island, a significant rental market throughout the Island was observed, as discussed below. It is also worth noting that everyone consulted observed the following: (1) the market for STRs has become increasingly popular on Dauphin Island with the COVID pandemic seeming to have

increased demand, and (2) the Island is becoming a year-round destination, although there is seasonality in rates (i.e., higher in summer).

This analysis and future FIAs would benefit from an investigation of the STR market on the Island. Specifically, detailed information on the number of rentals on the Island, the location of those rentals, characteristic or hedonic analyses, and the nightly rates or gross revenues would improve this analysis and greatly inform local adaptation policy. In addition, information on the number of overnight and day-trip visitors to the Island would be useful. Given the importance of tourism to the Island's economy, these data gaps are significant. It should be noted, however, that the STR market is inherently opaque and ever-changing [23]. Precise data is cumbersome, expensive, and often inaccurate [23]. Thus, as a cost-effective form of monitoring and data-collection, the Town might benefit from focusing on rental business licenses<sup>12</sup> and requiring operators to report their earnings.

**Expenditure Data:** The Town's annual published budget data are insufficient for determining expenditures according to government function (e.g., police, road maintenance). However, reasonable estimates of Town expenditures across administrative units and by region (i.e., west, middle, east) were developed based on interviews with Town officials, including the mayor. In addition, the Town did not provide data on departmental expenditures for routine or emergency/storm costs, which would have better informed estimates of area-specific expenditures and whether the West End is a fiscal liability.

**Historical Data:** This analysis was performed exclusively with data from 2021. Historical budget information may improve future estimates, particularly given that according to many experts, the COVID-19 pandemic has altered the rental market on the Island and may have impacted the annual budget.

**Federal Expenditure Data:** FEMA expenditures on the Island, either through the National Flood Insurance Program (NFIP) or direct assistance to the Town and individual households, were not considered in this analysis. FEMA records may benefit a future FIA and provide improved understanding of the true costs of living on Dauphin Island and its West End especially. Federal expenditures were beyond the scope of this analysis, but public records for past storm costs, although not specific to Dauphin Island, were examined.

## Methods

### Parcel Data Analysis

The first step in this FIA was an in-depth parcel data analysis. Parcel data for 2021 were provided by the Mobile County Revenue Commission Office. The dataset was restricted to include only properties on Dauphin Island, erroneous entries were eliminated, and the data were cleaned. The parcel data were

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<sup>12</sup> Requiring a business license of all rental property owners has been proposed to the Town Council but has not passed.

then combined with a separate parcel set from the Mobile Bay National Estuary Program and building footprint data<sup>13</sup>. This compiled dataset was overlaid with 2020 and 2010 census blocks, which had to be manually fit to many parcels, as they did not align with parcel boundaries, due to erosion and movement of the boundaries of the Island. Finally, each parcel was tagged with a specific area on the Island: East, West, or Middle. These areas were chosen based on their unique geographic and demographic features, as well as local perspectives. For the purposes of this analysis, Dauphin Island was divided into the following areas:

- **The West End:** defined as the area west of Pirate’s Cove Street. Primarily built on less solid ground and at lower elevations. Some residents have defined it as the point where homes are built on fill.
- **The Middle:** the area west of Salt Creek and east of Pirate’s Cove Street. The area houses the large condominium blocks comprising approximately 300 units, with an estimated 50% of those units serving as STRs. This area generates a considerable amount of economic activity heavily related to tourism. It is much less vulnerable than the West End, with less risk of erosion and flooding, and overall, less storm exposure.
- **The East End:** The area east of Salt Creek (Omega Street). This is the portion of the Island built on the most solid land and with the oldest structures. It is commonly thought of as more “local,” with most full-time residents residing here.

With this dataset, summary statistics for the Island were developed, and a variety of tests were run to determine the fiscal impact of each region in terms of property tax generation for the Town. The impact of ownership (on-island, State of Alabama, or out-of-state) and *classification* on revenues was also examined. In the Mobile County parcel data, properties are designated as either Class 2 or Class 3. Table 3 provides an official explanation of Class from the County. For the purposes of this FIA, Class 2 properties were treated as rental or investment properties, while Class 3 properties were treated as personal or owner-occupied properties (not registered as a rental or STR).

*Table 3: Explanation of Parcel Classification by Mobile County, as provided by the Mobile County Revenue Commission/ Assessor’s Office.*

Classification	Explanation of Property Use	Tax Rate (Annual rate on Assessed Value)
2	“Rental, vacant land and any property owned by a corporation/business”	20%
3	“Owner occupied, owner owned but not rented, can be classified as a second home if the utilities are in your name, and vacant land that is being used for agricultural purposes, if a current use application has been filed and approved”	10%

<sup>13</sup> From GMC for the Aloe Bay Plan.

### Expert Interviews

Unfortunately, detailed budget data were not available beyond the Town's posted budget. To fill in the gaps, expert interviews were conducted. In the social sciences, expert interviews are often used either as data or to inform estimates [2]. Residents involved primarily in local government and real estate/property management were interviewed. These interviews informed assumptions surrounding (1) the proportion of Town spending allocated to the West End, (2) the STR market and tourist behavior, and (3) sales tax and tourist expenditures on the Island. For expenditure allocation, department heads provided an estimate of the proportion of their work devoted to the West End. Expert insight into tourism and the rental market informed sensitivity analyses of lodging and sales tax revenues. Although Dauphin Island does have some hotel accommodations, the primary source of lodging revenue (according to everyone consulted) are STRs. Further, these rentals have become increasingly popular.

### Storm Damage

To calculate the potential fiscal impact of storm damage, the NGOM EIA model was fit onto the parcel dataset. As the NGOM predictions and the FEMA Hazus model are based on a regional scale, fitting those predictions to Dauphin Island required matching individual parcels to census blocks manually. This was especially difficult since the 2010 census blocks, due to the erosion and movement of the Island [6,15], did not match either the parcels or the physical shape of the Island in 2021.

Once the parcels were matched to the appropriate census block, the percentage of residential buildings damaged for each block was applied to the 2021 count of buildings, resulting in updated estimates of the number of substantially damaged buildings. From these estimates, the expected replacement cost was determined using the average developed parcel value for each census block. This method adheres to the assumptions of the Hazus model and the EIA, that the distribution of structures in a given area is standard. It applies percentage prediction in an identical manner to the Hazus method and original model but with updated and parcel-level (more granular) data.

For this FIA, estimates of substantial damage were used. The model does not provide sufficient granularity to determine the potential repair costs. However, given historical damage [20] and the high percentage of structures substantially damaged during major storm events, it is likely that many impacted homes would need to be replaced rather than repaired. Estimates of repair costs require specific information as to the damage percentage for the structure, the square footage of the structure, and a host of building characteristics beyond the scope of this FIA and the available model data [22].

## Results

### Parcel Data Results



*Figure 2. Geospatial analysis of parcel development and classification shows Class 2 homes concentrated on the West End and in the Middle, while vacant parcels are more prevalent on the East End.*

After checking for discrepancies and anomalies in the data (“cleaning”), the parcel data with property tax information from Mobile County were input into ArcGIS (ESRI). The geospatial visualization allowed examination of development patterns on Dauphin Island, in particular how development varied geographically on the Island from east to west. To understand settlement patterns on the Island, “developed” parcels were first examined and defined as those with improvements assessed in the parcel data<sup>14</sup>. In the parcel data, the County records the added value of “improvements” to a property. Improvements are work on a property that increases its value, typically construction of a structure, such as a home.

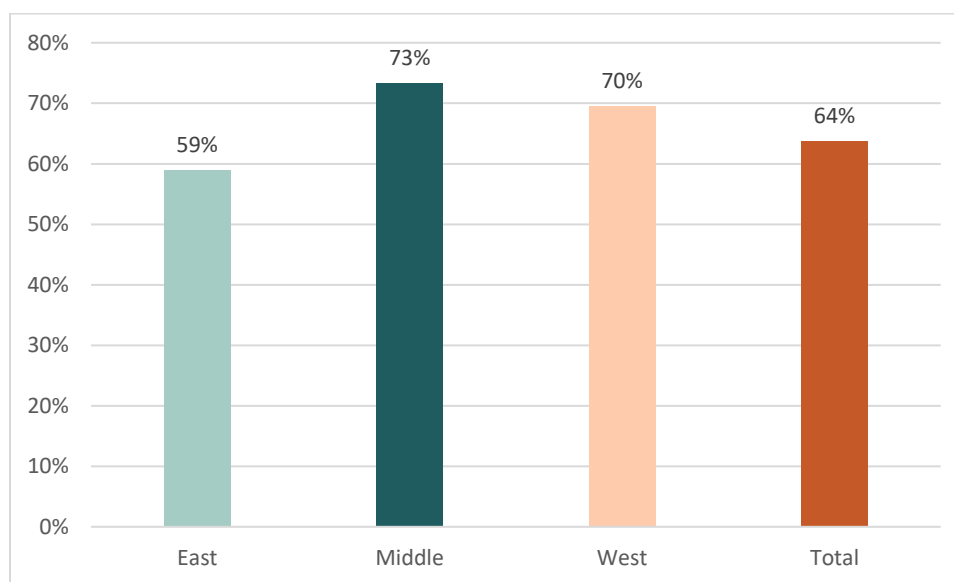
As shown in Table 4 and Figure 2, the Middle area has the highest percentage of developed parcels (73%), closely followed by the West End (69%), and the East End (58%). The West and Middle areas are similarly much more built out than the East End.

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<sup>14</sup> For this FIA all parcels with an improvement value greater than \$0 were considered “developed.”

*Table 4: Distribution of "developed" parcels on Dauphin Island, 2021. Developed parcels are defined as those with improvements made to the property, as documented in the Mobile County parcel data.*

<i>Area</i>	<i>Number of Parcels</i>	<i>Number of Developed Parcels</i>	<i>Number of Undeveloped Parcels</i>
<i>East End</i>	2,349	1,384	965
<i>Middle</i>	559	410	149
<i>West End</i>	1,023	711	312
<b><i>Total</i></b>	<b>3,931</b>	<b>2,505</b>	<b>1,426</b>



*Figure 3. Examination of the Mobile County parcel data for 2021/22 shows that while the developed proportion of area parcels is relatively consistent, the Middle and West End are more developed than the East End.*

Parcels were separated into areas and the average value of parcels and the average appraisal value of developed parcels<sup>15</sup> in each area were determined. Developed parcels serve as a proxy for homes or residential units, whereas undeveloped or unimproved parcels are assumed to be vacant lots. As shown in Table 5, both the highest value parcels and developed lots (homes) are found in the West End. While the East End has significantly lower values for parcels overall, the value of homes is comparable to the Middle area of the Island. However, West End homes are still significantly more valuable.

<sup>15</sup> The parcel data contained several values for parcels. We used the total value from the Mobile Bay NEP data which was the most up to date data with the fewest erroneous entries. This value is equivalent to the appraisal value as recorded in the Mobile County parcel data.



Table 5: Average appraisal values on Dauphin Island by area, according to Mobile County parcel data for 2021/22.

Area	Average Value, All Parcels	Average Developed Parcel Value
East End	\$175,463.43	\$290,822.00
Middle	\$206,785.23	\$291,825.51
West End	\$263,638.42	\$352,973.32
<b>Island Average</b>	<b>\$213,914.37</b>	<b>\$306,284.91</b>

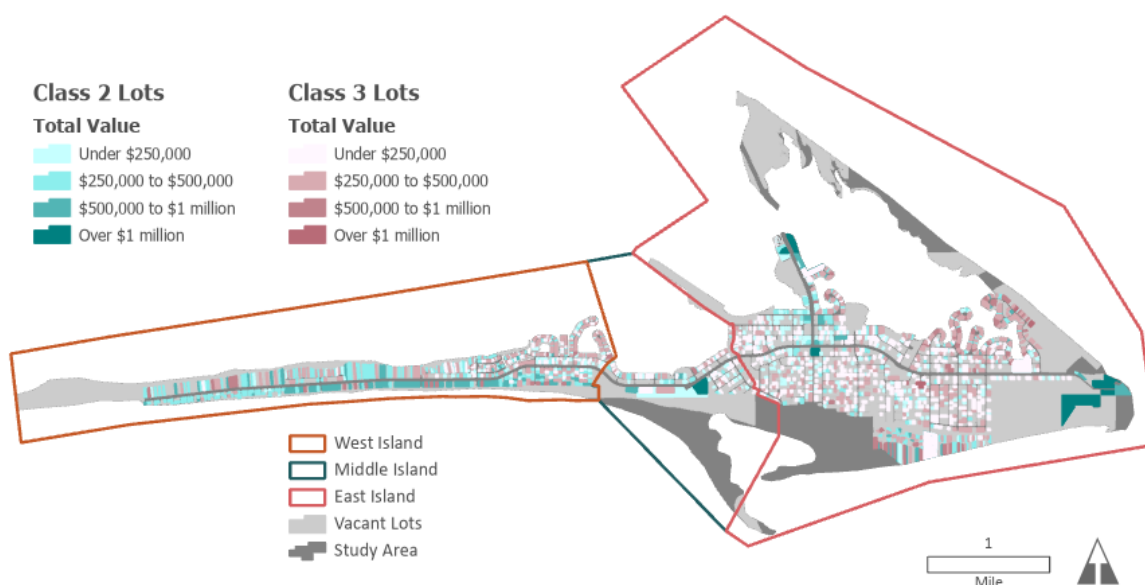


Figure 4. Geospatial analysis of parcel value for developed properties shows (a) Class 2 (blue) lots are more valuable, and (b) there are more Class 2 lots and higher value lots on the West End than other areas of the Island.

#### Land Use Analysis: Parcel Classification

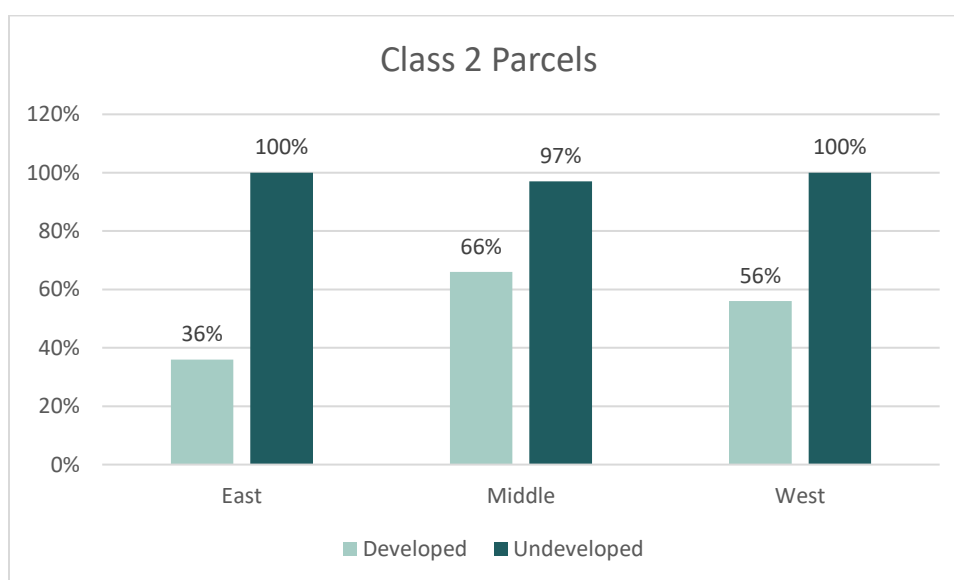
Crucial to this FIA was an analysis of parcel classifications as provided in the Mobile County data. All parcels in the dataset were either Class 2 or Class 3 parcels. As described previously, Class 2 properties include the following: rental property, vacation rentals, vacant land, and any property owned by a corporation or business; Class 3 property is owner occupied or owned but not rented, or a second home if the utilities are in owner's name. Class 2 property is taxed at twice the rate of Class 3 property. Table 6 shows the breakdown of developed and undeveloped parcels on the Island by classification and area. Most parcels are Class 2. There are almost no undeveloped parcels registered as Class 3 on the Island.

However, this classification could change if a property owner constructs a home for full-time or personal use.

*Table 6: Breakdown of parcel classification for each area, as recorded in the 2021 Mobile County parcel data.*

Region	Number of Parcels	Number of Developed Parcels	Number of Class 2 Developed Parcels	Number of Class 3 developed Parcels	Percentage of Developed Parcels that are Class 2	Number of Undeveloped Parcels	Number of Class 2 undeveloped Parcels	Number of Class 3 undeveloped Parcels	Percentage of Undeveloped Parcels that are Class 2
East	2,349	800	261	539	33%	1,549	1,193	356	77%
Middle	559	102	51	51	50%	457	368	89	81%
West	1,023	371	166	205	45%	652	545	107	84%
<b>Total</b>	<b>3,931</b>	<b>1,273</b>	<b>478</b>	<b>795</b>	<b>38%</b>	<b>2,658</b>	<b>2,106</b>	<b>552</b>	<b>79%</b>

Distribution of developed property varies between the three areas of the Island, as shown in Figure 5. While almost all undeveloped parcels are Class 2, homes in the Middle and West are predominantly Class 2, while the East has only 36% of homes registered as Class 2. Given that Class 2 homes are most likely to be rental properties, this shows the relative importance of rentals in the areas of the Island.



*Figure 5: A comparison of parcel classification between developed and undeveloped parcels, by area, shows that almost all undeveloped parcels are Class 2, regardless of area. In the Middle and on the West End, most developed parcels are Class 2, whereas on the East End only 36% of developed parcels are Class 2.*

Apart from distribution, the parcel data also revealed that on the West End and in the Middle areas of the Island, Class 2 homes (developed parcels) are significantly more valuable than Class 3 homes, as shown in Table 7. In the East End, however, Class 3 homes are more valuable. This finding supports the local consensus that the East End is more “local,” with less of a focus on tourism. On the East End, the most valuable homes are not rentals, but primary residences or second homes.

*Table 7: Average Developed Parcel (Home) Appraisal Values by Area, According to 2021 Parcel data.*

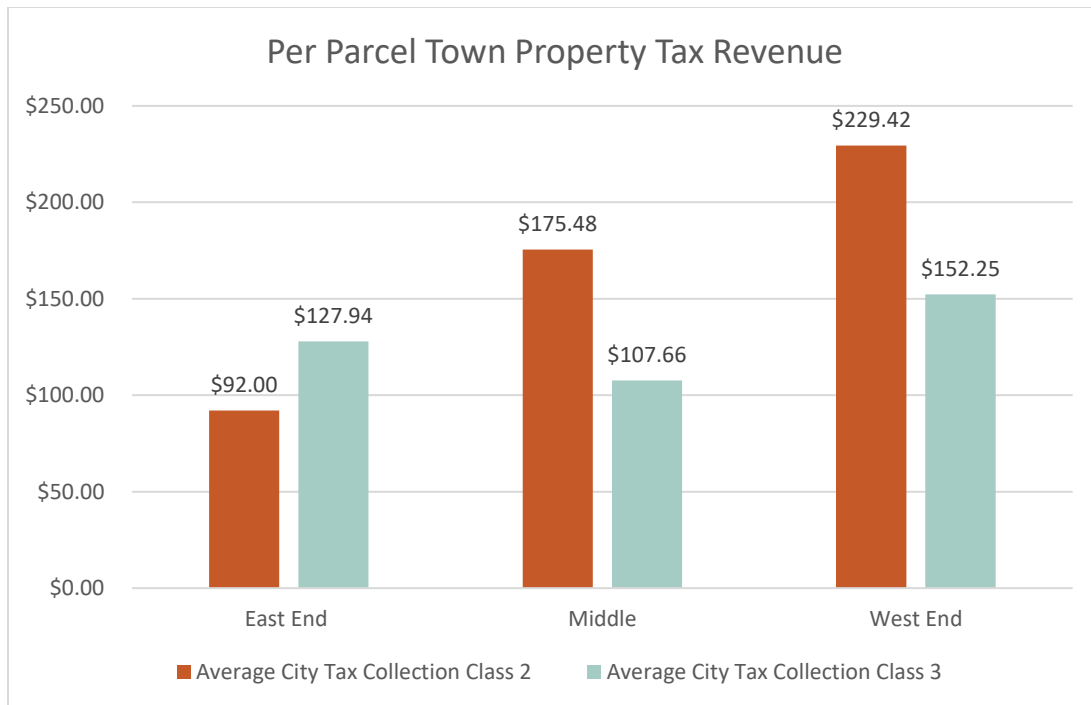
<i>Region</i>	<i>Class 3 Developed Parcel, Average Value</i>	<i>Class 2 Developed Parcel, Average Value</i>
<i>East</i>	\$264,802.91	\$257,019.51
<i>Middle</i>	\$218,815.11	\$277,359.93
<i>West</i>	\$312,675.64	\$388,222.06
<b><i>Total</i></b>	\$271,164.78	\$306,916.49

#### Fiscal Impact – Property Taxes

As discussed previously, Class 2 parcels are taxed at twice the rate of Class 3 parcels. Furthermore, given that Class 2 parcels on the West and Middle areas are more valuable than those on the East End, it follows that the West End and Middle region generate higher average Town property tax revenues for the Town. For all properties, the average Town property tax collection for class 2 parcels on the West End is more than twice that of the East End. For Class 3 parcels, there are significantly more developed, high value parcels on the East End, therefore, the average tax collection is higher than Class 2 parcels.

*Table 8: Average per-parcel Town tax collection for Class 2 and Class 3 parcels, as recorded in the County parcel data, shows higher tax collection for Class 2 properties in the Middle and West End, whereas on the East End, Class 3 homes generate higher property tax revenues.*

	<i>Non-Primary Residences/Investment Parcels (Class 2)</i>			<i>Primary Residences, Personal Use Parcels (Class 3)</i>		
<i>Area</i>	<i>Number of Parcels</i>	<i>Average Value</i>	<i>Average Town Tax Collection</i>	<i>Number of Parcels</i>	<i>Average Value</i>	<i>Average Town Tax Collection</i>
<i>East End</i>	1,454	\$120,912.45	\$92.00	895	\$264,085.92	\$127.94
<i>Middle</i>	415	\$203,145.78	\$175.48	140	\$217,573.57	\$107.66
<i>West End</i>	711	\$242,119.97	\$229.42	312	\$312,675.64	\$152.25



*Figure 6: Town parcel tax collection per-parcel for each area of the Island, based on the average value of Town property tax revenue in the 2021 parcel data for Class 2 and Class 3 properties, shows significantly higher tax revenues for Class 2 Properties, except on the East End, and that the West End generates the greatest revenue per-parcel.*

### Parcel Ownership

The Mobile County tax data include the taxpayers' billing addresses<sup>16</sup>. Table 9 shows that many parcels on Dauphin Island are owned by off-island residents, either from the State of Alabama or out of state. Even on the East End, which is widely considered to be more local, only 39% of parcels and 22% of Class 3 parcels are registered to an owner on the Island. Figure 7 shows only 9% and 11% of parcels on the West End and Middle, respectively, are Class 3 homes registered to a local owner. These data reveal not only the importance of tourism on the Island but also how much of the Island's land is controlled by non-residents. Since only residents are generally allowed to participate in Island governance, the fact that much of the property is owned by non-islanders is potentially important for future adaptation policies, as discussed in depth later.

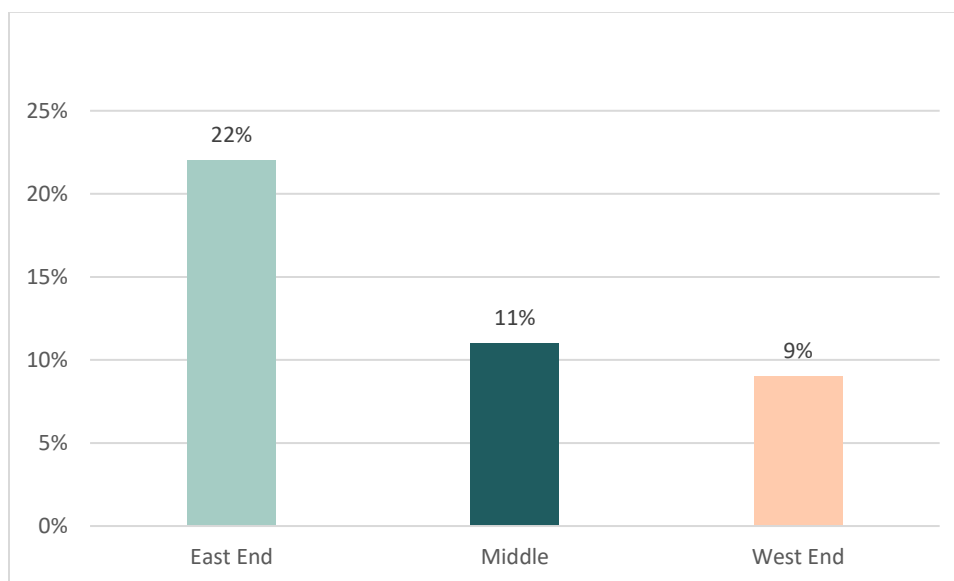
Furthermore, many homes are classified as Class 3, yet are registered to taxpayers who live off the Island, implying that the Island and Mobile County may not be collecting the property taxes they should be. It is possible that some of these homes are second homes that are *not* rented out, and therefore correctly classified as Class 3. However, some are potentially operated as STRs, especially as 168 developed parcels are registered to out-of-state taxpayers. Based on conversations with long-term

<sup>16</sup> Billing address was used as a proxy for home or primary address for this FIA. Even if the homeowner does not live at the billing address, the fact that the addresses is out of state still shows non-local control.

residents and real estate agents, it is worth investigating the nature of these properties to determine whether they are being rented out.

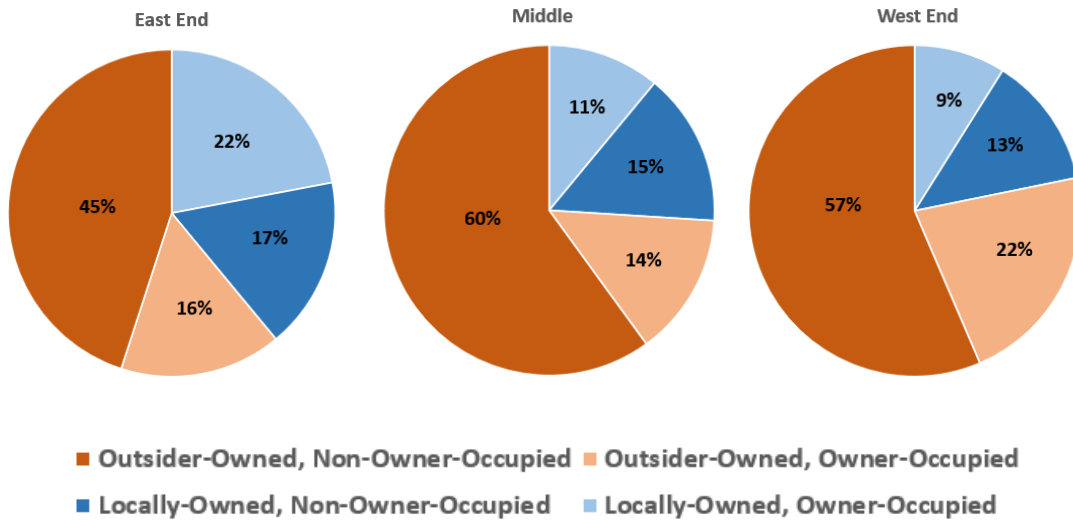
*Table 9: Analysis of Ownership on Dauphin Island by area shows that the majority of parcels are registered to Alabama or out-of-state owners, with the greatest proportion of local ownership on the East End.*

Area	Owned by Dauphin Island Resident		Non-Locally Owned, Class 3		Locally Owned, Class 3	
	Number of Parcels	Percent of Total	Number of Parcels	Percent of Total	Number of Parcels	Percent of Total
East End	916	39%	375	16%	520	22%
Middle	142	25%	81	14%	59	11%
West End	221	22%	222	22%	90	9%



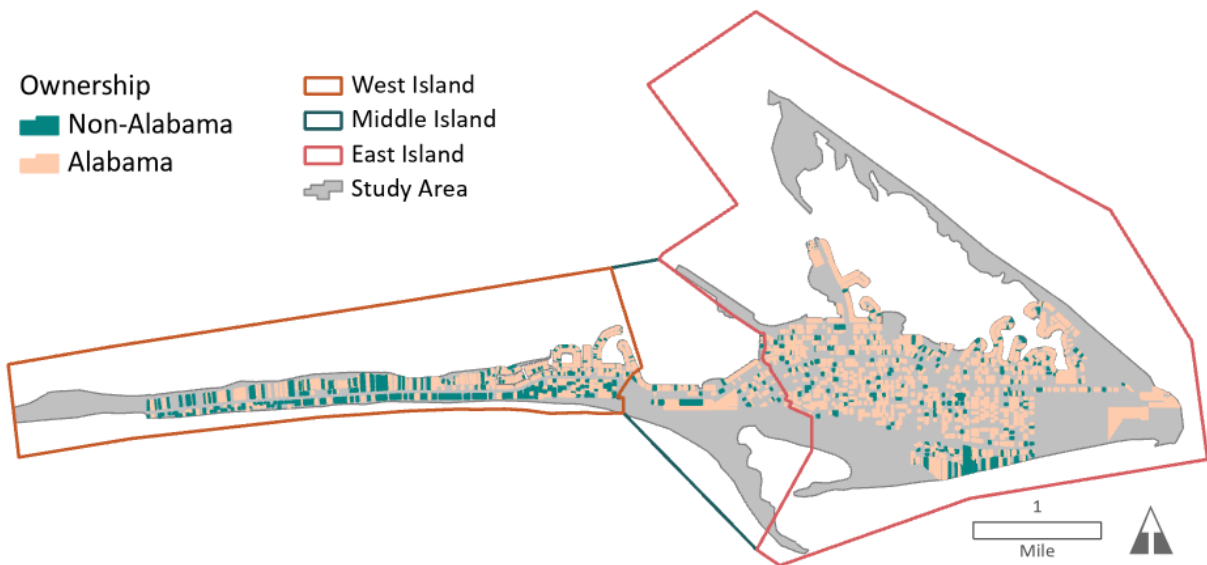
*Figure 7: Analysis of the proportion of area parcels registered as Class 3 to Dauphin Island residents shows that very few parcels on the West End or in the Middle are locally owned and occupied.*

The differences between areas are more apparent when considering only developed parcels (homes). Table 9 shows only 17% of homes on the West End are owned by a Dauphin Island resident, compared to 48% on the East End (Figure 8). Additionally, 31% of homes on the West End are registered as Class 3 to an off-island resident. These data show not only the prevalence of outside ownership across the different areas of the Island but also that West End (and Middle) Class 3 properties are predominantly owned by non-locals.



*Figure 8: Analysis of classification and taxpayer addresses in the 2021 parcel data shows the predominance of non-locally owned, Class 2 properties on the West End and in the Middle, along with the overall lack of local ownership on the Island, especially in these two regions*

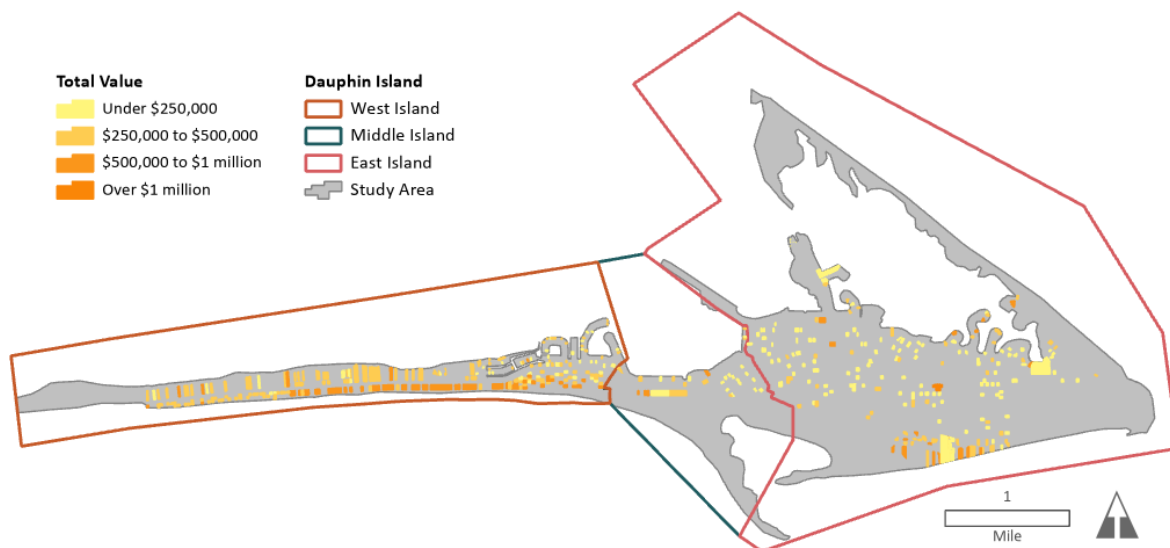
The parcel data analysis also showed clear patterns of out-of-state ownership, as shown in Figure 9. The vast majority of homes (developed parcels) registered to an out-of-state taxpayer are on the West End and in particular the ocean-facing side.



*Figure 9: Geospatial visualization of ownership of developed parcels in ArcGIS shows that out-of-state homes are largely concentrated on the West End, particularly the ocean-facing side.*

The value of parcels in the three areas of the Island varies based on ownership. While property values in the East and Middle areas are comparable between local owners, Alabama owners, and out-of-state

owners, on the West End homes registered to out-of-state owners are significantly more valuable. These homes have an average value of \$412,000, compared to average values around \$320,000 for other West End homes. Appendix C provides a breakdown of the property values by area. The highest value homes (developed parcels), irrespective of Class, on Dauphin Island are West End properties registered to taxpayers from out-of-state with an average value of \$412,011 in 2021. Considering Class, homes registered as Class 2 to *both* local and out-of-state owners are most valuable at over \$420,000. There are 222 Class 2 homes on the West End registered to an owner off the Island, compared to only 28 Class 2 homes registered to local owners. Overall, there are far fewer homes on the West End owned by local residents, while the highest percentage of locally owned homes are on the East End. Figure 10 shows the value of homes registered to out-of-state owners. As depicted, the most valuable of these properties are the ocean-facing homes on the West End.



*Figure 10: Geospatial analysis of the appraisal value of homes registered to out-of-state owners shows the highest value homes are on the West End, in particular the ocean-facing side.*

### Ownership & Tax Revenues

The parcel data indicate that the highest overall Town property taxes per parcel are collected from homes registered to out-of-state owners. As expected, given the higher tax rate for Class 2 properties, Town property tax revenues are much higher for these properties than for Class 3. It is important to note that for locally owned properties on the East End, Class 2 properties only generate 37% more revenue than Class 3 properties. For the Island's other areas, Class 2 homes generate more than twice the revenue of Class 3. Detailed information on property tax revenue is provided in Appendix C.

Interviews with homeowners and property managers/realtors on the Island provided insight into the ownership dynamics reflected in the data. According to locals, there are many property owners on the

Island who have second homes there—not for rental or investment purposes, but for their own use. According to local knowledge, most of these homeowners are from southern Alabama. Taxpayer (ownership) data from the County were examined to reveal 168 Class 3, developed parcels (homes) registered to an out-of-state owner. While it is possible that these homes are indeed for owner use and not rented out, if they are rental properties, they would be subject to the higher Class 2 tax rate. Table 10 shows the potential increase in Town property tax revenue if these homes were reclassified as Class 2. Reclassification would require an examination of the property use by the County and/or Town to determine whether each was, in fact, a rental property.

*Table 10: Potentially misclassified parcels on Dauphin Island were determined by identifying the parcels in the 2021/22 parcel data registered as Class 3 (personal use) to out-of-state owners who are unlikely to use those homes themselves.*

Area	Number of <i>developed</i> parcels registered as Class 3 to out of state payer	Potential Gain in Town Property Tax Collection
East End	101	\$ 14,166.10
Middle	25	\$ 3,273.50
West End	42	\$ 7,500.70
Total	168	\$ 24,940.30

## Short-Term Rentals and Lodging Taxes

As the property tax data show, rentals make up most of Dauphin Island’s properties, and, therefore, lodging taxes are a crucial part of the Town’s economy. Lodging taxes are largely collected by the property management companies that manage most rentals on the Island. Vacasa is a major operator, along with local operators such as ACP, Beach Rentals, and Beach Rentals and Sales. Together, these management companies are estimated to manage over 700 rental properties<sup>17</sup>. The combined local lodging tax rate is 11%, with 5% going to the Town of Dauphin Island itself<sup>18</sup>.

Due to the limited availability of rental and lodging data discussed in the data limitations section above, the overall number of STRs was estimated using several methods, given the limited data. The number of Class 3 properties indicated in the parcel data provided the most conservative estimate. This estimate of 478 is conservative for two main reasons. First, the parcel data undercount multi-unit properties (such as the large condominium blocks in the Middle area of the Island). Second, there are likely homes registered as Class 3 which are rented out as STRs, as discussed above.

To provide a more accurate estimate of STRs on the Island, the number of rentals were adjusted based on conversations with local experts including real estate agents and property managers (see Table 11 below), with the highest estimate being 700 rental units on the Island. This estimate factors in expert opinion that the condominium blocks have around 250 to 300 units.

<sup>17</sup> Estimated from conversation with local realtors.

<sup>18</sup> [https://222868be-fcef-4d0f-961c-0e6d442d5caa.usrfiles.com/ugd/222868\\_1521bbc0fd1640fbbb14ff45d4e3fb3f.pdf](https://222868be-fcef-4d0f-961c-0e6d442d5caa.usrfiles.com/ugd/222868_1521bbc0fd1640fbbb14ff45d4e3fb3f.pdf)



*Table 11: median Short-Term Rental (STR) estimates*

Estimate	Source
478	Number of Developed Class 2 Properties
700	Estimate from a long-term Island Real Estate agent and property manager
647	Number of developed Class 2 properties + 25% of the developed Class 3 Properties registered to an off-island owner

## Fiscal Impact –

### West End Lodging

A sensitivity analysis was conducted to estimate a range of possible lodging tax revenues generated by the West End. This analysis depended on (1) the proportion of total rentals on the West End and (2) the assumption of how much higher the average weekly rate for the West End rentals is compared to the rest of the Island. A full discussion of this analysis is provided in Appendix A. Based on this analysis, West End rental properties generate between \$604,000 and \$1.12 million in annual lodging tax revenue for the Town. We estimate that West End rental properties generate approximately 63% of lodging tax revenues.

### West End Expenses

One key concern that several Town officials and other experts expressed was that the costs of providing some key public services, in particular road maintenance and post-storm damage repair to local infrastructure, is much higher on the West End. To estimate how these costs are distributed across the Island, estimates were obtained from Town officials about how costs are distributed between the West End and East End.

The results, shown in Table 13, indicate that, according to local officials, most departments spend a disproportionate amount of funds on the West End properties. The total expense estimate for 2021 is more than \$1.3 million. Expenditures for the Water and Sewage authority were not estimated, as they are a distinct entity from the Town with their own budget and revenues and, therefore, beyond the scope of this FIA.

*Table 12: Proportional spending between the West End and the rest of the Island, based on interviews with Town officials, indicates the West End costs the Island approximately \$1.4 million annually (based on 2021 budget).*

Service	Proportion Attributed to		
	FY 20 -21 Budget	West End	Est. West End Expense
Administration (10)	\$ 508,840.00	25%	\$ 127,210.00
Council (20)	\$ 121,754.00	25%	\$ 30,438.50
Police (40)	\$ 1,122,510.00	45%	\$ 505,129.50
Public Works (30)	\$ 712,428.00	40%	\$ 284,971.20
Public Safety (45)	\$ 492,712.00	40%	\$ 197,084.80
Court (50)	\$ 68,451.00	25%	\$ 17,112.75
Chamber of Commerce (61)	\$ 30,000.00	40%	\$ 12,000.00
Building Dept. (70)	\$ 167,197.00	30%	\$ 50,159.10
Other (90)	\$ 643,750.00	25%	\$ 160,937.50
<b>Town Subtotal of Operating Costs</b>			<b>\$ 1,385,043.35</b>
Other Impacts			
Water Department		60%	

### Cost-Benefit Analysis

Using the estimates of West End proportional expenses (Table 12), we compared the relative costs and benefits of the West End properties to determine the fiscal impact of this area. Costs included routine maintenance costs and departmental costs but did *not* include storm-specific expenditures. Fiscal benefits included property, lodging, and sales tax revenues. A sensitivity analysis around both property and sales tax revenues were conducted and is discussed in detail in Appendix A. As shown in **Error! Reference source not found.3**, without considering storm costs, the revenue estimates for West End properties ranged from a \$459,000 net deficit to a \$151,000 net benefit.

*Table 13: Lodging and Sales Tax Revenue estimates for the West End*

Estimates of Net Fiscal Benefits of Lodging and Sales Tax Revenues for the West End	Most Conservative	Median Conservative	Least Conservative
Maintenance Cost Projections (not considering significant storms)/ Estimated Town Expenditure	\$1,385,043.35	\$1,385,043.35	\$1,385,043.35
Property Tax Revenues	\$209,470.00	\$209,470.00	\$209,470.00
Lodging Tax Revenues	\$604,060.58	\$900,462.98	\$1,125,578.72
Sales Tax Revenue	\$111,661.48	\$159,516.40	\$200,990.66
<b>Total Net Fiscal Benefit</b>	<b>-\$459,851.29</b>	<b>-\$115,593.97</b>	<b>\$150,996.04</b>

## Potential Storm Damage Fiscal Impacts

The analysis of storm damages in the NGOM, once adjusted for the discrepancies between the HAZUS model's 2010 census block data and the 2021 parcel data for the Island, yielded a range of estimates for residential property loss on Dauphin Island. As shown in Table 144, under almost all sea-level rise (SLR) scenarios, the model estimates the most severe impacts on the West End. However, in the Low SLR scenario (0.7 feet), storms are projected to have a relatively lower impact on the West End due to projections of sand motility in the wake of overwash. Essentially, the West End is expected to progress inland as sand is deposited from the ocean-facing side of the barrier island to the backshore, providing a temporary buffer against storm damage. This phenomenon is only sufficient to provide protection at the Low SLR level. The adjusted EIA data indicate the Town should be concerned about resource allocation as the model shows significant impacts (in terms of number and percent of homes and value) on both the west and east ends of the Island from both 100 and 500-year storms (Tables 13 and 14, respectively).

*Table 14: Projected Storm Damages, 100-year storm under various SLR scenarios, as determined by the NOAA EIA modeling.*

<i>Area</i>	<i>Percent of Homes Lost, Present SLR</i>	<i>Percent of Homes Lost, Low SLR<sup>19</sup> (0.7ft)</i>	<i>Percent of Homes Lost, Intermediate Low SLR (1.6ft)</i>	<i>Percent of Homes Lost, Intermediate High SLR (3.9ft)</i>	<i>Percent of Homes Lost, High SLR (6.6ft)</i>
<i>East End</i>	0%	3%	8%	21%	38%
<i>Middle</i>	4%	12%	17%	34%	46%
<i>West End</i>	11%	5%	26%	55%	71%

*Table 15: Project Storm Damage in a 500-year storm in the NOAA EIA model.*

<i>Area</i>	<i>Percent of Homes Lost, Present SLR</i>	<i>Percent of Homes Lost, Low SLR (0.7ft)</i>	<i>Percent of Homes Lost, IL SLR (1.6ft)</i>	<i>Percent of Homes Lost, IH SLR (3.9ft)</i>	<i>Percent of Homes Lost, High SLR (6.6ft)</i>
<i>East End</i>	14%	16%	23%	37%	50%
<i>Middle</i>	37%	34%	42%	47%	50%
<i>West End</i>	67%	16%	58%	73%	76%

<sup>19</sup> [https://222868be-fcef-4d0f-961c-0e6d442d5caa.usrfiles.com/ugd/222868\\_1521bbc0fd1640fbbb14ff45d4e3fb3f.pdf](https://222868be-fcef-4d0f-961c-0e6d442d5caa.usrfiles.com/ugd/222868_1521bbc0fd1640fbbb14ff45d4e3fb3f.pdf)

### Fiscal Impacts of Future Storms

Based on the NOAA EIA estimates, the expected fiscal impact of potential storm damage on the Island was determined. As shown in Table 166, the Town will lose between \$19,000 and \$142,000 in property tax revenues at current sea levels, and up to \$189,000 at higher sea levels. Table 17 shows the impacts on lodging tax revenues, with between \$114,000 and \$985,000 in lost annual revenue. The majority of lost lodging tax revenue, as estimated, comes from impacts on the West End.

*Table 16: For this FIA, lost Town property tax revenue for 100 and 500-year storms was determined from the number of developed properties projected to be significantly damaged, and applying the average Town property tax revenue from developed properties for each region to the expected loss. The expected property tax losses are between \$19,000 and \$176,000 in the different scenarios.*

Area	Present Sea Level		0.7ft of SLR		1.6ft of SLR		3.9ft of SLR		6.6ft of SLR	
	100-year storm	500-year storm	100-year storm	500-year storm	100-year storm	500-year storm	100-year storm	500-year storm	100-year storm	500-year storm
East End	\$287.37	\$20,654.94	\$4,023.12	\$26,396.30	\$11,494.64	\$38,604.59	\$30,460.78	\$62,196.28	\$55,748.98	\$84,468.16
Middle	\$2,831.19	\$24,222.41	\$7,864.42	\$17,055.80	\$10,695.61	\$20,954.27	\$22,020.37	\$23,634.47	\$29,884.79	\$25,096.39
West End	\$16,458.72	\$97,380.79	\$7,772.18	\$13,872.26	\$37,489.32	\$50,592.95	\$80,922.06	\$63,921.20	\$104,238.59	\$66,369.24
Total	\$19,577.28	\$142,258.14	\$19,659.72	\$57,324.36	\$59,679.56	\$110,151.80	\$133,403.22	\$149,751.94	\$189,872.36	\$175,933.79

*Table 17: For this FIA, lost Town property tax revenue for 100 and 500-year storms was determined from the number of developed properties projected to be significantly damaged, and applying the estimated lodging tax revenue from for each region to the expected loss. The expected property tax losses are between \$115,000 and \$986,000 in the different scenarios.*

Area	Present Sea Level		0.7ft of SLR		1.6ft of SLR		3.9ft of SLR		6.6ft of SLR	
	100-year storm	500-year storm	100-year storm	500-year storm	100-year storm	500-year storm	100-year storm	500-year storm	100-year storm	500-year storm
East End	\$584.23	\$42,356.38	\$8,179.16	\$46,738.07	\$23,369.04	\$68,354.43	\$61,927.95	\$110,126.58	\$113,339.82	\$149,561.83
Middle	\$13,106.80	\$112,135.92	\$36,407.77	\$101,941.75	\$49,514.56	\$125,242.72	\$101,941.75	\$141,262.14	\$138,349.51	\$150,000.00
West End	\$101,250.00	\$599,062.50	\$47,812.50	\$143,437.50	\$230,625.00	\$523,125.00	\$497,812.50	\$660,937.50	\$641,250.00	\$686,250.00
Total	\$114,941.02	\$753,554.80	\$92,399.43	\$292,117.32	\$303,508.60	\$716,722.15	\$661,682.19	\$912,326.22	\$892,939.34	\$985,811.83

## Limitations of Results

The data limitations faced in this analysis reduce the certainty of the results. Estimates of the STR market—including the lodging tax revenue attributed to the West End—and sales taxes could be improved with better tax records from the Town, County, and/or State. Similarly, better records of Town revenues and expenditures (both day-to-day and around storm cleanup) would improve estimates of the portion of those revenues and expenditures attributed to the West End. In addition, Town budget data from previous years would enhance this analysis and further FIAs on the Island. Due to these limitations, a range of assumptions was used, all of which could be refined with improved data. Some of these assumptions and questions include:

- The percentage of STR revenue attributable to the West End.
  - What percentage of rentals are on the West End?
  - How do the prices of those rentals compare to others on the Island?
- The distribution of STR properties on the Island.
- Departmental expenditures or the percentage of departmental budget spent on the West End.
- Sales tax revenues attributable to (1) tourism and (2) the West End.

Additionally, while the estimates of the impacts of projected storms were made with the best science available, models of climate impacts, storms, and SLR are constantly evolving. Therefore, estimates of the fiscal impact of future storm events should be refined as new science and data become available.

Finally, not much is known about visitors to Dauphin Island or how future events and policies might influence tourists and the revenue they generate. Better understanding of tourist behavior might provide new inputs to the analyses used here, such as whether rentals in different parts of the Island are indeed substitutable or the role day-trippers might play in a Dauphin Island economy with more retail. At present, given that the Town does not track the number of visitors nor information about them or their spending habits, conclusions about their behavior cannot be inferred.

## Discussion

An additional purpose of this FIA was to examine the Island's practices related to storm damages. Specifically, it sought to analyze the long-term sustainability of the Island given its susceptibility to future storms. Although the Island's economy is currently quite healthy in terms of real estate sales, its long-term resiliency to storm damages, especially on the West End of the Island where real estate has been booming, is questionable.

### Storm Damages

This FIA examines the relative costs and benefits of the West End development in terms of local costs. It does not attempt to consider the impact of major storms, or federally declared disasters (most often hurricanes)<sup>20</sup>. These events drastically increase costs, although not exclusively for the West End. For example, while Katrina decimated the West End, it was reported by numerous residents and officials that Ivan had a severe impact on the East End. Given the precarious position of Dauphin Island in the Gulf's "hurricane alley" and its vulnerability to storms and wave action, it is necessary to understand the Town's ability to absorb the associated costs.

In the scope of this analysis, however, regional costs associated with storms and declared disasters were not fully examined. Officials estimate the costs of federally declared disasters around \$500,000 to \$600,000 per event. When a federal disaster is declared, the federal government—through FEMA—covers 85% of the repair and cleanup costs. In instances of a severe storm that is *not* declared a federal emergency, the Town is entirely responsible for these costs. One such event in 2021 resulted in \$2.5 million in sand removal costs exclusively on the West End. Because of the lack of federal assistance, these storms are of greater concern for the Town's fiscal situation than declared disasters. For this FIA, however, records of recent storm expenses were unavailable. There is general indication from Town officials that the West End imposes greater costs in these instances.

Storm threats are of acute importance to the fiscal resilience of the Island. In part, this FIA was conducted to understand how the Island would fare if the West End was no longer viable. While we could not examine the costs for this area from past storms, analysis of the Town's revenues suggests that irrespective of storm costs the West End either costs the Town more to maintain than it generates in revenues or, at best, generates a very small net revenue (tax dollars generated minus costs) for the Town. Importantly, this revenue would not offset the cost of either a "non-event" storm, or even a federally declared disaster. While these results are preliminary pending more accurate data, they indicate that the West End has an overall net negative impact on the Town's fiscal situation.

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<sup>20</sup> When a storm is not declared a federal emergency, it is considered a "non-event." Unlike the storms described above, the Town bears the full cost of these damages. Non-events range in severity from routine wind and wave uprush to coastal storms that are severe but not severe enough to reach federal emergency status. These all involve costs such as clean-up (debris removal, road clearing, sand removal), emergency services including the presence of police and fire, road repair, and the impact storms have on water and sewage systems

In regard to these findings, this FIA recommends both increasing the Town’s sources of revenue *in other areas* and reducing the costs of at-risk properties.

## Recommendations

Based on this analysis, Dauphin Island cannot offset the cost of storm damages. The Town, however, can shift its economic base from the more vulnerable lowest lying areas to less vulnerable properties and development. In doing so, they can offset the coming losses with new revenue sources. New policies are needed to incentivize this shift. Table 18 below provides a brief overview of some of the options available to the Town to increase revenues and decrease costs.

*Table 18: Some of the options available to the Town which would either (a) increase revenues or (b) reduce costs. The impact of each recommendation is presented in terms of High, Medium, and Low. The timescale of each is also indicated, as a combination of short- and long-term strategies will likely be necessary.*

	Description	Impact & Effort	Timescale
<b>Tax Recommendations</b>			
Increase STR Collection	Some rental properties likely do not collect taxes. Ensuring collection of all the taxes would increase revenues	Low impact, low effort (monitoring)	Immediate
Increased STR Rate	The combined tax rate for Dauphin Island is 11%, with 5% going to the Town. Some tourist areas have rates as high as 15%, with 7% collection for the Town.	Low to medium impact, medium effort (ordinance)	1 year
Verify Class 3 Homes/Exemption	The County should verify that the homes claiming Class 3 (lower property tax rate) are indeed Class 3 homes. <sup>21</sup>	Low impact, medium effort (enforcement)	Immediate – 1 year
Special Tax District for the West End Homes / other low-lying areas	Special Tax Districts can raise additional funds for properties. These funds can be used to mitigate against or recover from disaster.  Low-lying areas of the East End identified as at-risk of severe damages should also be required to form a Special Tax District.	High impact, medium effort (ordinance)	1-3 years

<sup>21</sup> Analysis of property classification in the parcel data was especially important to this FIA. However, in the course of the analysis it became clear that not only is property classification an imprecise measure of property use, but many are confused about the meaning of those classifications. The definition of Class 3 property—assessed at the lower (10%) tax rate—may in fact leave ample room for short-term rental properties to be incorrectly classified as Class 3. It is recommended that, along with cleaning up the parcel data, the County consider investigating these properties in Dauphin Island and other popular coastal communities.

	Description	Impact & Effort	Timescale
Increase Tourism and Sales taxes	Market the Island more for short (1-3 night) stays and day-trippers.	Medium Impact, medium effort (ordinance)	1 -3 years
<b>Non-Tax Recommendations</b>			
Rebuilding Permit Fee	Require a significant fee to rebuild homes destroyed following major storms, as a preventative measure.	High impact, medium/high effort  Would require discussion with Town. The fee should be <i>high</i> . The idea is not to increase revenues but rather encourage abandonment of those homes. Could be paired with another attempt at a buyback program (for parcel value).	1 year
Buyback Program	Offer buyouts to property owners whose homes are destroyed during storms, except reduce the value of the property to match the risk. Therefore, the buyout would be offered to homeowners in the wake of a storm as an alternative to a rebuilding fee. They could sell their parcel to the government and that parcel would be decommissioned for further development.	High impact, high effort  Reduces burden following storms, reduces FEMA payouts to homeowners on the Island. Would potentially results in loss of property and lodging tax.	3-5 years
Toll on West End of Bienville Boulevard	Charge for access on West End of Bienville Blvd. to offset cleanup and maintenance costs. Could be a permit for full-time residents or full-time residents may be exempt. Weekly pass option should be available to tourists renting on that end of the Island	Low impact, medium-high effort	Immediate – 1 year
Parking Fees	Require a parking fee for day users and in the historic part of the Island	Low impact, low effort	Immediate
Marina Fees		Low impact, low effort	Immediate
STR Permit for 3 <sup>rd</sup> Party Managed Rentals		Low to medium impact, low effort (ordinance)	Immediate
<b>East End Growth</b>			
Aloe Bay Plan	The Aloe Bay plan offers many opportunities to increase Town revenues and attract more visitors. It is discussed in detail below	Medium impact (See Table 20 below)	1- 5 years (phased)
Incentivize Rentals on East End		Medium impact  Offset the loss of lodging tax revenue on the West End with more high-end East End rentals.	N/A



While many of these policies could generate several million in revenue, that increase does not begin to compare to the full cost of the threats the Island faces. These policies provide a way for the Town to offset routinely lost West End revenues (between \$700,000 and \$1.3 Million gross revenues, up to \$150,000 considering costs), *not* as a way to recover from storms.

Additionally, it is recommended the Town pursue the creation of a special tax district<sup>22</sup> to shift the cost burden to the area where costs are generated. The purpose of such districts is to levy an additional tax on at-risk properties in response to the risks faced by that property's significant exposure to geological hazard. On Dauphin Island, certain properties are far greater risk due to (1) their low elevation, (2) the shifting nature of the sand, and (3) the lack of physical protection from storms and inundation. A special tax could be levied on these properties to increase Town revenues and offset the disproportionate expenses imposed in the wake of storms. The tax would be limited to at-risk homes, and those funds would have to be used to protect and repair this area, reducing the burden on the Town at large and helping promote resilience. The funds could also be used for adaptation efforts on the West End.

Projected storm damage makes it clear that Dauphin Island cannot afford to continue building as it has, placing high value homes in the path of hurricanes. Instead, the Island must adapt. The Town should be encouraged to create a "carrot and stick" style policy around at-risk homes. This two-pronged solution would only impact homes destroyed by hurricanes and tropical storms. In that event, a homeowner could either (a) pay the Town a *rebuilding fee* (recommended at \$50,000 or more) or (b) sell the parcel to the Town for parcel value (an average of \$53,000 according to Mobile County data for undeveloped parcels, although parcel value would need to be reappraised before the buyback). In the event they sell the property to the Town, that parcel would be precluded from further development.

### Monitoring & Accounting

One issue identified in this study is that current fiscal record keeping, reporting, and the accuracy of local tax data creates serious limitations for the community in planning and preparing for future storms. This data is vital for assessing how communities can grow and adapt in the face of these changes. Community resilience requires financial resilience, and financial resilience requires transparency in fiscal accounting. Although these issues are often paid lip-service in reporting, this analysis revealed specific policies that could be implemented on Dauphin Island in the near future (1-10 years) to improve the Town's understanding of its own fiscal health. Accounting and monitoring of expenditures (and where they occur) would not only assist the Town and affiliated agencies in resource allocation, but also help make the public aware of the Island's financial sustainability.

Some specific examples:

- Accurate property tax rolls including indications where homeowners may not be paying their legally required share of taxes.
- Accounting for sales taxes and other taxes that allows planners to determine which sector and parts of the Island are generating taxes.
- More detailed accounting for how money is spent on the Island for government services, e.g., maintenance of roads.

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<sup>22</sup> Sometimes referred to as a Geological Hazard Abatement District, or GHAD

- More detailed information on revenues generated by hotels, and short-term rentals on the Island, including a breakdown by area.

### Federal Policy

Reducing the number of properties at high risk of storm damage brings the Island in alignment with federal policy. FEMA encourages communities to identify and mitigate the causes of repetitive losses [22]. Furthermore, the National Flood Insurance Program (NFIP) updated the guidelines and risk rating system in acknowledgement of climate change and its impact on flooding risk. Beginning in April 2022, these changes will lead to an up-to-18 percent annual increase in premiums per year for the next 20 years. The new system, Risk Rating 2.0, is meant not only to reflect costs more accurately, but also to discourage unsustainable building and rebuilding so prevalent on Dauphin Island. The previous method of calculating premiums, based on a static model, had been criticized for not accurately considering the effects of climate change and SLR (Batten).

Going forward, FEMA and other federal programs are likely to continue to make changes in response to the threat of climate change, SLR, and increasing severity of coastal storms. Between these changes and the increasing frequency and severity of emergency events, the status quo on Dauphin Island cannot last. It is worth undertaking efforts to adapt the Island in anticipation of losing federal subsidies rather than in reaction to the lack thereof.

While FEMA continues to intervene and assist the Island, the existence of a repetitive loss area<sup>23</sup> on the West End contradicts FEMA guidance, as directed by Congress<sup>24</sup>. Certain strategies aim to eliminate or reduce the damage to residential property and the disruption to life caused by repeated flooding and provide for mitigation measures against the continual loss of these properties<sup>25</sup>.

After all, continual rebuilding in the path of hurricanes does not meet FEMA's requirements for cost effective mitigation efforts. The guidelines for Hazard Mitigation Assistance (HMA) require not only cost effectiveness but also that the intent is to "reduce the loss of life and property." The HMA program is distinct from the Individual and Households Program (IHP), and the IHP currently lacks the requirement for cost effectiveness. The IHP program, for which many homeowners on Dauphin Island have applied in the aftermath of previous storms, will be extremely overburdened in the coming years, as climate-related disasters worsen and increase in frequency. It is possible they may begin to look at the cost

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<sup>23</sup>. A repetitive loss property is defined by the Federal Emergency Management Agency (FEMA) as a property for which two or more National Flood Insurance Program (NFIP) losses of at least \$1,000 each have been paid within any 10-year rolling period since 1978 (FEMA 2017). From 1978 through 2017, about a quarter of all claims paid under the NFIP nationwide were for repetitive loss properties, even though such properties make up fewer than two percent of all NFIP insurance policies (FEMA 2017). A repetitive loss area is 50 or more contiguous repetitive loss properties. While the West End is specific as an LRA, this may in part be due the high value of the homes there, which exceed the value covered by NFIP. The pattern of damage and loss on the island, however, could meet the requirement for LRA.

<sup>24</sup> [https://www.fema.gov/pdf/nfip/manual201205/content/20\\_srl.pdf](https://www.fema.gov/pdf/nfip/manual201205/content/20_srl.pdf)

<sup>25</sup> [https://www.fema.gov/pdf/nfip/manual201205/content/20\\_srl.pdf](https://www.fema.gov/pdf/nfip/manual201205/content/20_srl.pdf)

effectiveness of the program and discontinue the practice of funding rebuilding efforts where homes are unlikely to last.

### New Areas for Growth

Given the relative fiscal impact of the West End, it would benefit the Town to shift its tax base to the more protected East End or Middle areas. The Aloe Bay Plan [8] was conceived in the 5Es plan to shift the tax base from the West End and re-establish it in more secure and safer areas of the Island. It aims to develop a “town center,” a planned community at the harbor area near the Dauphin Island bridge. The goal is to redevelop the area into a gateway for the Island with shops, a fish market, boutique dining, and lodging. It has been proposed as a three-phase development project incorporating significant local input. The eventual outcome is a multi-use space of several city blocks generating additional economic activity (and associated revenues) for the Town while retaining community character. More information on the project and plans can be found at <https://www.aloebay.org/>.

The Aloe Bay Plan includes 108,200 square feet of space for tax-generating businesses, including retail, restaurants, and event spaces. Applying national averages for sales per square feet, these spaces should generate on the order of \$37 million in spending and economic activity, including \$1.8 million in sales tax revenues for the Island. The Aloe Bay Plan also recommends 123 units for overnight lodging which are estimated to generate just over \$6 million in revenues and \$300,000 in hotel taxes for the Island. More specific fiscal impacts for the Plan are provided in Appendix B. The sales tax and lodging revenue generated by the Aloe Bay Plan would not offset the cost of repairs or damages. However, they would likely offset the lost lodging tax revenue from decommissioning at-risk vacation homes on the West End of the Island.

The Aloe Bay Plan crucially helps shift the focus of tourist and economic activity on Dauphin Island away from the vulnerable West End. Revitalizing and redeveloping the East End will be key for offsetting the lost revenues of the large vacation homes. Aloe Bay would also help draw short-term and day-use visitors to the Island. Going forward, Dauphin Island should prioritize projects which grow the East End (and perhaps the Middle as well) and increase the draw for tourists to that portion of the Island, so eventually tourism on more eastern portions of the Island can compensate for the loss on the west. We are not advocating an immediate condemnation of the West End homes, but sooner rather than later, a storm may necessitate this shift.

## Conclusion

In many ways, Dauphin Island is a harbinger of the challenges facing coastal communities nationwide, and in fact worldwide.

Dauphin Island faces significant challenges to its long-term sustainability and possesses limited resources with which to meet these challenges. Understanding how best to maximize and allocate those resources is vital to the Island's survival. This FIA set out to determine if the West End was a net benefit to Dauphin Island. Careful assessment of the available data indicates that the West End is in fact a net negative, and a potential drain on the Town's resources. That isn't to say that this portion of the Island doesn't generate significant revenues—including most of the lodging tax revenues—but these revenues do not offset the cost of maintaining the West End area and providing public services to the properties. Furthermore, these revenues certainly do not offset the cost of storm damages. These findings are crucial for future planning, policymaking, and adaptation efforts on the Island.

Most property on the Island is (1) not owned by Island residents, and (2) not owned for personal use. This is especially apparent on the West End. Thus, a significant portion of the Town's expenditures benefits property owned by off-Island and out-of-state residents. While these properties generate revenues for the Town, most of the revenue they generate goes to owners and management companies off the Island entirely.

With the knowledge that the West End is not a fiscal benefit to the Island, Town officials and full-time residents, along with off-Island property owners, need to consider the future they envision for Dauphin Island. As the estimates of property damage from the NOAA model demonstrate, a major storm would impose massive losses on the Island. The Town needs to be prepared not only to absorb the costs of these physical damages, but also look for solutions to reduce the costs of future natural disasters.

Dauphin Island is becoming increasingly commercial, with more STRs each year. Without proper awareness of the costs and benefits of tourism and rentals, how can the Town plan sustainable growth? Of the many recommendations that resulted from this FIA, the most achievable and potentially the most impactful is to improve the accounting of revenue expenditures on the Island, both day-to-day and after storms.

# Appendix A—Sensitivity Analysis

## Sensitivity Analysis

### Lodging Taxes

To estimate the fiscal benefits of the West End, it was necessary to determine the lodging taxes generated by rentals there. Lodging taxes are a major portion of the Town's budget, and many of the people consulted perceived that most of the rentals—and certainly the highest grossing rentals—are located on the West End. As mentioned earlier, precise data regarding the short-term rental (STR) market on the Island were unavailable. However, several Island real estate agents interviewed felt the Middle area also has a significant number of short-term rentals, and the East End has pockets with high rental rates. Based on interviews with real estate professionals and other local experts, a sensitivity analysis was conducted based on two assumptions. First, the proportion of rentals on the West End (either 60%, 50%, or 35%), and second, while it was clear from all our interviews (and observations) that West End STRs are priced higher than all others, this differential is uncertain, based on our interviews. We decided to assume that West End rentals are either 15%, 20%, or 25% greater.

Under the nine possible scenarios, we determined the proportion of 2021 fiscal year lodging tax revenues attributable to the West End and the dollar value of those revenues. The lodging tax revenue collection data was obtained from the Town's 2021 budget.

### Sales Taxes

Determining the regional sales tax contribution, along with tourists' sales tax contribution, was an original goal of this analysis. However, service-sector-specific sales tax data was unavailable. As a result, this FIA does not include extensive estimates of sales tax impacts. However, in the analysis of the relative costs and benefits of the West End development, estimates of sales tax generated by those properties were included.

These estimates are based on standard assumptions and insights provided by local officials. First, several experts in the area noted the large volume of gas sales on the Island related to recreational boating (fishing). Due to these sales and the limited other retail transactions on the Island, we attributed 50% of total sales tax revenue to boating gas, unrelated to development. Second, following economic practice, we assumed that sales taxes would follow property taxes, and thus the proportion of sales taxes attributed to each area would reflect the same proportion as lodging taxes.

<b>West End Additional Rental Rate</b>	<b>Percentage on the West End</b>					
	<b>35%<sup>(4)</sup></b>		<b>50%<sup>(6)</sup></b>		<b>60%<sup>(5)</sup></b>	
	<i>Town Lodging Taxes Collected</i>	<i>Percentage of Total Town Lodging Tax Revenue</i>	<i>Town Lodging Taxes Collected</i>	<i>Percentage of Total Town Lodging Tax Revenue</i>	<i>Town Lodging Taxes Collected</i>	<i>Percentage of Total Town Lodging Tax Revenue</i>
<b>15%</b>	\$604,060.58	40%	\$862,943.69	58%	\$1,035,532.42	69%
<b>20%</b>	\$630,324.08	42%	\$900,462.98	60%	\$1,080,555.57	72%
<b>25%</b>	\$656,587.59	44%	\$937,982.27	63%	\$1,125,578.72	75%

# Appendix B – Potential Sales Tax

## Aloe Bay Sales Tax

Table 19: Estimated Sales Tax Revenue, Aloe Bay Master Plan

<i>Business Type</i>	<i>BFE Square Feet</i>	<i>Estimates Sales per Square Feet</i>	<i>Estimates Annual Sales</i>	<i>Estimated Sales Tax Revenues at 5%</i>
<i>Ecotourism Center</i>	8,500	\$486.00	\$4,131,000.00	\$206,550.00
<i>Fish Market</i>	8,000	\$389.00	\$3,112,000.00	\$155,600.00
<i>Open Pavilion (Commercial)</i>	3,750	\$299.00	\$1,121,250.00	\$56,062.50
<i>Hook-to Table Restaurants</i>	8,000	\$408.00	\$3,264,000.00	\$163,200.00
<i>Mixed Use/Boutique Lodging</i>	13,200	\$299.00	\$3,946,800.00	\$197,340.00
<i>Waterfront Use (Oysters)</i>	3,000	\$299.00	\$897,000.00	\$44,850.00
<i>Mixed Use Space</i>	29,600	\$299.00	\$8,850,400.00	\$442,520.00
<i>Restaurant/Snack Bar</i>	3,000	\$408.00	\$1,224,000.00	\$61,200.00
<i>Waterfront Use (Charter/Marina)</i>	2,800	\$418.00	\$1,170,400.00	\$58,520.00
<i>Personal Services</i>	6,000	\$418.00	\$2,508,000.00	\$125,400.00
<i>Sporting Goods/Rentals</i>	2,200	\$299.00	\$657,800.00	\$32,890.00
<i>Bait/Tackle Shops</i>	3,675	\$299.00	\$1,098,825.00	\$54,941.25
<i>Restaurant</i>	3,675	\$408.00	\$1,499,400.00	\$74,970.00
<i>Boat Shop</i>	2,600	\$299.00	\$777,400.00	\$38,870.00
<i>Art Maker Gallery</i>	2,100	\$135.00	\$283,500.00	\$14,175.00
<i>Books</i>	2,100	\$299.00	\$627,900.00	\$31,395.00
<i>Health/Personal</i>	3,500	\$172.00	\$602,000.00	\$30,100.00
<i>Restaurant</i>	2,500	\$408.00	\$1,020,000.00	\$51,000.00
<i>Total</i>	108,200	\$6,042.00	\$36,791,675.00	\$1,839,583.75

Source: Philip King, sales tax analysis based on Randall Gross estimates of capacity at Aloe Bay and the Aloe Bay Master Plan.

# Appendix C – Parcel Data Analysis Results

## Ownership Analysis

Table 20: Parcel Value by Ownership

Area	Parcels Owned by Dauphin Island Resident	Average Value	Locally Owned Parcels, Class 3, Average Value	Locally Owned Parcels, Class 2 Average Value
East End	922	\$ 264,344.58	\$ 256,793.87	\$ 290,447.02
Middle	142	\$ 255,352.43	\$ 220,396.61	\$ 302,225.00
West End	221	\$ 343,213.39	\$ 316,094.74	\$ 423,721.88

Area	Alabama Owned Parcels	Average Value	Alabama Owned Parcels, Class 3, Average Value	Alabama Owned Parcels, Class 2 Average Value
East End	468	\$ 267,788.03	\$ 278,804.03	\$ 252,365.64
Middle	150	\$ 256,042.00	\$ 210,341.82	\$ 282,500.00
West End	328	\$ 314,447.56	\$ 298,325.56	\$ 334,055.41

Area	Outside Alabama Owned Parcels	Average Value	Outside Alabama Owned Parcels, Class 3, Average Value	Outside Alabama Owned Parcels, Class 2 Average Value
East End	250	\$ 245,357.60	\$ 271,782.18	\$ 227,445.64
Middle	154	\$ 260,405.19	\$ 233,724.00	\$ 265,575.97
West End	265	\$ 412,011.70	\$ 363,264.29	\$ 421,192.83



Table 21: Property Tax to the Town, by Ownership

Area	Parcels Owned by Dauphin Island Resident	Average Value	Locally Owned Parcels, Class 3, Average Value	Locally Owned Parcels, Class 2 Average Value
East End	666	\$ 124.44	\$ 114.84	\$ 158.20
Middle	102	\$ 174.09	\$ 101.30	\$ 272.28
West End	118	\$ 205.72	\$ 146.15	\$ 397.17

Area	Alabama Owned Parcels	Average Value	Alabama Owned Parcels, Class 3, Average Value	Alabama Owned Parcels, Class 2 Average Value
East End	468	\$ 173.97	\$ 148.94	\$ 209.01
Middle	150	\$ 181.63	\$ 105.33	\$ 231.58
West End	328	\$ 221.96	\$ 149.15	\$ 310.51

Area	Outside Alabama Owned Parcels	Average Value	Outside Alabama Owned Parcels, Class 3, Average Value	Outside Alabama Owned Parcels, Class 2 Average Value
East End	250	\$ 178.85	\$ 141.66	\$ 203.98
Middle	154	\$ 231.49	\$ 130.94	\$ 251.12
West End	265	\$ 363.76	\$ 178.59	\$ 398.63

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