

Block Island and the Invisible Burden of Tourism

Sustainable Tourism Report



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Created for Block Island Tourism Council

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Executive Summary

Tourism is an important revenue stream for many destinations around the world, but it can also produce significant costs that are typically not accounted for in the budgets of local governments. These costs, or the “Invisible Burden” of tourism, put pressures on environmental and socio-cultural resources. This can range from increases of use in public utilities, to degradation of natural landscapes, to lack of affordable housing for residents. Understanding these costs is critical for effective tourism management.

One destination that has recognized this Invisible Burden in its community is the small island of Block Island. Located just 12 miles from mainland Rhode Island, Block Island has conserved nearly 50% of its land from development, making it well known among outdoor enthusiasts as a destination endowed with conserved landscapes with great natural beauty. However, Block Island has seen considerable growth in tourism outside protected lands and is now experiencing building pressure on infrastructure, utilities, and public services.

A study of the sustainability of tourism on Block Island was conducted by EplerWood International in partnership with the Harvard T.H. Chan School of Public Health from February to July of 2022. This study was built on the Holistic Environmental Accounting for Tourism Destinations (HEAT-D) framework tested on the island of Djerba, Tunisia, as part of a Harvard T.H. Chan study performed by EplerWood International in 2018. The tool focuses on measuring tourism’s impact on environmental resources. It was adapted for use on Block Island, focusing on triple-bottom line factors: economic, environmental, and socio-cultural.

The methodology and goals for this study include:

- Initial research on Block Island and its reported advantages and impacts of tourism
- Speaking with stakeholders to identify target tourism issues that could benefit from ongoing monitoring
- Collecting existing data to be used as sustainable tourism indicators for baseline measurements
- Locating pressure points
- Identifying potential actions to address tourism’s effect on resources
- Presenting this report to the community of Block Island as a living document to be built upon and refined for improved tourism management in the future

The data show that many resources on Block Island are subject to high seasonality, with significant increases in use during the summer months when tourism is at its peak. Water has experienced an 87% increase in usage from winter to summer in 2017, while energy recorded a 159% increase during the same year. In addition to strains on Block Island’s public utilities, pressure points have also been found on socio-cultural resources. For example, tourists represented 82% of urgent care patient visits in 2021.

Of all the factors studied for this report, four were identified as areas requiring a priority focus to relieve stress: affordable housing, adequate police force staffing, water, and municipal solid waste. These resources appear to be hitting a tipping point.

Important measures to guarantee the success of the Invisible Burden of tourism management for Block Island involve 1) maintaining current data on recommended indicators and reporting them regularly to the Tourism and Town Councils and 2) acquiring updated tourism visitor numbers annually. The lack of visitation numbers should be handled by 1) engaging the State on requiring ferry’s to report visitor

numbers for all operations serving the island and/or 2) regularly surveying tourism facilities to create an informed estimate of the number of visitors coming to Block Island by using a simple occupancy rate database system. With the acquisition of visitor numbers, and the measuring of indicators, the Town can analyze the revenue required to cover the Invisible Burden of tourism.

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Introduction

The Invisible Burden of Tourism

Destinations around the world have long known that tourism is an effective approach to drive revenue into the local economy and to provide direct and indirect employment opportunities to residents. In 2019, prior to the Covid-19 pandemic, the travel and tourism industry comprised 10.3% of global GDP and was responsible for 333 million jobs around the world (WTTC, n.d.). Many destinations worldwide have sought to take advantage of these tourism benefits, largely focusing on increasing tourism numbers via marketing, with little investment in tourism management.

In many popular destinations the very real concern of overtourism is now in play, and local residents are developing an awareness of the toll tourism can have on a region's infrastructure, natural resources, and culture. The "Invisible Burden," or hidden costs of tourism, can considerably reduce the perceived value of a destination. Forward-looking destinations are now seeking to understand these costs — from the increased expense of waste management during peak periods, to tourism facilities' use of power, to growing housing expenses for locals. By doing so, town managers together with tourism management organizations can underscore and pinpoint the means to preserve the value of tourism, which should be assessed regularly in a more holistic manner.

The landmark report [*Destinations at Risk: The Invisible Burden of Tourism*](#) (Epler Wood et al., 2019-b) studied this phenomenon in detail and found that many destinations' financial accounting methods do not calculate the impact of tourism. While nearly all destinations know how much revenue is generated by visitors, few local authorities have accounts which enable them to evaluate the costs of tourism growth. In actuality, the net revenue per tourist is lower than what economic impact reports indicate, and in some cases, may even cause municipal debt. It is critically important that destinations begin to rethink their accounting processes to find the true operational value of tourism to their region.

Simultaneous to the *Destinations at Risk* report, EplerWood International and the Harvard T.H. Chan School of Public Health under the direction of Principal Investigator, Dr. Jack Spengler, conducted a study which developed a Holistic Environmental Accounting for Tourism Destinations (HEAT-D) tool on the island of Djerba, Tunisia to document the actual costs of the Invisible Burden, and the carbon footprint of a destination. HEAT-D measures the use of energy, water, wastewater, solid waste, transportation, biodiversity, and coastal impacts of tourism. Among the many findings, the team identified that visitors to Djerba Island used three times more energy and produced two and a half times more greenhouse gas emissions than the average Tunisian resident (Epler Wood et al., 2019-a). HEAT-D evaluated the cost of managing tourism on a per tourist basis and opened the door to a range of studies to manage and protect destinations. Overall, HEAT-D demonstrates the importance of proper tourism accounting to effectively manage local destinations.

Block Island

A nature-lovers paradise, with idyllic New England beaches and seemingly endless miles of hiking trails, Block Island is a distinctive tourism destination. The small seven- by three-mile island is located about 12 miles off the coast of Rhode Island and was named one of the “Last Great Places” in the western hemisphere by The Nature Conservancy. Thanks to the foresight and collective effort of the community beginning in the 1970s, over 47% of Block Island is now conserved, preserving much of this island from commercial development. It is a unique and beautiful place to visit, and due to recent trends driving higher interest in nature destinations (Bergstrom et al., 2020), it has now found itself to be an extremely popular tourist destination.

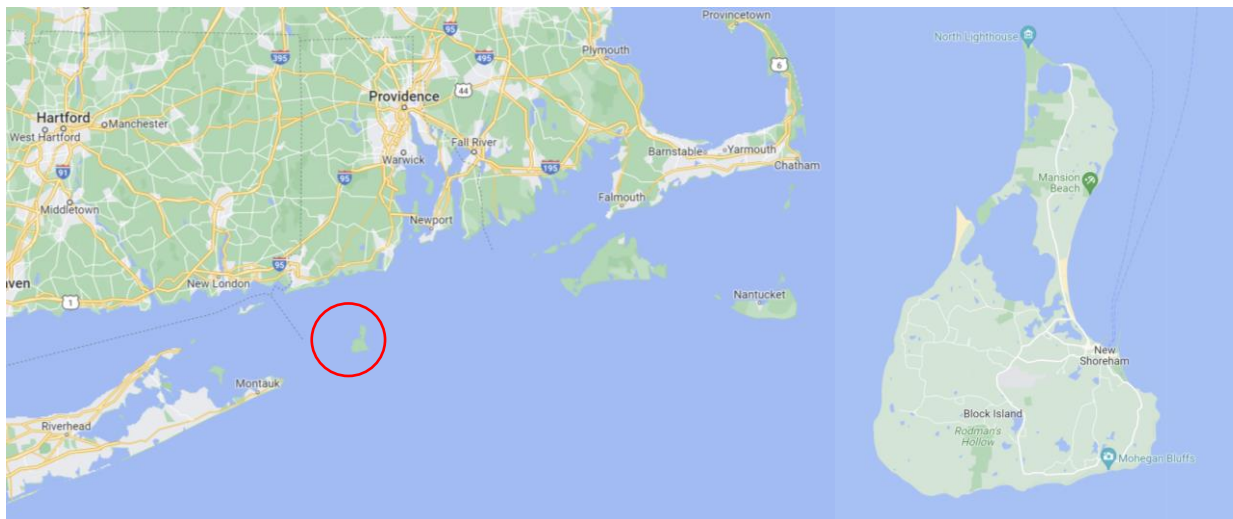


Figure 1. Left: Block Island in relation to Rhode Island. Right: Map of Block Island (Google Maps, n.d.).

Block Island experiences high seasonality — around 1,000 residents call Block Island home year-round, while in the summer months the number of people on the island can grow to an estimated 20,000 a day (BITC, n.d.). These numbers include seasonal residents, overnight guests, and day-trip visitors.

Block Island residents are acutely mindful of the importance of their environment. They have taken great strides in preserving almost half of their land from development through the help of three conservation organizations, they gladly volunteer to participate in wildlife studies and beach grass plantings, and many contribute their time to groups focused on concerns such as sea level rise and resiliency. In short, Block Island residents are committed to the sustainability of their community.

Over the past few years, residents have noticed changes to tourism patterns. Although exact visitor numbers are not documented, concerns have been raised that tourism may be reaching levels that the island cannot support. Those responsible for utilities, public emergency services, and tourism services have begun to raise concerns that Block Island must better understand tourism flows and impacts of potential future growth.

Currently, Block Island has no record of the numbers of visitors that come to the island, which makes it difficult to analyze how tourism is changing over time and its associated impacts. Visitors can arrive to the island by plane or a private boat, but most travel on one of several ferries from mainland New England. While the number of planes and private boats that arrive are recorded, passenger numbers are

rough estimates. Interstate, a Rhode Island public utility that operates the main ferry, runs its service year-round, while high speed ferries and ferries from other states run only to support the summer tourist season. Multiple stakeholders on Block Island, including the former Chief of Police, have requested ridership numbers from Interstate, but the company has declined to release them. The relationship with Interstate is structured as such that Block Island has little control over the number of visitors that are transported to the island, with Interstate having full discretion over how many crossings the ferry makes each day.¹

Tourism's Economic Impacts on Block Island

The Rhode Island Commerce Corporation has commissioned reports from Tourism Economics to study the direct, indirect, and induced spending by visitors at both the state and local levels. Table 1 provides definitions and examples.

Table 1. Types of tourism-related spending.

Tourism-Related Spending	Definition	Examples
Direct	Money spent by travelers on sectors tied to tourism	The money spent by a visitor on their hotel stay or to pay their restaurant bill
Indirect	Money spent by tourism sectors to support their operations	The money spent by a hotel for construction of a new wing or by a restaurant to a food distributor
Induced	Money spent by those that earn their wages from tourism (directly or indirectly) in the local community	The money spent by a hotel front desk employee to buy their child an ice cream cone from a local shop

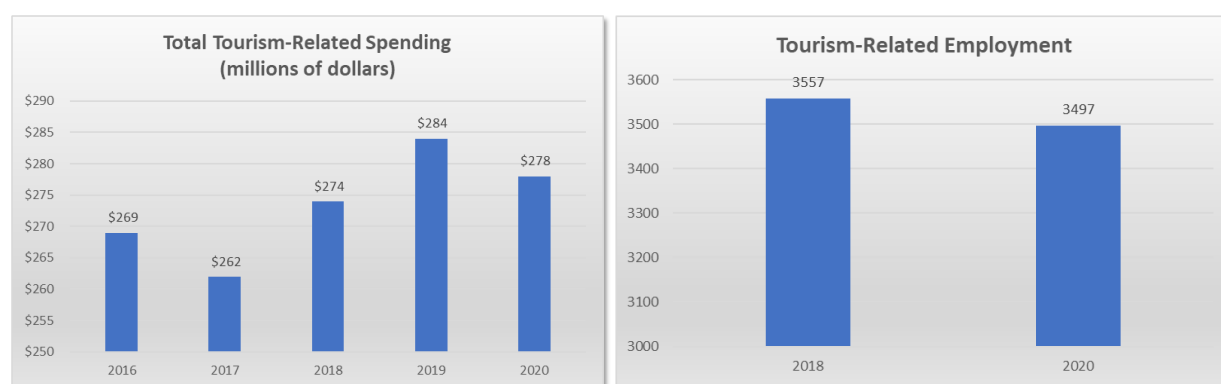


Figure 2. Left: Total tourism-related spending on Block Island from 2016-2020. Right: Total tourism-related employment on Block Island for 2018 and 2020 (Tourism Economics, n.d.-a; Tourism Economics, n.d.-b).

Tourism-related spending and tourism-related employment include direct spending, induced spending, and indirect spending on tourism-related construction. Block Island has seen growth in tourism-related

¹ Ferry information is vital to understanding tourism on Block Island. Exploring avenues for access to this data from the State would require further study.

spending over time, but the numbers do not indicate a significant increase that would demonstrate a sharp rise in tourism. However, at over a quarter billion in tourism-related spending annually since 2016, the metrics show the considerable amount of money one industry passes through this small island community of about 1,000 year-round residents.

Project Goals and Objectives

Responding to growing questions within the Block Island community around the expansion of tourism and its potential impacts, Block Island Tourism Council's Executive Director Jessica Willi arranged a series of engagements with sustainable tourism consultancy EplerWood International and key Block Island stakeholders. In 2021, Megan Epler Wood conducted two Town Hall meetings with the community – one with a wide range of residents and a second with local business owners. This was followed by a keynote speech at the Tourism Council's annual meeting in October of 2021.

Stakeholders expressed concerns regarding overtourism, traffic, affordable housing, and a strain on emergency services. Perhaps reaching to the heart of the matter was the question: "How do we maintain what makes Block Island such a special place to visit?" During her keynote address, Epler Wood presented the concept of *The Invisible Burden* and the importance it plays in destinations like Block Island. Soon after this speech, the Town Council gave its approval for this study which was supported by Harvard T.H. Chan School of Public Health.

The purpose of this study is to identify metrics which demonstrate how tourism affects the island's vital economic, socio-cultural, and environmental resources. By benchmarking and monitoring this information over time, the community can focus their resources on the issues of greatest impact and track if improvements are made.

The team surveyed the availability of relevant data and has identified proposed indicators that can be used as a baseline for future tourism management. The work is informed by sustainable tourism principles, HEAT-D, and a series of 24 stakeholder interviews conducted February to May 2022. A broad range of triple-bottom line indicators were considered, and a targeted set of economic, socio-cultural, and environmental metrics were identified based on qualitative research and local capacity for data collection.

The goal was to design this project as a baseline for future decision making, from which Block Island can internally build their capacity to collect and analyze relevant data in future. The study benchmarks past and current data and establishes tools and methodologies so that the community can continue to monitor these metrics over time, while refining data collection and developing further data points as needed.

Methodology

Phase 1: Block Island Context

This study began with initial research of Block Island, its demographics, and information regarding tourism to the island. Further context was provided during introductory meetings between the research team and Jessica Willi of the Tourism Council. The research team also conducted interviews to

understand the broader context of tourism in Rhode Island and performed desk research to identify potential indicators. Based on this research, a baseline of general concerns and issues facing Block Island was created.

Phase 2: Stakeholder Engagement

With this information and data from Epler Wood's Town Hall meetings on Block Island in the Fall of 2021, a group of stakeholders were contacted for preliminary interviews. These stakeholders were selected for their deep experience related to identified tourism issues and so that an array of local perspectives could be documented. The interviews allowed the research team to gauge the most pressing areas of focus for the study.

Select stakeholders were also asked to provide available data that might be analyzed to understand tourism's impact on local resources. Based on the data provided, a set of potential indicators were developed. The goal was to use data that is already available, but to organize that data such that trends can be identified.

Phase 3: Focused Stakeholder Engagement and Research on Block Island

An on-site visit to Block Island was organized in May of 2022. The purpose of this visit was to continue stakeholder engagement, collect relevant data, and to identify how local stakeholders might manage this work in future. In addition to scheduled interviews with various government leaders, utility managers, and hotel operators, the visit also allowed for impromptu interviews with tourists and hospitality employees.

Phase 4: Data Collection and Information Categories Required for Town Planning

Based on collected data and desk research, the following set of indicators was developed.

Table 2. Measures required to develop for Block Island based on the triple-bottom line.

Triple-Bottom Line	Category	Indicator
Environmental	Energy	Total amount of power consumed
		Amount of power consumed by user type
	Water	Total amount of water consumed
		Amount of water consumed by user type
	Municipal Solid Waste	Amount of solid waste generated by user type
		Amount of recycling generated by user type
	Land Management	Volunteer hours spent maintaining trails
		Anticipated flooding due to climate emergencies

Socio-Cultural	Safety	Motor vehicle violations
		Motor vehicle collisions
		Calls for service
		Number of urgent care visits
Economic	Revenue from Tourism	Affordable Housing
		Housing prices in comparison to average income
		Percent and total amount of State and Local Hotel Taxes collected
		Percent and total amount of Local Cottage Tax collected
		Percent and total amount of Local Meals and Beverage Tax collected

Stakeholders were requested to provide monthly data, which is most effective for monitoring tourism impacts to ensure trends in seasonality can be easily understood. Where possible, data is reported monthly and for the past five years to demonstrate trends before and after the start of the Covid-19 pandemic.

Ideally, data would be presented per tourist because this clearly demonstrates the relationship between tourism growth and impacts. However, due to the unavailability of visitor numbers to Block Island this is not yet possible.

Block Island Sustainable Tourism Indicators

Environmental Indicators

Energy

For many years, Block Island relied on diesel generators for its energy supply. This type of energy production was polluting, noisy, and pungent, in addition to being expensive to operate. Block Island burned an estimated one million gallons of diesel a year (BIPCo, 2019), which not only created unhealthy air pollution but released excessive harmful greenhouse gas emissions. During this time, Block Island Power Company (BIPCo) was investor-owned and was known to have several blackouts during the year as well as experience high utility prices.

On May 1, 2017, Block Island was connected to the National Grid's energy supply through the Sea2Shore submarine cable from mainland Rhode Island. This was made possible through a deal when the Block Island Wind Farm was constructed. (Deepwater Wind, n.d.). Upon its completion, BIPCo officially transitioned from an investor-owned company to a cooperative utility and is currently overseen by its president, Jeffery M. Wright.

The installation of the cable from Rhode Island has provided Block Island with a much more stable energy supply according to BIPCo and has greatly improved power quality. In addition to this, BIPCo recently completed a conversion on the island which doubled the voltage of its power lines. Unlike capacity issues other utilities on Block Island are currently facing, this conversion should allow the power company to manage the energy load on the island for years to come.

Indicator: Total amount of power consumed



Figure 3. Left: Monthly energy usage from 2017-2021. Right: Yearly total of energy usage from 2017-2021.

There is an obvious jump in the consumption of electricity during the summer months, some of which may be attributed to items used by the year-round community such as air conditioners. However, many hotels and restaurants are closed during winter months and reopen in the spring when tourism begins to pick up and would therefore create a considerable uptick in power usage on Block Island. As the graph on the left demonstrates, there is a predictable trend in power usage beginning in the spring and tapering off in the fall. Yearly usage totals indicate that power consumption has seen considerable growth since 2017.

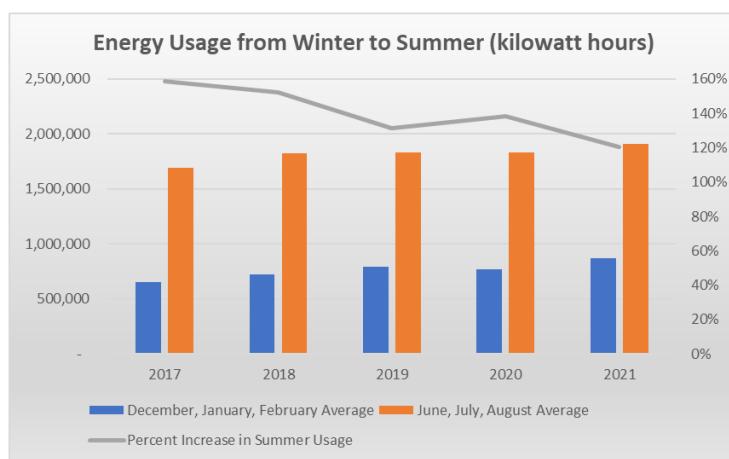


Figure 4. Average energy usage in winter and summer months with percent increase from 2017-2021.

Taking a three-month average in the winter months and comparing that to a three-month average of the summer months, Block Island has seen an increase in energy consumption of over 120% each year, with a 159% increase in 2017. The increase has been trending downward, but that is due to a rise in energy usage during the winter months.

Indicator: Amount of power consumed by user type

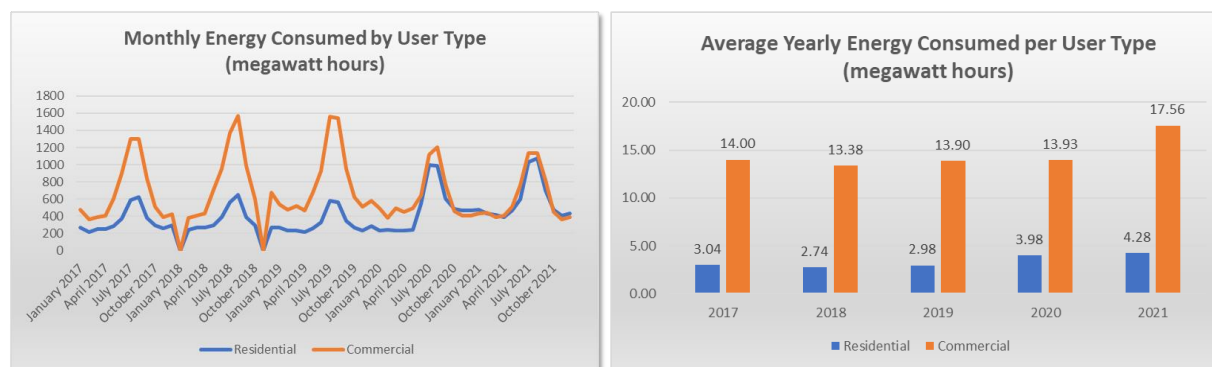


Figure 5. Left: Total monthly energy consumed by customer type from 2017-2021. Right: Average yearly energy used per customer type.

Looking at energy usage by user type, a predictable wave pattern appears showing the influx of usage in the summer months. While it would appear that commercial usage has decreased and residential increased when viewing the graph on the left, this is due to a change in the number of users classified as these user types. Appendix B has more details on this information.

Breaking down the total commercial and residential usage per number of customers in the figure on the right demonstrates that commercial users consume considerably more energy than residential. Perhaps most notable, was the average commercial customer had a 26% increase in energy usage from just 2020 to 2021, consuming 17.56 megawatt hours over 13.93 megawatt hours in 2020.

Discussion

Block Island has made great strides in recent years with its power supply, improving both the quality and capacity. This has been confirmed by several stakeholders who noted that with the cable installation and recent voltage conversions, Block Island's power supply should be reliable for at least a generation, even with increased tourism. Additionally, moving away from diesel generators to the National Grid has reduced greenhouse gas emissions and pollution on the island.

While Block Island has lowered its greenhouse gas (GHG) emissions by moving away from diesel, electricity usage has increased over time, and the impact of these increases requires further analysis. As the climate crisis accelerates, communities must make additional investments to monitor and mitigate greenhouse gas emissions.

Rhode Island's carbon reduction goals have recently been set to 100% renewable energy by 2033, the most ambitious target in the United States (McDermott, 2022). Meeting these targets requires Block Island to reduce its reliance upon fossil fuels. Currently, BIPCo buys power wholesale from ISO New England which includes 25% from renewable energy sources. According to Wright, Block Island is working towards aligning with Rhode Island's goals and continues to find affordable energy for the community while increasing its renewable energy portfolio.

Enhancing energy efficiency on Block Island, especially in commercial facilities, can also help Block Island meet Rhode Island's target. Tourism facilities have a key role to play here.

Table 3. Summary of key issues, data, and potential actions for Energy.

Key Issues	• Increase in greenhouse gas emissions from rising usage of energy
Knowns	• Total energy usage per residential and commercial customers, with commercial responsible for majority of use • Consumption has been rising over time • The power company is capable of supplying Block Island's power demand for the foreseeable future • At least 25% comes from renewable sources, and is on pace with Rhode Island's current renewable energy goals, though RI aims to transition their grid to 100% renewable by 2033. • Power use experiences high seasonality
Unknowns	• Power usage by vacation rental homes versus year-round residents • The commercial sources responsible for consuming the most energy • Changes in commercial use of energy over time are not fully clear due change in classification of user types, and could benefit from additional research • When energy capacity is projected to be reached
Ways to Address	• Improve energy efficiency, especially of commercial facilities • Increase renewable energy at the grid level and commercial level on the island to decrease greenhouse gas emissions • Provide education on power usage
Potential Actions	• Require or incentivize energy efficiency improvements including lighting and appliance upgrades at hotels and restaurants • Continue purchasing renewable energy to improve BIPCo's portfolio • Provide funding and incentives for residential and commercial solar panels • Create educational campaigns about sustainable utility usage for both residents and tourists
For Further Discussion	• How are goals being set by Block Island to increase its renewable energy percentage? • Can incentives for electric vehicles, bicycles, and mopeds lower carbon emissions while improving noise pollution, and how will they affect the energy grid? • What is the average day-trippers' energy usage, and how much in relation to overnight tourists?

Water



Figure 6. Block Island Water Company (Hester, 2021 July 7).

Water on Block Island is supplied by two sources: private wells and the Block Island Water Company (BIWC). While around 90% of the structures on Block Island receive their water from private wells, the water company supplies around 50% in terms of volume in July to August (RIDH, n.d.). This can be attributed to BIWC's service for Block Island's downtown commercial district, which houses many of the hotels and restaurants used by tourists.

BIWC draws its water supply from a single source aquifer below the ground water table, where a layer of freshwater floats on top of a layer of saltwater. This "brackish" water is treated through reverse osmosis by the water company. BIWC currently has six wells and two storage tanks, which can produce up to 190,000 gallons a day when operating at 100% capacity (Hester, 2021 September 23).

John Breunig has been Superintendent at BIWC since 2012. Breunig considers the water company a "Quasi-Municipal Enterprise Fund," as it is a Town entity but does not draw from the General Fund in the Town's budget. This is due to the fact that BIWC does not supply water to the entire Block Island community, and therefore cannot use the community's taxes to operate. BIWC has been experiencing a growing need for infrastructure improvements, particularly a new tank for increased storage capacity and housing for employees. As BIWC only generates revenue to operate, the Town of New Shoreham and BIWC will need to jointly review the possible need for raising capital expenditures, normally handled via municipal bonds.

Indicator: Total amount of water consumed

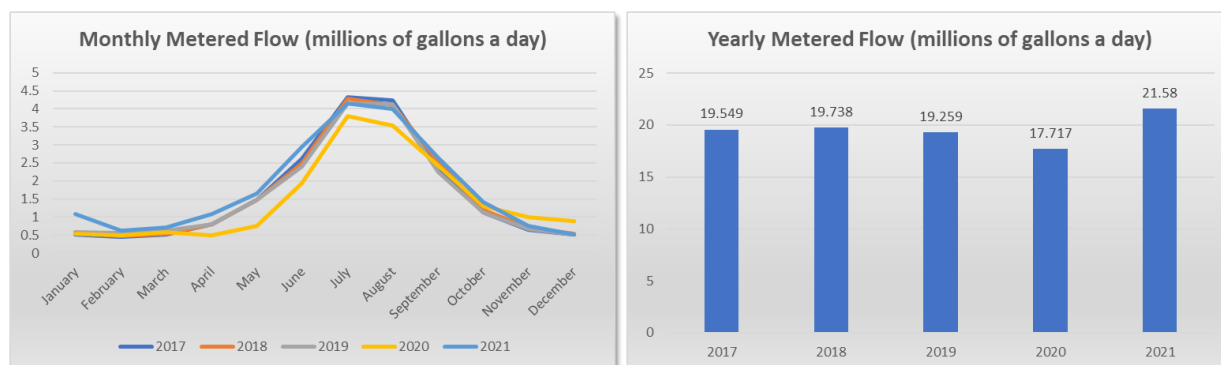


Figure 7. Left: Monthly water hour usage from 2017-2021. Right: Yearly total of water usage from 2017-2021.

Like many other resources on Block Island, water consumption increases in the summer months, displaying considerable seasonality. It is notable that there has not been significant growth in yearly total water usage over time. This is likely because BIWC has reached its capacity limit and cannot provide more water to facilitate growth.

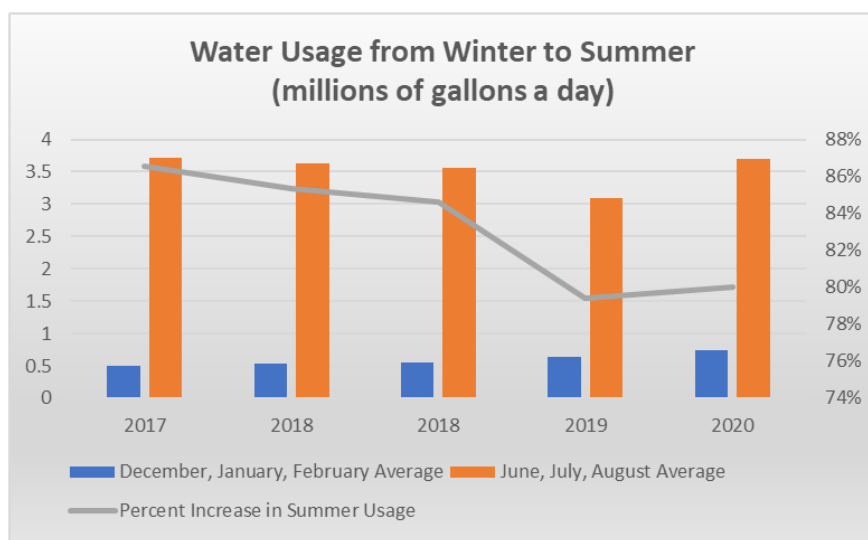


Figure 8. Average water usage in winter and summer months with percent increase from 2017-2021.

Similar to energy, the winter month average of water consumption is significantly lower than the summer month average. The percent increase in summer usage ranged from 79% to 87% during the 2017-2020 timeframe.

Indicator: Amount of water consumed by user type

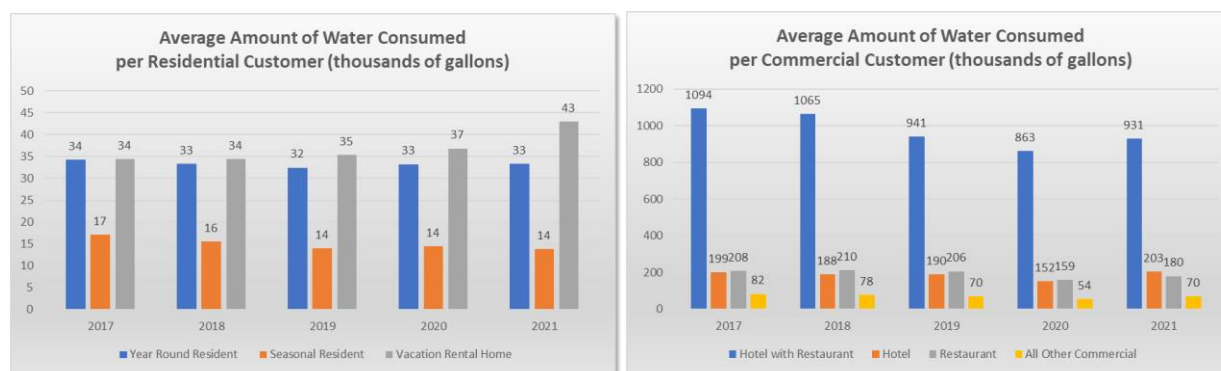


Figure 9. Average yearly water used per residential customer type (left) and commercial customer type (right).

BIWC provided detailed analysis of customer types and usage for this report, showing the obvious impact tourism plays on this critical resource. For residential customers, the average vacation home rental used as much or more water than the average year-round resident, despite these homes not being occupied for the entire year. Commercial customers show an even more pronounced difference, as the average hotel with a restaurant consumes significantly more than all other consumer types. It should be noted that these types of properties may be much larger than other commercial types and would need to be studied in more detail to understand the cause of this dramatic difference.

Discussion

There are four constraints in water production at BIWC that limit its ability to supply more water: (1) the water source, which needs time to recharge, (2) the time it takes to treat water through reverse osmosis filters, (3) water storage capacity, and (4) the waste stream of water at the sewer company. The most difficult constraint currently faced by BIWC is its storage capacity, which is capped around 300,000 gallons. In the busy summer months, usage can reach 200,000 gallons – potentially leaving an insufficient amount left for a buffer in case of emergencies.

Taking these factors into consideration, Breunig has had to deny multiple requests for water hookups because they simply cannot take on the additional load. Since October 2021, he has turned down expansions to both Surfside and Manisses hotels, as well as a new subdivision that could help ease some of the housing issues Block Island faces.

Increasing capacity will be important for BIWC to relieve the stress of providing water in the busy summer months. However, when the island only consumes around 20,000 gallons a day in the winter, the costs to upgrade and maintain the infrastructure for just eight to ten weeks of seasonal tourist use could be a prohibitive cost for year-round residents to bear. With development outpacing the ability of BIWC, it is also a likely scenario that even with increased capacity, the water company will simply find itself still trying to keep up with demand.

Another critically important issue to keep in mind is the potential of overusing the water sources, creating scarcity of supply or saltwater intrusion. BIWC does not foresee a problem with this in the near future. However, it should be investigated as the potential to pump water increases to meet growing demand, as well as rising sea levels from climate change upsetting the balance of fresh water sources.

Table 4. Summary of key issues, data, and potential actions for Water.

Key Issues	• Capacity to process, store, and deliver water • Managing high seasonality • Approving new water allocation requests
Knowns	• Current limits to processing and storage • Monthly and yearly totals for water usage • High seasonality in consumption • Water usage breakdown by user type • Hotels with restaurants are by far the highest commercial consumer of water • Vacation rental homes use more water than year-round residents per month
Unknowns	• Maximum capacity based on limits of water source • If sea level rise will affect water source, and a projected timeline
Ways to Address	• Improve water efficiency • Increase capacity to deliver water • Provide education on water usage
Potential Actions	• Require or incentivize water efficiency measures for tourism facilities • Encourage use of grey water where feasible, such as hotel landscaping • Review infrastructure requirements based on tourism uses and deliberate what types of water infrastructure might be needed in the future and required financing • Consider bonds to cover costs of needed infrastructure • Create educational campaigns about sustainable water usage for both residents and tourists
For Further Discussion	• Should seasonal rentals and hotels with restaurants receive more information from the Town regarding water efficiency and water saving devices? • What would encourage implementation of water reduction practices? • Based on allotment refusals, what actions should the Town be taking to ensure water availability to residents and visitors? • What is the capacity of the town together with BIWC to manage the increased water services tourism growth requires? • Can a public private initiative be undertaken? • Can capital expenditures be raised? • Could government funds be sought for expanding water storage, via the State?

Municipal Solid Waste



Figure 10. Block Island Transfer Station (photo provided by Nicole Wargo).

Block Island has one transfer station, a site where all municipal waste passes through on its way to Central Landfill in Johnston, Rhode Island, on the mainland. Waste and recycling are collected separately at the transfer station, while recycling is further sorted after it arrives at Central Landfill. The New Shoreham Transfer Station is operated as a public-private partnership between the Town and Block Island Recycling Management (BIRM).

The waste and recycling from the transfer station are picked up by the public utility ferry, Interstate, up to five times a week. The ability to store waste at the transfer station is critically important as the flow can be disrupted by events like weather, which prohibits the ferry from traveling some days. The transfer station must also account for the significant increase in waste produced in the busy summer months.

Although not required by the State of Rhode Island, in 2020 BIRM began to take the responsibility of identifying how much waste is produced by four types of users: commercial, residential, the school, and Town. All customers pay for solid waste removal by weight. Recycling is free for residents, while all other users pay by weight. For residential recycling totals, BIRM is able to calculate this number based off a total weight for recycling received and reported by Central Landfill, minus the total weight for commercial, school, and Town that was previously measured at the transfer station.

BIRM intends to continue this data collection in the future, and beginning in July 2022, break these numbers down monthly. BIRM notes that they refined their data collection process from 2020 to 2021, and therefore trends in solid waste generation should not yet be interpreted from the data.

Indicator: Amount of solid waste generated by user type

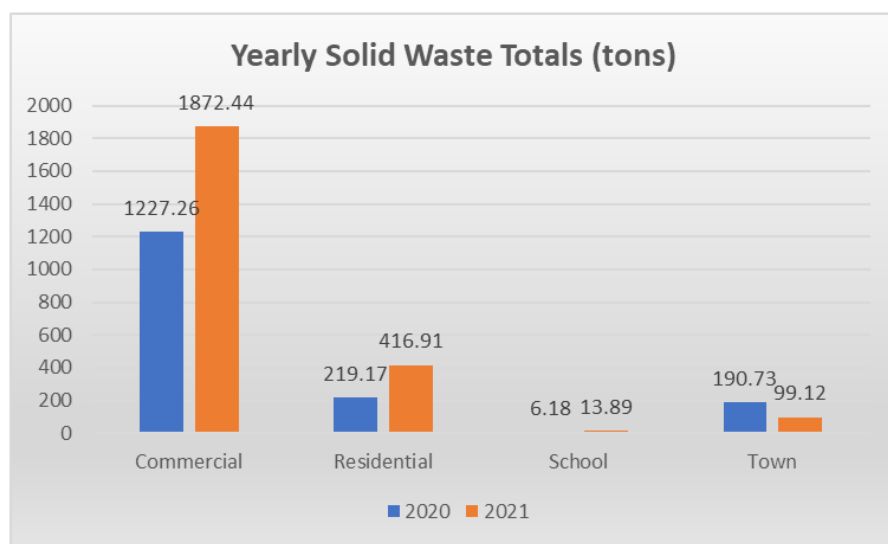


Figure 11. Yearly solid waste totals in tons by user type from 2020-2021.

Although year over year increases or decreases in solid waste production by user type cannot yet be determined, it is clear that commercial customers generate the bulk of solid waste on Block Island. It is important to mention that for both waste and recycling, vacation house rentals are considered “residential” users.

Indicator: Amount of recycling generated by user type

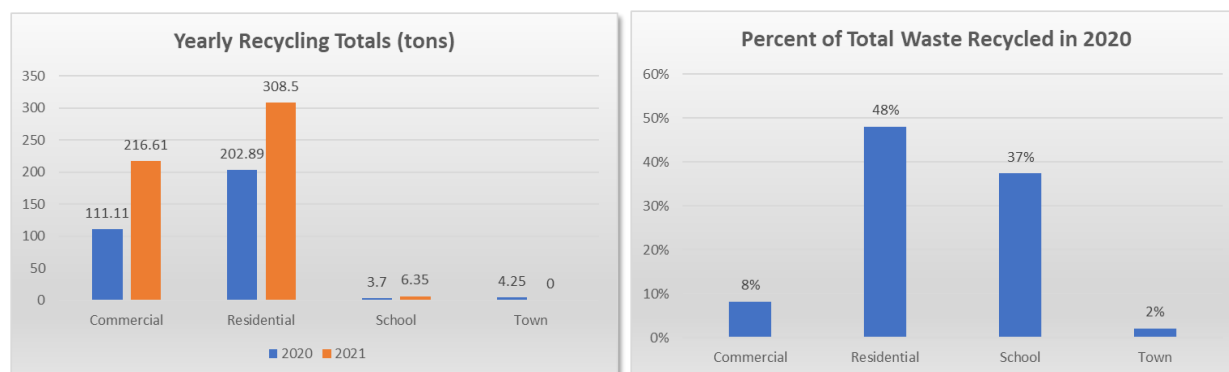


Figure 12. Yearly recycling totals in tons by user type from 2020-2021 and percent of total waste recycled by user type in 2020.

In 2020, residents recycled at a much higher rate than commercial customers—the residential recycling rate was 48.1% and the commercial recycling rate was just 8.3%.

McGarry notes that Rhode Island’s focus is on recycling and diversion of residential waste only, despite the commercial sector making up most of the waste produced on Block Island. To truly make an impact in waste diversion, regulations, incentives, or initiatives to increase recycling by commercial customers must be undertaken.

Discussion

The transfer station faces two concerns: how much waste and recycling it can hold and process and how much can be shipped through Interstate during busy summer months, especially when ferries are delayed. In short, there is both a site limitation and an export limitation. If tourism continues to grow, it will place a strain on this resource to the point where BIRM may not be able to manage waste efficiently, or costs will rise to handle management. It is important that these site and export caps be considered now, before it is too late, and the thresholds are crossed.

BIRM, like many organizations on Block Island, noted the difficulty of acquiring and maintaining a skilled workforce. Positions at the transfer station require special licensing to perform and cannot simply be filled by entry-level employees for the three summer months when support is most needed. This, along with issues around affordable housing, make finding skilled labor difficult.

In addition to the issues faced at the transfer station, several stakeholders at the Town Meetings expressed concern over the lack of public trash cans and recycling bins for tourists. Overall, the transfer station has a mandate to handle waste for the island in a highly economical manner but will have limits on what types of expansion of services it can deliver. Similar to BIWC, its capacity to raise capital funds or add services is limited, and this could help to explain why the needs of a highly seasonal tourism population are beyond its operational limits.

Thanks to the foresight of BIRM, they have made a useful start in the data collection process and with monthly totals now being collected, seasonality will be better understood in the future. BIRM is also taking important steps in waste diversion, such as converting landscaping scraps into mulch that residents can utilize.

In the future, it would be helpful if residential waste could be broken down by long-term resident housing versus vacation rental homes. The same applies to calculating the amount of waste generated by hotels and restaurants instead of a broad “commercial” category. This could be done by categorizing each customer account under a more specific user type in data entry software or by implementing a survey to better understand how hotels, restaurants, and rental properties are managing waste currently.

Table 5. Summary of key issues, data, and potential actions for Municipal Solid Waste.

Key Issues	• Site Capacity • Export Capacity • Improving recycling, particularly among commercial users • Maintaining qualified staff • Raising capital budget for increased amount of waste driven by tourism growth
Knowns	• Commercial users have highest waste generation • Residents have highest recycling amounts • The ferry transports waste five days a week, weather pending
Unknowns	• The tourism metrics within resident and commercial, such as short-term rentals and hotels • The amount of waste brought to the island by tourists • The ease of recycling for tourists, particularly in short-term rentals and hotels • The projected timeline of capacity limits for transfer station and exporting by ferry
Ways to Address	• Improved data gathering • Increase recycling and diversion through policy, changes in purchasing, or education • Raising capital budget for expansion of solid waste treatment facility and services
Potential Actions	• Reduce cost of recycling or increase cost of waste removal • Implement commercial composting or incentivize onsite composting by hotels and restaurants • Provide more recycling containers in public areas • Design policies to ensure recycling bins are available at rental properties • Establish a program to redistribute unused food to food banks • Audit hotel and restaurant waste to determine how tourism businesses can alter purchasing, menus, and preparation to decrease waste to landfill. • Create educational campaigns about sustainable waste management for both residents and tourists
For Further Discussion	• What are the site and export capacity limits and when are they projected to be reached? • What is the capacity of the town together with BIRM to manage the increased solid waste treatment services tourism growth requires? • Can a public-private initiative be undertaken to decrease waste to landfill? • Could government funds be sought for improving waste treatment, via the State?

Land Management



Figure 13. Dune removal to create a beach access point in May 2022 (photo provided by Megan Epler Wood).

Block Island has three conservancy organizations — Block Island Conservancy, The Nature Conservancy, and The Block Island Land Trust — that have been dedicated to conserving land and protecting the island's delicate ecosystem since the 1970s. While Block Island Conservancy and The Nature Conservancy are both funded by donations, The Block Island Land Trust is supported by a 3% fee on the transfer of real property demonstrating the dedication to conservation by the Town and community (Town of New Shoreham, n.d.). There are also environmental committees dedicated to resiliency and sea level rise. While many destinations struggle with tourism impacting their natural environment, Block Island has residents that are knowledgeable and prepared to proactively manage tourism impacts. While no community is infallible, Block Island is more prepared than most.

Many tourists visit Block Island because of its natural landscapes and outdoor recreation opportunities. If not properly maintained, this can create stress on outdoor spaces. One area of concern mentioned by stakeholders was the increased use of the many hiking trails available around the island. This has generated a need for increased trail maintenance, the development of new trails to alleviate pressure on existing ones, and the consideration of closing trails for rehab.

Climate change might also impact land management on Block Island. Sea level rise is projected to be a challenge for residents as well as the outdoor landscapes that tourists come to the island to see. Several stakeholders mentioned flooding along popular tourist corridors and worries about dune health. Tourists tend to walk on dunes to access beaches, eroding this critical natural infrastructure that prevents flooding events. Additionally, sections of dunes are cleared for beach access in the summertime which, in the event of a summer storm, would become a gateway for flood waters.

Indicator: Volunteer hours spent maintaining trails

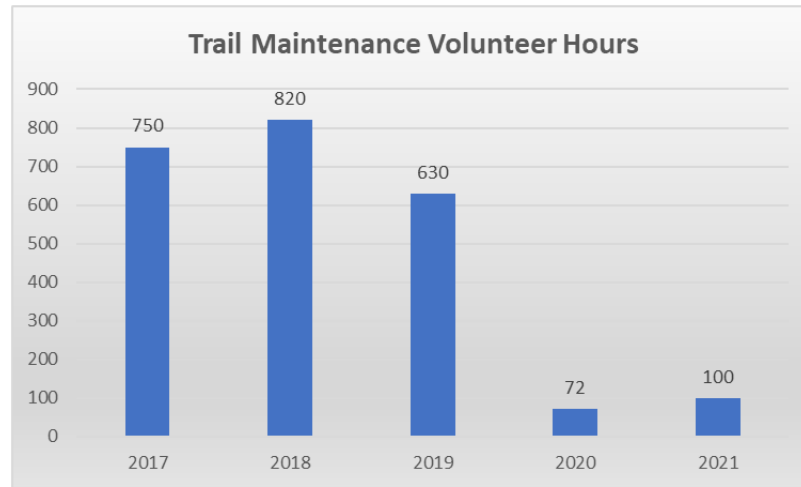


Figure 14. Estimated yearly volunteer hours dedicated to trail maintenance from 2017-2021.

The majority of trail maintenance is done by The Nature Conservancy (TNC), with Block Island Conservancy contracting TNC for upkeep on their properties. Much of this work is done by volunteers and TNC tracks their hours. Note that TNC volunteer hours were significantly cut back in 2020 and 2021 due to the COVID-19 pandemic.

Table 6. The yearly costs to TNC if volunteer hours were paid at a rate of \$20 per hour.

2017	2018	2019	2020	2021
\$15,000	\$16,400	\$12,600	\$1,440	\$2,000

The cost of the type of work required to maintain trails is estimated at a minimum of \$20 per hour, as it can be difficult physical labor involving landscaping and removal. Calculating the economic value of these volunteer hours demonstrates that at the peak of this work in 2018, TNC would have had to pay over \$16 thousand for trail upkeep. This would be a considerable cost to the organization, particularly if a growth in tourism and additional land acquisitions were to necessitate increased trail maintenance in the future.

Indicator: Anticipated flooding due to climate emergencies



Figure 15. Anticipated flooding from one foot of sea level rise marked in yellow, for (left) Block Island and (right) Town of New Shoreham and downtown commercial district (Coastal Resources Center, 2019).

The effects of climate change are numerous and far-reaching, and largely dependent on location. For Block Island, of particular concern would be flooding – either due to increasing sea level rise or more frequent and intense storms. It is expected that sea levels will rise up to one foot by 2050 (NOAA, 2022) and will affect both the local community and tourism on Block Island.

Sea level rise of one foot is highlighted on the maps in Figure 15 in yellow (Coastal Resources Center, 2019). Looking more closely at the downtown commercial district, it can be seen that sea level rise will impact the popular Block Island State Beach and the numerous tourism businesses found downtown. Additionally, high-traffic roadways like Corn Neck Road and Beach Avenue will be prone to flooding, affecting both resident and tourist access to other areas of the island.

Discussion

Land management is a unique consideration for Block Island compared to many of the other resources mentioned in this report. Tourism not only affects this resource, but the quality of this resource will also affect tourism to the island. If the natural landscapes of Block Island are prone to flooding, or recreational areas like trails and beaches are not adequately maintained, tourists may spend their time elsewhere, thereby significantly impacting revenue to the community and Town.

Sea level rise is already on the forefront of the community's mind and the Town recently compiled a committee and report about this topic (Town of New Shoreham, 2021). Items for climate resiliency are already being considered, including ways to mitigate its impacts, which will be helpful to maintaining visitors to the island.

Table 7. Summary of key issues, data, and potential actions for Land Management.

Key Issues	- Increased use of trails is necessitating more upkeep - Dune preservation, in particular due to disturbance from tourists - Further preparations for sea level rise in the next 10-20 years and any weak points in dune structure that should be addressed immediately
Knowns	- Estimated volunteer hours for trail restoration - Areas of potential flooding in the future
Unknowns	- The real costs for maintaining trails - The number of visitors using the trails - The trails that are most utilized - Budget and hours for dune preservation measures
Ways to Address	- Improve trail maintenance metrics - Discuss reallocation of property tax for land acquisition towards maintenance of existing sites, removal of invasive species, trail stewardship, and active measures to prevent climate impacts - Review potential sources of funding to manage biodiversity, land management, and climate resiliency - Increase education around land management concerns, particularly dune disturbance - Plan safety measures for future sea level rise scenarios
Potential Actions	- Review tax allocation on real estate tax for Land Trust versus land management and preparation for climate resiliency - Survey how many tourists are using the trails and which trails are being used most often - Promote trail use of least utilized trails - Offer more signage as a reminder to avoid walking on dunes, as well as directions to beach access points - Create more presence of staff on trails and beaches to educate public and direct traffic - Develop action plan for potential flooding situations and review with police station and medical center - Begin discussing engineering requirements and costs to handle future sea level rise
For Further Discussion	- Does the Land Trust allocate part of its budget to trail maintenance, and can this be accounted for in the Town budget? - How much is the Town spending on dune preservation and other land management measures?

Socio-Cultural Indicators

Safety

Several stakeholders expressed concern over the congestion of vehicles and the risk of accidents during the summer months. Roads on Block Island can be narrow and often lack sidewalks, with vehicles, pedestrians, and bicycles utilizing them all at once. This is exacerbated by the number of tourists that transport their vehicles to Block Island by ferry, as well as the numerous visitors that rent mopeds to sightsee for the day. There are five moped rental companies, and they are a convenient way to see and move about the island if you do not bring a car. However, concerns have been raised that people as young as 16 years old can rent a moped, that operating one only requires a short lesson, and that some visitors operate mopeds under the influence of alcohol.

The former Chief of Police for the New Shoreham Police Department (NSPD) noted that recent improvements to staffing and technology have helped Block Island better address safety challenges. Staffing was increased and employee schedules altered so that Block Island could employ eight year-round full-time officers, with a minimum of two police officers scheduled per shift. Previously, there was often only one available per shift. In the summer months, there is an additional full-time officer, occasional support from the Rhode Island State Troopers, and eight summer interns as part of a community service officer program.



Figure 16. Block Island Medical Center (The Block Island Times, 2019).

Like the Police Department, Block Island Medical Center (BIMC) sees an increase in number of urgent care visits in the summer season — with patient needs ranging from treatment of tick bites to injuries related to vehicle accidents. Rethinking how they manage urgent care visits, BIMC made significant changes in 2018 to handle the influx in the summer months more effectively. Chief Operating Officer, Alison Warfel, also credits the work done in the last year by NSPD for a reduction in visits to the medical center. She notes that the police have been more present around visitors to Block Island and often stop dangerous situations, such as reckless moped driving, before serious incidents occur.

The medical center, like so many other resources on the island, must maintain staff that can serve the needs of the estimated 1,000 year-round residents, while “flexing” in the summer months to sustain the swell of 20,000 tourists that visit each day in the summer. Warfel’s largest concern is that there will come a day when they will no longer be able to meet this challenge. Tied to this, is the problem that staff could experience burnout from the strain of the summer months. It is difficult to provide consistent medical care for a community if there is high turnover among the physicians and nurses that provide that care.

Indicator: Motor vehicle violations

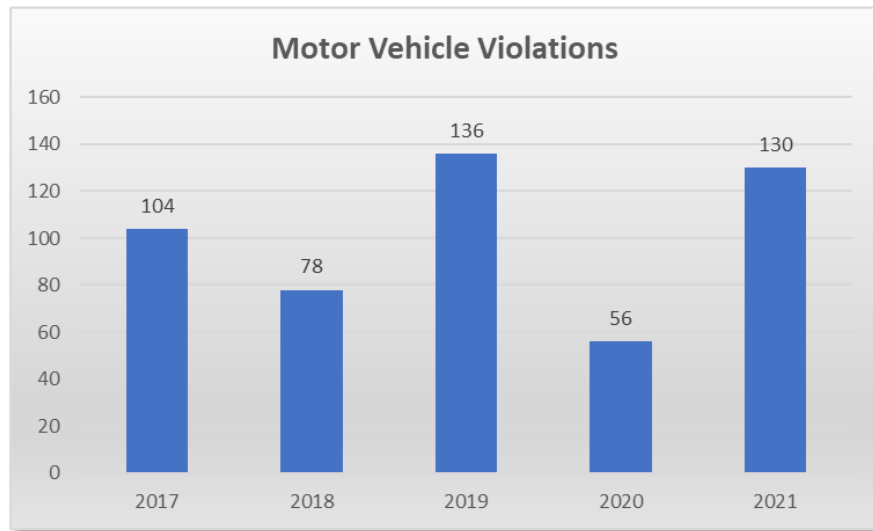


Figure 17. Yearly totals of motor vehicle violations from 2017-2021.

These types of violations can include incidents like speeding or not wearing proper safety equipment while riding a moped. The data only show actual tickets or citations issued and do not include verbal warnings. The former Chief of Police stressed the importance of education through verbal warnings, as many tourists may not be cognizant of all the laws on Block Island, and therefore are not aware they are in violation of one. The data do not show an upward trend in citations over time.

Comparing this data to a Rhode Island study on traffic stops, the State saw an average of 210 stops for motor vehicle violations per 1,000 residents in the year 2019 (IMRP, 2021). Assuming Block Island has an estimated 1,000 year-long residents, the number of motor vehicle violations in 2019 was 35.1% less at 136 incidents. Even with large tourism numbers in the summer months, motor vehicle violations on Block Island are lower than the Rhode Island average.

This indicator would benefit from monthly data collection to understand seasonality, as well as a breakdown of categories that the violations fall under. This would allow Block Island to monitor violations associated with moped usage, a concern several stakeholders identified.

Indicator: Motor vehicle collisions

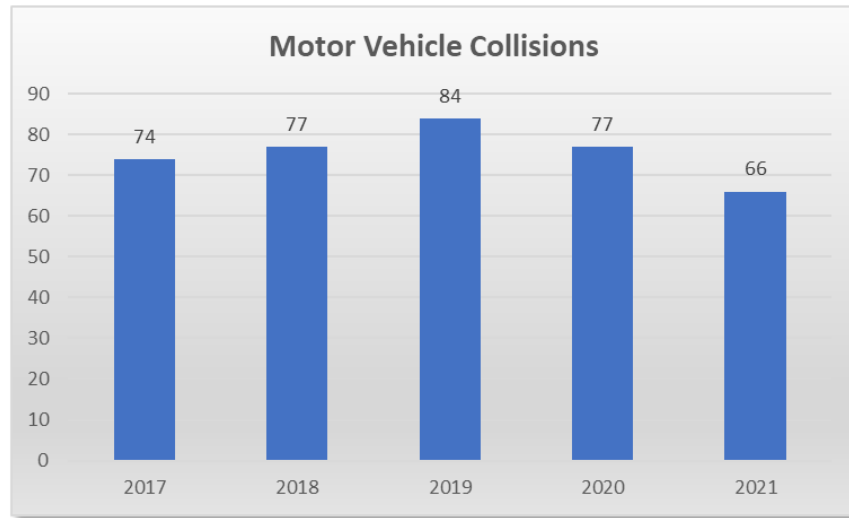


Figure 18. Yearly totals of motor vehicle collisions from 2017-2021.

For this indicator, motor vehicles include cars, trucks, mopeds, and motorcycles, but not bicycles. There were 66 collisions in 2021, with 55% of them reporting injuries. There was one fatality. Thirty-eight of the vehicle collisions, or a total of 58%, involved mopeds. Like the motor vehicle violation data, there are no considerable trends in collisions, although they do appear to have decreased in the last three years.

Like motor vehicle violations, this indicator would be better understood with data segmented by month to determine if tourism in the summer months produces a significant increase in collisions on Block Island.

Indicator: Calls for service

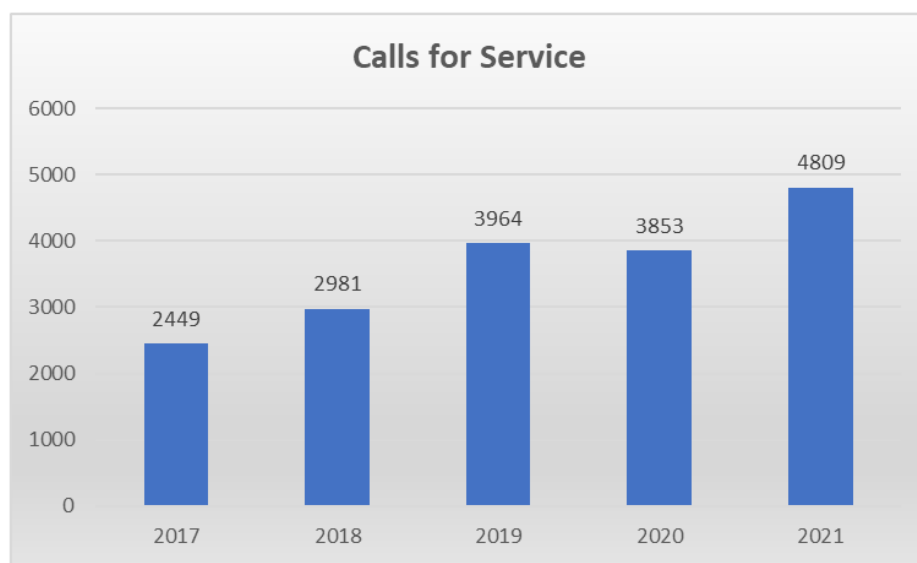


Figure 19. Yearly totals for calls for service to Block Island Police Station from 2017-2021.

Calls for service is a useful way to gauge how much time officers are spending responding to incidents. This indicator has increased 96% since 2017. At first glance, one might assume that an increase in tourism has resulted in these numbers; however, the former Chief of Police pointed out that the increase did not just happen in the summer months. More calls were also made from October to December of 2021, with a 99.7% increase from the same period in 2017. The reason for the considerable increase in calls for service is unclear.

Segmenting data by month would again be helpful to demonstrate if the considerable increase in demand warrants more year-round assistance or seasonal support.

Indicator: Number of urgent care visits

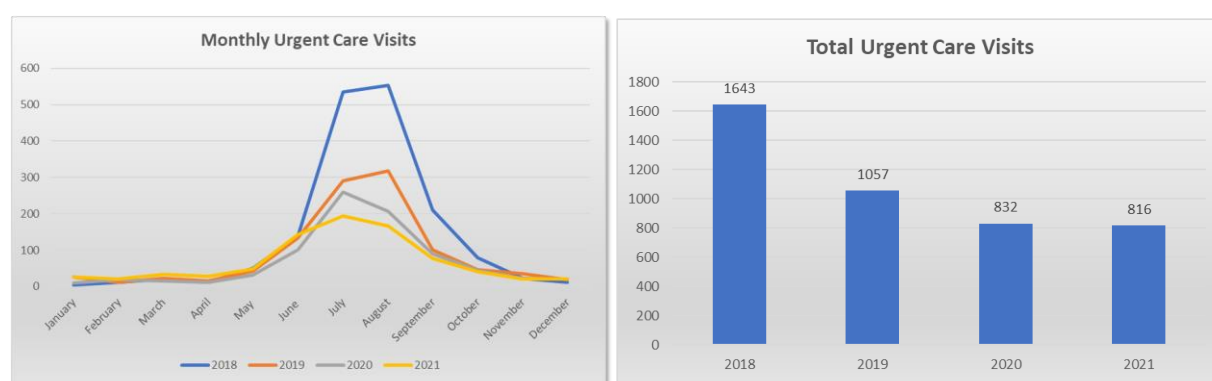


Figure 20. Left: Monthly urgent care visits from 2018-2021. Right: Total yearly urgent care visits from 2018-2021.

Urgent care visits increase considerably in May and taper off by September, with the rest of the year remaining steady. It is apparent that increases in tourism drive an increase in the need for emergency medical resources. The average number of visits during summer months was 86.4% higher than the average number of visits during winter months in 2021.

For total visits, BIMC saw a dramatic decrease after 2018. This correlates to Warfel's comment that this was a year of adjustment to better manage treatments and appointments.

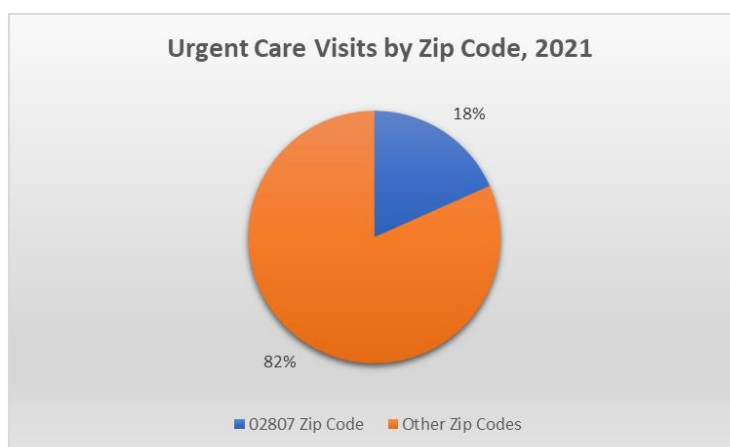


Figure 21. Urgent care visits by zip code in 2021 (adapted from: New Shoreham, 2022).

In the future, it is important to not only continue monitoring the data from urgent care visits, but to discern the demographics of those that visit. The medical center does gather data related to zip codes provided by patients and is shown in Figure 21; however, Warfel noted that there may not be consistency in what is reported. For example, it is possible that one seasonal resident may use the zip code from their permanent address, while another uses the Block Island zip code of their vacation home. Another example could be a seasonal employee that may be leaving the island in three weeks but uses the Block Island zip code because that is their current address. With this in mind, it is recommended that data is gathered based on a more specific question for the patient to answer, such as identifying as a permanent resident, seasonal resident, seasonal employee, or visitor.

Discussion

There are serious concerns over safety resources, but they remain difficult to categorize. The former Chief of Police stated that other communities typically know their local population numbers versus visitor numbers and can prepare accordingly based on that information. Meanwhile, BIMC worries that if too many tourists are using their services for urgent care visits, they will not be able to provide enough primary care to the local community. Without this valuable lifeline for residents, many may choose to move to another town that can provide better medical care.

Although stakeholders expressed concerns over motor vehicle safety on Block Island, it does not appear that tourism has caused a sudden increase in infractions or accidents. It is possible that congestion is growing, particularly in the summer months, but this would require a traffic study to be better understood.

Appropriate funding to maintain adequate staffing for the police department and medical center is imperative, especially given tourism on the island is likely to continue to grow. This is a textbook example of the problem of operational externalities caused by the *Invisible Burden* of tourism, which places excess costs on a local municipality without recompense. As part of the review of this report, it is likely that a budgetary evaluation of tax allocations from tourism should be considered.

Table 8. Summary of key issues, data, and potential actions for Safety.

Key Issues	• Significant increase in calls to police station • High seasonality of urgent care visits • Maintaining adequate staff to handle safety-related issues • Concerns with budgeting for the police and police management • Costs for police and medical staff to live on the island
Knowns	• Yearly totals of vehicle violations and collisions, as well as calls to service to police station • Seasonality of urgent care visits • Improvement of urgent care visits over time

Unknowns	• The seasonality of motor vehicle incidents and calls for service • The reason for the calls for service and tourism versus resident metrics • Clear data on numbers of residents versus tourists using urgent care
Ways to Address	• Improved data gathering • Budget improvements • Visitor tax allocation review
Potential Actions	• Categorize who is placing calls to police station and the reason • Gather more specific data on urgent care patients, as opposed to zip code • Consider tourism-related tax revenue in relation to safety services within Town budget
For Further Discussion	• Is there data from the Block Island Rescue Squad that can provide a better picture of the most pressing safety issues that should be addressed? • How can the Town budget demonstrate the costs tourism is having on safety services?

Affordable Housing

Affordable housing is typically defined as “housing on which the occupant is paying no more than 30 percent of gross income for housing costs, including utilities” (HUD, n.d.). Many stakeholders expressed concern over this issue, perhaps more so than any other topic. Year-round residents on Block Island have limited housing options as many properties are used as vacation rentals for tourists, while companies must provide housing as part of an employment package to attract talent. The recent pandemic has seemed to worsen this problem, as communities throughout the country have experienced increased real estate costs, often due to remote workers looking to leave the cities they had previously been tied to for more open environments, and Block Island is not an exception.

The Block Island Medical Center, Police Department, Water Company, and hotels all spoke of the necessity of providing housing to employees and most noted the difficulty involved in acquiring enough housing to maintain an adequate workforce. One hotel operator remarked that they cannot hire as many employees as they need because there is not enough housing available and that even they had lost employee housing due to residences being converted into vacation rentals for tourists. The former Chief of Police said that homes are priced out of the average officer’s budget, and it would make more sense to find an employment opportunity on the mainland due to this. Therefore, he had made significant efforts to provide housing to bring in more staff. As for the Water Company, they are trying to find money in their budget to build two new housing units for attracting staff.

Despite creating tough competition for housing, tourism does provide some benefit to this issue. A 1% local tax on vacation home rentals funds the Block Island Housing Board (BIHB), which seeks to make affordable housing more accessible for year-round residents. BIHB has an estimated annual budget of around \$100,000, which pays for housing and construction loans, paying off the loan when a home is sold and then beginning the next project (Hester, 2022). Since 2010, they have been able to supply eleven houses and four apartments to the community (Hester, 2022).

Indicator: Housing prices in comparison to average income

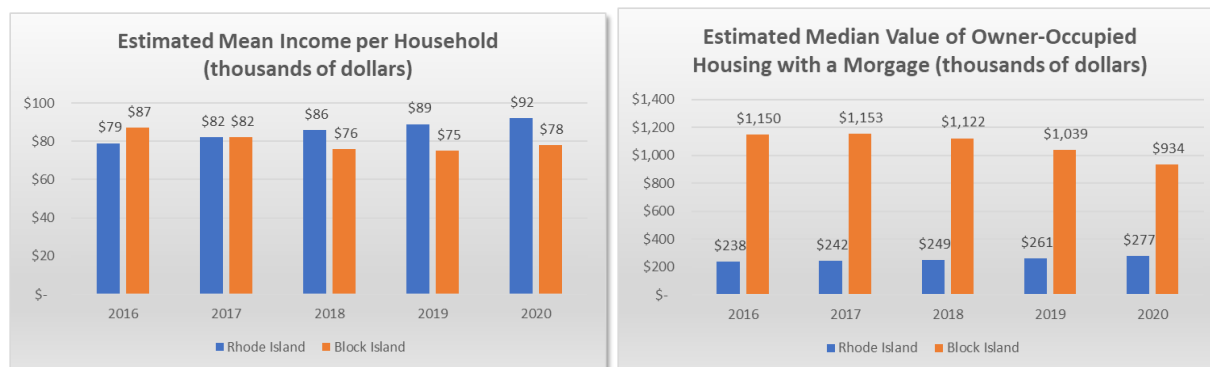


Figure 22. Comparisons between Rhode Island and Block Island for mean income per household (left) and median home value from 2016-2020 (right) (U.S. Census Bureau, n.d.-a; U.S. Census Bureau, n.d.-b).

U.S. Census data was used to compare Rhode Island and Block Island for mean income and median housing value. What is most notable about these two sets of data is that while income between Block Island and Rhode Island residents is similar, there is a very large discrepancy between the median values of their homes.

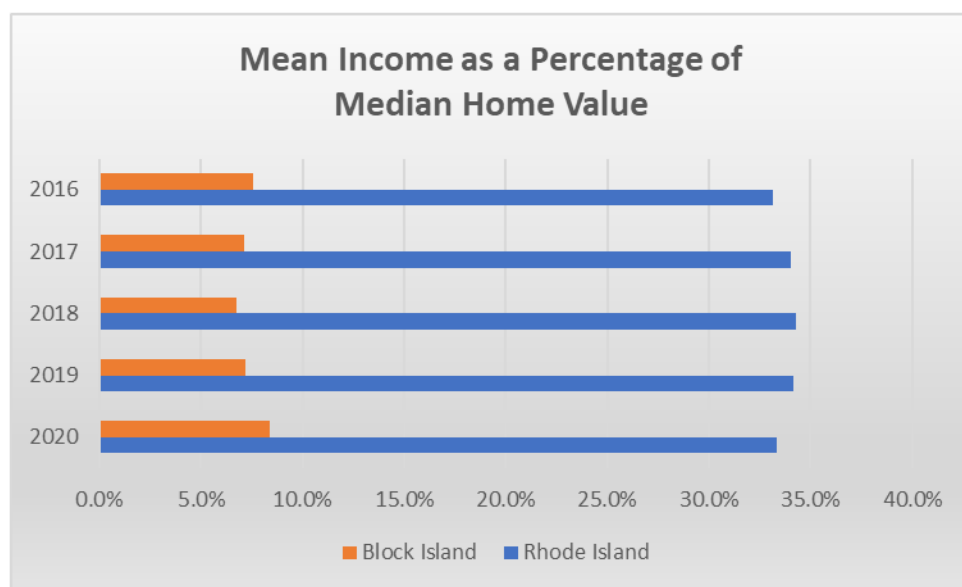


Figure 23. Comparison of Rhode Island to Block Island for mean income as a percentage of median home value from 2016-2020 (U.S. Census Bureau, n.d.-a; U.S. Census Bureau, n.d.-b).

Figure 23 shows the percentage of mean income in relation to the median home value. For the average person in Rhode Island, yearly income represents 33-34% of the value of a median home. For the average person in Block Island, however, yearly income is only 7-8% of the value of a median home. It is easy to see why it would be difficult to purchase a home on Block Island as a permanent resident, and why employers struggle to recruit employees for many positions.

Discussion

With community members, local businesses, and tourists all competing for limited housing options, it is clear that this is a significant issue facing Block Island. If affordable housing is not addressed, Block Island may soon transition from a charming, middle-class community to another example of property transfer to the wealthy in appealing tourism destinations.

Although there is relief through a local tax on vacation home rentals that funds the BIHB, it is a small sum to handle a growing housing crisis. Along with BIHB's eleven houses and four apartments, affordable housing on the island comes to 11% of the total housing stock. This falls within Rhode Island's requirement of a community maintaining at least 10% of its housing as affordable (OHCD, n.d.). In fiscal year 2018, the tourism-related tax to fund BIHB raised just over \$123 thousand (BIHB, 2018), which needs to be evaluated to determine if this is adequate to relieve the pressure that has escalated related to affordable housing.

An additional concern that could affect affordable housing is the capacity of the Water Company to provide allotments to new developments, particularly higher-density long-term rentals and employee housing. Water capacity should be addressed in tandem with zoning and funding of affordable housing as these two matters are some of the largest facing Block Island and will have an effect on each other.

Table 9. Summary of key issues, data, and potential actions for Affordable Housing.

Key Issues	• Inadequate supply of housing • Affordability of housing • Concerns about building new housing due to water demands
Knowns	• Block Island income as a percentage of home value is significantly lower than Rhode Island average • Housing must be provided by many employers to attract staff • Water capacity issues require strict consideration of new buildings, including housing
Unknowns	• The percentage of short-term rentals in relation to total housing stock • The amount of high-density housing • How many affordable homes or long-term rentals are needed to alleviate demand
Ways to Address	• Consider regulations to limit short-term rentals • Discuss possible zoning considerations • Improve water company capacity
Potential Actions	• Gather data on property types, such as year-round residential or short-term rental • Create new regulations on short-term rentals • Incentivize long-term rentals • Develop projects for high-density housing, both for staff and residents • Fund increased capacity at the water company and with the intention to prioritize water allotments to housing

For Further Discussion

- What are the zoning laws that should be addressed in order to provide more high-density housing for long-term rentals?
- Could residents receive incentives for providing long-term rental apartments on their properties?
- Would the Block Island Housing Board benefit from an increase in revenue from tourism-related taxes or are they already working within their capacity?

Economic Indicators

Revenue from Tourism

Block Island is largely dependent on tourism to drive its economy, with many stakeholders noting that “it’s the *only* economy.” As the community is so reliant on this one industry, it is important to understand how much revenue is generated by tourism.

The Town of New Shoreham, Block Island, receives revenue from three tourism-related taxes: (1) hotels, (2) cottage (home rentals), and (3) meals and beverage. A percent of the State Hotel Tax and 100% of the local taxes are returned to New Shoreham, after first passing through the state of Rhode Island. Table 10 provides more details.

These taxes are collected by the Town as part of its revenue stream and can then be applied to costs within its budget. As reported in *The Invisible Burden*, this type of tourism-related revenue can be used by local governments to address the operational externalities. Operational externalities are defined as “the excess costs generated by the Invisible Burden which require holistic accounting by local authorities to avoid deficits from tourism development” (Epler Wood et al., 2019-b).

Separate from the Town budget, Block Island Tourism Council (BITC) receives funding from a portion of the State Hotel Tax, as well as other sources. As mentioned previously, the Town receives 25% from a 5% State Hotel Tax. From that same State Hotel Tax, BITC receives 45%, which is then used to pay BITC’s expenditures.

Other important revenue streams are the 3% property tax that is transferred to the Block Island Land Trust (Town of New Shoreham, n.d.) and the 1% local tax on vacation home rentals that is used to fund the Block Island Housing Board for affordable housing projects (Hester, 2022).

Table 10. Tourism-related taxes received by New Shoreham, Block Island.

Tourism Tax	Tax Rate	Amount of tax collected as revenue by New Shoreham	Amount of tax collected as revenue by Block Island Tourism Council
State Hotel Tax	5%	25%	45%
Local Hotel Tax	1%	100%	0%
Local Cottage Tax	1%	100%	0%
Local Meals Tax	1%	100%	0%

Indicator: Percent and total amount of State and Local Hotel Taxes collected

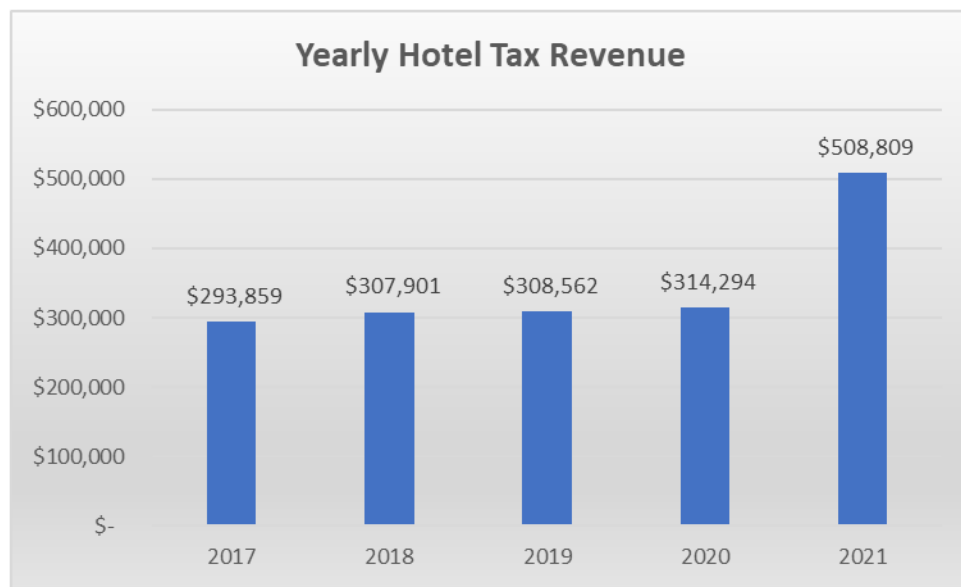


Figure 24. Yearly totals for State and Local Hotel Taxes received by Town of New Shoreham from 2017-2021.

There was a significant jump in Hotel Tax revenue in 2021. According to Block Island Tourism Council Executive Director, Jessica Willi, this is likely due to a combination of factors such as more hotel rooms being available, a longer tourism season, and higher charges for hotel rooms.

Indicator: Percent and total amount of Local Cottage Tax collected

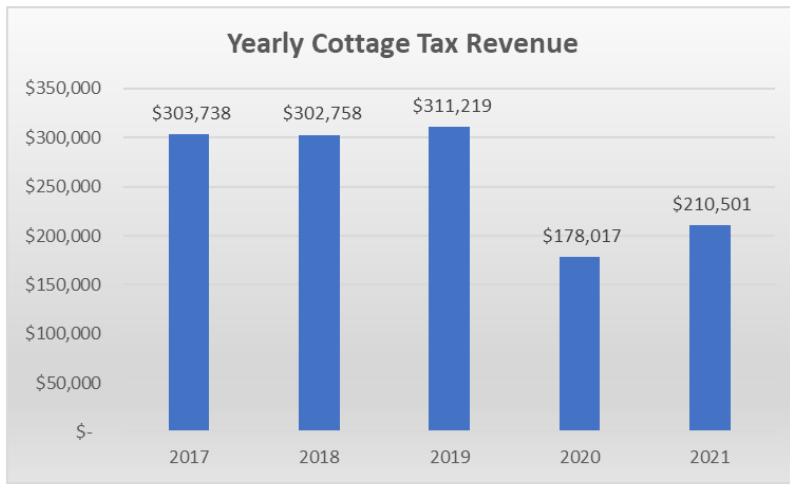


Figure 25. Yearly totals for Local Cottage Tax revenue received by Town of New Shoreham from 2017-2021.

Local Cottage Tax, the tax that is applied to short-term rentals, saw a substantial decrease in 2020 and 2021 compared to previous years. It is difficult to track what caused this decrease as the Cottage Tax is collected on a different schedule than the Hotel and Meal Taxes (see Appendix H). However, Willi notes that there was a decrease in inventory during the Covid-19 pandemic, as people were living in their vacation homes on Block Island in the summer as opposed to renting them out. Even though the Cottage Tax is only a 1% local tax, the amount collected by the Town was on par with the revenue from both the State and Local Hotel Taxes New Shoreham received in 2017-2019.

Several stakeholders noted that Cottage Tax collection on rental properties may not be enforced as much as it should be and could be a consideration for the Town.

Indicator: Percent and total amount of Local Meals and Beverage Tax collected

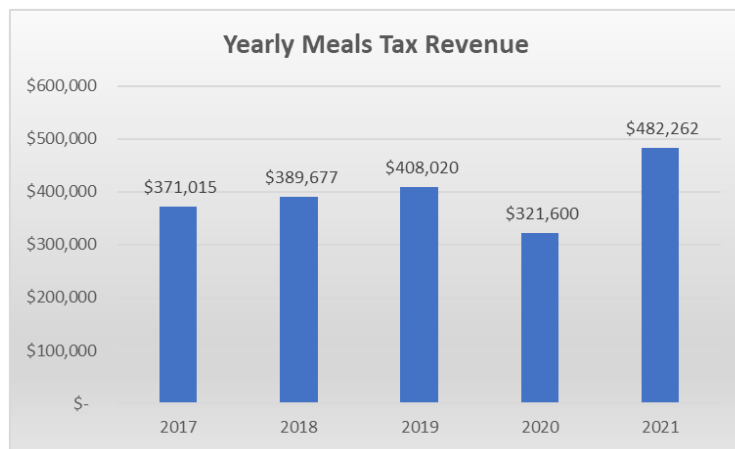


Figure 26. Yearly totals for Local Meals Tax revenue received by Town of New Shoreham from 2017-2021.

Meals and Beverage Tax revenues have grown steadily since 2017 with the exception of 2020. Like the Cottage Tax, this is a 1% local tax and is also similar to the Hotel Taxes when considering total amounts collected.

Discussion

Tourism is a valuable lifeline for Block Island, bringing economic vitality to the community. This is demonstrated in the nearly one million in yearly tourism-related tax revenues that support the Town and the over quarter billion generated annually from tourism-related spending.

Table 11. Total tourism-related taxes collected by New Shoreham for calendar years 2017-2021.

Tourism-Related Tax	2017	2018	2019	2020	2021
State and Local Hotel Taxes	\$293,859	\$307,901	\$308,562	\$341,294	\$508,809
Local Cottage Tax	\$303,738	\$302,758	\$311,219	\$178,017	\$210,501
Local Meals Tax	\$371,015	\$389,677	\$408,020	\$321,600	\$482,262

Questions remain, however, as to whether or not the tourism-related tax revenue received by the Town is enough to cover the costs generated by tourists when they visit Block Island. Do the Hotel, Cottage, and Meals taxes include the increased use of infrastructure and demand on resources? What would be the cost to the Town and thus Block Island residents to cover operational externalities, and is it possible with existing financial resources? These are the questions *The Invisible Burden* looks to uncover with the help from more detailed financial accounting.

Table 12. Summary of key issues, data, and potential actions for Revenue from Tourism.

Key Issues	• Adequate review of tourism-related revenue in relation to costs • An understanding if revenue from tourism covers the operational externalities • Uncertainty if all sources of tourism-related taxes are sufficiently filed and collected
Knowns	• Hotel, Cottage, and Meals Taxes allocated to New Shoreham • Monthly revenue totals of Hotel, Cottage, and Meals Taxes received • Percentage of Tourism-related taxes as part of the total Town General Fund
Unknowns	• Other tourism-related revenue sources for the Town, if any, such as licenses or fees • Effectiveness of tax collection for the Cottage Tax

Systems to Address Issues	• Evaluate all sources of tourism revenue and costs within the town budget • Greater enforcement of Cottage Tax collection
Potential Actions	• Develop system to review operational externalities for managing tourism growth • Develop budgeting system that projects required revenues based on operational externalities
For Further Discussion	• Should Town Council review existing tax base to ensure all revenues are being collected as required? • Should operational externalities include review of capital costs for outsourced utilities?

Financial Reporting of the Invisible Burden



Figure 27. New Shoreham Town Hall (Turaj, 2013).

When considering the sustainability of tourism to a destination, a government's financial system would ideally be able to code all the revenue and costs related to tourism and calculate the expense per tourist to the region. While isolating tourism costs may be difficult initially, the overall question of managing utilities and their ability to service tourism efficiently and sustainably requires evaluation in the Town budget as part of the calculation of operational externalities. This is especially true for municipalities that have annual seasonal visitation rates that dwarf the size of the local resident population.

As visitation numbers to Block Island are not yet known, the costs associated per tourist cannot be calculated at present. However, considerations can be made in the Town budget, particularly because future planning of vital resources and services can only be accurate if the data collection around tourism improves. Lacking a per visitation number is in fact a missing link, and one that impedes all legitimate

data-oriented management efforts to calculate the cost of managing tourism on Block Island sustainably.

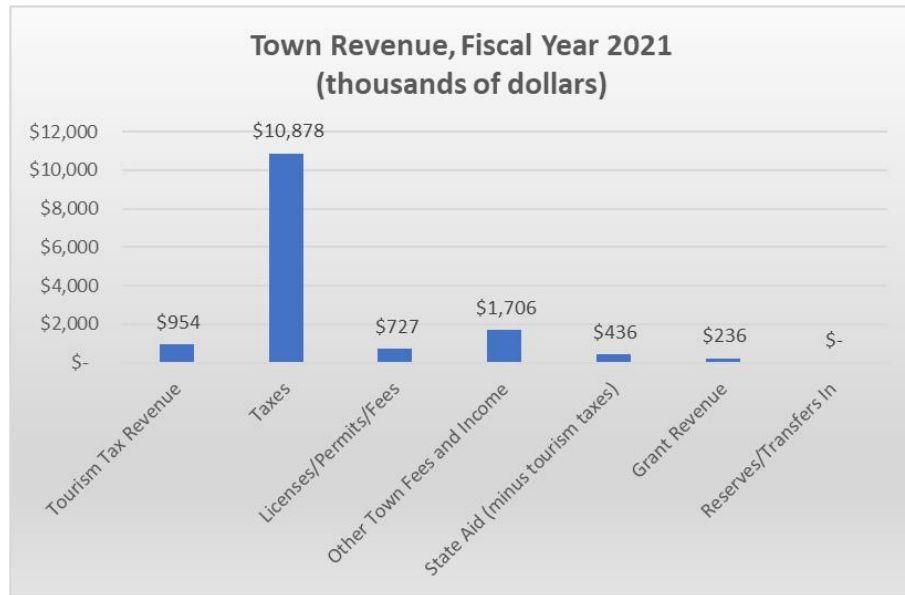


Figure 28. Total revenue from all sources for the Town of New Shoreham, Block Island, in fiscal year 2021 (Town of New Shoreham, 2022).

In fiscal year 2021, the Town received \$14,940,710 in total revenue from six categorized sources. The tourism-related taxes came to a total of \$954,710, or 6.4% of the Town's total revenue. The itemization of revenue is shown in Figure 28.

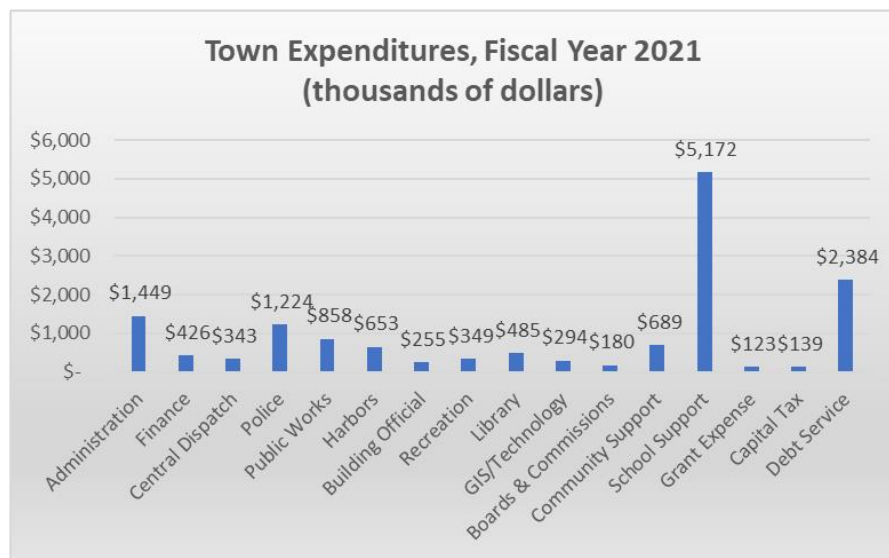


Figure 29. Town of New Shoreham's total expenditures for fiscal year 2021 (Town of New Shoreham, 2022).

This revenue is aggregated into a General Fund to support paying the Town's expenditures which fall into 16 broad categories. The tourism-related taxes are collected into the General Fund with all other revenue sources, which are then used to cover the cost of all expenditures. In fiscal year 2021, the largest allocations went toward School Support, Debt Service, Administration, and Police.

With the revenue from tourism being pooled into a General Fund, it cannot be said that tourism is covering the cost of any particular expenditure within the budget. Using coding for tourism in the accounting system would help to better understand if tourism is generating a net gain or loss.

Tourism Council expenditure allocation of revenue

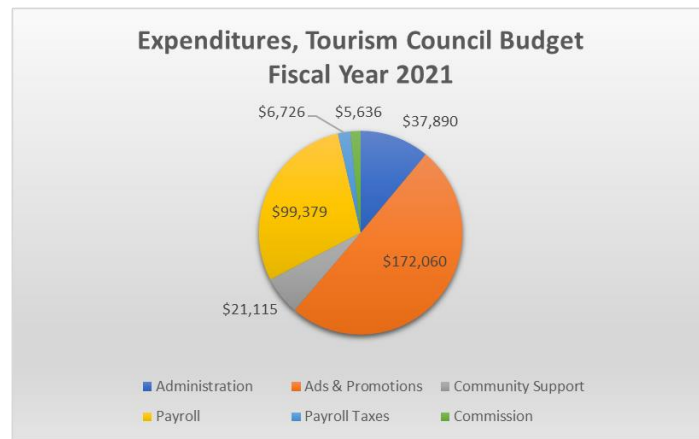


Figure 30. Expenditure allocation for Tourism Council in fiscal year 2021.

In addition to the State Hotel Tax supporting the Town, Block Island Tourism Council (BITC) also receives a portion from this tax to manage its operations. BITC collects 45% from the 5% State Hotel Tax, with around half of its budget being used for marketing.

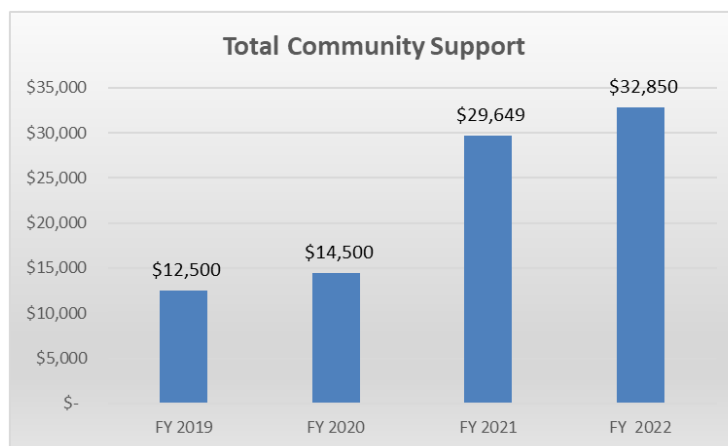


Figure 31. Yearly community support from BITC for fiscal years 2019-2022.

Among budget costs like administrative fees and marketing expenses, BITC also distributes money for community support. This can come in the form of sponsorships of festivals on the island, college scholarships for seniors of Block Island School, or towards maintenance and upkeep, such as repairs for the Southeast Lighthouse (Meyer, 2022). The community has received nearly \$90,000 in assistance from the Tourism Council since fiscal year 2019, including nearly \$33,000 in fiscal year 2022 alone.

According to BITC's budget, in fiscal year 2021 community support totaled over 21 thousand dollars. This is 5.3% of the \$397,020 received in State Hotel taxes.

Table 13. Summary of key issues, data, and potential actions for Revenue Allocation.

Key Issues	• Distribution of tourism funds in the Town budget • If there is a deficit of tourism tax revenue in comparison to tourism management costs • Which costs, if any, that are not covered by existing Town Budget to manage tourism • Difficulty considering tourism's effect on utilities when all are operated differently and not part of Town budget
Knowns	• All tourism tax revenue to Town is collected into a General Fund • All Town expenditures are paid for by the General Fund • Tourism Council's budget, while separate from Town, is also funded by the State Hotel Tax
Unknowns	• Utility management costs are not in Town Budget leaving questions open on total capital costs required to manage these systems given high seasonality and low resident population, especially for water and waste utilities.
Ways to Address	• Develop system wide review of operational costs presently not in town budget • Review allocation of tax revenue against specific costs and burdens placed on town from tourism • Review of tax system and additional finance mechanisms to cover questions of water and waste management capacity to manage the growth of tourism, without additional capital expenditures. • Review of tax system and additional finance mechanisms to cover questions of policing and security
Potential Actions	• Review capital budget needs for utilities • Review existing tax structure and consider alterations to cover costs • Consider a separate accounting system focused on triple-bottom line of all tourism related costs to underline precisely the costs tourism places on the Town management system.
For Further Discussion	• How to uncover the relevant cost per-tourist who visits Block Island, given the ferry systems are not required to provide tourism numbers • Strategies to present the overall question of rising tourism numbers and burdens being placed on Block Island to State level legislators and administrators of Interstate Ferry system, with questions of uncovered costs for rising tourist numbers, and long-term sustainability implications for Block Island

Areas of Focus

The issues discussed throughout this report have been mentioned by numerous stakeholders as critical issues facing Block Island. Reviewing these comments and the data provided, four areas in particular have stood out as needing immediate management to alleviate mounting pressures:

- Lack of affordable housing availability
- Concerns over water capacity and distribution
- Limitations to municipal solid waste storage and export
- Costs to manage a sufficiently staffed police force

These resources are quickly approaching capacity limits, if they have not been reached already. If tourism were to continue to grow on the island, it is likely these resources will be stretched to their limits. Therefore, it is imperative that solutions are found to relieve this stress.

Although an obvious solution would be direct government funding, it is clear that with the small tax base on the island, the Town Council must consider other options to confront these challenges. Solutions could include educational campaigns focused on tourists about water and waste usage, incentives to convert vacation home rentals into housing for year-round residents, required waste treatment programs for hotels, and water efficiency programs for all services and the use of grey water to reduce water use. It is important that Block Island finds the solutions that make sense for their community and begins to implement them quickly.

While these four areas should be the primary focus for the short-term, it does not mean that resources like trail maintenance and energy are protected from the effects of tourism. All the resources in this report require consistent monitoring to ensure that they, too, will not be stretched too thin from seasonality and overuse.

Recommendations

Below is a list of recommendations to begin managing *The Invisible Burden* on Block Island:

- As the intention of this report is to be used as a guide and benchmark for future tourism management, it is advised that
 - The indicators within this report are regularly recalculated to track tourism management and refined as the needs of the community changes
 - There is an annual update
 - A person or committee is assigned the responsibility of maintaining this information and reporting updates to the Tourism and Town Councils
- Survey important tourism metrics to better understand the benefits and costs per tourist
 - Visitor numbers by ferries, airplanes, and private boats
 - Number of hotels, as well as rooms and beds per hotel, and monthly occupancy rates
 - Number of short-term rental properties and number of rooms offered
- Petition the state legislature, Rhode Island General Assembly, to gain more control over ferry numbers, landing fees, and ferry schedules as these items are essential to New Shoreham's tourism management

- Identify and begin to implement solutions for the four areas of focus: Affordable Housing, Police Force Staffing, Water, and Municipal Solid Waste
- Apply accounting metrics within the Town budget that presents all revenue and costs attributed to tourism to ensure that tourism is operating at a net positive and not at a loss
- Develop a public-private system to address capital investments needed in water and waste treatment services

Conclusion

Block Island, like many destinations around the world, is seeing mounting pressures from unmanaged tourism. There is a general concern among permanent residents that tourism is escalating too quickly and burdening their environment and local well-being. It is imperative that safety valves are put in place to alleviate the building g pressure tourism is placing on critical resources and services on the island.

To begin to address this, this report establishes a small but critical set of indicators so that Block Island can better understand how environmental and socio-cultural capital are affected by tourism over time. This initial data collection can serve as a benchmark, and recommendations to improve data collection will increase Block Island's ability to monitor impacts in future. Importantly, a person or committee should be tasked with data collection and monitoring to examine future tourism impacts as well as the success of tactics deployed to decrease tourism impacts.

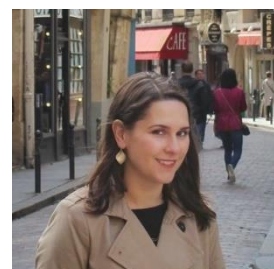
Particular attention should be given to the areas of focus identified in this report: Affordable Housing, Water, and Municipal Solid Waste. Block Island should prioritize further analysis of these areas and consider recommended potential actions.

It cannot be overstated that the community of Block Island is acutely aware of the challenges they face and are poised to work together to find solutions. The hard working and can-do attitude of island residents is laudatory. A solutions-oriented approach is a trademark of local residents, and their commitment to improvement is assiduous.

The research team of this project wants to thank Block Island for their willingness to deliberate on these issues. By reviewing *The Invisible Burden of Tourism*, and regularly monitoring the operational externalities, islanders will find opportunities to improve tourism management on the island and ensure that tourism benefits residents. With this method, the exact solutions will become much clearer. It is without question that Block Island has the human capital to analyze how to improve and maintain the unique character of the island and keep its community intact, making it a sustainable destination to visit for years to come.

Authors

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References

- Bergstrom, J.C., Stowers, M., & Shonkwiler, J.S. (2020). What does the future hold for U.S. National Park visitation? Estimation and assessment of demand determinants and new projections. *Journal of Agricultural and Resource Economics*, 45(1), 38-55. Doi: 10.22004/ag.econ.298433
- Block Island Housing Board [BIHB]. (2018). *Block Island Housing Board annual report: July 1, 2017 – June 30, 2018*. Town of New Shoreham. <http://www.new-shoreham.com/DocumentCenter/View/893/BIHB-2017-2018-Annual-Report-PDF>
- Block Island Power Company [BIPCo]. (2019, March 9). BIPCo generators and fuel resources. <https://blockislandpowercompany.com/bipco-generators-and-fuel-resources/>
- The Block Island Times. (2019) Block Island Medical Center [Photograph]. <https://www.blockislandtimes.com/affiliate/block-island-medical-center/12049>
- Block Island Tourism Council [BITC]. (n.d.). New Shoreham (Town). <https://www.blockislandinfo.com/island-information/new-shoreham-town>
- Coastal Resources Center. (2019). Rhode Island STORMTOOLS. <https://stormtools-mainpage-crc-uri.hub.arcgis.com/>
- Deepwater Wind. (n.d.). RI Supreme Court upholds Block Island Wind Farm power contract. <https://dwwind.com/press/ri-supreme-court-upholds-block-island-wind-farm-power-contract/>
- Epler Wood, M., Fotiadou, S., Jarrar, Z., & Daouda, M. (2019-a). *Tourism and environmental health in a changing climate: Implementation in Tozeur and Djerba, Tunisia*. Harvard T.H. Chan School of Public Health, International Sustainable Tourism Initiative.
- Epler Wood, M., Milstein, M., & Ahamed-Broadhurst, K. (2019-b). *Destinations at risk: The invisible burden of tourism*. The Travel Foundation.
- Google Maps. (n.d.). Block Island. https://www.google.com/maps/place/Block+Island,+New+Shoreham,+RI+02807/data=!4m2!3m1!1s0x89e5f2c9f8a7cff9:0xa20c27ff7497a9cc?sa=X&ved=2ahUKEwit_PGk3OD4AhUcDkQIH6yA74Q8gF6BAgDEAE
- Hester, S. (2021, July 7). *Block Island Water Company* [Photograph]. The Block Island Times. <https://www.blockislandtimes.com/article/town-water-under-pressure/59467>
- Hester, S. (2021, September 23). Water com-pany turning off the tap? *The Block Island Times*. <https://www.blockislandtimes.com/article/water-company-turning-tap/59906>
- Hester, S. (2022, February 16). Council discusses affordable housing with Housing Board. *The Block Island Times*. <https://www.blockislandtimes.com/article/council-discusses-affordable-housing-housing-board/60459>

- Institute for Municipal & Regional Policy [IMRP]. (2021, February). *Traffic stop data analysis and findings, 2019*. State of Rhode Island Comprehensive Police-Community Relationship Act of 2015 (CCPRA). https://www.dot.ri.gov/safety/CCPRA_safety.php
- McDermott, J. (2022, June 29). Rhode Island sets ambitious target for 100% renewable energy. *AP News*. <https://apnews.com/article/politics-legislature-providence-state-6b77f98faa5e1023d1891b91771fd4b0>
- Meyer, R. (2022, June 17). Tourism Council funds several community projects, tables Visitor Center request. *The Block Island Times*. <https://www.blockislandtimes.com/article/tourism-council-funds-several-community-projects-tables-visitor-center-request/60933>
- Moynihan, M. C. (2022, January 19). *2021 year in review: Presentation to the New Shoreham Town Council*
- National Oceanic and Atmospheric Administration [NOAA]. (2022, February 15). *U.S. coastline to see up to a foot of sea level rise by 2050: Report projects a century of sea level rise in 30 years*. <https://www.noaa.gov/news-release/us-coastline-to-see-up-to-foot-of-sea-level-rise-by-2050>
- Office of Housing and Community Development, State of Rhode Island [OHCD]. (n.d.). *Low and moderate income homes by community*. <https://ohcd.ri.gov/online-resources/policy-and-planning/low-and-moderate-income-homes-community>
- Rhode Island Department of Health [RIDH]. (n.d.). *Block Island drinking water assessment results*. <https://health.ri.gov/publications/assessments/BlockIslandWaterCompany.pdf>
- Tourism Economics. (n.d.). *Economic impact of visitors in Rhode Island 2020*.
- Tourism Economics. (n.d.-b). *The economic impact of tourism in Rhode Island: 2018 analysis*.
- Town of New Shoreham. (2022, May 2). *Financial town meeting*.
- Town of New Shoreham. (2021, September). *Municipal resilience program: Community resilience building process & workshop summary of findings*. <http://new-shoreham.com/DocumentCenter/View/1385/Final-New-Shoreham-Community-Resilience-Building-Summary-of-Findings-September-2021?bidId=>
- Town of New Shoreham. (n.d.). *Block Island Land Trust*. <http://www.new-shoreham.com/167/Block-Island-Land-Trust>
- Turaj, S. (2013, February 22). *Town Hall* [Photograph]. *The Block Island Times*. <https://www.blockislandtimes.com/article/complaints-against-gaffett-move-forward/32325>
- U.S. Census Bureau. (n.d.-a). *Financial characteristics for housing units with a mortgage*. https://data.census.gov/cedsci/table?q=FINANCIAL%20CHARACTERISTICS%20FOR%20HOUSING%20UNITS%20WITH%20A%20MORTGAGE&g=0400000US44_860XX00US02807_8610000US02807_8710000US4402807

U.S. Census Bureau. (n.d.-b). *Income in the past 12 months*.

https://data.census.gov/cedsci/table?q=Median%20Household%20Income&g=0400000US44_860XX00US02807_8610000US02807_8710000US4402807

U.S. Census Bureau. (n.d.-c). *QuickFacts Rhode Island: Population estimates, July 1 2021*.

<https://www.census.gov/quickfacts/RI>

U.S. Department of Housing and Urban Development [HUD]. (n.d.). Glossary of terms to affordable housing. <https://archives.hud.gov/local/nv/goodstories/2006-04-06glos.cfm>

World Travel & Tourism Council [WTTC]. (n.d.). *Economic impact reports*.

<https://wttc.org/Research/Economic-Impact>

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Appendices

Appendix A. Data for tourism's economic impact on Block Island.

Table 14. Total tourism-related spending in millions of dollars from 2016-2020 (Tourism Economics, n.d.-a; Tourism Economics, n.d.-b).

2016	2017	2018	2019	2020
\$ 269	\$ 262	\$ 274	\$ 284	\$ 278

Table 15. Tourism-related employment for 2018 and 2020 (Tourism Economics, n.d.-a; Tourism Economics, n.d.-b).

2018	2020
3557	3497

Appendix B. Energy data for Block Island.

Table 16. Kilowatt hour usage for all customer types (data provided by Block Island Power Company President Jeffery Wright).

	2017	2018	2019	2020	2021
January	668,143	783,007	802,335	727,113	910,903
February	560,400	627,802	706,510	700,599	872,375
March	520,699	678,178	752,014	727,840	801,683
April	655,695	701,139	678,048	683,672	794,927
May	888,376	1,003,412	936,020	735,548	982,355
June	1,273,361	1,317,775	1,255,767	1,185,259	1,357,288
July	1,881,260	1,950,311	2,141,155	2,107,918	2,170,830
August	1,917,749	2,213,768	2,096,281	2,192,157	2,207,622
September	1,221,523	1,384,158	1,299,333	1,373,116	1,521,482
October	797,912	889,859	907,224	940,280	922,320
November	758,409	746,062	744,739	766,555	768,257
December	732,402	761,944	865,326	873,099	815,527
Total	11,875,929	13,057,415	13,184,752	13,013,156	14,125,569

Table 17. Winter and summer monthly averages of kilowatt hour usage, and percent increase (adapted from data provided by Block Island Power Company President Jeffery Wright).

	2017	2018	2019	2020	2021
December, January, February Average	653,648	724,251	791,390	766,937	866,268
June, July, August Average	1,690,790	1,827,285	1,831,068	1,828,445	1,911,913
Percent Increase in Summer Usage	159%	152%	131%	138%	121%

Note: Data for January and November 2018 were not provided.

Table 18. Residential and commercial monthly energy consumption in megawatt hours from 2017-2021 (data provided by Block Island Power Company President Jeffery Wright).

Residential						Commercial					
	2017	2018	2019	2020	2021		2017	2018	2019	2020	2021
January	270.731	n/a	267.668	230.192	475.698	January	475.024	n/a	534.667	496.921	435.205
February	216.814	245.848	230.398	245.848	433.991	February	365.200	381.954	476.112	381.954	437.561
March	247.156	267.383	233.779	234.385	411.236	March	392.178	410.776	518.215	493.455	390.447
April	246.684	270.711	215.163	233.112	386.941	April	406.739	430.447	465.518	450.552	407.986
May	284.955	291.51	256.678	241.101	470.687	May	603.059	711.89	679.342	494.447	511.668
June	374.357	390.624	328.17	542.054	593.82	June	898.308	950.167	927.597	643.205	763.468
July	587.4	560.169	581.257	993.126	1032.189	July	1303.56	1364.653	1559.898	1114.792	1138.641
August	621.166	648.592	565.281	984.487	1073.974	August	1296.583	1565.176	1540.189	1207.07	1134.571
September	377.515	391.823	343.306	602.465	699.552	September	843.524	990.957	956.027	770.651	821.93
October	289.835	289.747	264.032	484.399	476.684	October	508.077	600.112	619.499	456.173	446.236
November	260.008	n/a	236.074	466.618	409.101	November	388.168	n/a	508.665	406.481	359.156
December	297.052	264.323	282.865	466.618	430.415	December	425.322	678.649	582.461	406.481	385.112
Total	4,073.673	3,620.730	3,804.671	5,724.405	6,894.288	Total	7,905.742	8,084.781	9,368.190	7,322.182	7,231.981

Table 19. Monthly number of residential and commercial customers from 2017-2021 (data provided by Block Island Power Company President Jeffery Wright).

Residential						Commercial					
	2017	2018	2019	2020	2021		2017	2018	2019	2020	2021
January	1340	n/a	1297	1263	1608	January	560	n/a	657	695	359
February	1342	1338	1295	1338	1612	February	562	572	649	572	358
March	1337	1341	1292	1266	1612	March	557	571	656	696	368
April	1338	1335	1292	1264	1606	April	560	571	662	696	365
May	1348	1341	1287	1268	1604	May	563	579	664	699	367
June	1336	1346	1285	1505	1611	June	562	618	668	466	366
July	1341	1322	1271	1503	1608	July	567	614	681	465	370
August	1344	1306	1263	1511	1605	August	569	611	689	461	376
September	1344	1306	1263	1520	1610	September	561	611	690	462	639
October	1343	1294	1266	1617	1609	October	568	642	691	362	639
November	1344	n/a	1265	1611	1614	November	571	n/a	691	366	367
December	1336	1298	1262	1611	1619	December	576	653	691	366	368
Total	16093	13227	15338	17277	19318	Total	6776	6042	8089	6306	4942

Table 20. Average yearly megawatt hours consumed per user type (adapted from data provided by Block Island Power Company President Jeffery Wright).

	2017	2018	2019	2020	2021
Residential	3.04	2.74	2.98	3.98	4.28
Commercial	14.00	13.38	13.90	13.93	17.56

Appendix C. Water data for Block Island.

Note: All data covers customers served by Block Island Water Company, water used for a sewage connection, or both.

Table 21. Monthly and yearly metered flow of water provided by Block Island Water Company in millions of gallons a day from 2017-2021 (data provided by Block Island Water Company Superintendent John Breunig).

	2017	2018	2019	2020	2021
January	0.522	0.589	0.573	0.54	1.084
February	0.455	0.47	0.548	0.487	0.618
March	0.523	0.538	0.628	0.574	0.719
April	0.794	0.791	0.791	0.494	1.084
May	1.488	1.485	1.483	0.745	1.661
June	2.613	2.492	2.396	1.944	2.942
July	4.32	4.286	4.148	3.793	4.153
August	4.235	4.107	4.129	3.548	3.998
September	2.317	2.526	2.249	2.414	2.647
October	1.121	1.197	1.127	1.298	1.41
November	0.638	0.718	0.663	0.996	0.752
December	0.523	0.539	0.524	0.884	0.512
Total	19.549	19.738	19.259	17.717	21.58

Table 22. Winter and summer monthly averages of water usage in millions of gallons a day, and percent increase from 2017-2020 (adapted from data provided by Block Island Water Company Superintendent John Breunig).

	2017	2018	2018	2019	2020
December, January, February Average	0.50	0.53	0.55	0.64	0.74
June, July, August Average	3.72	3.63	3.56	3.10	3.70
Percent Increase in Summer Usage	86.6%	85.3%	84.6%	79.4%	80.0%

Table 23. Total residential usage per user type in thousands of gallons and total number of residential customers from 2017-2021 (data provided by Block Island Water Company Superintendent John Breunig).

Total Residential Usage (thousands of gallons)						Total Number of Residential Customers					
	2017	2018	2019	2020	2021		2017	2018	2019	2020	2021
Year Round Resident	3632	3534	3443	3556	3572	Year Round Resident	106	106	106	107	107
Seasonal Resident	1115	1027	925	954	923	Seasonal Resident	65	66	66	66	67
Vacation Rental Home	4028	4068	4208	4385	5158	Vacation Rental Home	117	118	119	119	120
MultiFamily Dwelling	1696	1820	1731	1565	1678	MultiFamily Dwelling	7	7	7	7	7
Employee Housing	3177	3181	3128	2653	3217	Employee Housing	14	14	14	14	14

Table 24. Average amount of water consumed per residential user type from 2017-2021 (adapted from data provided by Block Island Water Company Superintendent John Breunig).

Average Water Consumed per Account (thousands of gallons)					
	2017	2018	2019	2020	2021
Year Round Resident	34	33	32	33	33
Seasonal Resident	17	16	14	14	14
Vacation Rental Home	34	34	35	37	43
MultiFamily Dwelling	242	260	247	224	240
Employee Housing	227	227	223	190	230

Table 25. Total commercial usage per user type in thousands of gallons and total number of commercial customers from 2017-2021 (data provided by Block Island Water Company Superintendent John Breunig).

Total Commercial Usage (thousands of gallons)						Total Number of Commercial Customers					
	2017	2018	2019	2020	2021		2017	2018	2019	2020	2021
Hotel with Restaurant	7659	7452	6585	6039	6516	Hotel with Restaurant	7	7	7	7	7
Hotel	4783	4505	4562	3640	4865	Hotel	24	24	24	24	24
Restaurant	3530	3573	3707	2861	3231	Restaurant	17	17	18	18	18
All Other Commercial	5729	5759	5282	4131	5284	All Other Commercial	70	74	76	76	75

Table 26. Average amount of water consumed per commercial user type from 2017-2021 (adapted from data provided by Block Island Water Company Superintendent John Breunig).

Average Water Consumed per Commercial Account (thousands of gallons)					
	2017	2018	2019	2020	2021
Hotel with Restaurant	1094	1065	941	863	931
Hotel	199	188	190	152	203
Restaurant	208	210	206	159	180
All Other Commercial	82	78	70	54	70

Appendix D. Municipal solid waste data for Block Island.

Table 27. Yearly solid waste totals per user type in tons for 2020-2021 (data provided by Block Island Recycling Management Owner Sean McGarry).

	2020	2021
Commercial	1227.26	1872.44
Residential	219.17	416.91
School	6.18	13.89
Town	190.73	99.12
Total	1643.34	2402.36

Note: Block Island Recycling Management did not have recycling metrics for the Town in 2021.

Table 28. Yearly recycling totals per user type in tons from 2020-2021 (data provided by Block Island Recycling Management Owner Sean McGarry).

	2020	2021
Commercial	111.11	216.61
Residential	202.89	308.5
School	3.7	6.35
Town	4.25	n/a
Total	321.95	531.46

Table 29. Recycling rates in relation to total waste generated by user type in 2020 (adapted from data provided by Block Island Recycling Management Owner Sean McGarry).

	Total Solid Waste	Amount Recycled	Percent Recycled
Commercial	1338.37	111.11	8%
Residential	422.06	202.89	48%
School	9.88	3.7	37%
Town	194.98	4.25	2%

Appendix E. Land management data for Block Island.

Table 30. Estimated number of volunteer hours focused on trail maintenance (data provided by The Nature Conservancy's Associate State Director Scott Comings).

2017	2018	2019	2020	2021
750	820	630	72	100

Table 31. Costs if volunteer hours were converted to employee pay at \$20 per hour (adapted from data provided by The Nature Conservancy's Associate State Director Scott Comings).

2017	2018	2019	2020	2021
\$ 15,000	\$ 16,400	\$ 12,600	\$ 1,440	\$ 2,000

Appendix F. Safety data for Block Island.

Table 32. Total yearly motor vehicle violations from 2017-2021 (Moynihan, 2022).

2017	2018	2019	2020	2021
104	78	136	56	130

Table 33. Total yearly motor vehicle collisions from 2017-2021 (Moynihan, 2022).

2017	2018	2019	2020	2021
74	77	84	77	66

Table 34. Total yearly calls for service from 2017-2021 (Moynihan, 2022).

2017	2018	2019	2020	2021
2449	2981	3964	3853	4809

Table 35. Statistics and totals for Rhode Island motor vehicle collisions in 2020 (U.S. Census Bureau, n.d.-c; IMRP, 2021).

Statistic	Total
Rhode Island population (2021)	1,095,610
Per capita of 1,000	1,096
Total motor vehicle stops	243,431
Percent that are classified as violations (94.3%)	229,555
Number of motor vehicle violations per capita	210

Table 36. Monthly urgent care visits from 2018-2021 (data provided by Block Island Medical Center Operations Chief Alison Warfel).

	January	February	March	April	May	June	July	August	September	October	November	December
2018	4	12	21	11	50	139	535	552	211	79	22	11
2019	27	11	22	15	42	133	291	317	100	46	35	18
2020	10	19	16	12	32	100	259	206	90	44	23	21
2021	27	20	33	28	48	142	193	166	77	40	21	21
Monthly Total	68	62	92	66	172	514	1278	1241	478	209	101	71
Monthly Average	17	15.5	23	16.5	43	128.5	319.5	310.25	119.5	52.25	25.25	17.75

Table 37. Total urgent care visits by zip code in 2021 (Town of New Shoreham, 2022).

02807 Zip Code	Other Zip Codes
150	667
18%	82%

Appendix G. Affordable housing data for Block Island.

Table 38. Estimated mean income per household in U.S. dollars from 2016-2020 (5-year average) (U.S. Census Bureau, n.d.-b).

	Rhode Island	Block Island
2016	\$ 79,024	\$ 86,650
2017	\$ 82,407	\$ 82,335
2018	\$ 85,527	\$ 75,560
2019	\$ 89,093	\$ 74,626
2020	\$ 92,427	\$ 78,416
Average	\$ 85,695.60	\$ 79,517.40

Table 39. Estimated median value of owner-occupied housing units with a mortgage in U.S. dollars from 2016-2020 (5-year average) (U.S. Census Bureau, n.d.-a).

	Rhode Island	Block Island
2016	\$ 238,300	\$ 1,150,000
2017	\$ 242,200	\$ 1,152,500
2018	\$ 249,400	\$ 1,121,900
2019	\$ 260,700	\$ 1,038,800
2020	\$ 277,100	\$ 933,800
Average	\$ 253,540	\$ 1,079,400

Table 40. Income as a percentage of home value from 2016-2020 (adapted from U.S. Census Bureau, n.d.-a and U.S. Census Bureau, n.d.-b).

	Rhode Island	Block Island
2016	33.2%	7.5%
2017	34.0%	7.1%
2018	34.3%	6.7%
2019	34.2%	7.2%
2020	33.4%	8.4%
Average	33.8%	7.4%

Appendix H. Tourism-related tax revenue data for Block Island.

Note: The Hotel and Meals taxes are shown in the month they are collected by the State; they are sent back to Block Island two months later. The Cottage tax is shown in the month it is received by New Shoreham, as there has not been confirmation of the timing when they are collected by the State. The Town operates on a July to June fiscal year.

Table 41. Hotel tax revenue from 2017-2021 (data provided by New Shoreham Finance Director, Amy Land).

	2017	2018	2019	2020	2021
January	\$ 2,467	\$ 3,261	\$ 760	\$ 830	\$ -
February	\$ 1,133	\$ 17,331	\$ 1,500	\$ 1,634	\$ 2,268
March	\$ 1,928	\$ 1,394	\$ 1,417	\$ 719	\$ 3,628
April	\$ 4,219	\$ 2,825	\$ 3,018	\$ 5,164	\$ 8,355
May	\$ 17,696	\$ 17,624	\$ 14,118	\$ 320	\$ 22,516
June	\$ 41,205	\$ 41,737	\$ 40,868	\$ 29,524	\$ 79,323
July	\$ 69,267	\$ 75,707	\$ 91,109	\$ 94,555	\$ 141,793
August	\$ 89,647	\$ 89,089	\$ 97,152	\$ 92,774	\$ 139,178
September	\$ 47,956	\$ 43,137	\$ 45,018	\$ 54,331	\$ 78,765
October	\$ 14,230	\$ 9,859	\$ 8,646	\$ 12,630	\$ 21,299
November	\$ 1,711	\$ 3,248	\$ 3,025	\$ 17,959	\$ 10,256
December	\$ 2,400	\$ 2,689	\$ 1,931	\$ 3,853	\$ 1,428
Total	\$ 293,859	\$ 307,901	\$ 308,562	\$ 314,294	\$ 508,809

Table 42. Cottage tax revenue from 2017-2021 (data provided by New Shoreham Finance Director, Amy Land).

	2017	2018	2019	2020	2021
January		\$ 941	\$ 394	\$ 322	\$ 4,843
February	\$ 3,710	\$ 14,315	\$ 7,602	\$ 10,491	\$ -
March		\$ 36,958	\$ 26,918	\$ 47,417	\$ 27,653
April	\$ 64,989	\$ 17,345	\$ 33,542	\$ 13,876	\$ 17,759
May		\$ 12,280	\$ 18,957	\$ 3,957	\$ 22,716
June	\$ 15,171	\$ 8,433	\$ 12,734	\$ 3,236	\$ 15,203
July	\$ 13,992	\$ 20,853	\$ 23,095	\$ -	\$ 27,601
August	\$ 18,572	\$ 44,248	\$ 20,860	\$ 1,301	\$ 27,944
September	\$ 35,053	\$ 25,458	\$ 65,885	\$ 15,710	\$ 23,727
October	\$ 56,825	\$ 13,190	\$ 51,518	\$ 24,978	\$ 24,185
November	\$ 16,866	\$ 107,718	\$ 5,641	\$ 40,966	\$ 16,601
December	\$ 78,559	\$ 1,019	\$ 44,074	\$ 15,764	\$ 2,272
Total	\$ 303,738	\$ 302,758	\$ 311,219	\$ 178,017	\$ 210,501

Table 43. Meals tax revenue from 2017-2021 (data provided by New Shoreham Finance Director, Amy Land).

	2017	2018	2019	2020	2021
January	\$ 3,269	\$ 2,340	\$ 1,819	\$ 3,596	\$ 1,338
February	\$ 1,161	\$ 2,274	\$ 1,674	\$ 3,533	\$ 1,698
March	\$ 1,719	\$ 1,295	\$ 1,524	\$ 967	\$ 1,949
April	\$ 4,236	\$ 3,737	\$ 4,775	\$ 1,976	\$ 5,098
May	\$ 16,353	\$ 17,501	\$ 20,914	\$ 3,676	\$ 16,241
June	\$ 45,493	\$ 51,378	\$ 50,770	\$ 33,960	\$ 75,412
July	\$ 114,092	\$ 116,329	\$ 123,522	\$ 101,316	\$ 141,642
August	\$ 120,385	\$ 121,803	\$ 123,754	\$ 104,802	\$ 141,412
September	\$ 45,895	\$ 57,473	\$ 58,562	\$ 54,659	\$ 63,965
October	\$ 12,271	\$ 8,806	\$ 11,123	\$ 10,602	\$ 21,167
November	\$ 4,284	\$ 3,819	\$ 3,462	\$ 1,396	\$ 7,652
December	\$ 1,857	\$ 2,923	\$ 6,120	\$ 1,115	\$ 4,689
Total	\$ 371,015	\$ 389,677	\$ 408,020	\$ 321,600	\$ 482,262

Appendix I. Data for Town of New Shoreham and Block Island Tourism Council budgets.

Note: Under the New Shoreham budget, the three tourism-related taxes are typically found under the revenue section “State Aid.” Here, they have been listed separately and removed from the rest of the State Aid revenue.

Table 44. All sources of revenue for Town of New Shoreham from fiscal years 2017-2021 (Town of New Shoreham, 2022).

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Tourism Tax Revenue	\$ 832,704	\$ 996,832	\$ 990,671	\$ 949,695	\$ 954,710
Taxes	\$ 9,635,471	\$ 10,005,731	\$ 10,195,642	\$ 10,495,769	\$ 10,878,451
Licenses/Permits/Fees	\$ 444,537	\$ 481,418	\$ 529,327	\$ 416,440	\$ 727,563
Other Town Fees and Income	\$ 1,866,634	\$ 1,615,424	\$ 2,025,242	\$ 1,695,988	\$ 1,706,399
State Aid (minus tourism)	\$ 401,461	\$ 395,246	\$ 415,904	\$ 400,596	\$ 436,567
Grant Revenue	\$ 211,529	\$ 169,160	\$ 32,903	\$ 28,817	\$ 236,484
Reserves/Transfers In	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 13,392,336	\$ 13,663,811	\$ 14,189,689	\$ 13,987,305	\$ 14,940,174

Table 45. Town of New Shoreham expenditures for fiscal year 2021 (Town of New Shoreham, 2022).

Expenditure	Amount
Administration	\$ 1,449,244
Finance	\$ 426,763
Central Dispatch	\$ 343,345
Police	\$ 1,224,354
Public Works	\$ 858,718
Harbors	\$ 653,146
Building Official	\$ 255,595
Recreation	\$ 349,379
Library	\$ 485,146
GIS/Technology	\$ 294,640
Boards & Commissions	\$ 180,563
Community Support	\$ 689,365
School Support	\$ 5,172,384
Grant Expense	\$ 123,771
Capital Tax	\$ 139,387
Debt Service	\$ 2,384,834
Total	\$ 15,030,634

Table 46. Total Hotel Taxes received by the Town of New Shoreham (25% of 5% State tax and 100% of 1% Local tax) and Tourism Council (45% of State tax) for fiscal years 2017-2021 (Town of New Shoreham, 2022; tourism data provided by Tourism Council Executive Director Jessica Willi).

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Town	\$ 336,739	\$ 309,383	\$ 285,410	\$ 285,072	\$ 392,193
Tourism	\$ 344,867	\$ 292,484	\$ 285,410	\$ 288,380	\$ 397,020

Table 47. Block Island Tourism Council expenditures for fiscal year 2021 (data provided by Tourism Council Executive Director Jessica Willi).

Expenditure	Amount
Income	\$ 438,770
Administration	\$ 37,890
Ads & Promotions	\$ 172,060
Community Support	\$ 21,115
Payroll	\$ 99,379
Payroll Taxes	\$ 6,726
Commission	\$ 5,636
Total	\$ 781,576

Table 48. Community support from Tourism Council for fiscal years 2019-2022 (data provided by Tourism Council Executive Director Jessica Willi).

	FY 2019	FY 2020	FY 2021	FY 2022
Community Support	\$ 12,500	\$ 14,500	\$ 29,649	\$ 32,850