



Foundation  
for Puerto Rico™



# THE STATE OF HOUSING IN PUERTO RICO

An Analysis of the Factors That Impact Housing  
and Rent Prices in Puerto Rico and Proposed  
Strategies to Increase Housing Affordability

Prepared in collaboration with



NATIONAL  
ASSOCIATION FOR  
LATINO  
COMMUNITY  
ASSET  
BUILDERS



vámonos

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**BOTTOM-UP**  
DESTINATION RECOVERY INITIATIVE



**YO TRABAJO**  
POR PUERTO RICO

**ABOUT FOUNDATION FOR PUERTO RICO**

**Foundation for Puerto Rico** (FPR) is 501(c)3 not-for-profit organization that seeks to promote economic development from the ground up, helping community members to lead the planning and management of their destination with a multisectoral approach. For the last decade, we have been designing and implementing initiatives that range from policy and advocacy to community development programs to support the sustainable development of the economies of communities and municipalities around the island.

Economic Development strategies defined and explored by FPR include:

- Making Puerto Rico an experiential destination for the world, expanding its appeal and extending and diversifying visitors' stay to include its unique cultural and natural assets in geographical communities across the island, as proposed in our seminal 2016 paper, [Visitor Economy: A First Step Towards Transformation](#).
- Understanding how the sharing economy could make economic activity more participatory, broad and varied as stated in the 2016 paper, [Sharing Economy: Innovation and Regulation for Ground Transportation](#).
- Decentralize and disperse tourism to other regions outside the metropolitan area by co-creating, with multi-sectorial, community participation, 8 unique regional [Destination Plans](#) that are serving as the central economic development path for these regions and the communities within them (2018-2021).
- Rehabilitating tourism destination assets within communities and establish co-management models as implemented through our [Bottom Up Destination Recovery Initiative](#).
- Educating and supporting local businesses and entrepreneurs around the Island as executed through various technical assistance and business support programs.
- Designing, promoting, incubating, and supporting the creation of a non-governmental, not-for-profit Destination Marketing Organization (DMO, "Discover Puerto Rico, 2017-2020)
- Fostering destination management practices across state and municipal levels (2018-present day).
- [Whole Community Resilience Planning Program \(WCRP\)](#): an initiative designed to provide communities across the island the opportunity, tools, and funds necessary for creating community resilience plans. With these plans, the Program aims to increase the capacity communities in Puerto Rico have for responding quickly and efficiently to any disruptive event they may face.

# EXECUTIVE SUMMARY

Puerto Rico is facing a housing affordability crisis as average prices have increased due to limited supply significantly impacting low to middle-income and, particularly, younger residents. Housing is an essential human need and by enhancing housing security we can improve a community's overall well-being and financial viability. Housing affordability can free up a household's budget, allowing them to pay for healthcare, food, education, and other necessities. Additionally, increasing housing supply in ways that address the diverse and evolving needs of our communities will result in a more equitable and prosperous society with a more sustainable economic future.

Increasing housing inventory and, thus, affordability, can reduce housing access inequality. This can, in turn, improve social mobility by allowing an increasingly diverse population to live in high-opportunity areas. Housing affordability can create a path to prosperity by maximizing economic growth at a time where Puerto Rico is breaking out of an extended economic decline. Thus, it is a pressing issue that requires urgent and careful consideration to ensure the wellbeing of all Puerto Ricans.

Recent public discussion in Puerto Rico has focused on short-term rentals (STRs) as a principal cause, but our research has uncovered a more complex picture in terms of both causes and potential solutions. Tourism and the visitor economy have become the major source of economic recovery in Puerto Rico and are expected to surpass 10% of GDP and 100,000 jobs with visitors lodging in STRs accounting for a substantial portion of this growth. Communities across the island are benefiting, and close-by lodging is a main factor in increasing local visitation and economic activity. Local visitor expenditures not only generate STR lodging revenues that supplement household incomes but also create substantial employment and local business opportunities.

We examined data on STRs both on an islandwide and municipal level in order to understand their true impact on the housing market. STRs comprise about 1.1% (17,711 out of 1.6 million) of the housing units in Puerto Rico. Only 4 municipalities (Culebra, Rincón, Luquillo and Vieques) have a proportion greater than 7%. Although concerns about STR-related gentrification and displacement are valid in particular locals - referenced municipalities and a few neighborhoods in San Juan that have significant tourism activity- we assess that it has yet to become a major contributor to overall housing affordability.

There are numerous other factors that are greater contributors to problems of housing affordability. Here are some of the most salient ones:

- A nominal surplus of housing units on the island is offset by the fact that as many as 30% of all housing units were damaged by a series of natural disasters or are otherwise in disrepair following a long economic decline.
- Better paying jobs are concentrated in the metropolitan areas while housing surpluses are located in places with relatively few jobs and where many residents are either unemployed or have very low incomes.



- Insufficient planning and development of housing for low and medium income households to address existing needs.
- Zoning laws have historically facilitated, and developers have concentrated on sprawling urbanizations of relatively expensive, and typically more profitable, single family homes that take up available land.
- Construction costs have risen dramatically affecting both rehabilitation and construction of new housing.

Over the course of this study, we have gathered data and done significant research about the local housing situation and examined models of success from around the world. We have engaged and consulted local community stakeholders, experts, and businesses and nongovernmental organizations that deal with housing.<sup>7</sup> A framework of solutions was identified and recommendations were developed.

We have concluded that a key goal for policy and practice is to increase available housing inventories, particularly in high opportunity areas. For example, putting surplus and vacant inventory back in circulation represents one of the greatest opportunities to contribute to housing affordability. Creating more and better paying opportunities for employment in municipalities with little economic activity is crucial. Where there is no income there is no affordability.

Land use plans and associated zoning regulations often impose barriers to the development of affordable housing within areas of concentrated economic activity and employment. Zoning laws and regulation reforms are key to incorporate other models such as form-based codes, inclusionary housing policies and innovative construction approaches that promote densification and the mixed use of already impacted land. Multifamily housing can be developed in lieu of single-family housing. Flexible designs can foster diversity and increase affordability for low- and medium- income households.

Special attention and regulation should be put in place to discourage large financial investors external to communities from accumulating disproportionate share of properties within communities and displacing existing tenants. This form of financialization of housing can potentially create misalignments with local community interests and development plans, promote gentrification, and by concentrating control of housing availability can have adverse effects on pricing.

Land Trusts, have been proven to work in the context of Puerto Rico. Support for and coordination with non-profit organizations like CHDOs that develop and create affordable housing opportunities is critical. Community technical capacity can and must be increased so they can successfully replicate successful housing models and initiatives such as Land Trusts and Land Banks. This means that these are feasible solutions for the housing crisis in Puerto Rico and thus, they merit further exploration.

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<sup>7</sup> It was important during this study to reach out to stakeholders, experts, and organizations to discuss the present housing issue and our recommendations since community engagement is vital for equitable development. However, due to time constraints local resident engagement was not achieved. This engagement with residents is crucial for future studies to ensure equitable development and to guarantee that the recommendations are properly implemented.

# 1. INTRODUCTION

Foundation for Puerto Rico (FPR) seeks to identify practical solutions to the challenges regarding housing affordability, created by a confluence of factors: The economy, that has been in extended decline with a shrinking population, low income and diminishing personal wealth. The island's nominal, quantitative surplus of housing stock has been degraded by that long economic decline and damaged by more recent natural disasters such as hurricanes and earthquakes, reducing habitability and further hindering restoration. Rising inflation and a recent economic surge have caused a rise in both the cost of living and housing prices.

Puerto Rico's long economic decline and the devastating weather and seismic events have led to unemployment and underemployment, with labor participation rates that are significantly lower compared to the United States (U.S.) mainland. Ongoing, decades-long emigration has resulted in the departure of many of Puerto Rico's younger, more productive, often highly educated workers whose marketable skills can double their pay with a \$200-300 airline ticket to the mainland U.S. Among those who have remained, many households survive on a fraction of U.S. median incomes.

Along with high youth emigration rates, birthrates have collapsed, leaving behind a disproportionately older population in many towns.<sup>2</sup> Many incomes are derived from pensions or social programs and are so low that almost any market-based housing prices become unaffordable. Some had been living in highly vulnerable places, in housing that was too fragile, and that were devastated by the natural disasters.

As the economy begins to recover and the population begins to stabilize, contention for those properties that remain in usable condition may be a contributor to the sudden rise in the cost of both acquiring and renting properties and has led to an increasing concern among the public to find causes and reasons for the lack of affordable housing across the island.

There is a growing public narrative that it is visitors in short-term rentals (STR) and new residents moving to the island to take advantage of tax incentives (and who are required to buy properties) who are the cause of these problems. This narrative has led to public calls for regulation that could have the counterproductive effect of significantly limiting the availability of housing for STR and eliminating the tax incentives.

The small fraction of housing stock directly affected by short-term renters and high-end purchasers makes these groups unlikely to be the principal cause of rising housing prices and decreasing affordability. A far greater fraction of housing stock is either damaged or in disrepair or otherwise not fit for present-day needs, or where the ownership is in legal limbo - and bringing those housing units that can be rehabilitated back into circulation

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<sup>2</sup> In 1995 there were 63,425 births compared to 2020 where there were 18,933 births in Center for Disease Control and Prevention (CDC) and National Center for Health Statistics 2021.

needs to be prioritized, in tandem with pursuing reasonable reforms that address the concerns mentioned above.

To resolve the housing affordability issues that residents face, solutions must be devised that get to the root of the problem. We must identify and implement strategies that increase the overall housing supply, locally and across the island, in the most timely, economical, and equitable manner. Increasing the number of places to live, in parallel with updating policies that make home ownership equitable, will have the greatest effect on reducing housing and rent costs for all.

As the economy continues to recover, Puerto Ricans must unite to address the underlying causes of the housing crisis and tailor workable solutions that consider the island's unique needs and circumstances on the ground. This paper will attempt to identify and explain those causes and circumstances – and to propose concrete, attainable solutions.

## 1.1. HOUSING AFFORDABILITY AND THE PUERTO RICO ECONOMY

Access to affordable housing has created challenges to social and economic progress in many places around the world.<sup>3</sup> More often, at least in the U.S., this is a problem that occurs in venues where rapid economic growth creates demand that outpaces the supply of housing, or where the construction cost of new housing rises to the point where it is no longer affordable to community residents.<sup>4</sup> Rising demand for housing in an environment where supply is limited, either due to zoning or other regulatory restrictions, or is constrained by high construction costs or other factors, increases market prices and decreases affordability.

Affordability can be aggravated by a process of “gentrification”<sup>4</sup> to the extent that areas where housing that had been available at an “affordable” cost for current residents begin to come into demand by those with higher incomes, who may be willing to pay a higher price for the location and to invest in improvements that increase property values further. When larger sized accommodations and single-family homes are preferred and purchased, an area's housing density capacity is reduced for decades.

In Puerto Rico, however, there are factors that impact housing affordability that are not in evidence in typical high-growth market-driven locales. The island has the lowest income levels in the U.S.<sup>5</sup> which by itself makes housing unaffordable to many in a dollar-denominated economy.

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<sup>3</sup> Even as income levels vary greatly in different settings, it is generally understood that individuals should not have to pay more than 30% of their income on rent or equivalent housing costs.

<sup>4</sup> Gentrification – a type of neighborhood change in which real estate price leads to involuntary displacement and significant culture change (NALCAB, n.d., pp. 5-6).

<sup>5</sup> In the U.S Census (2021), Puerto Rico had the lowest U.S median income with \$21,967 annually. The second lowest was Mississippi with \$49,111, more than double Puerto Rico's income.

The elimination in 1996 of the Federal Section 936 manufacturing incentive resulted in the loss of half (75,000) of the highest paying jobs. From a peak in 2006, overall employment declined by over 22% with a loss of 250,000 jobs. Puerto Rico’s population has declined 11.8%<sup>iii</sup> over the last decade and reached its lowest point since 1979,<sup>iv</sup> while total housing stock has declined 2.4%.

Chart 1: Puerto Rico’s Manufacturing Employment, 1990-2022.<sup>v</sup>

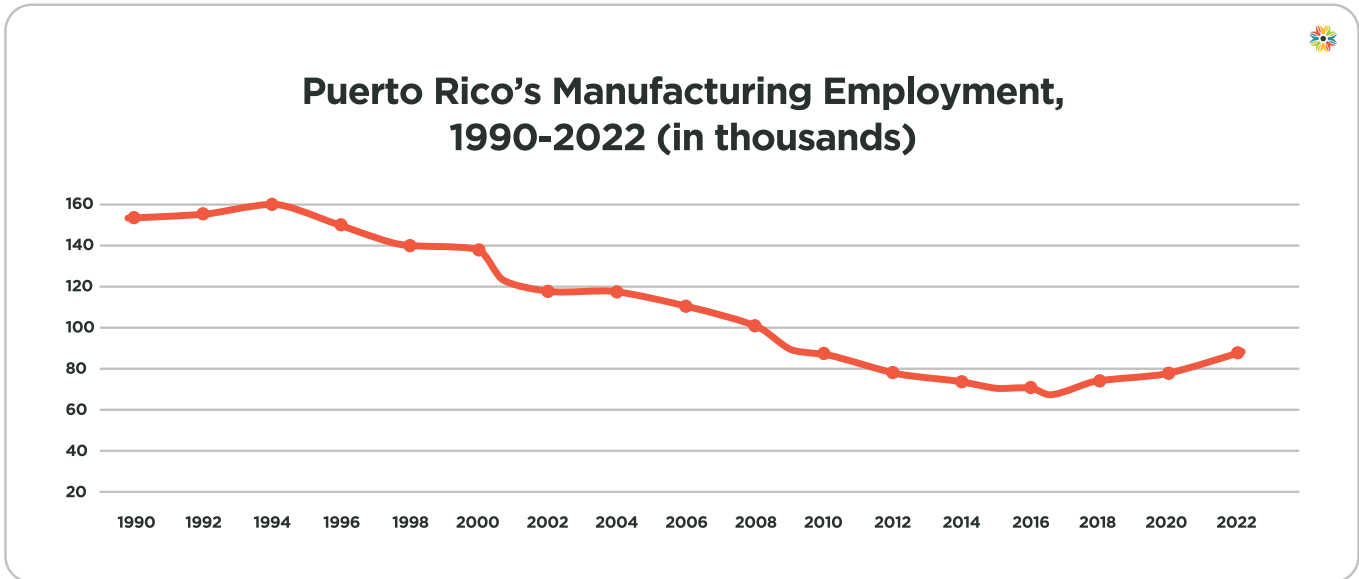
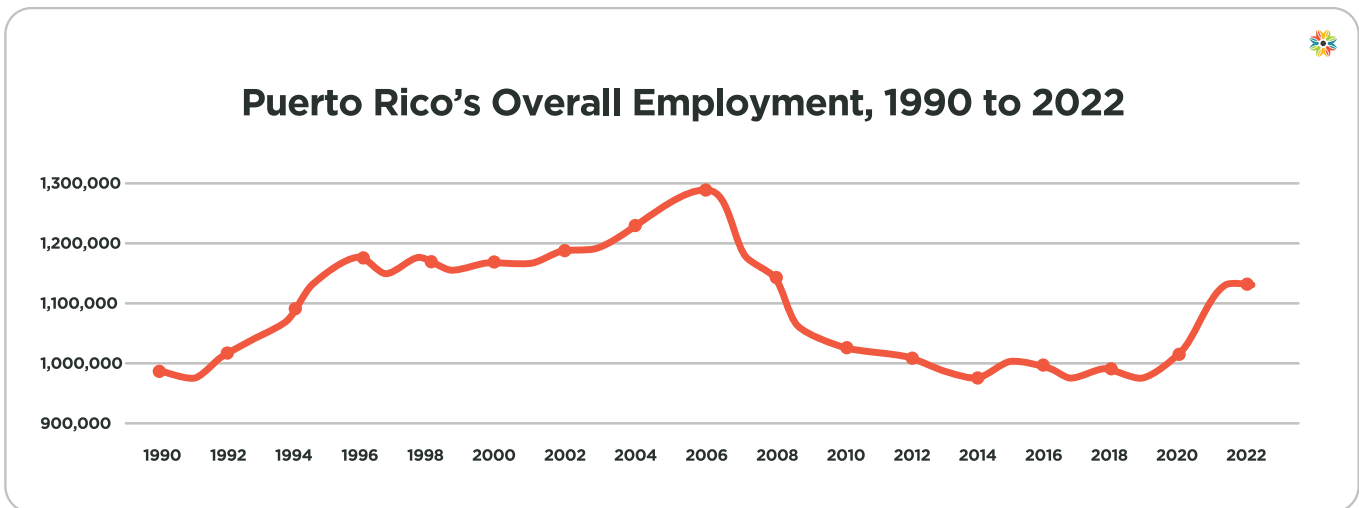


Chart 2: Puerto Rico’s Overall Employment, 1990-2022.<sup>vi</sup>



According to the 2021 census data there are approximately 1.6 million housing units and 1.2 million households in Puerto Rico.<sup>vii</sup> Logically, there should be more than sufficient housing stock for this substantially reduced population. However, the lengthy economic downturn the island has experienced over the last two decades, and the devastation caused by Hurricanes Irma and Maria in 2017, plus the swarm of earthquakes that followed at the end of 2019 and early 2020, have resulted in at least 20% of housing units being unavailable for habitation. Furthermore, even prior to those disasters, the number of abandoned housing units was high.<sup>viii</sup>

Reduced economic resources have hampered repair and reconstruction. Most owners of lower cost properties lack the means, and, after the disasters, as many as half of the damaged properties were unable to benefit from government aid from FEMA because of issues such as inadequate legal title - a situation that has persisted even after the waiver of that requirement.<sup>ix</sup> Other properties, and even areas encompassing entire communities, were deemed ineligible for Federal reconstruction at their locations for being in a zone that is designated as prone to flooding.<sup>6</sup>

A significant number of properties that could have potential for housing are owned by various governmental bodies. Some of these properties have fallen out of use and languished during the economic downturn mostly due to a lack of the resources to repurpose them. The distraction of too many crises and incomplete information have also contributed to the issue of rehabilitation of assets. There is a clear need to develop an integrated plan that focuses on and prioritizes affordable housing needs. New construction of federally subsidized affordable housing is limited in number of units planned versus the population in need; it is costly because of the high federal standards for construction, and otherwise delayed by federal processes and compliance requirements.

There is insufficient local construction capacity and skilled labor for the required scale of reconstruction, resulting in competition for capacity between governmental, commercial, and private projects causing delays while labor and material costs have soared driven by inflation.

Steeply rising interest rates are now putting a further chill on private construction projects while, recently, the government of Puerto Rico announced that rising construction costs on Federally funded infrastructure projects made the funding allocated to the projects insufficient.

Some houses are owned by locals who have kept them as second homes that have been part of Puerto Rico's cultural tradition for generations. Used only on the weekend or when visiting family, they were not available for rental, nor had they been a source of affordable housing. Other properties - whether they originally served as the residences of owners or relatives who emigrated or relocated due to shifting needs in household size or were acquired by inheritance or as investments - have been increasingly offered for long- and short-term rental and have become an important source of income to these owners. Identifying, cataloguing, classifying, and quantifying each of these categories of properties is a challenge because the census classification of housing units as either occupied or vacant does not encapsulate the situation of these properties, so other methods like community surveys may be needed to determine the full scope.<sup>7x</sup>

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<sup>6</sup> There are approximately 331,332 structures located within flooding zones in Puerto Rico. This data emerges from a meeting between the Consejo de Cambio Climático de Puerto Rico (PRCCC) and El programa de Manejo Costanero del Departamento de Recursos Naturales Ambientales. (DRNA) Retrieved from: <https://www.paralanaturaleza.org/identifican-mas-estructuras-en-zonas-inundables/>

<sup>7</sup> According to the U.S Census' 2020 decennial census, around 16% of available housing is considered "vacant". The U.S Census defines a vacant housing unit as one that was unoccupied during the time of the interview unless its residents were only temporarily absent. It also includes new housing units once it has all exterior windows, all doors, and usable floors installed. A vacant unit may also be one that is occupied by people that have usual residence elsewhere (e.g., second homes and vacation homes).

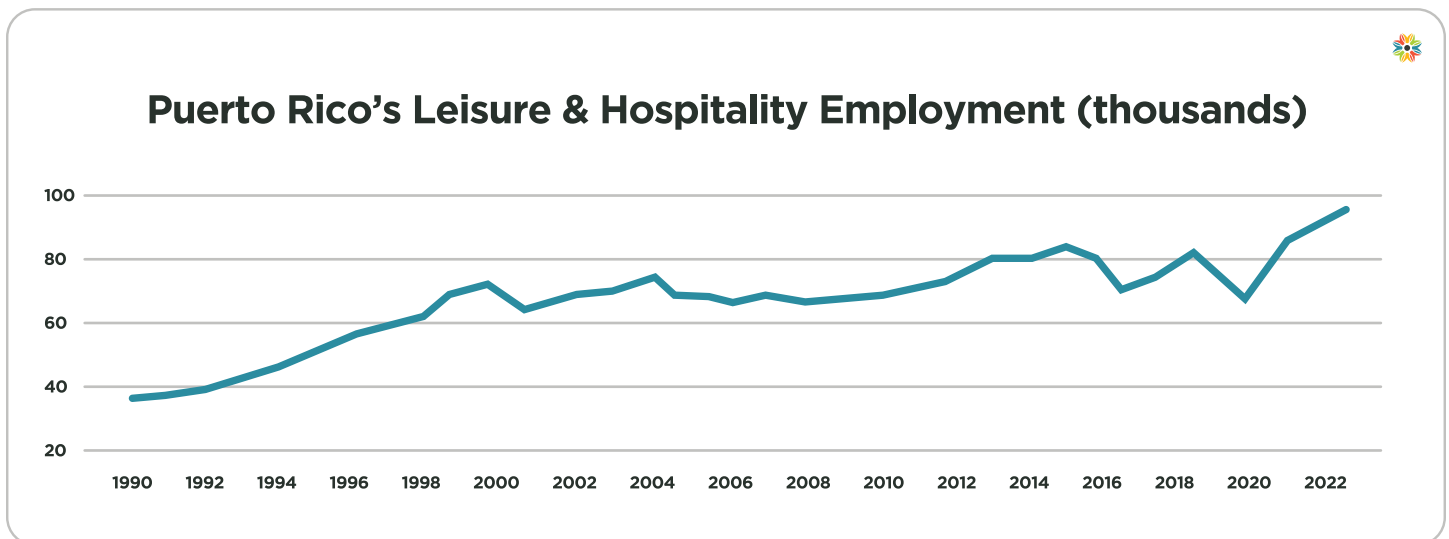
Some properties, along with spare rooms within primary residences, are being increasingly made available for STR to tourists and other visitors who can access them via internet-based platforms. This has led to concerns about whether this is leading to higher housing costs for locals.

All these issues will be explored in depth in this study, but before proceeding, it is important to return to the overall economic circumstances of the island. After the long decline, Puerto Rico has been showing signs of growth over the last several years. Aside from the post-disaster reconstruction surge, sustainable growth is coming from the Visitor Economy and its impact on the overall economy. It is critical to understand the dynamics of this economic engine and its interactions with both the housing price numerator and the household income denominator of housing affordability. We will attempt to address both in the following sections.

## 1.2. VISITOR ECONOMY DEVELOPMENT STRATEGY (Impact and Opportunities in Puerto Rico)

The Visitor Economy<sup>8</sup> can create significant economic impact with powerful direct, indirect, and induced economic flows<sup>9</sup> as well as societal and reputational advantages that can accrue to regions and communities.<sup>xi</sup>

Chart 3: Puerto Rico's Leisure & Hospitality Employment.<sup>xii</sup>



<sup>8</sup> A deep exploration of the Visitor Economy and its potential for Puerto Rico can be found at [https://foundationforpuertorico.org/wp-content/uploads/2021/10/Visitor-Economy\\_A-First-Step-Towards-Transformation.pdf](https://foundationforpuertorico.org/wp-content/uploads/2021/10/Visitor-Economy_A-First-Step-Towards-Transformation.pdf)

<sup>9</sup> Direct Impacts - these are explicit visitor expenditures at a destination. They include expenses such as renting hotel rooms, eating at restaurants, and engaging in other types of touristic activities.

Indirect Impacts - these are the expenses of governments and the tourism-related sectors in order to respond to visitor needs. They can include anything from renovating the airport infrastructure to employing information technology experts at a travel agency.

Induced Impacts - under this definition, these showcase the multiplier effect a particular visitor and his/her direct expenses have over the economy. (World Travel & Tourism Council, 2017)

Chart 4: P.R. International and Domestic (USA) Visitor Arrival History, Discover Puerto Rico 2022. <sup>xiii</sup>

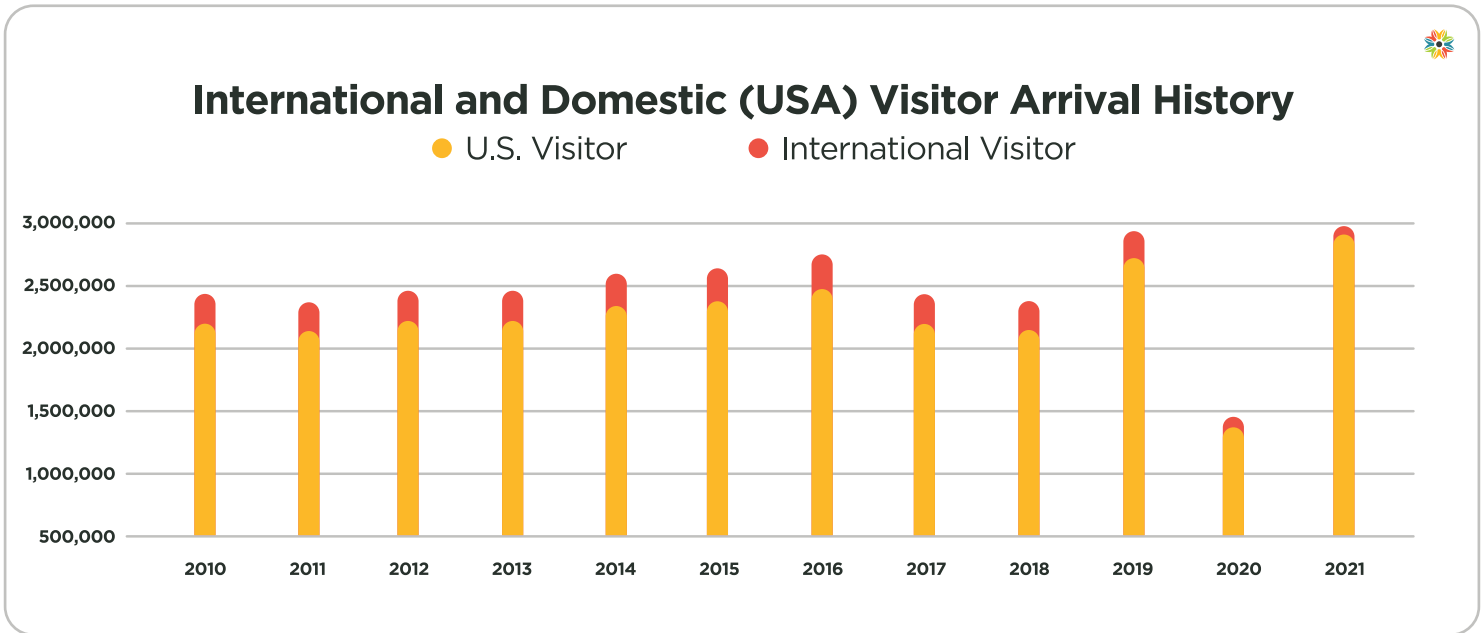


Chart 5: Lodging Revenue CY 2015-2022 in dollars (\$). <sup>xiv</sup>

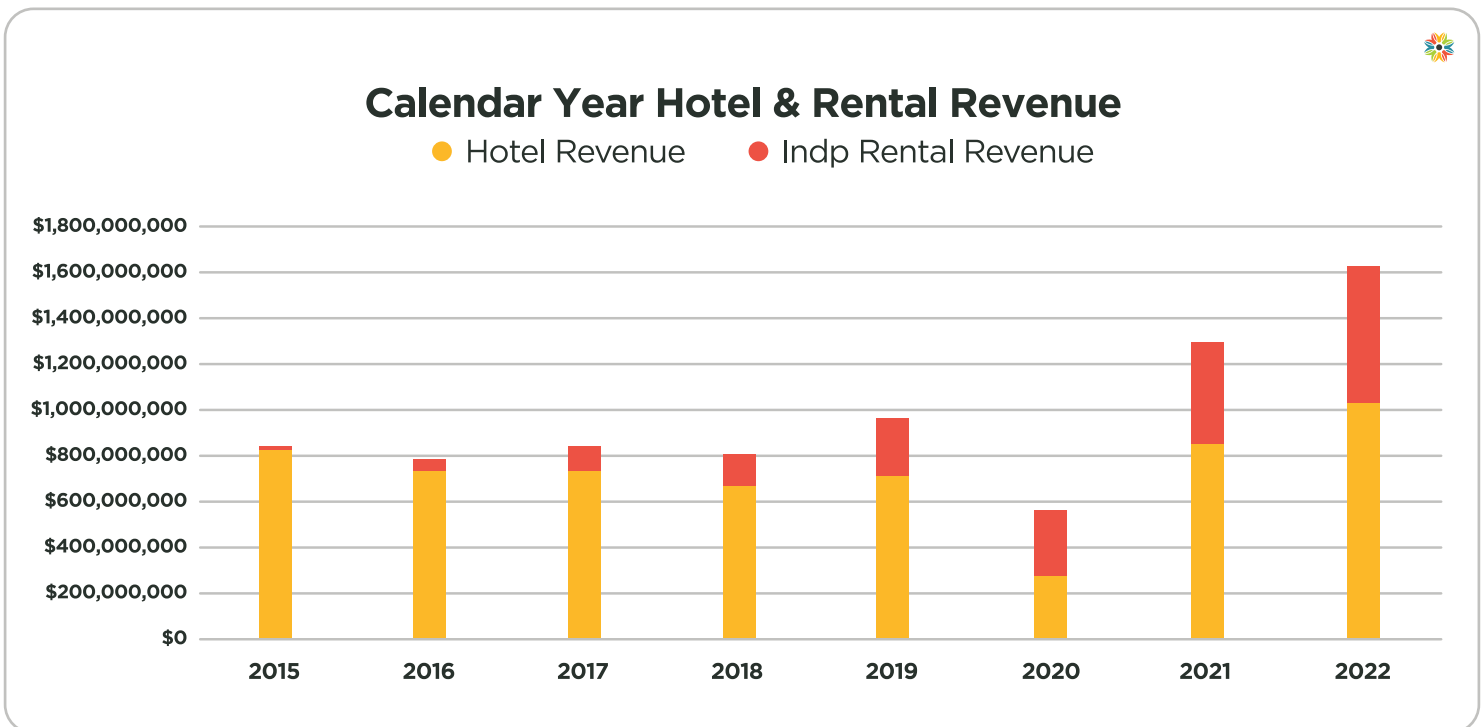
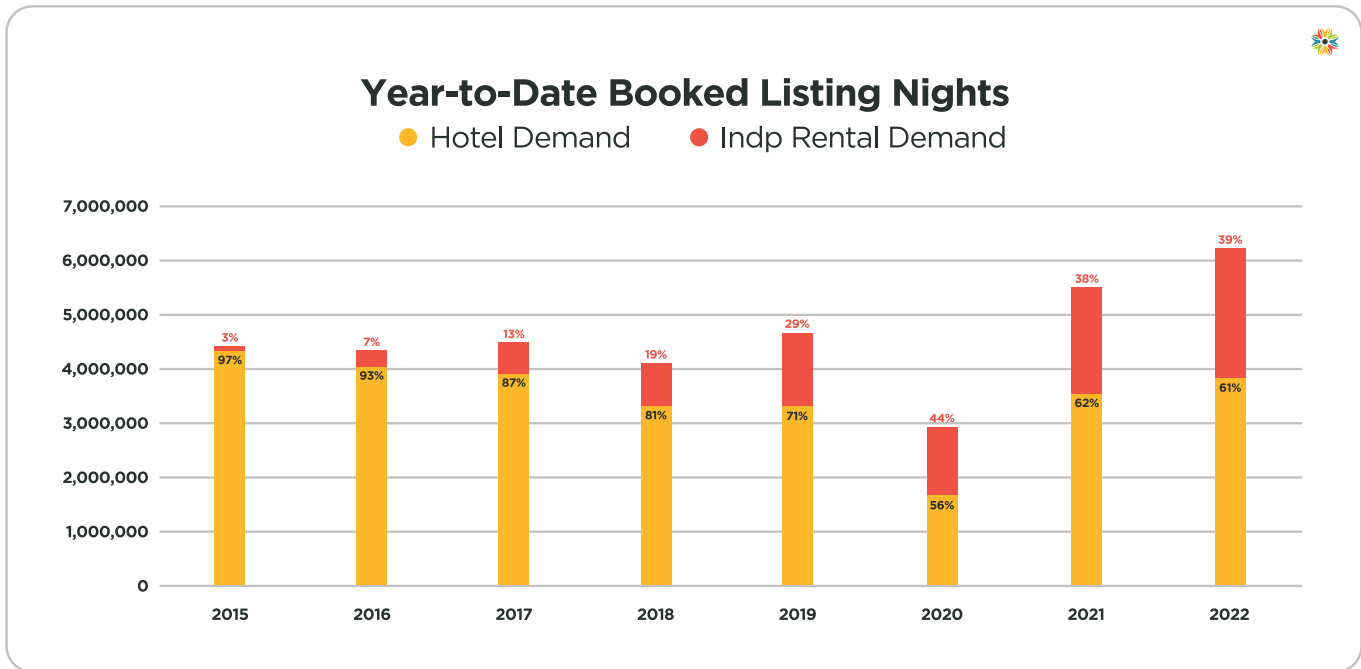


Chart 6: Lodging Demand in Room Nights 2015-2022.<sup>xv</sup>



In 2021, Puerto Rico received approximately 3 million visitors from outside the island who spent \$4.6 billion, an 11% increase over 2019 visitor expenditures.<sup>10</sup> Overall tourism-related expenditure, including local tourism, approached \$7.4 billion and directly generated over 90,000 jobs.<sup>11</sup> In 2022, these numbers improved further with increased lodging revenues of 24% and demand (lodging unit nights) 13%, respectively. The fact that visitor spending grew notwithstanding the COVID-19 pandemic that suppressed visitation during the intervening period, is evidence of the extraordinary resiliency of the Visitor Economy.

During the last decade, visitation has continued to grow. Even more importantly, visitor stays are increasing steadily to where today’s visitors remain on-island longer than in the past. Ensuring that more people visit the Island and that they stay longer encompasses the integration of multiple strategies.

<sup>10</sup> See Tourism Economics and Discover Puerto Rico, 2022.

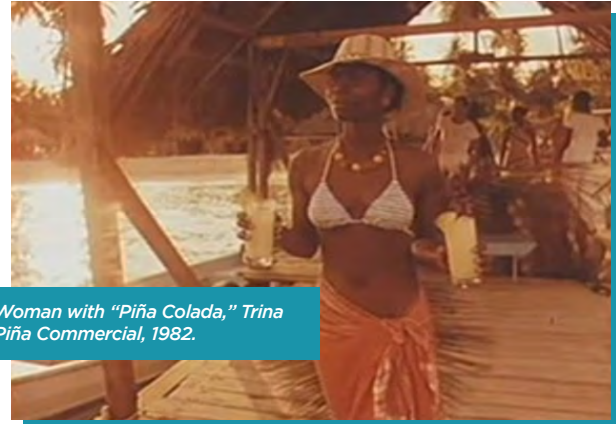
<sup>11</sup> Tourism in Puerto Rico, 2021 and U.S. Bureau of Labor Statistics, 2021



## 1.3. THE POWER OF EXPERIENTIAL TOURISM FOR COMMUNITIES

Today, most travelers seek a vacation that goes beyond sipping a “piña colada” on their hotel beach. They learn about authentic experiences via the internet and social media and wish to explore a destination on a deeper level, experiencing its culture and connecting with locals. These tendencies have blurred the lines around traditional “tourism zones” at the geographical, economic, social, and cultural levels, while digital platforms increase visibility, drive visitor traffic, and facilitate the exploration of cultural and natural assets down to the community level.

This evolution creates the opportunity to develop the island’s visitor economy in ways that spread its benefits throughout many rural and off-the-beaten-path regions where little economic opportunity exists. Puerto Rico’s marketing efforts<sup>12</sup> today go well beyond traditional, resort-hotel-mediated “sun-and-sand” destination profile. They are focused on exposing the variety of unique experiences across all its geography. The internet and the sharing economy allow visitors to access more detailed information when planning their trips and purchasing destination services and products in ways that allow locals to directly develop and improve visitor-related products and services within their individual communities.<sup>xvi</sup>



Woman with “Piña Colada,” Trina Piña Commercial, 1982.



People dancing at culture event, Discover Puerto Rico Live Boricua.

<sup>10</sup> See Tourism Economics and Discover Puerto Rico, 2022.

## 1.4. THE IMPORTANCE OF SHORT-TERM RENTALS TO THE PUERTO RICAN ECONOMY

During 2022, approximately 40%<sup>xvii</sup> of all visitors to Puerto Rico stayed in STR lodging. This makes the STR lodging alternative a critical part of the Visitor Economy. The opportunity is particularly important to the depressed economic regions of the island where often there are few or no traditional lodging options available.<sup>13</sup> With the Visitor Economy becoming the most important and resilient source of economic growth for the island,<sup>14</sup> the availability of STR lodging has created a path for robust economic recovery for those depressed regions. By enabling residents to participate in new and existing economic activities, STRs located in these communities are pivotal to create equitable opportunities for residents.



Collage of  
Puerto Rico's  
Culture,  
Discover  
Puerto Rico  
Live Boricua.

<sup>13</sup> Short-term rentals represented 37% of total lodging supply in Puerto Rico. Source: AirDNA and Discover Puerto Rico, 2022.

<sup>14</sup> In 2016, total tourism direct spends (including local resident tourism) totaled \$6.5 billion. After the hurricanes, it declined, but by 2019 it rebounded back to 2016 levels. In 2020, during the pandemic, it dropped to \$4.0 billion, a -38.1% decline, but by 2021, it reached a record \$7.4 billion. 2022 tourism direct spend is expected to surpass \$8.0 billion. Tourism Economics 2022.

## 1.5. AIR ACCESS - A FORCE MULTIPLIER IN THE VISITOR ECONOMY

The volume of visitors to Puerto Rico who lodge in STRs is strategic in more ways than one. Not only do visitors staying in STRs bring billions of dollars in additional direct economic benefits, but the passenger volume all those additional visitors generate is essential to maintain and grow airlift capacity to Puerto Rico. More visitors lead to more flights, more airlines, direct air service from more cities, and more efficient, higher capacity aircraft, all of which mean more competitive airfares and easier air access to the destination. This, in turn, makes the destination, overall, more competitive, and thus, in a powerful virtuous cycle, attracts even more visitors.<sup>xviii</sup>

To illustrate with actual data the extraordinary power of airlift on air fare competitiveness, here are the current lowest cost, high season, round-trip, non-stop fares from New York / JFK and Atlanta to San Juan, as compared to four major Caribbean destinations.<sup>xix</sup>

Table 1: Flight prices between destinations, Mar 4-11, 2023, Kayak.com

MAR 4-11 (2023)	SAN JUAN	MONTEGO BAY	CANCÚN	ARUBA	PUNTA CANA
JFK	\$341	\$524	\$572	\$745	\$1,033
ATL	\$603	\$2,350	\$842	\$1,459	\$1,949

In Puerto Rico, the average daily rates (ADRs) at STRs are as much as 20% lower than hotels, but the average number of guests staying in each STR is about 50% higher, because most STR properties have more than one bedroom. So, on average, the effective lodging cost per guest per night in STRs is only 40% of that of a hotel room.

Table 2: Cost of a 5-day family vacation to San Juan vs. other destinations, Kayak.com

FAMILY OF 5 (2023)	SAN JUAN	MONTEGO BAY	CANCÚN	ARUBA	PUNTA CANA
AIR FARE	\$1,705	\$2,620	\$2,860	\$3,725	\$5,165
STR LODGING <sup>15</sup>	\$1,250	\$1,250	\$1,250	\$900	\$750
AIRFARE + STR	\$2,955	\$3,870	\$4,110	\$4,625	\$5,915
DIFFERENCE		\$915	\$1,155	\$1,630	\$2,960

The combination of the much lower air fare and the cost profile of STR lodging, particularly for family groups, dramatically improves Puerto Rico's competitive position as a destination over top Caribbean resort destinations. This competitiveness is becoming a major game changer for Puerto Rico's economy.

<sup>15</sup> Prices sourced from Kayak metasearch engine in February 2023. Nightly rates for 2 BR – San Juan \$250, Montego \$250, Cancun \$200, Aruba \$180, Punta Cana \$150

## **1.6. THE VISITOR ECONOMY, AN EQUITABLE AND INCLUSIVE ECONOMIC STRATEGY**

The Visitor Economy can support equitable and inclusive local economic development strategies in communities throughout Puerto Rico. Using this model, communities can participate and benefit by understanding how their unique assets can generate economic activity through leveraging the activity of both Puerto Rico residents and visitors from offshore in ways where they can receive a direct economic benefit. To participate, community members don't need higher education degrees, a large pool of capital, to lure developers or investors, gleaming high rises, luxurious resorts, or access to industrial quantities of water or energy.

In its research, FPR has identified that the issue of access to local lodging by visitors is one of the most critical elements in developing a destination because the economic activity generated by a visitor who overnights in the vicinity of a community is far more substantial than an excursionist, the visitor who simply passes through.<sup>16</sup> The challenge we hope to address is to ensure that the critical economic benefits to communities from visitation can be maximized without making communities unlivable or impacting the quality of life for residents.

### **1.6.1. COMMUNITY BASED TOURISM AND THE SHARING ECONOMY**

Sharing Economy platforms increase visitors' ability to gain access to lodging, transportation, and other services offered directly by individual home or vehicle owners or service businesses in geographical destinations that would otherwise not be visible, or practicably reachable, creating new demand and opportunities. Communities can benefit from the added economic activity generated from growing visitor flows by renting property and providing transportation as well as by creating new businesses, or connecting their existing businesses with these opportunities, and by offering a growing array of products and services that cater to locals as well as visitors. In many communities in Puerto Rico, as manufacturing vanishes, emigration increases, and the local service and consumption economies decline, this newer, more local and experiential form of tourism, may be the only economic growth opportunity available.

It is important to recognize that any substantial new economic activity may cause displacement, whether from the development of a large shopping mall that would disrupt

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<sup>16</sup>A visitor who lodges in a community, pays for lodging, multiple meals, retail purchases, entertainment, transportation, and other services, all within the local community whereas a visitor who simply passes through spends less time and uses far fewer local services.

local retail businesses to a ship scrapping businesses that might damage natural resources. A substantial increase in the flow of visitors might negatively impact the availability of properties for long-term rental by locals, change neighborhood dynamics including increased traffic, lack of parking, noise, and exacerbate challenges with solid waste management. It might make some community residents feel uncomfortable and travelers' experiences less desirable. Visitation can change social and cultural dynamics as the community's assets evolve to attend to visitor-oriented demands and needs. It is possible, however, to successfully navigate these challenges, especially where the very economic future of these communities lies in the balance.

An understanding of the economic opportunities, and the intrinsic capacity to absorb visitor flows and trade-offs is essential. The balance of these changes can be highly positive and even transformational for these communities, especially where few economic options exist. However, to maximize the benefits and mitigate adverse impact of visitor activity to locals, stakeholders and decision-makers need to take those factors into account based on data and community input.

The reshaping of communities as destinations brings about the need to define sustainable strategies to promote equitable neighborhood economic development and the healthy, and even synergistic, coexistence between residents and visitors. In housing, for example, owners of residential properties can make them available for STR lodging, reducing availability for residents who may be long-term renters or purchasers. An understanding of the status of housing assets within those communities is essential. This is important since research shows that stable housing is necessary for health, education, employment, and intergenerational prosperity.<sup>xx</sup>

While working in Orocovis, a municipality located in the central and mountainous region of Puerto Rico, to develop a comprehensive [destination plan](#), FPR learned that lodging, gastronomy, experiences, and local business have a vital role in the prosperity of a community. Travelers used to visit Orocovis for less than one day due to the scarcity of lodging options. After several meetings and working groups, local leaders reached a consensus regarding Orocovis' unique opportunity to maximize the existing cultural, adventure, and ecotourism assets to encourage a more extended stay by visitors. After the meetings, the community continued integrating more experiences into the popular day trips (mainly for the two main attractions Toro Verde, the longest zip-line in the Americas, and the Ruta de la Longaniza gastronomy route) along with galloping experiences and other lodging options. These offerings have encouraged both extended and recurring visits by people from Puerto Rico and from across the world. Additional visitation and longer stays translate to a more significant economic impact on the area.

Globally, the sharing economy has led to notable transformations in the various industries that converge in travel activity, be it in accommodations, transportation, touring, food and beverage, and entertainment. It allows community members to share assets with and provide goods and services to visitors and locals in mutually beneficial ways that increase local, monetizable value-added. Communities benefit directly from visitor travel to their localities by increased consumption of locally produced goods and services.<sup>17</sup>

With proper design and community engagement, entire new, local, visitor-focused businesses can be developed, natural and cultural assets can be revitalized and reoriented towards participatory visitation. For example, ecotourism has the benefit of environmental protection while it promotes job creation and entrepreneurial opportunities in communities<sup>xxi</sup>. In communities in Puerto Rico that have been shedding jobs for decades, travel activity is able to reduce emigration, bring youth and vitality back, and help ensure that essential services are maintained or improved.

## 1.6.2. ADDRESSING RISKS AND NEGATIVE EFFECTS—

### The Principles of Equitable Development

Along with the benefits of the visitor economy, FPR also recognizes its potential risks and adverse effects, such as increased cost of living, cost of infrastructure upgrades, impact on natural resources, gentrification, and the risk that unbridled business interests not aligned with community interests might take priority over public wellbeing.<sup>xxii</sup> It is equally important to understand that public wellbeing can be challenged by an absence of economic opportunity. It is crucial to keep in mind these issues while planning the development of communities as destinations and to rely on comprehensive and holistic approaches such as “equitable development” to ensure we mitigate these risks.

NALCAB defines gentrification as: “a type of neighborhood changes in which real estate price leads to involuntary displacement and significant cultural change, the consequences of gentrification for low- and moderate-income families can be dramatic and long-lasting”.<sup>xxiii</sup> The current media narrative claims that STRs are the leading causal factor impacting housing dynamics, creating gentrification and displacements. We will examine these dynamics in depth and identify important causalities.

Conscious of the potential for undesirable consequences, FPR, in developing recommendations to address housing affordability in Puerto Rico will always be cognizant of equitable development principles to foster fair and sustainable economic development. NALCAB defines **equitable development** as policies and practices that promote economic security and mobility for low- and moderate-income communities by increasing access to affordable housing, transportation options, good jobs, high-quality education, resources for healthy living, and opportunities for wealth creation.<sup>xxiv</sup>

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<sup>17</sup> Community based tourism is tourism in which residents invite tourists to visit their communities with the provision of overnight accommodation. See: <https://www.responsibletravel.com/copy/what-is-community-based-tourism>

Some of its principles include:

- Ensure transparency and public accountability in decision making.
- Promote public participation that addresses disparities in access for different populations.
- Includes community organizing efforts and incorporates education for all stakeholders.
- Value and balance both the experiences of community members and technical expertise.
- Ensure that public policy and public-sector investment advance a public interest.
- Advance economic security and mobility for low- and moderate-income communities by increasing access to affordable housing, transportation options, good jobs, high-quality education, resources for healthy living, and opportunities for wealth creation.
- Be data-driven.
- Respect local history and culture
- Acknowledge and address legacies of racial/ethnic inequality.
- Promote resiliency for the built environment and for vulnerable populations.
- Connect to broader planning efforts, including those related to housing, transportation, economic development, and health.

To increase equitable neighborhood development, it is imperative that the Puerto Rican community identify a path forward that maximizes the benefits of economic development, centered on growing visitor flows and activity to economically challenged communities around the island, in ways that maximize the opportunities of residents and ensure their wellbeing with a particular emphasis on increasing access to affordable housing.



## 2. THE STATE OF HOUSING IN PUERTO RICO

In this section we describe the main factors that played a significant role in influencing the housing market in Puerto Rico during the last decade. We determined that this asset class was affected by multiple underlying social and economic forces as described below

According to the U.S. Census Bureau for 2020, the estimated number of housing units in Puerto Rico is 1.6 million, while the number of households dropped below 1.2 million<sup>xxv</sup> pointing to an apparent surplus of over 400,000 housing units versus households.<sup>18</sup> Notably, Puerto Rico and Virginia were the only two places in the U.S. that showed a reduction in housing stock.<sup>19</sup> However, Virginia's population grew by 7.9%, unfavorably affecting the balance between supply and demand, while Puerto Rico's population declined 11.8%. It is important to note that while the census showed some reduction in population growth rates across the U.S., unlike Puerto Rico, no state showed a major decline in population.<sup>20 xxvi</sup> The island's singular and dramatic depopulation points to the magnitude of its economic challenges and to the high emigration these challenges have caused.

Table 3: Population and Housing Stock Change<sup>21</sup>

STATE	2011 - 2021	
	POPULATION CHANGE	HOUSING STOCK CHANGE
PUERTO RICO	-11.8	-2.4%
VIRGINIA	7.9%	-3.2%

<sup>18</sup> Housing units refer to houses or larger structures divided into smaller segments, like apartments, where people can live, eat, and sleep.

<sup>19</sup> According to the U.S. Census, Puerto Rico's housing stock declined 2.4% in 2020 from 2010.

<sup>20</sup> West Virginia had a small decline of 3.2%.

<sup>21</sup> US Census, ACS-1, 2021

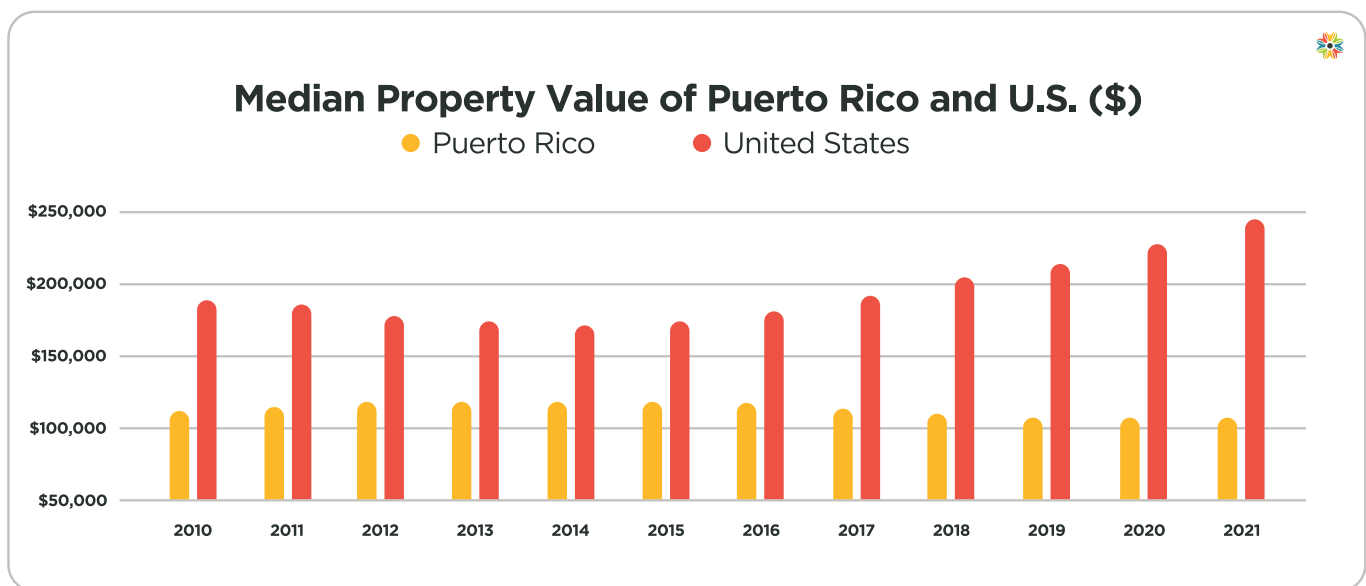


Notwithstanding the apparent housing surplus, in the last half of 2020, both prices and number of units sold began to trend higher. Several factors likely combined to contribute to this 25% increase in average pricing over a 24-month period in hypothetical order of possible impact:

- the return of the island to economic growth after a decade of stagnation and decline
- the aftermath of the natural disasters that dramatically reduced available housing stock
- an end-of-decade rise in population after a long reduction
- insufficient availability of government-developed low-cost housing
- the use of housing as lodging for offshore visitors
- well-capitalized investors buying low-priced real estate betting on an economic recovery
- low mortgage interest rates in an inflationary environment through 2022
- sharply increasing local construction costs due to post-disaster reconstruction
- global inflation with a very pronounced rise in the cost of construction materials<sup>22</sup>
- preexisting government tax incentives to promote investment in housing development
- increased demand for housing due to a shift from office to remote work
- many surplus housing units are disproportionately located in rural areas where there is rapidly shrinking population due to lack of employment opportunities

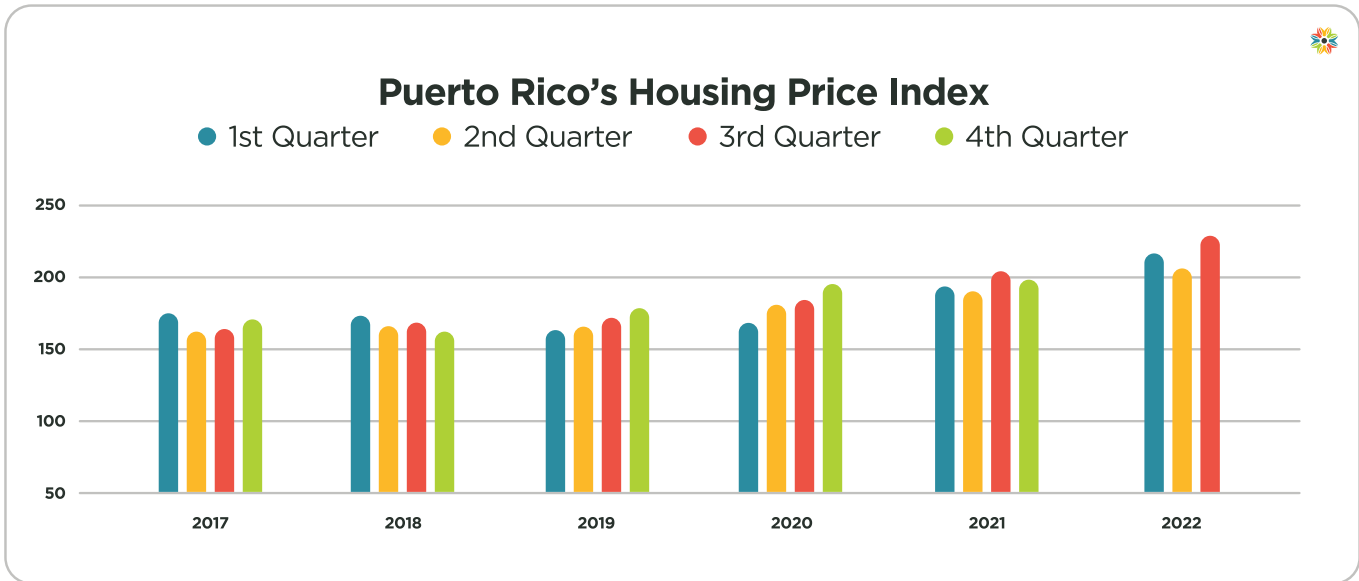
Despite the rise in housing prices, housing in Puerto Rico is still far less expensive than in the U.S. with median values of \$111,800 versus \$244,900<sup>xxviii</sup> in 2021. This points to the dramatic and widening gap in wealth and household income compared with the U.S. mainland.

Chart 7: Median property value of Puerto Rico and U.S. (\$).<sup>xxix</sup>



<sup>22</sup> In March 2022, after the Russian invasion of Ukraine, U.S. consumer prices rose 8.5% from the previous year. The Federal Reserve instituted major interest rate increases which have had widespread impacts including dramatically increased mortgage costs. Puerto Rico' local inflation rate increased from 3.2% to 6.6% between the third quarter of 2021 and the third quarter of 2022 per Puerto Rico Fiscal Agency and Financial Advisory Authority (AFAFF).

Chart 8: Puerto Rico's Housing Price Index.<sup>xxx</sup>



The Housing Price Index (HPI) is a repeat-sales and weighted index that is being used by the Federal Housing Finance Agency to measure the movement of single-family house prices. It serves as an accurate indicator of house price trends on geographic levels. It also provides much information for estimating changes in the rates of mortgage defaults, prepayments, and housing affordability.<sup>xxxi</sup>

These indices clearly confirm the sudden increase in the sale prices of single-family houses. They do not necessarily address or reflect the pricing trends in other residential housing options such as rentals or multi-family structures such as condominiums or apartment buildings. Lastly, they do not consider the large pool of housing stock that is currently not on the market. They are certainly not able to tell us if rising housing prices are a short-term spike or a long-term trend.

*This study hopes to explore the underlying dynamics of housing and affordability and to identify what strategies and actions can have a major impact while ensuring that our island and its residents can grow and prosper.*

## 2.1. ANALYSIS OF FACTORS THAT IMPACT HOUSING SUPPLY

### 2.1.1. POPULATION CHANGES

Housing prices, like any other market driven pricing, are affected by the balance between supply and demand. That balance has undoubtedly been impacted in Puerto Rico by reduced demand due to economic stagnation and resulting loss of wealth extending over most of the 21st century. That effect is compounded by depopulation due to emigration, low birth rates and an aging population.

Chart 9: Puerto Rico’s Population Annual Change & Forecast (2000-2030).<sup>xxxii</sup>

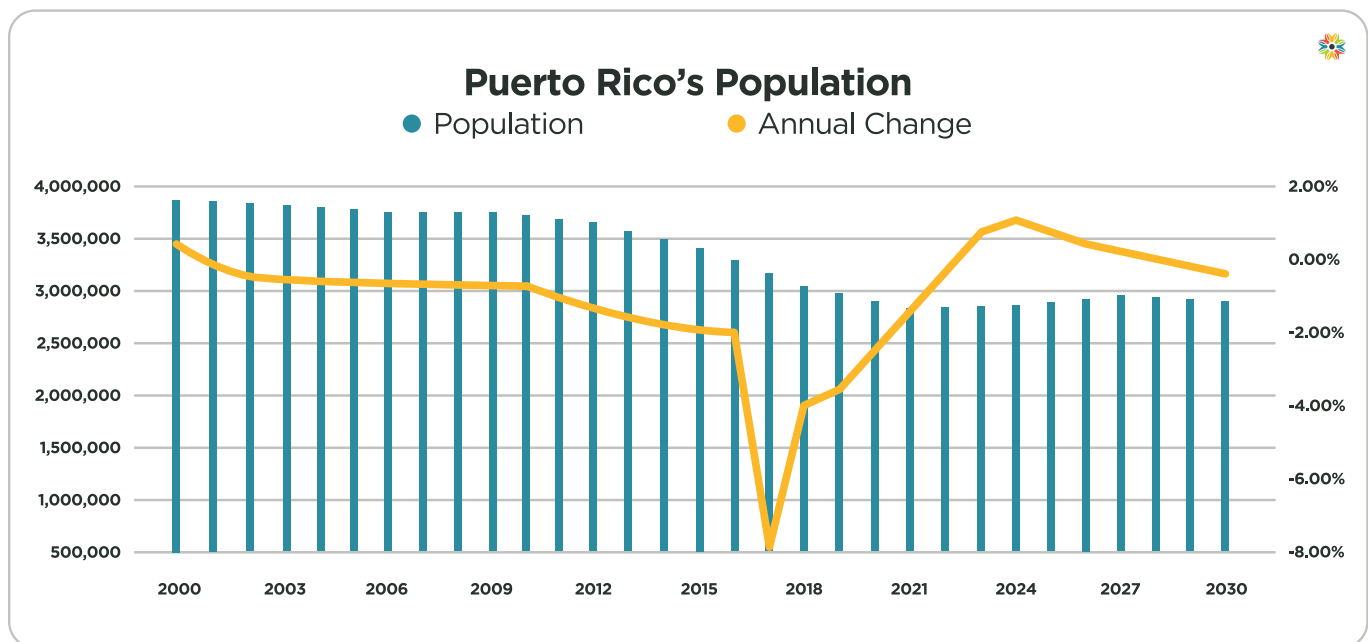


Table 5: Puerto Rico’s Population Change, US Census Bureau.

PR Population 2010 <sup>xxxiv</sup>	PR Population 2020 <sup>xxxiv</sup>	Change	Change %
3,725,789	3,285,694	-440,095	-11.8%

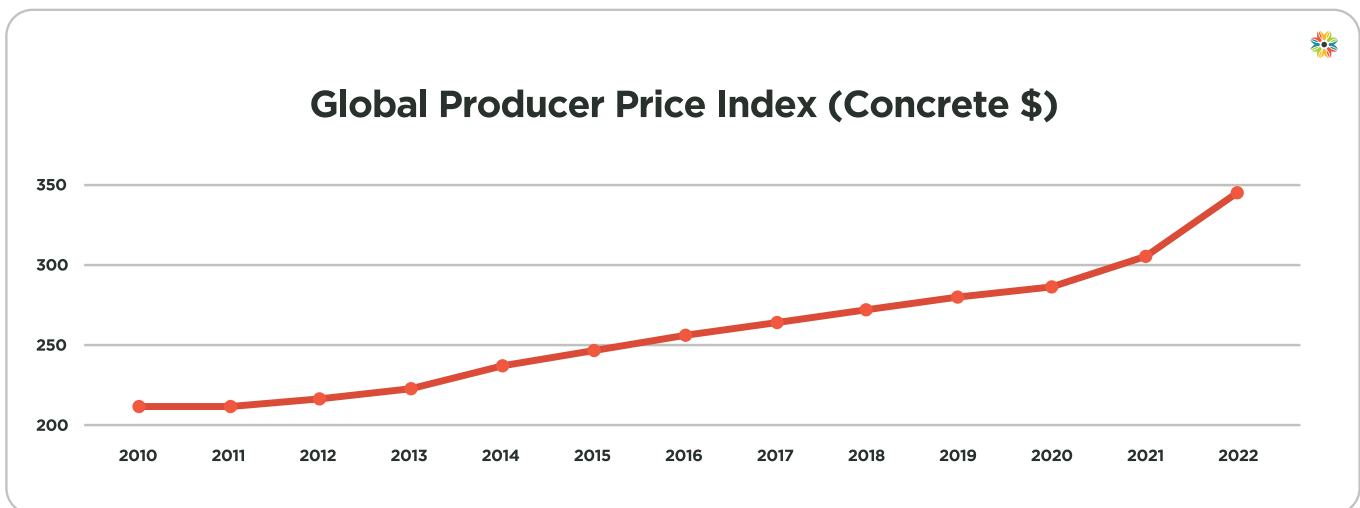
The 2020 U.S. Decennial Census reported Puerto Rico lost more than one tenth of its population over the decade and has almost doubled our proportion of adults over 65 years old. The Puerto Rico Community Survey,<sup>23</sup> showed that between 2010 and 2019 Puerto Rico lost 14% of its population.<sup>xxxv</sup> Some of the differences might be explained by different

<sup>23</sup> It is a version of the American Community Survey customized for Puerto Rico.

methodologies<sup>xxxvi</sup> and by a small net population gain at the end of the decade as some fraction of those who were forced to leave after the 2017 hurricanes have been returning. In addition to emigration, low fertility rates and an abrupt increase in deaths contributed to the depopulation of Puerto Rico.<sup>xxxvii</sup> Births have decreased by 70% since 1995, clearly a long-term trend.<sup>24 xxxviii</sup> Without significant new immigration, the rapidly aging population and exceptionally low birthrates will cause a further decline over the next decade. As the population ages, housing needs may vary, but increased population will not likely be a major growth factor for housing demand.

## 2.1.2. CONSTRUCTION COSTS

Chart 10: Global Producer Price Index of Concrete.<sup>xxxix</sup>



Another challenge has arisen in the aftermath of the pandemic: supply-chain-derived inflation. The data-driven efficiency of “just in time” supply chains took the inventory cushions away and increased their vulnerability to disruptions and scarcity. This, along with pandemic-induced labor shortages, led to increased costs for everything from consumer goods to construction materials. This global inflation factor has made recovery and reconstruction in Puerto Rico even more difficult, increasing costs of materials and supply interruptions further delaying the restoration of housing stocks.

Although local labor costs have historically been lower than in the U.S., rising demand and scarcity of skilled labor due to the scale of post-disaster reconstruction have erased any difference. Construction material costs have always been higher in Puerto Rico than the U.S. This is partly due to transportation and import costs but also because local building codes must address both hurricane and seismic risks resulting in higher-cost, concrete construction becoming the standard. California with comparably rigorous building codes, due to high earthquake risk, base housing construction costs for individual homes range from \$131.33 - \$195.00 per square foot, 40% higher than U.S. median costs.<sup>xi</sup> Construction costs do not include the cost of land, utilities and road networks, or the

<sup>24</sup>In 1995 there were 63,425 births compared to 2020 where there were 18,933 births in Center for Disease Control and Prevention (CDC) and National Center for Health Statistics 2021.

developer's financing costs and profits, that together could increase costs by 20-40%. If we applied the lower range of California construction costs to Puerto Rico, a newly constructed, 1,400 square-foot 2-bedroom house suitable for a small family might be priced in the range of \$220,000 depending upon location, amenities, and other variables. A 30-year mortgage would require monthly payments above \$1,277.<sup>25</sup> On an island where median annual household incomes are just below \$22,000,<sup>xli</sup> this makes a new house unaffordable for most residents.

## **2.1.2.1. INFORMAL CONSTRUCTION AND ITS CONSEQUENCES:**

### Lessons Learned and Future Opportunities

Informal construction is quite common in Puerto Rico. Anywhere between 585,000–715,000 (45–55% of) homes and commercial buildings have been constructed without building permits or following land use codes.<sup>xlii</sup> Most of these structures were not built to resist wind and seismic damage as required by current code standards, either because their construction predated those standards, or because they were “informally” built, often out of inexpensive materials and without necessary structural elements. Other structures suffer from age-related deterioration and inadequate maintenance, particularly as the financial circumstances of the owners have declined along with the economy. All these properties would need to be repaired in the current, far higher cost environment where this work must compete for contractors and workers alongside all the other reconstruction efforts on the island.

*Given the extraordinary cost of new housing construction in the current environment, repairing, rehabilitating, and repurposing of existing properties is the greatest opportunity not only to lower housing costs for low-income residents, but for other purposes as well. Properties located in areas of high labor activity are going to be critical to further economic growth as they provide housing for an expanding labor force. Those that are in areas with little economic activity must be revitalized as part of a sustainable economic strategy planning process.*

*The knowledge and the skills to repair and reuse these costly assets in imaginative and transformational ways could become a superpower for Puerto Rico and its communities. It requires a different approach to zoning and construction codes. It may need construction workers with different sets of skills who know how to use wood structurally, to rethink floor space, to understand how modern technology in utilities and communications can be retrofitted to existing structures in ways that don't require extensive reconstruction, how we need to rethink the concept of shared spaces and how modularity, prefabrication and flexible design can be applied to interiors. In other words, to move away from the way we built in the past to new, 21<sup>st</sup> century approaches that use ideas, materials, and technology in innovative, value-adding ways.*

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<sup>25</sup> Does not include mortgage origination costs or insurance. Oriental Bank Mortgage Calculator. FHA loan for first time buyers.

## 2.1.3. IMPACTS OF EXTREME WEATHER AND SEISMIC EVENTS ON HOUSING STOCK

The aggregate impacts of Hurricanes Irma (2017), María (2017) and the earthquakes in the southwest of Puerto Rico (2020) caused the loss or damage of properties resulting in a sudden reduction in available housing inventory. The extraordinary scale of loss was the consequence of often fragile, informally built non-code-compliant structures, the lack of resources to protect existing structures in advance of storms, and their location in high-risk areas.

Much of the housing stock (1,138,843 housing units) sustained at least some damage from the 2017 hurricanes. Most owners sought to apply for assistance under the Federal Emergency Management Agency's (FEMA) Individuals and Households Program (IHP).<sup>26</sup> <sup>xliii</sup> About 60% of the housing assistance applications were denied. This gap was dramatic and material in terms of its social impact, both delaying recovery and increasing human suffering and economic injury while reducing available housing stock.

The 2008 mortgage crisis, economic decline and mass emigration had collapsed demand for housing long before the 2017 hurricanes. As an indicator of the depth of the crisis, the number of permits granted for housing construction in Puerto Rico dropped from 14,718 in 2006 to 2,528 in 2016.<sup>27</sup> <sup>xliv</sup> Even the reduction of housing stock due to hurricane-related damage did not immediately lead to higher housing prices. Price per square foot remained in continuous decline from \$150 in 2011 to \$85 in 2018.<sup>xlv</sup>

## 2.1.4. ABANDONED OR UNSAFE PROPERTIES

The Federal Census estimates there are over 370,000 vacant homes in Puerto Rico. Other sources point to 300,000 dilapidated or abandoned housing units. This is in addition to many unused government properties, including hundreds of closed schools and many commercial properties. In San Juan alone, there are 40,000 to 50,000 abandoned properties with fewer than a hundred legally declared as a “public nuisance”<sup>xlvi</sup> or in U.S. terminology,<sup>28</sup> a “condemned property.” The legal processes to deal with these properties are slow and cumbersome, but public awareness of the magnitude of this

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<sup>26</sup> Individuals affected by Hurricane Maria could apply to federal disaster aid programs through FEMA.

<sup>27</sup> Similarly, results from the Puerto Rico Government Development Bank showed a drop from 17,830 permits granted in 2016 to only 2,047 in 2015 (Hinojosa & Meléndez, 2018).

<sup>28</sup> A public nuisance in Puerto Rico's Municipal Code is any abandoned structure or abandoned lot, barren or wasteland that is unsuitable to be inhabited or used by human beings, because it is in of dilapidation, lack of repair, construction defects, or that is detrimental to health or safety of the public. Such conditions may include, but are not limited to, the following: defects in the structure that increase the risks of fires or accidents; lack of adequate ventilation or sanitary facilities; lack of electricity or potable water; and lack of cleanliness. Código Municipal 2020.

challenge is increasing, and legal and administrative structures are being upgraded. We see an important opportunity to accelerate economic recovery, and to increase the stock of affordable housing, by speeding up these processes. The spillover effects of restoring these abandoned properties, many in strategic locations, could improve quality of life and change the dynamics of housing availability.

*Information is key to understanding the housing supply characteristics and for planning efforts. Government agencies in Puerto Rico including the Housing Department, the Land Authority, Agriculture Department, need to focus their efforts on updating their property inventory to reflect all the missing and necessary details required for proper identification and classification of properties. For example, properties lacking proper title can be classified as vacant in one agency even though they are inhabited while in another agency they may have a different classification. The Puerto Rico Housing Department should take a lead role within the government in gathering, consolidating, and making this information readily available. Identification and differentiation of abandoned and derelict properties, combined with an aggressive and effective legal strategy to repurpose them, accompanied by financial resources and appropriate management structures, could be transformational in accelerating their rehabilitation.*

*For example, the Municipality of Toa Baja created a Community Land Bank, an NGO that identifies those derelict properties and determines how best to rehabilitate them, whether it be affordable housing, the creation of green spaces, or other local needs. There are a few municipal-level and community-level initiatives like Toa Baja that we will point to in this study that can be promoted and serve as models for change. Support for these types of organizations is vital so they can expand their scope of work and impact.*

## **2.1.5. PROPERTY TITLE**

As many as 260,000 residential properties lack titles or deeds.<sup>xlvii</sup> Historically, it had not been an absolute legal requirement, but the lack of proper title can create significant challenges to resale, financing, or to receive Federal assistance for reconstruction. In addition, financial predators could take advantage of these deficiencies to fraudulently gain title to someone else's property. Also, in communities where residents lack title, the government itself has sometimes acted as if those communities did not exist in planning redevelopment initiatives.

The magnitude of the problem is the consequence of so many people over the years, especially in rural municipalities, settling on land that originally belonged, generations before, or subsequently came to belong, to someone else - the government, or an ancestral relative, or the original landowner of the farm on which they or their ancestors had lived and labored, sometimes dating back to the days of slavery. These people built informally on the land to put a roof over their heads, not realizing that, under the law, their rights to that land might not be secure.

Another challenge is that a property might be registered to a deceased person and must go through an inheritance process that could go on for years; there could be disputes between the heirs; some heirs might not be able to pay the corresponding back taxes. Many property owners simply lack the knowledge and/or the financial means to obtain a property title, which can be difficult and costly.

At the end of 2015, the government implemented a complete, on-line property title recording system (Registro de la Propiedad) called Karibe.<sup>xlviii</sup> It provides digital visibility for all records speeding up the process of registering, searching, and studying all the properties of Puerto Rico by notaries, banking institutions, appraisers, title examiners, policy makers and the public.<sup>xlix</sup>

*Simplifying the recording of properties needs to be combined with help for those that can't afford legal expertise in real estate property titles. Organizations like Ayuda Legal PR, a non-profit entity, offers education that helps people understand how to obtain full ownership rights to their properties while other NGOs like Servicios Legales de Puerto Rico, offer consultancy and legal representation. Promoting, and supporting the growth and development of organizations like these is a good first step in ensuring that properties can be maintained, restored, and made available for housing.*

## **2.2. THE FINANCIALIZATION OF HOUSING**

Over the past few years there's been an increase in opportunistic investors looking to buy residential properties, taking advantage of historically depressed prices and, until recently, extremely low interest rates. For whatever purpose they invest in and improve properties in various conditions, whether for resale or long term and short-term rental purposes, they can pay sellers/owners in cash, and, if they need to, they have the means to pay higher prices than individual home buyers might be able to afford. Many sellers prefer the security and immediacy of a cash transaction to the complexities and uncertainties of a mortgage and, of course, every seller benefits from a higher price.

With median home prices and rentals rates suddenly rising, there is a growing concern that investors, particularly those who might develop large portfolios of properties for rent, could adversely affect housing affordability. If these investors are from outside the community, they may have the capacity to repair and improve properties; they may have little engagement with the community and their interests may not be aligned with any future benefit to the community. On the other hand, the money that sellers receive may be the only monetizable asset they might have for retirement or for crucial expenses for their families.

*Some suggest a strategy for countering this risk is that the government take an active role in prioritizing local, individual proprietors, urban rehabilitation and promoting and incentivizing the development of affordable housing.*



## 2.2.1. TAX INCENTIVE-BASED NEW RESIDENTS

Since 2012, ACT 60<sup>1</sup> (formerly known as Act 20/22) beneficiaries have come to Puerto Rico. There is a growing outcry from those who believe that real estate investments made by these wealthy beneficiaries are not fair competition since they are able to avoid paying income tax on interest and dividends on the revenues they receive from products and services they export from Puerto Rico. Many have misinterpreted this benefit and believe that revenues from local income and the gains from the sale of their properties are exempt from local taxation, which is not the case at least under Act 60. There is also the sentiment that these individuals can pay more for properties than local Puerto Ricans could afford.

Most ACT 60 beneficiaries live in high-value housing areas including Dorado, Condado, and Palmas del Mar, followed by Guaynabo, Isla Verde, and Old San Juan. Since 2020, approximately 500 Act 60 beneficiaries have reported property purchases to the Department of Economic Development. Of those, 13.3% (70 purchases) were priced in the “affordability” range of low-income residents (below \$120,000). Another 15% (80 purchases) were between \$120,000 and \$250,000, an affordable range for many middle-income residents, for a combined total of 150 purchases. Even if a similar proportion of the other 7,000 ACT 60 beneficiaries, apparently not accounted for in the DDEC filings in 2021, had made property acquisitions in the same ranges (under \$250,000), those purchases would represent approximately 2,200 property purchases or about one tenth of one percent of all Puerto Rico housing stock. Even adding in the balance of 3,500 properties presumed to have been acquired at over \$250,000, the total properties occupied by Act 60 beneficiaries would only account for three-tenths of 1% of overall housing stock. Housing purchases by Act 60 beneficiaries might affect housing prices in a few high-end neighborhoods but are less likely to affect housing affordability for low-income residents. *Increasing the number of beneficiaries submitting their annual report is essential to understand Act 60-related real estate purchases better and avoid under reporting. Recently, the Treasury Department began using digital tools to identify and map cash transactions of real estate properties to evaluate them for tax purposes. These government initiatives are crucial first steps in promoting transparency, ensuring legal compliance, and overseeing restrictions.*

Act 60 beneficiaries create thousands of direct and indirect employment opportunities including those who may find work in the export businesses they establish on the island. Specifically, the law requires every beneficiary to create a minimum of 5 jobs. It is important to point out that there are some ACT 60 beneficiaries whose businesses individually create hundreds of jobs. By mid-2019, approximately 36,000 jobs had been created. If, for example, Puerto Rico were able to increase the number of ACT 60 beneficiaries to 10,000, and each employed an average of 7.5 people, that could translate to 75,000 jobs. This would be comparable to the total number of manufacturing jobs remaining in Puerto Rico and to the number of people currently employed in the visitor economy.

*Any impact of Act 60 property acquisitions on housing prices, and particularly affordable housing, is likely small compared to other factors that are driving housing costs. Any public policy restriction on investment in the housing market, beyond the Act 60 statutory requirement of the acquisition of a residence, should be made applicable to any large-scale real estate investor. Capital is a valuable commodity if its purposes are not in conflict with the public interest.*

*The government, the private sector and all of Puerto Rico need to engage and work closely with ACT 60 beneficiaries to increase their commitment to and investment in Puerto Rico and maximize the number of jobs they create. It would be of great value to measure job creation at the level of each beneficiary not only to ensure compliance with the statute but to identify those beneficiaries with the greatest potential for growing well paid jobs and to work closely with them to ensure they can successfully do so.*

*Many of the facts outlined here are not well known, and the incomplete narratives that have developed have engendered a great deal of public resentment. Awareness of the job-creating potential of Act 60 and the economic power of innovation-driven exports in all its forms is critical as well. To the extent that the potential of ACT 60 in job creation is well understood, and there is knowledge and public support for its continuation, this law could become as important to Puerto Rico's future as Section 936 manufacturing incentives were to Puerto Rico's past.*

## **2.3. THE HOUSING COST BURDEN IN PUERTO RICO**

The U.S. Department of Housing and Urban Development (HUD) defines cost burdened households as families that pay more than 30% of their income for housing.<sup>29</sup> According to the U.S. Census Bureau, 38% of households in Puerto Rico who pay a mortgage are cost burdened. Even more worrisome is data that shows 52% of renters are similarly cost burdened. Cost burdened households have difficulty funding other necessities such as healthcare, education, and transportation.<sup>ii</sup>

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<sup>29</sup> Affordable housing is generally defined as housing on which the occupant is paying no more than 30 percent of gross income for housing costs, including utilities.

Table 6: P.R. Gross Rent as a Percentage of Household Income (GRPI), US Census ACS 2021.

P.R. GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME (GRPI) 2021. <sup>iii</sup>		
%	ESTIMATE	PERCENTAGE
Occupied units paying rent	205,890	-
Less than 15.0 percent	24,409	11.9%
15.0 - 19.9 percent	25,923	12.6%
20.0 - 24.9 percent	24,188	11.7%
25.0 - 29.9 percent	24,956	12.1%
30.0 - 34.9 percent	18,560	9.0%
35.0 percent or more	87,854	42.7%
Not computed	159,537	(x)

### 2.3.1. THE “HIDDEN COST” FACTOR IN HOUSING AFFORDABILITY

Defining housing affordability goes beyond the housing price-to-income ratio. To properly define affordability, we must also consider housing services/amenities associated with residential location such as school quality, job accessibility, and public safety.<sup>liv</sup> If jobs are not close by, a greater percentage of household income must be allocated to transportation or people may be forced to choose lower-quality lodging to offset those costs. Distant neighborhoods or smaller spaces may appear more affordable, but the tradeoffs involved can lead to overcrowding within a household or compromised access to, or increased costs for, healthcare or education. Food and energy, among others, may lose spending priority to offset these increased expenditures.<sup>lv</sup>

Housing affordability can have short- and long-term consequences both economically and sociologically. There are regional effects where a lack of housing affordability leads to a lack of diversity, more traffic congestion, longer commutes, and displacements.<sup>lvi</sup> Studies, such as those done by Glaeser and Gyourko, concluded that excessive rent burden can undermine regional growth.<sup>lvii</sup> Additionally, the cutbacks and consumption shifts can

adversely affect health, education, mental health, and family dynamics.<sup>lviii</sup>

High housing costs can also lead to living in overcrowded housing to save money, evictions, and mortgage delinquency or foreclosures. All the above elements are considered linked with the effects on mental health and dietary selection with populations that are experiencing high living costs related to their home and day-to-day necessities.

Providing affordable housing that considers both sociological impact and availability of services within residential locations can have great benefits on residents and communities. The National Low Income Housing Coalition states that affordable housing is the most cost-effective way to reduce childhood poverty and increase economic mobility. Children can thrive in school when they have a stable home environment, contributing to the reduction of achievement gaps.<sup>lix</sup> Likewise, without the burden of poverty or the fear of homelessness, it can improve family dynamics/relationships.

Housing Forward argues that affordable housing reduces stress and disease, improving psychological health. Affordable housing gives people a sense of control and security over their environment which reduces stress and may improve self-esteem.<sup>lx</sup> Also, preventing overcrowding reduces stressors and the spread of infectious diseases.<sup>lxi</sup> Likewise, by having affordable housing, it frees up a household's budget to pay for healthcare, food, and other necessities.<sup>lxii</sup> It can also give them the opportunity to create savings and build assets, bolstering economic growth.<sup>lxiii</sup> Essentially, it eliminates unhealthy and unfavorable living conditions while positively impacting the communities' education, health, and economy.<sup>lxiv</sup>

## **2.3.2. AFFORDABLE HOUSING AND POVERTY**

Providing affordable housing is particularly critical for Puerto Rico considering that 40% of its population lives below the poverty line, double the number of the poorest state, Mississippi.<sup>lxv</sup> Although median property prices are a low \$111,800,<sup>lxvi</sup> with a median household income on the island of \$22,000 they are unaffordable to most people. Wages have not kept up with rising inflation, making Puerto Ricans struggle with high taxes, high electricity bills, job accessibility, rising food prices, healthcare, declining school education quality and accessibility.

Affordable housing would provide critical stabilization to the average Puerto Rican household that would allow them to participate in new and growing economic opportunities. Housing policies and investment models in Puerto Rico must be transformed to be more equitable ensuring that affordable housing plans adopted are aligned with community needs and infrastructure.

After a long historic decline of housing prices, the impact of natural disasters on available housing stock, the delay in repair and reconstruction, high post-disaster construction and

revitalization costs, and recent global inflationary pressures all may be contributing to an increase in property prices.

Those increases may have been amplified by opportunistic real estate investors who acquire new properties to offer for rental purposes as well as ordinary homeowners raising their asking prices in anticipation of further rising prices. Investment buyers have been paying higher prices, and with recently increasing interest rates further increasing costs, they are likely to charge higher rents, further increasing housing costs. All of this could add up to what is known as “momentum” or a bubble. If affordable housing supply can be increased, any bubble is likely to burst.

Home ownership is a critical wealth builder for many families and affordable rentals can enable more low-income people to move into home ownership if affordable housing stock keeps up with demands.<sup>lxvii</sup>

### 2.3.3. THE INCOME FACTOR IN THE HOME OWNERSHIP AFFORDABILITY RATIO

Different factors may underlie the growing problem of affordability of housing in Puerto Rico. *Loss of human capital due to emigration, and the loss of productive employment and personal wealth within the population that remains on the island, both consequences of a long and severe economic downturn, have depressed household incomes, and incomes are the denominator, or divisor, in the affordability ratio. The lower their incomes the less they can afford to pay for housing.*

Table 8: P.R Home Ownership Affordability Ratio, US Census ACS 2021.

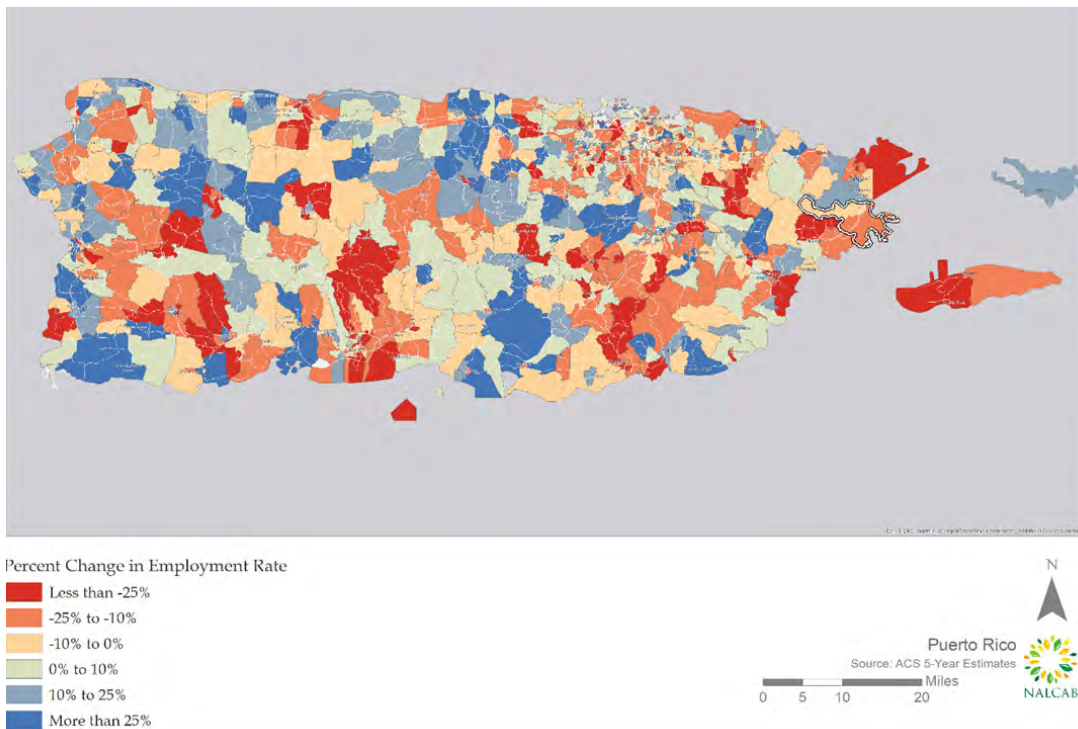
Age Range	Income Per Age of Householder <sup>lxviii</sup>	30% of Income for Housing Expenses	Monthly Payment per Maximum	Maximum 30-year Mortgage <sup>lxix</sup>
Puerto Rico Avg.	\$21,967	\$549	\$430	\$80,181
15-24 years	\$7,826	\$196	\$153	\$28,565
45-64 years	\$26,052	\$651	\$510	\$95,092
65 years or over	\$18,687	\$467	\$366	\$68,209

Most of the houses available have an asking price of \$90,000+.<sup>lxx</sup>  
 The median value of housing units is \$111,800.<sup>lxxi</sup>  
 This means that much of the population can't afford to buy a home.

Rising housing prices and high inflation are making housing less affordable. The challenge is particularly acute for first-time younger buyers. In 2022, the average age for first-time buyers in the U.S. was 36, the highest on record.<sup>lxvii</sup> In Puerto Rico, there are even greater challenges than on the mainland because household incomes are so much lower. This is not only because wages are lower but because the median household income includes a disproportionate number of individual households with little or no income due to unemployment and underemployment, disability, or retirement.

**Map 4: Percent Change Employment Rate**

Percent Change in Employment Rate  
2011-2021



With such a low birthrate and the emigration of so many talented, younger people, the population is becoming older and less vigorous. This affects productivity and employability directly but also impairs the ability of family members who act as caregivers to this aging population to obtain paid work, but even for the younger, more employable population, there is a scarcity of worthwhile, well-paying jobs across most of the island. The options available in many communities are emigration to the mainland, or internal migration to the few urban centers where such jobs may be available, further lowering the average household income within the towns from which they migrate.

In Puerto Rico, rising housing prices and the sharp increase in rent and mortgage interest rates<sup>30 lxxiii</sup> have made acquiring a new home too costly for most residents, but especially those who are under 35 or do not currently own a home. For older generations (75+), many of their homes may no longer be suitable for aging bodies, and adapting them to meet their needs may prove too costly so many must relocate. The following table illustrates the proportion of owner-occupied housing per age group in Puerto Rico:

<sup>30</sup> Due to the pandemic, mortgage interest rates dropped to record-low rates. In 2021, the 30-year fixed rate dropped to 2.65%. However, after 2021 the mortgage rates quickly skyrocketed. It jumped from an average of 3.22% to a high 7.08%.

*Table 9: The proportion of owner-occupied housing per age group in Puerto Rico.  
Source: Census Bureau 2022*

Age of Householder	Owner-occupied housing units <sup>lxxiv</sup>
Under 35 years	10.7%
35 to 44 years	16.4%
45 to 54 years	18.5%
55 to 64 years	22.1%
65 to 74 years	19.5%
75 to 84 years	9.6%
85 years and over	3.2%

Because of the extent to which a lack of well-paying jobs is lowering household incomes and affecting housing affordability, the denominator in the affordability ratio must be aggressively addressed. That has been the focus of the work of our foundation for the last decade – improving Puerto Rico’s ability to create monetizable value for the world in ways that engender equitable opportunities within all the geographic dimensions of our island. Whatever measures are taken to address issues of affordability of housing, we must consider this critical need to create equitable economic opportunities, by seeking collaborations, not conflicts, in our strategies.

## **2.4. SHORT TERM RENTALS ROLE ON PUERTO RICO’S ECONOMY AND HOUSING MARKET**

We have examined data and information on the current STR market in Puerto Rico and how it interacts with the overall housing supply. We will be referencing data from Transparent Inc.<sup>37</sup> and the U.S. Census, among other sources.

In recent years, the rise of sharing economy platforms such as Join a Join, Airbnb, Tujia, HomeExchange, VRBO, HomeAway, and Couch Surfing have revolutionized finding and booking accommodations allowing individual property owners to rent, exchange, or donate the use of their space to travelers who show a growing preference for this type of lodging and experience. They connect potential guests with hosts and provide a rating system to minimize information asymmetries while offering communication channels, financial transacting, insurance, and other services. This technological-digital change continues to evolve exponentially, creating an overall growth in demand and consumption in the tourism and visitor services sector mediated by these online sharing economy platforms.

<sup>37</sup> Transparent aggregates vacation rental sector data from multiple platforms including Airbnb, TripAdvisor, HomeAway, and Booking.com. Using machine learning, they weed out duplicate properties, for true market insight. Transparent does not aggregate local short term rental platform platforms such as JoinaJoin with some 850 listings, properties that are promoted on their own or by internet classified pages. However, it is likely that some of those properties are also listed on the large participating platforms.

STRs existed before the rise of digital platforms. Individual owners promoted their properties with very limited visibility, and it was difficult for visitors to find accommodation options. VRBO and Booking.com, emerged in 1995 and 1996, respectively, leveraging the internet to intermediate between potential guests and property owners. STRs have exploded worldwide since the establishment of Airbnb – a digital hosting platform founded in 2008.<sup>lxxv</sup>

Over the last decade, STRs have grown dramatically and spread globally, thanks to the sharing economy platforms. In the U.S. market, STRs had exponential growth of 100% - 500% between 2009 - 2016 and continue to grow to this day, albeit at a slower pace despite a global pandemic.<sup>lxxvi</sup>

## 2.4.1. PUERTO RICO'S SHORT TERM RENTAL MARKET



According to Transparent, the number of properties advertised in Puerto Rico is 22,701 but after removing duplicate listings they have identified 17,705 unique STR units. This consists of all properties that were advertised on at least one of the platforms over the course of one month (July 2022). Individual unit types include rooms, entire homes, villas, townhouses, B&Bs, RVs, galloping, boats, etc.



Chart 11: Short Term Rental Property Count (Monthly count average).<sup>32</sup>

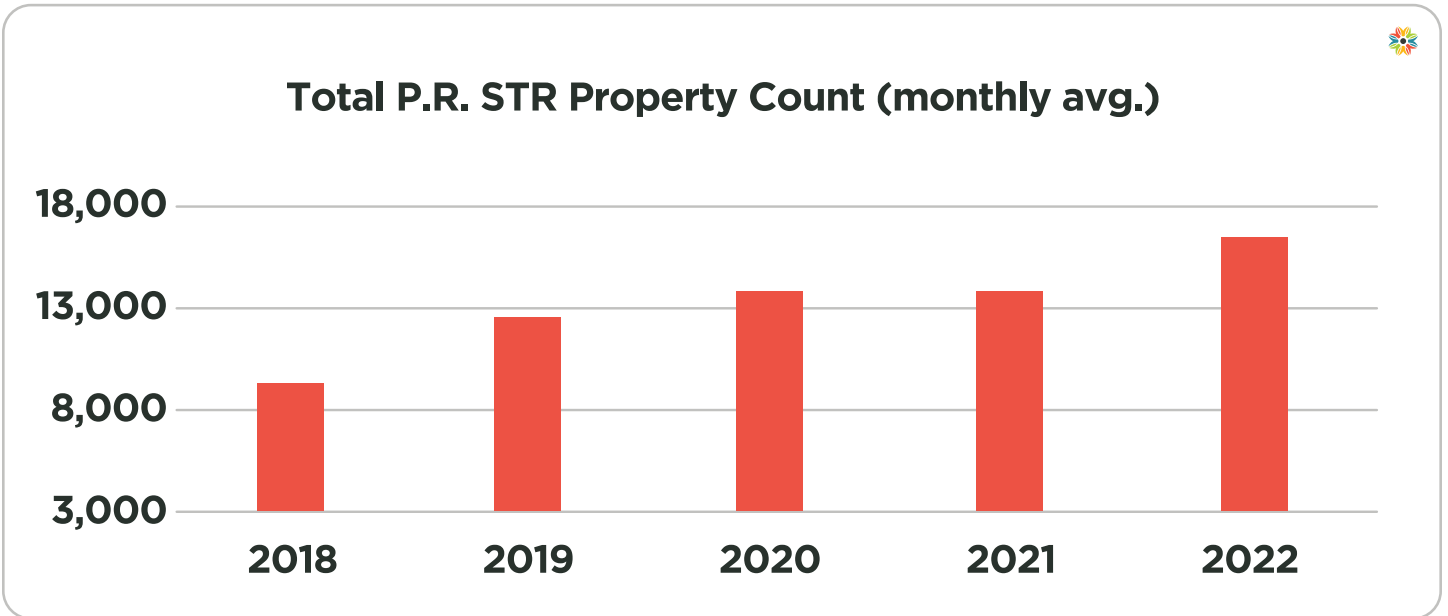
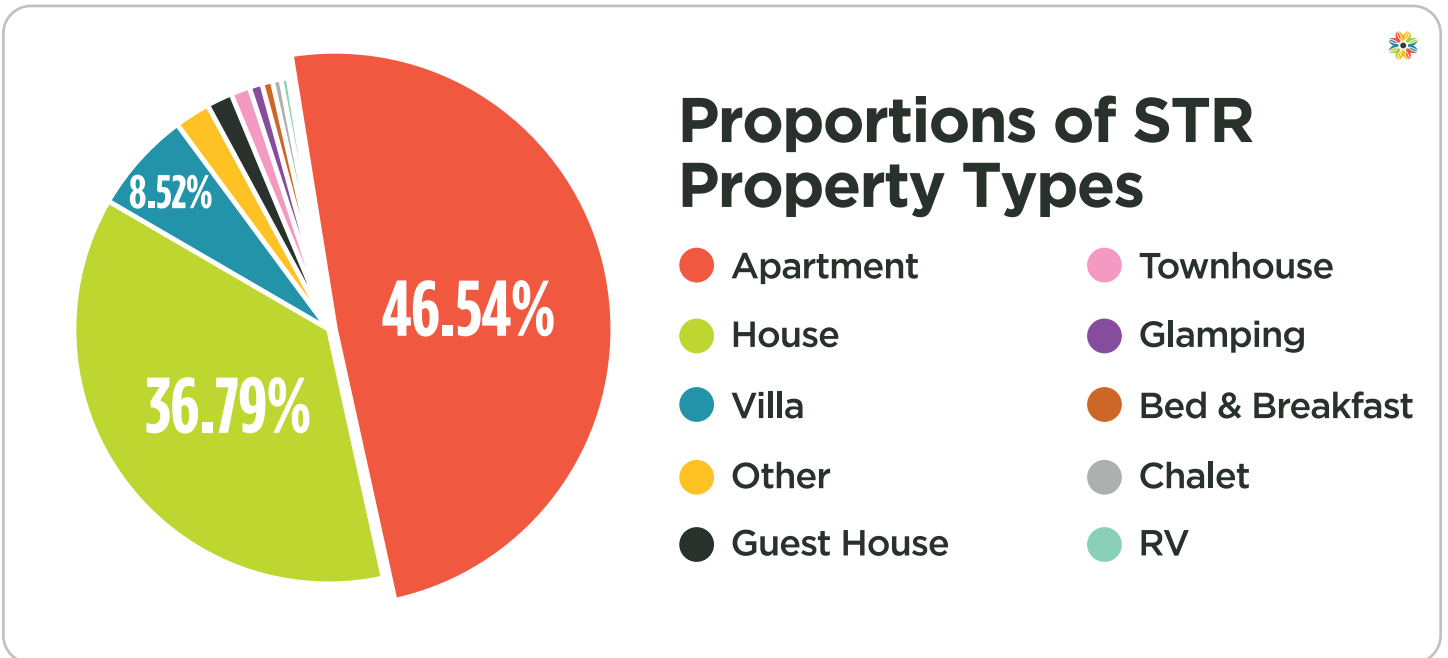


Chart 12: Proportions of STR Property Types.<sup>35</sup>

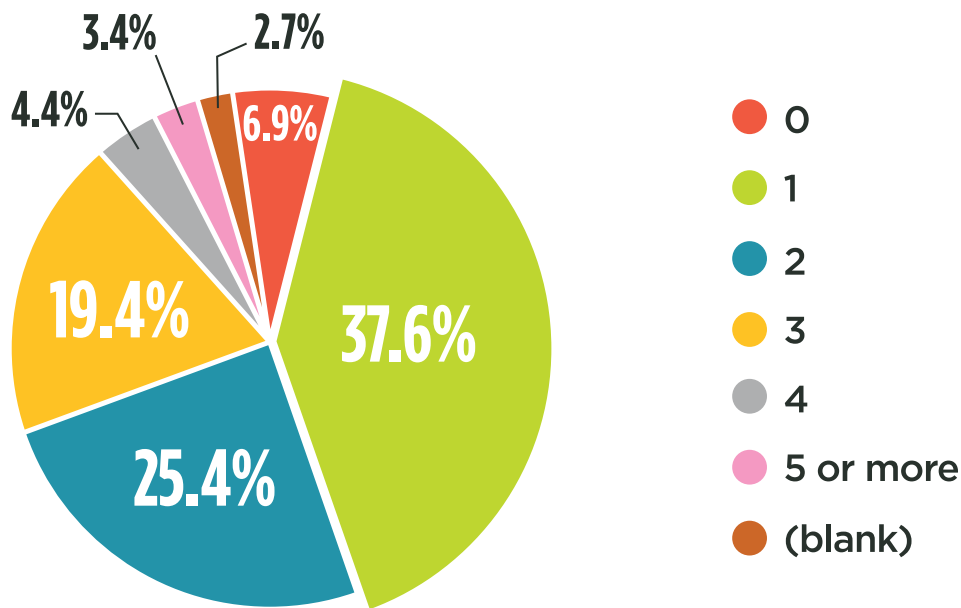


<sup>32, 33</sup> 2022 monthly average only includes YTD data until July 2022.

The number of properties multiplied by the number of guests that can be accommodated at each translates to the total capacity island-wide. These properties comprise more than 32,000 rooms and can potentially accommodate 88,000+ guests. If every STR property were full every day, with an overall economic impact of over \$200 per guest per day, that would translate to a potential direct economic benefit to Puerto Rico of over \$6.4 billion annually.

Chart 13: Bedroom Distributions per Property Type.

## Bedroom Distributions per Property Type



Travelers who stay overnight at a destination tend to spend more, and those who stay at places where there are no traditional lodging options consume more local goods and services. The extra consumption provides added revenue that local businesses would otherwise not receive from local consumption. STRs powerfully drive traffic and visitor latency to non-traditional tourism zones, distributing tourism-related economic activity in far-flung regions of a destination.

In Puerto Rico, for example, on average, travelers tend to stay longer in the destination if they stay in a STR. The average length of stay in an STR is 4.7 days for 2021, increasing by one day (5.7) over the course of 2022<sup>34</sup>. This figure considers local and offshore visitors who spend the night in STR.

<sup>34</sup> Sourced: Transparent YTD 2022.

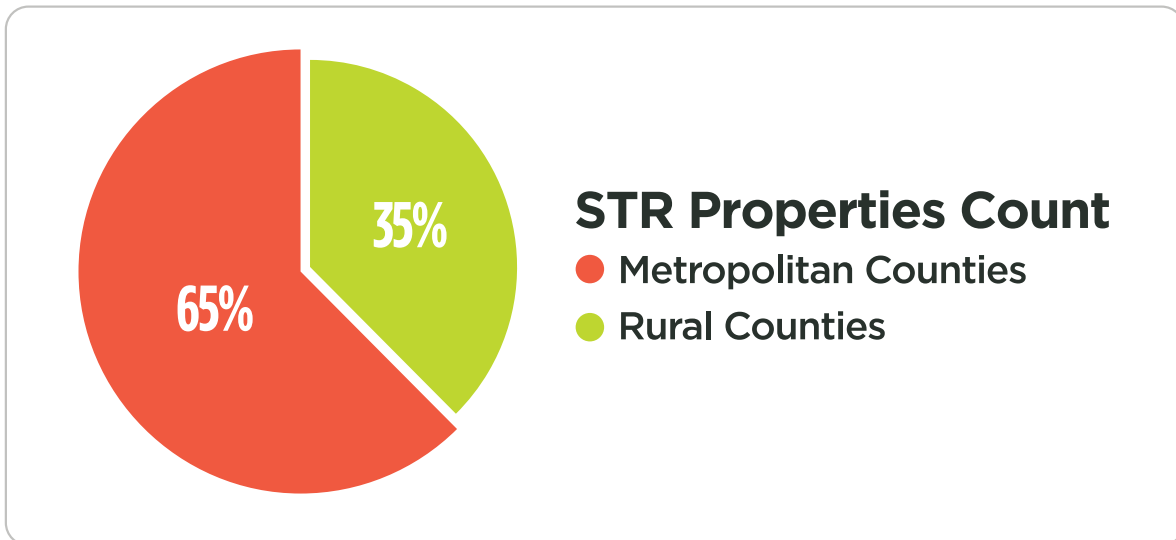
Table 10: Average Length of Stay (Days).<sup>35</sup>

Avg. Length of Stay			
Type	2019	2020	2021
Hotel	2.6	2.5	2.7
STR	3.5	4.4	4.7

According to the Puerto Rico Tourism Company (PRTC), the average stay in a hotel in Puerto Rico was 2.7 days in 2021. The overall itinerary of a visitor could potentially include more than one hotel and/or STR lodging venue on a single visit. It is clear, nonetheless, that the average stay in an STR is now over 2 days longer than in a hotel.

According to Transparent<sup>36</sup> 65% of STRs are located outside the major urban centers, bringing additional economic activity to these generally low-income, rural areas. STRs have allowed more lodging options for both local and offshore tourists, thus allowing many people to spend the night in non-traditional places in our archipelago instead of visiting them on day trips.

Chart 14: STR Distribution



<sup>35</sup> Source: PR Tourism Company Statistics 2022 (Hotel) and Transparent Inc. 2022 (STR), Average Length of Stay

<sup>36</sup> Metropolitan counties include: Bayamón, Carolina, Cataño, Toa Baja, Guaynabo, and San Juan

## **2.4.2. STRs AN EQUITABLE OPPORTUNITY OR A BOONDOGGLE FOR THE WEALTHY?**

Voices against STRs have increased, and the claim is being made that STRs are the main cause of the shortage of affordable housing on the island. However, the affordable housing challenge is much more complex and cannot be attributed to a single factor, let alone one that may represent the principal opportunity for economic activity for some of our communities.

Another argument that is regularly heard is that the STR market is dominated by large investors seeking to evade taxes. We have seen no evidence to support that argument. STRs do not have special treatment or tax exemption. In fact, STRs are taxed right off the revenue line. This does not rule out that some investors may have obtained an individual “tax decree” that provides some benefit not directly linked to the STRs.

Taxation compliance is critical, transparency is essential, and public policy should not allow any exemptions from the Room Tax and the benefits of that taxation should flow to the towns and communities where those visitors go.

Our communities need local, impactful economic activity to prosper, and the visitor economy is an inclusive strategy and equitable opportunity to insert our communities into economic activity, as we have discussed earlier in this report. STRs are essential for visitors to be able to come and stay and spend in our communities and not just pass through.

According to Airbnb, the average annual gross income per short-term rental unit in 2021 was \$13,000 per year.<sup>37</sup> While that may appear to be a large sum, particularly when most people on the island have a very low income, that amount is before taking in consideration the capital cost, maintenance, applicable taxes, services fees paid to platforms, property managers and other service and management costs that all go off the top line. The net benefit to an individual owner is far less while the remainder of the benefit goes to the multiple service providers and workers involved in every dimension of the lodging activity. All of this without considering what guests spend within the community beyond what they pay for lodging. The STR market is becoming important not only for individual homeowners but for an entire community.

Transparent data also shows that 16% of STR hosts in Puerto Rico own or manage more than five properties. Those same 16% of hosts manage 31% of all STR properties and generate 39% of the income. On the face of it, there appears to be a disproportionate weighting of revenues in favor of owners of multiple properties. However, this is a misconception because the digital platforms do not account for owners but rather for “hosts”, and while a host may indeed be an owner, an owner may not necessarily be a host, delegating that function to a professional property manager or real estate agency. Professional service organizations may manage dozens or even hundreds of properties.

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<sup>37</sup> Airbnb's Internal Data, 2022

Therefore, to make any inferences, we would need to know how many of the hosts of 5 or more properties are, in fact, owners of those properties and were not merely agents servicing several individual owners. On the other hand, 46% of hosts that appear in the data with only 1 property are almost certainly individual property owners. This makes it likely that a small fraction of owners overall has ownership control of even 5 properties. This is important because individuals with ownership of one or a few properties are participating in the sharing economy and are likely to be benefiting from the only monetizable asset they may possess, and the net revenues may be critical to their households.

New legislation is under consideration in Puerto Rico, the House Bill #1557 (HB 1557), that proposes to create a single regulatory framework and the use of an online system to collect taxes and register owners. It will require the positive and validated identification of each individual property, its owner and host. The data collected should give policymakers and stakeholders visibility down to the community level of concentrations of ownership, pricing trends and other metrics that allow a better understanding of the real dynamics and impact of STRs.

It is important to differentiate between those who own one or a few properties and are participating in the sharing economy and those who by acquiring many properties have turned STR rentals into a major business venture. Housing businesses should not be regarded as part of the sharing economy the way that individual owners are. They should be treated and required to adhere to the same regulations as lodging business just as are hotels and other larger scale lodging business alternatives. Granular, identified data allow communities to monitor and deal with unhealthy over-financialization of housing assets.

### **2.4.3. THE IMPACT OF SHORT-TERM RENTAL PROPERTIES ON PUERTO RICO'S HOUSING MARKET**

Globally, major visitor destination cities such as London, Barcelona, and New York have seen a rise in STR and have taken measures to regulate them due to limited housing supply. Likewise, in Puerto Rico, there is an ongoing and growing public debate, demonstrated by increased attention by mainstream media and other journalism outlets, regarding a generalized public concern that the growth of the STR sector could affect housing affordability and community quality of life particularly in areas with many visitors.

We examined the number of housing units based on data from the 2020 census, and STR represent only 1.1% of the housing properties in Puerto Rico.<sup>38</sup> Clearly, STR properties are a small fraction of housing inventories. However, STRs are continuing to grow and concentrate in places with high visitor activity. It is equally true that in those places, tourism is the main source of economic activity.

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<sup>38</sup> It is also important to note that some properties have more than one individual rental unit, making the total number of short-term rentals properties smaller than 17,711 units (2022).

**Table 11: The top 10 municipalities with the highest proportion of short-term rentals vs housing units (U.S. Census and Transparent. Inc):**

P.R. Municipalities	Proportion of STRs vs Housing Units	Median Gross Rent Change 2012-2021	Median Housing Value Change 2012-2021	Median Income Change 2012-2021	25+ Population with Bachelor's Degree or Higher Change 2012-2021	Population Change 2012-2021	Ratio of Residents to Housing Units
Culebra	25.7%	15.3%	32.1%	35.7%	9.5%	-16%	0.9
Rincón	12.5%	23.3%	7.9%	51.7%	5.1%	-1%	1.5
Vieques	11.0%	22.1%	6.1%	-10.0%	4.1%	-11%	1.7
Luquillo	7.2%	1.5%	-1.1%	17.9%	3.6%	-11%	1.7
Río Grande	3.9%	19.1%	-1.9%	10.0%	4.2%	-12%	2.1
Fajardo	3.6%	24.2%	-4.9%	2.4%	7.6%	-12%	1.6
Isabela	3.3%	11.0%	4.1%	17.5%	7.5%	-6%	2.0
Cabo Rojo	3.2%	17.6%	-12.6%	16.1%	6.2%	-7%	1.6
Aguadilla	2.6%	15.0%	0.3%	10.7%	3.3%	-9%	1.9
Aguada	2.5%	-5.9%	-5.8%	24.0%	1.8%	-9%	2.1

***The lack of long-term housing is affecting us greatly. Our teachers, construction workers, and service workers must commute from the mainland due to scarce affordable long-term housing. Some residents in Culebra have been displaced because landlords have turned their long-term housing into short-term rentals to obtain greater revenues.***

**—Edilberto Romero, Mayor of Culebra**

The (10) municipalities with the highest proportion of STRs versus available housing units are coastal municipalities. Apart from the islands of Culebra and Vieques, they are readily accessible by car from the highly populated San Juan metropolitan area. P.R. residents and offshore visitors frequent these municipalities to take advantage of their natural attractions, gastronomy, culture, and other experiences. The accessibility to locals is also a driver for a form of gentrification as weekend homes of prosperous city dwellers could be a factor in rising housing costs.

In most of these destinations, there are insufficient (or even no) hotel accommodations to meet demand,

and STRs provide the capacity to support those visitor flows and the economic life they bring to those communities. U.S. census data shows that most of these municipalities are growing economically. They have experienced an increase in long-term rental costs, and most, but not all, have seen an increase in housing prices. To date, the low ratio of residents versus housing units still points to a housing surplus on most of the island.

In Culebra, with the highest percentage (25.7%) of housing stock dedicated to STRs, there is over one housing unit per resident, but it appears that many of the “surplus” housing units may be “weekend homes”. It is nonetheless clear that the high percentage of STRs is influencing housing costs for residents and for lower-income workers. Rincon has 12.5% of housing stock dedicated to STRs, yet it too has an apparent favorable ratio of units per resident. Once again, the large number of weekend homes needs to be considered. It is worthy of note that both municipalities are highly dependent on the visitor economy and that, over the last decade, the median gross income of their residents has risen 35.7% and 57.7%, respectively.

The case of Culebra is exceptional, not only in terms of the high percentage of STRs and weekend homes but also because, like Vieques, it is an island quite isolated from the rest of Puerto Rico so that commuting from an adjacent municipality is quite challenging with a long, unreliable ferry ride. This creates an urgency and immediacy to the challenge of affordable housing. The visitor economy is crucial to the island and its residents, but on-island housing is equally important. The development or designation of sufficient affordable housing that is protected from visitor-economy-related demand is necessary.

The condition of the housing units that comprise these apparent surpluses within all municipalities needs to be evaluated and accounted for. Their potential for rehabilitation and prioritized return to availability to the housing market is very important to stabilize housing prices. Further research is necessary to understand, at the municipality level, the breakdown of vacant homes and their usability. Identifying how many of these homes are second homes, derelict, abandoned, or are being used for other purposes, and using that data to accelerate their rehabilitation is critical to devising the most effective housing development strategy. The goal of such a strategy should be to ensure that residents can afford a place to live and that the communities can develop a viable economic path to a prosperous future. Within the body of this document, we have compiled a series of recommendations that can be taken into consideration when devising a housing development strategy.

## **2.4.4. PROPERTY RIGHTS AND REGULATION**

There has been recent reporting about STRs in places like the Puerta de Tierra neighborhood of San Juan and Hatillo, among others. The local media are covering instances where investors buy apartment buildings and evict tenants to turn the apartments into STRs. Although these displacements may be legal, they are harmful to the

individuals affected. These examples illustrate real challenges people face in the current housing dynamics and should help inform the design of inclusionary policy solutions.

Real estate assets change hands and are repurposed for a variety of uses that may include but are not limited to short-term-rental-related activities. These changes impact people who reside where the changes occur and in the surrounding or interconnected areas.

There is a constitutional right to property ownership and to acquire, use and dispose of property freely and prevents its “taking without just compensation.” It is important, however, to note that property ownership rights are not absolute, and that the government has extensive regulatory power. That power needs to be used wisely, however, because of the harm that it can cause by stifling initiative or strangling economic development.

Governmental regulation of property can include zoning requirements and the permitting processes for construction and access to utilities. Regulation of the pricing of long-term rental housing units such as is observed in rent control initiatives in major cities can be taken into consideration. There could also be restrictions on converting entire apartment buildings to STRs, especially when housing affordability is a serious issue. These options, as beneficial as they could prove to be, require careful study and design to identify causality (what’s really at the root of a problem) and devise creative solutions that avoid unnecessary economic harm.



*FPR participated in a public hearing before the Tourism Commission where House Bill No. 1557 was being discussed, which seeks to regulate the short-term rental activity in Puerto Rico. During the presentation FPR emphasized in the opportunities that STR's represent for locals to generate income, particularly in disadvantaged regions and communities.*



# 3. PROPOSED STRATEGIES TO INCREASE HOUSING SUPPLY AND AFFORDABILITY IN PUERTO RICO

Housing inventory in Puerto Rico has not increased during the last decade making Puerto Rico one of the few places in the U.S.<sup>39 lxxvii</sup> where there has been a housing supply reduction. When any asset class is limited in supply, and demand either stays constant or increases, its prices increase. For this reason, it is vital to see housing supply and housing development as a social justice issue.

To increase affordable housing supply in Puerto Rico there needs to be an understanding of who needs housing the most and where, what populations are most vulnerable to displacement and what tools need to be put in place to bring stability to those who are at risk of displacement or have been displaced. *There should be a multisectoral strategic housing plan to focus investment efforts and the resources to create housing for low to moderate income households. This plan can take into consideration the following strategies:*

## 3.1. ZONING LAWS, MIXED USE DEVELOPMENT AND INCREASED POPULATION DENSITY

Zoning laws govern how real estate property can or cannot be used. Zoning is a very important element since it dictates what can be built. This matters greatly because real estate investments create hard assets that shape communities at their core and physical structure that may not be easily removed or replaced, meaning their impact lasts for decades.

Research suggests that Euclidean zoning practices, also referred as exclusionary zoning, which enable the separation of land uses into geographic geometries, are behind the current housing shortage in the U.S.<sup>lxxviii</sup> The White House defines exclusionary zoning as “zoning laws that place restrictions on the types of homes that can be built in a particular neighborhood. Common examples include minimum lot size requirements, minimum

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<sup>39</sup> According to HUD it is estimated to increase 0.9-2% annually from 2020.

square footage requirements, prohibitions on multi-family homes, and limits on the height of buildings.”<sup>lxxxix</sup> These may benefit the home values of existing homeowners in these zones by setting high restrictions on what can be built. However, they can have the negative outcome of driving the segregation of communities by race and economic status<sup>lxxx</sup> and increasing urban sprawl, eliminating green spaces, and increasing dependence on automobiles, making commutes longer, and producing environmental pollution.

Inversely, inclusionary zoning exists to create diversity. Inclusionary zoning (IZ) policies are focused on accommodating low-income families in exclusive communities, by increasing the supply of affordable housing and promoting social inclusion and integration.<sup>lxxxi</sup> In recent urban studies,<sup>lxxxii</sup> IZ policies have had mayor impacts in reducing displacement. It has also increased health and educational benefits on populations that are included in this planning strategy. It can reduce the risk of displacement linked to market-rate development in gentrifying areas, by adding affordable housing stock, stabilizing legacy residents’ rents, and promoting mixed-income communities.

IZ can help residents live in more resource-rich, health-promoting environments, which may be especially important for already marginalized residents in the face of gentrification.<sup>40</sup>

In Puerto Rico, zoning is managed and governed centrally by the Puerto Rico Planning Board (PRPB). The PRPB has the power to approve or reject changes to the zoning maps in all of Puerto Rico, except for eight (8) autonomous municipalities. This means that any changes to zoning legislation in Puerto Rico will automatically apply to most areas of our territory. The PRPB assigns zoning districts based on analysis of the physical structures’ characteristics, social and economic activities, architectural attributes, and existing communities’ demographics. The idea behind zoning districts is to ensure that there are a set of rules on the kind of construction allowed, the density and the social and economic activities permitted. Those in residential areas, for example, might, understandably, want to maintain peace and tranquility and not be disturbed by other activities. However, when exclusionary-zoned residential areas with low density, single-family properties take up the available areas zoned for housing, it creates constraints on housing stock growth and causes shortages that put upwards pressure on housing prices. This reduces housing affordability, increases the cost of living, and constrains local economic development.

Changing zoning laws is difficult and often the biggest opposition comes from existing property-owners in the areas where the zoning change is needed. If the property owners are wealthy or well connected, they are often successful in blocking changes due to their access and influence. This movement is called “Not in my back yard” (NIMBY) and they block new housing development or otherwise reduce the exclusionary restrictions on

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<sup>40</sup> IZ has had their implementation shortcomings in the U.S. because local and state governments lack enforcement. Furthermore, some states like Texas and Oregon prohibit IZ. However, states like New York, particularly New York City (NYC), have local laws that mandate real estate developers to adhere to inclusionary housing practices via Mandatory Inclusionary Housing (MIH), a zoning tool, developed by the Department of City Planning and the Department of Housing Preservation and Development (NYC Council Mandatory Inclusionary Housing, 2022). Many states’ IZ policies are tailored to encourage the private sector to adopt this planning strategy. In most cases, developers who participate in these projects are given special zoning permissions to allocate more properties or housing units in their construction area. Likewise, another method of encouragement is special tax exceptions in construction projects. Regularly, developers must reserve 10% to 25% of their household units for IH.

their neighborhood. Its counterpart, the “Yes in my back yard” movement, envisions “an integrated society where every person has access to a safe, affordable home near jobs, services, and opportunity” and they advocate for inclusive housing policies and housing developments.

*Restrictions imposed by exclusionary housing create powerful incentives for developers to focus on large, luxurious, single-family housing instead of more affordable alternatives or that offer housing for more people like multifamily housing. However, we propose a different vision for zoning and housing development in Puerto Rico. By encouraging or incentivizing inclusionary zoning it can promote social diversity which can bring economic development to underserved areas and population. This creates externalities and benefits including the stabilization of the local tax base, new jobs, businesses, and services. It can be a key policy that protects vulnerable communities at risk of displacement and gentrification.*

*To successfully implement this, it needs to be based on strategies that have succeeded in other places. Japan, like Puerto Rico, is an island with limited land area for its population size, but, unlike us, they don't have a housing shortage. So, what can we learn from Japanese zoning laws?*

### **3.1.1. THE JAPANESE ZONING MODEL**

Japanese zoning is a good example of how government decisions can impact the livelihoods of people for decades. Contrary to both the U.S. mainland and Puerto Rico, every year since 1968 when the “New City Planning Law” was enacted,<sup>41</sup> Japan has been able to consistently build more houses than the increase in the number of households. While the overall population of Japan has been declining because of low birth rates, the population in Tokyo and the cluster of other major cities has continued to rise allowing the cities to become the engines of Japan’s economic growth. The increasing housing supply has kept property prices affordable and is one of the underlying factors of its economic success. Once again, denser areas allow for lower public infrastructure and government services costs, and more people can have access to needed services and jobs.

Japan has a zoning system that allows almost all its 12 different zoning categories to be developed for multiple uses including housing. Encouraging multiple use zoning has allowed housing to be built in many more areas, including industrial and commercial areas. In conclusion, housing can and should be built in virtually all zone types.

There are also certainly cultural differences - there is little opposition in Japan to new housing developments. Interestingly, community input is not required as the owner of the land determines what to do with it.<sup>lxxxiii</sup> But the Tokyo and contiguous cities’ high

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<sup>41</sup> See more at: <https://www.yesinmybackyard.org>

density, mixed use, urban planning model has provided a large supply of housing at a remarkably low and affordable cost. In fact, the absence of flexible, multi-use zoning versus the Euclidean zoning that is the norm, both in Puerto Rico and on the mainland, has led to sprawling suburbs and inefficient and costly land use. It is important to note that immediately after World War II, Japan sought to emulate the U.S. practice of Euclidean planning and suburbanization and quickly realized the adverse consequences of urban sprawl and by 1968 had created a new zoning law.<sup>lxxxiv</sup>

Notably, housing costs in Japan have only risen 20% over a decade where other major cities around the world have seen increases of that scale in as little as a year. In conclusion, housing supply is the most powerful factor in housing affordability. Puerto Rico must ensure that housing supply is unleashed.

In Puerto Rico, zoning rules need to be revamped to encourage the mixed use of land, especially in high density areas. The San Juan and metropolitan regions can adopt zoning models that maximize synergies between housing supply and the commercial activity that brings economic growth. The learnings from the Japan model are powerful and need to be embraced and adopted, while considering local circumstances. The goal must be an ample supply of high density, efficient, affordable housing adjacent to major sources of employment. This goal can be achieved by focusing on the following initiatives in the area of zoning and planning:

1. Replace exclusionary housing zoning with mixed-use zoning – more apartments, accessory dwelling units, multifamily structures.
  - a. Speed up and make predictable the outcome of the approval process of projects that meet new zoning laws by implementing Objective Design Standards (ODS). ODS are measurable, verifiable, and knowable to all development parties and allow jurisdictions to streamline the approval of development projects, including affordable housing projects and infill developments. Slow, bureaucratic processes slow down housing supply growth and increase construction costs, all leading to higher housing and rental costs.<sup>42</sup>
  - b. Adopt Form Based Codes (FBC) as an alternative to conventional zoning regulations. Current zoning practices focuses on the segregation of land uses and construction controls through abstract and uncoordinated parameters that do not allow multiple development to be built in integration with each other. FBC and objective design standards use objectivity, clearly drawn diagrams and visuals that foster predictable construction results by using physical forms as organizing principles.<sup>43</sup>
2. Prioritize and build affordable housing near employment and/or transit access.
  - a. Reduce parking requirements and other exclusionary restrictions for projects with walkable adjacency to jobs, food shopping and other services or to public transit and/or short distance sharing economy transportation (e.g. Uber).
  - b. Include in the design of housing development projects Wi-Fi-enabled common

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<sup>42</sup> City of Oakland, Planning and Building 2022: [www.oaklandca.gov/topics/objective-design-standards](http://www.oaklandca.gov/topics/objective-design-standards)

<sup>43</sup> Formed Based Codes Institute 2023: [www.formbasedcodes.org/definition/](http://www.formbasedcodes.org/definition/)

areas that provide virtual workspaces, green areas, childcare, among others that minimize the need for external transportation.

3. Develop a detailed understanding of, and careful alignment with, Federal housing policy by government and non-governmental sectors stakeholders could maximize the benefit of significant resources to fund affordable housing.
  - a. Leverage, adopt and scale Federal housing programs including Low Income Tax Credits, Housing Vouchers, and other incentive-based programs.
  - b. Take full advantage of new Biden administration economic support for inclusionary housing.<sup>44 lxxxv</sup>
  - c. Establish and expand affordable-housing trust funds that can flexibly source federal and private funding streams.
  - d. Maintain and establish emergency rental assistance programs to prevent renters from losing their housing.
  
4. Land Recycling
  - a. Inventory and allocate public land for affordable housing.
  - b. Support and expand community land trusts.

## 3.2. MULTIFAMILY HOUSING: CONDOS, COOPS, AND MODULAR HOMES

Inclusionary housing (IH) is a development policy intended to build affordable housing in upper – high income communities for lower and moderate-income families. One of the main characteristics of IH is the involvement of the private sector in its implementation. This housing policy mandates or encourages real estate developers, depending on the state or local laws, to address a portion of the developed properties for lower income families who can buy or rent them at below market prices.<sup>lxxxvi</sup> Therefore, IH does not only apply to those buying property but can also help people find affordable rents.<sup>lxxxvii</sup>

Multifamily housing is a type of inclusionary housing designed to house more than one family. This can include apartments, condos, duplexes, quadruplexes, and the rest.<sup>lxxxviii</sup> This type of housing has been growing in demand as the population's trends have changed. Aside from economic challenges that prevent homeownership, young adults are delaying marriage and children which are typically milestones that lead to home ownership. Similarly, for older generations, renting is more appealing than owning a house since it allows them to downsize yet still live comfortably. Immigration is also a driving factor for growing demand as immigrants are more likely to rent than to buy a house.<sup>lxxxix</sup> As demand continues to grow, multifamily housing is incredibly important for meeting housing needs. Apart from relieving the housing crisis, this type of accommodation can have a positive impact on its surroundings. There are three fundamental characteristics for multifamily housing that allow it to be beneficial: diversity, variety, and efficiency.<sup>xc</sup>

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<sup>44</sup> The Biden-Harris Administration proposed an infrastructure bill, to use ARP funds towards affordable housing, while making it easier for recipients to make long-term affordable housing loans, including those that take full advantage of the Low-Income Housing Tax Credit (LIHTC) incentive.

Multifamily housing increases the density on any given land. This allows housing in much-needed areas with high desirability such as metropolitan areas, areas with greater employment opportunities, and/or areas with a higher quality of life. Density allows for sociodemographic diversity as it gives people from different backgrounds an opportunity to move into high-opportunity spaces. Higher density can improve quality of life by reducing traffic levels and commute times.<sup>xcii</sup> Additionally, it allows for an expanding economy since housing constraints hinder economic growth. Secondly, multifamily housing can meet a variety of household needs. Due to different types of multifamily housing, these accommodations are available in different locations, price points and in different unit types. This allows them to satisfy a variety of lifestyles and needs. The variety of housing also gives people the power of choice, giving them more control and security over their surroundings. Finally, this type of housing is highly efficient. It can fit numerous accommodations in the same amount of land a single house unit would take. It is a more ecofriendly option than traditional single housing units. Since it takes less land, it also helps preserve open spaces. According to the National Multifamily Housing Council, properly planned denser housing uses 20-45% less land than unplanned sprawling development. Since more open spaces are available it allows for more vibrant public spaces and amenities, improving public, physical, and mental health.<sup>xciii</sup>

There are misconceptions and worries concerning higher density, multifamily housing. Established residents might worry that building more of this type of housing threatens their neighborhood by, for example, raising property value/rent in the adjacencies.<sup>xciii</sup> However, research has tested the demand and supply effects to understand what impacts housing and rent prices. The demand effect is the idea that when a new building is built there is an increase in demand to live in the area that might eventually force existing residents out. The supply effect is when there is an increase in housing supply it makes housing more affordable since inventory increases and there are more places to live in an area. The research concludes that the supply effect overwhelms the demand effect even when the new housing options are sold at the market rate since having more housing options means rents decrease or stay the same and there is less risk of displacements. The research calculates that for every 10% increase in housing stock, rents decrease by 1%; and for every 10% increase in condo stock, condo sales prices decrease by 0.9%.<sup>xciv</sup>

### **3.3. LAND RECYCLING**

Land Recycling is the act of repurposing abandoned, vacant, or underused properties for redevelopment.<sup>xcv</sup> It can be a powerful tool to generate more affordable housing in a timely and efficient way. A key technique is infill development, that reutilizes existing structures, rather than building new ones. It seeks to maximize their density thus creating a more affordable revitalization of these properties. A great example of this is the Emerald Vista housing project. This multifamily housing complex utilized obsolete public housing and revitalized it, instead of building on virgin land. Land recycling promotes smart growth and responsible, sustainable patterns of development. Studies show that for every acre of brownfield redeveloped, 4.5 acres of undeveloped land is conserved with further studies showing that denser cities reduce carbon emissions per capita and are better for the environment overall.<sup>xcvi</sup>

Puerto Rico continues to be more environmentally conscious, another example of this is in the design made by “Díaz Paunetto Arquitectos”. This architectural firm won an Award for Unbuilt Design, titled Bayamón Infill Housing.<sup>45 xcvi</sup> They designed it after Hurricane Maria’s impact and its design not only preserves the structures, but is built with recyclable material such as shipping pallets that can be used to build doors, sunscreens, and benches. This design helps create more multifamily housing units that are safe for families in high-risk areas as well as make good use of disaster funding.

## 3.4. THE MULTIDIMENSIONAL VALUE OF HOUSING

Housing is a basic need for all humans and housing affordability is a critical priority, but housing is also the largest part of a family and individual wealth in the U.S. and Puerto Rico. The financial value of their residential property is critical to many people’s living standards or their retirement. Obviously, people want to be able to sell or rent the property for the highest possible return. On the other hand, many individuals at the lowest income levels may be struggling to keep a roof over their heads. Viewed at multiple levels of society, housing can be viewed as a human right, an investment, or an expense. All these views have merit.

To mitigate displacements, it is important to identify communities at risk and develop policies and methodologies that consider equitable development principles when planning economic development and housing strategies. Having a consolidated understanding of housing needs and identifying the main drivers of housing affordability can help Puerto Rico plan for its future. If the private, public, and non-profit sectors can work together to implement a housing strategy that works for everyone, our economy will continue to grow while reducing social inequalities.

Increasing available housing stock will allow more people to rent or buy a home. However, we must never lose sight of that all-important denominator in the housing affordability ratio - household income. People, specifically those in their productive years, need well-paying jobs so they can afford to live in their communities. We need to bring the kind of economic activity into our towns and communities that create equitable economic opportunities for residents so they can stay in their towns and afford to live in their communities.

Every other measure to lower housing costs may be necessary, particularly for those who are unable to work, but they cannot replace well-paying jobs. If we fail to create opportunity on our island and within our communities, we will lose our young, productive people to emigration, and there will be nobody left over to take care of those who are unable to take care of themselves.

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<sup>45</sup> They won the AIA Florida/ Caribbean Award in 2018.

## 3.5. PROPERTY RIGHTS AND TITLE: CASE STUDIES AND POSSIBLE MODELS AND SOLUTIONS

For generations, lack of title has adversely affected the lives of many hundreds of thousands of people. While there are several laws on the books that address property title issues either directly, by granting title, or collaterally, by allowing construction permits in the absence of titles, including on land that is not owned. These have been piecemeal and focused on mitigating some specific problem. For example, three decades after Hurricane Hugo, Act 202<sup>46</sup> finally granted property titles to people whose house had been affected by the storm and who had been legally given permanent residence but had been unable to properly improve or repair their homes or pass on their property due to lack of title.

In December 2022, five years after Hurricanes Irma and Maria, and almost 3 years after the earthquakes, Law 118-2022<sup>47</sup> was enacted to more broadly address the issue of property titles. The property rights granted will allow these property title recipients to access federal post-disaster assistance to repair and rebuild their properties, and through ownership create a source of wealth they can pass on to their heirs and provide protection against expropriation. Having property titles fundamentally changes people's lives,<sup>48</sup> it allows them to repair and improve their homes to meet their needs, to capture the value not as a sunken and irretrievable cost but as a wealth-creating investment, to finance those improvements with housing loans, to be able to sell or rent their homes to others when their needs and circumstances change, and to have access to renewable energy resources (e.g., solar panels), among many other benefits. It is critical that these benefits be fully understood in Puerto Rico so that alignment can be achieved.

### 3.5.1. CAÑO DE MARTIN PEÑA TRUST AND OTHER LAND TRUST EXAMPLES

For generations, lack of title has adversely affected the lives of many hundreds of thousands of people, and a local case illustrates how the lack of property title threatened an entire community. The Caño Martín Peña, an estuarine waterway that runs through the center of the city of San Juan, was populated by impoverished people fleeing to the city from the countryside in the aftermath of the devastating San Ciprian hurricane in 1932. Over the years, these precarious settlements developed into a series of tightknit communities, but, due to the informal nature of their homes, residents lacked property title. They couldn't make alterations to their houses for protection against natural disasters, and for too long, struggled to access basic utilities. The once pristine waterway became

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<sup>46</sup> Ley Núm. 202 de 5 de agosto de 2018 "Ley para Conceder el Título de Propiedad a las Personas Beneficiarias del Programa de Vivienda Permanente para los Damnificados del Huracán Hugo"

<sup>47</sup> "Ley para Acelerar los Procesos para Otorgar Títulos de Propiedad bajo el Programa de Autorización de Títulos adscrito al Departamento de la Vivienda"

<sup>48</sup> Peru and Argentina had similar issues with property titles. The people were at risk of being displaced due to them lacking the proper documents. Through legislation and community effort, both countries were able to greatly improve the number of titled lands. Doing so allowed residents to stay in their homes and allowed them to receive aid.



perhaps the most highly polluted body of water on the island. In the meantime, in the absence of individual property rights, the government wanted to turn the area into an 'Opportunity Zone' to bring outside investors.

To protect their homes and their land, a Trust was created. Thanks to this Trust, with the creation of a new corporation, ENLACE, and a law, Act (Law 489-2004), the government was impeded from unilaterally selling the land and removing its residents from the eight communities (G-8) that define Caño Martín Peña. The Caño Trust is the first community land trust that has been used to relocate families in a participatory fashion and thus be able to build public infrastructure, in compliance with the parameters of the Federal Uniform Relocation Law. The success of the "Fideicomiso de la Tierra del Caño Martín Peña Trust" (Caño Trust) can serve as a beacon and model to be replicated, emulated, or adapted by more communities in Puerto Rico.

It is however important to clarify what a Land Trust is. Simply put, it is a binding agreement between a property owner and a trustee that authorizes the trustee to hold the property on behalf of the community. In the case of the Caño Trust, its specific objectives were to contribute, through collective land tenure, to the solution to the problem of lack of valid land titles suffered by many of the district's residents; to equitably address the physical or economic displacement of low-income residents resulting from urban reconstruction projects. If the necessary infrastructural work can be completed, the quality of life will improve dramatically, the land value will increase and the benefits will accrue more to the residents, meaning that they can stay in the area enjoying the urban improvement developments in the Caño Trust. Even visitors may flow to these communities to participate in the experiences afforded by their unique cultural heritage.

*Land Trusts are an important vehicle for leveraging community rights, particularly for creating individual and family property rights, preventing displacement, developing, and financing community infrastructure on public lands, and preventing outside development that goes against the interests of communities whether under the guise of Opportunity Zones or even Flood Zones. Land Trust also have the capacity for necessary economic development to take place within a geographically defined district while maintaining control of land and protecting the community against displacement.*

*Another great tool that can help with both economic development and a community's infrastructure are Land Banks, not to be mistaken with a Land Trust. According to HUD Land banks are public or community-owned entities created for a single purpose: to acquire, manage, maintain, and repurpose vacant, abandoned, and foreclosed properties – the worst abandoned houses, forgotten buildings, and empty lots. The goal of a land bank is to meet a community's development goals and vision by bringing back to productive use properties that are neglected or abandoned.*

*Land Banks are an excellent tool to swiftly identify and take control of vacant, derelict, obsolete or abandoned properties. They allow communities to identify the best ways of revitalizing or reutilizing them with full community participation and considering local community goals and priorities, whether they be for the creation of affordable housing*

*or building a new economic future for the community. The first Community Land Bank established in Puerto Rico in the municipality of Toa Baja, an NGO that identifies those derelict properties and determines how best to rehabilitate them, whether it be affordable housing, the creation of green spaces, or other local needs. The Community Land Bank of Toa Baja is a great example to follow seeing as the implementation of more Community Land Banks can help mitigate the effects of gentrification, prevent the displacement of families and provide affordable housing to low- and middle-income families.*

*Municipalities and their constituents can greatly benefit from these and other powerful tools. The key to success is an effective collaboration between residents, community and business leaders and organizations, financial lenders and investors, and local governments and the development of a common understanding of goals and a shared vision of a path forward to be able to make these transformational projects happen at a scale that fully addresses the supply side of housing affordability.*

### **3.6. FEDERAL LOW-INCOME HOUSING TAX CREDITS (LIHTCS)**

The LIHTC was created in 1986.<sup>xcviii</sup> The LIHTC program operates through local state housing finance agency (HFA) using Federal Reserve tax credits as incentives for affordable housing. Between 1986 and 2006 more than 1/3 of U.S. new housing, or more than 100,000 units per year involved LIHTCs. It requires developers guarantee rental pricing for 10 year.<sup>49 xcix</sup> After the 10-year compliance period, LIHTCs can subsidize the acquisition, construction, and rehabilitation of affordable housing for low- to moderate-income renters.

LIHTCs have been essential for the construction of thousands of housing units in Puerto Rico, before and even after Hurricanes Irma and María, which heavily impacted the housing market. Supporting the construction and revitalization of these spaces would greatly benefit low-income families throughout Puerto Rico. Important aspects of the LIHTC incentives could be reserved for NGOs (CHDOs) or community lead programs (CFDs) regarding affordable housing, so that future housing development can maintain its affordability. In the next section, we present CHDOs as a viable option for housing affordability through LIHTC incentives. CHDOs can guarantee long-term affordability due to their nonprofit status and avoid real estate market value, therefore considering them as prime candidates for LIHTC credits.

The following image presents a map of Puerto Rico that includes several projects under the LIHTC provided by the CDBG-DR portal. According to information provided by the portal, all the locations shown in the image are at a reasonable distance so that people can have essential services (food, medicine, public transportation, and recreational areas).

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<sup>49</sup> In New York, LIHTC projects must guarantee a minimum of 20 percent of the units must be occupied by tenants with incomes less than 50 percent of Area Median Income (AMI), or 40 percent of units must be occupied by tenants with incomes less than 60 percent of AMI.

Map of Puerto Rico with LIHTC projects with CDBG-DR grants.



Table 12: LIHTC Projects on Puerto Rico, CDBG-DR.

Project Name	Location	Project Type	Total Unit Number	Beneficiary Population	Estimated Development Cost	Estimated CDBG-DR Grant Amount
José Gautier Benítez (JGB) Family	Caguas	Multi-family Apartments	238	Low-Income Family	\$82,341,000	\$31,715,900
De Diego Village	San Juan	Multifamily Apartments	94	One-Parent Families	\$33,811,005	\$18,127,253
JGB Elderly	Caguas	Nursing Home	200	Elderly	\$53,077,000	\$14,147,390
Sabana Village Apartments	San Juan	Multifamily Apartments	160	Low-Income Family, HIV people and homeless people	\$26,109,567	\$9,995,987
Hogar Manuel Mediavilla Negrón II	Humacao	Nursing Home	90	Elder and Handicapped People	\$25,622,726	\$8,576,778
San Blas Apartments	Coamo	Nursing Home	69	Elder and Handicapped People	\$21,128,774	\$7,969,563
<b>Total</b>			<b>851</b>		<b>\$242,090,072</b>	<b>\$90,864,871</b>

Information is key to understanding the housing supply characteristics and for planning efforts. Government agencies in Puerto Rico including the Housing Department, the Land Authority, Agriculture Department, need to focus their efforts on updating their property inventory to reflect all the missing and necessary details required for proper identification and classification of properties. For example, properties lacking proper title can be classified as vacant in one agency even though they are inhabited while in another agency they may have a different classification.

*The Puerto Rico Housing Department should take a lead role within the government in gathering, consolidating, and making this information readily available. Identification and differentiation of abandoned and derelict properties, combined with an aggressive and effective legal strategy to repurpose them, accompanied by financial resources and appropriate management structures, could be transformational in accelerating their rehabilitation.*

### **3.6.1. CHDOs**

In measuring the advancement of growth and development for housing affordability, we need to examine the options already available to us, one of them being CHDOs. According to HUD Exchange and Community Housing Development Organization (CHDO) is a certified private non-profit, community-based service organization that has got or intends to get staff with the capacity to develop affordable housing for the community it serves. DVPR (Departamento de la Vivienda) must certify the housing development in Puerto Rico as a Community Housing Development Organization and show experience in developing affordable housing in order to gain the certification and access the set aside of federal HOME program funds.<sup>c</sup> In the case of Puerto Rico, eight CHDOs have been certified, with three of those focusing solely on affordable housing:

- Corporación para el Desarrollo Económico de Proyectos Comerciales y de Vivienda de Ponce (CODEPCOVI)
- Corporación para Desarrollo de Viviendas de Toa Baja, C.D
- Comité Comunitario Pro-Vivienda, Inc. (COCOPROVI).

Local CHDOs have made a difference and can still bring a lot to the table regarding affordable housing. They can develop a CHDO if it meets the requirements, but here are some problems they encounter when trying to develop a CHDO:

- Limitations on information flow, autonomy for local action, and competition for access to funding sources when collaborating with elected officials.
- Lack of capacity to prepare complex, multi-year projects for CDBG-DR because of the bureaucratic complexity of federal funding applications.
- Limited project management and compliance expertise.
- Delays increased overhead costs, and overextension of project development phases because of the inefficiency of government agencies and offices.
- Lack of resources to include communities and other potential stakeholders in strategic planning (a requirement for federal applications.)
- Lack of data and applied research to support grant proposal writing and project monitoring and evaluation.
- Lack of pre-development finance for planning projects, land/property acquisition, site preparation, and architectural and engineering studies.

*The key recommendation is to ensure certified CHDOs in Puerto Rico with proven capacity and experience in developing affordable housing will always have a preference in the funding evaluation process, from federal waives to outside sources. On the federal aspect, they can use the HOME program for acquiring land, construction, and revitalization of housing, even going as far as allowing the use of these funds to gain abandoned or derelict*

properties to rehabilitate them into affordable housing. Collaboration by the municipalities is imperative since they can determine the areas where these types of organizations need to be developed. Further research is needed to understand how CHDOs can augment their capacities, thus enabling them to obtain funds for the development of more projects.

### 3.7. SHORT-TERM RENTALS: INCREASING DATA GRANULARITY AND TRANSPARENCY

The Puerto Rico Tourism Company (PRTC) is the government agency that regulates, manages, and taxes tourism activity in the island. PRTC publishes data about hotel performance but reveals little to no information about STRs. With the data provided by Discover Puerto Rico and AirDNA; we can see how the supply of rentals has continued to grow compared to hotels. In 2015, the proportion of overnight stays for STRs was only 5% of the total. By 2021 this STR share rose to 37%.<sup>50</sup> If we consider the average number of guests overnighing in a STR versus a hotel room, the visitor lodging nights generated by STRs is comparable to hotel stays.

***Some STR owners are not paying their fair share of taxes and we (the municipal government) don't have the information to ensure they comply with local regulations and pay their fair share of property taxes. Having access to an inventory of STRs will be of great assistance to oversee this activity.***

**—Edilberto Romero,  
Mayor of Culebra**

Given the current size of the STR market it is time for the government to update published statistics so we can better understand the lodging market dynamics in Puerto Rico. We learned from our stakeholder engagement efforts that many lack visibility about the STR market. This evidences that market information is key for any regulatory, planning and investment efforts.

*The following is a list of data sets we recommend the PRTC to gather, aggregate and publish:*

- 1. Short-term rental supply - The number of properties operating in Puerto Rico by municipality and tourist region, on Qualified and Unqualified platforms of Short-Term Supplemental Accommodations.*
- 2. Capacity - The total number of accommodation units available by municipality, including the number of rooms and number of capacity or beds of Short-Term Supplemental Accommodations.*

<sup>50</sup> Discover Puerto Rico Industry portal 2022. Data sources include AirDNA and the Puerto Rico Tourism Company

3. *Visitor length of stay - The average monthly length of stay by municipality and tourist region of Short-Term Supplemental Accommodations.*
4. *Average daily rate (ADR) - The average daily rate by municipality and tourist region of Short-Term Supplemental Accommodations.*
5. *Visitor profile - The visitor profile of people staying in a STR by municipality and tourist region in the Supplemental Short-Term Accommodations, including but not limited to the place of origin/origin of the visitors and available demographics (Ex. Age, race and sex).*

*The government, using data it obtains from current authorized STR platforms, can update its statistical reporting to show both overall, regional, and municipal level STR activity distribution and revenues. Having the government publish this information can help community planning efforts and for local governments to monitor and control this activity in their region. Local governments for example can match their property tax payments with PRTC's database to ensure that STR owners are paying their proper share of taxes.*

### **3.8. REGULATIONS FOR STRs –ENSURING THE WELL-BEING OF COMMUNITY RESIDENTS.**

Tourism continued to grow in municipalities that historically do not receive high amounts of visitors, and STRs have helped satisfy the growing demand for lodging in Puerto Rico. However, many community residents are concerned since no well-known, established legal framework regulates this sector directly. Currently, two laws indirectly touch STRs, and their scope is limited in determining what regulations should apply. The first Law is Act 272 -2003 (best known as the Room Occupancy Tax Law), and the second is Act 129 - 2020 (also known as the Condos Law of Puerto Rico).

Act 272 initial purpose is to transfer the power and role of collecting room tax from the Treasury department of P.R. to the PRTC. Also, it created a new formula so guests would pay a percentage of the price established depending on the lodging type they choose. This law also requests the hostel owners to obtain a Contributive Identification Number from the CTPR, to make the tax collection process easier (Law number 272, article 26).

The PRTC has published a set of regulations in the “*Reglamento de Hospederías*” (*regulation*) with requirements, frameworks, and responsibilities that lodging owners and operators should follow. Greater awareness of the responsibilities and remedies citizens must protect themselves against misuses or abuses of STRs is needed to ensure that this economic opportunity continues to grow without struggles. For example, PRTC defined in the regulation that no individual or business could own more than six (6) STR units at any time.<sup>ciii</sup> Any amount over that quantity will require a license change, treating owners of multiple properties like hotels in terms of regulations and requirements. We recognize that monitoring and enforcing this rule is complex due to the many legal ways a person can structure a business and legal entities. Regulations should be implemented to prevent excessive amounts of STRs properties by opportunistic investors that may only seek to increase their wealth without reinvesting in the communities they operate.

Public policy and a regulatory legal framework that standardizes the requirements needed to operate STRs and facilitates its enforcement in a way that does not conflict with the ease of doing business are imperative for the growth of the Visitor Economy. PRTC regulations currently define STR owner responsibilities to address waste management costs, transit issues, and noise complaints STR's may create but these rules may not be easily enforced. This illustrates that sometimes it is not necessarily that we create a new set of rules, but that information and resources are needed for their enforcement. Additionally, platforms like Airbnb have updated their policies to ban large gatherings and parties. Property owners that do not comply with these policies may get their listing removed from Airbnb. These actions allow the platforms to self-regulate this activity and facilitate or alleviate local governments overseeing responsibilities.

Studies show that legislation is required to mitigate rising housing prices in places where STRs accumulate.<sup>cf</sup> Many communities in Puerto Rico need additional income due to the manufacturing sector drastic reduction. Therefore, the goal of any regulation should be to allow the development of STRs without negatively impacting our communities, discouraging the replacement of long-term rental housing for STRs. In parallel, policies and investments that increase the housing supply should be implemented to address the root cause of housing affordability.

It is worth mentioning that new legislation is being proposed as we are working on this study. House Bill 1557 seeks to create a law that regulates STRs. It has provisions and recommended measures for regulating STR activity, such as developing an electronic registration system where owners and managers must register their properties. Other measures standardize legal framework requirements and offer protection to those who stay there. It also presents recommendations that may limit the participation of the current owners.

FPR presented recommendations for changes to this bill that we hope will be addressed before its approval. To address the impact STRs have on affordable housing, we must evaluate what measures should be taken into consideration to discourage unscrupulous investors from displacing existing residents. That's why a holistic strategy that takes into consideration some or all the elements we've described so far is needed to reduce housing prices and increase the options available for residents to buy or rent.

*Imagine if there were no STRs or it if were regulated to the point of prohibition in residential areas. This will result in an income reduction for thousands of residents who supplement their wages with the economic activity that lodging generates for them and the additional income local and international visitors produce during their stay. Household income is the main factor that determines what type of housing families can afford and it is one of the most critical challenges to address on our archipelago. Without income to pay for a decent residence, whether through direct purchase, mortgage or rent, it is impossible to achieve access to the housing that we all aspire to. Further research is needed to understand and propose strategic solutions to avoid the financialization of homeownership in Puerto Rico that go beyond STRs.*

### 3.9. RENT CONTROL AND TENANT PROTECTION

Rental prices have continued to increase in Puerto Rico, especially during the pandemic's housing boom. Various factors such as inflation, cost of living increases, and stagnant housing inventory have motivated owners of houses, apartments, and condominium units to increase their tenants' rent. In Puerto Rico, the law is pro-landlord regarding pricing, meaning tenants have no protections beyond their contractual agreement with their landlord. When a landlord decides to increase their rent price, existing tenants have little choice but to pay more or to find another place to live. It is not easy to swiftly evict a renter for non-payment, but neither is it legally tenable for a renter to pay less than the increased rent.

**House Bill 1242**, March 2, 2022, or the "Puerto Rico Income Stabilization Act," proposes to mitigate future displacements by controlling excessive and unfair rent increases. It seeks to protect the rights of renters, especially in areas where gentrification can push rents dramatically higher. The project will be presented with **resolution 643** for the house to study gentrification and its long-term effects and **resolution 658** to better understand the benefits of STRs.

Project 1242 defines limitations on the increase in the cost of rent allowed by the State, which include the following:

- The rent will not change during the first year of the lease. After the first year, it will be inflation indexed.<sup>57</sup>
- Landlords must notify of any change 90 days in advance.
- To evict a tenant, landlords must show "just cause".
- To terminate a rental agreement, landlords must produce evidence of a breach of contract and show "just cause."
- Just cause is defined in the statute as non-payment, major nuisance, repairs that require temporary relocation, exiting from the property market for at least 5 years, expiration of the contract, and the property owner's personal use."
- It establishes the tenant's continuing right to rent the unit after the period during which it is being remodeled or under construction.
- It also prohibits the landlord or owner from increasing the rental cost to the next tenant.

Rent control provides some protection for tenants. Studies leveraging migration data have found that, in the long term, rent controls prevent displacements in 10-20% of cases compared to properties without rent control protection. Rent-controlled owners may choose to sell to owner-occupants or repurpose the structures ultimately reducing rental housing supply by 15%.<sup>cii</sup> In other words, rent control policies may reduce displacements in the short run but can cause rental housing supply to decline in turn causing upward pressure on housing costs. It is also true that rents that are kept too low prevent property owners from investing and updating depreciating assets. For this reason, rent control

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<sup>57</sup> Calculated by that increase in inflation compared to the average for the previous year, according to the most recent data from the Official Consumer Price Index of Puerto Rico.



should be implemented alongside the other recommendations while the housing inventory increases. Once housing is more readily available, rent control should be removed to avoid its drawbacks.

Housing is an essential need and improving housing security for thousands of renters improves a community's overall mental health and financial viability. It is important to note that the protections provided in the proposed rent-control legislation are broader than rent price controls addressing other behaviors and practices by rental operators that affect not only rental prices but create the risk of unjust displacement.

*The impact of the recent sudden rise in housing costs could be mitigated by rent control and the additional protections could reduce displacements, but rent control is not a panacea and cannot be a long-term solution. It needs planning and policy and investment that can help increase the available housing supply that addresses the need of local, lower-to-medium-income households.*



Source: <https://www.rooseveltroads.pr.gov>

## **4. MOVING FORWARD: CEIBA, AN OPPORTUNITY FOR EQUITABLE DEVELOPMENT**

Ceiba is a municipality with immense economic development opportunities. It has natural resources that extend from beaches to tropical forests and physical infrastructure such as the Roosevelt Roads Naval Base that connects people with the islands of Culebra and Vieques. The municipality can plan for its future, ensuring that economic development is equitable and includes affordable housing for its population. Many of the recommendations included in this study can be taken into consideration in local development plans.

### **4.1. HISTORICAL CONTEXT**

The municipality of Ceiba is a town with little economic activity but with enormous potential.

**Table 13: Information on Ceiba. Source : Census Bureau 2022**

<b>CEIBA</b>	
<b>Population<sup>ciii</sup></b>	<b>11,463</b>
<b>Median Income<sup>civ</sup></b>	<b>\$20,748</b>
<b>Median Age<sup>cv</sup></b>	<b>45</b>
<b>25+ with high school degree or higher<sup>cvi</sup></b>	<b>75.2%</b>
<b>Employment Rate<sup>cvi</sup></b>	<b>45.6%</b>
<b>Population % Under Poverty Level<sup>cvi</sup></b>	<b>41%</b>

Almost 20% of the territory of Ceiba was occupied by the former Roosevelt Roads Naval Base which was built during World War II. In 1941, due to the emergency generated by the U.S. entry into the War, the Federal Department of Defense expropriated a third of Ceiba’s territory to take advantage of its strategically located deep-water port. The presence of Roosevelt Roads has had profound social and economic outcomes in the history of its people.

The expropriation of the land in Ceiba and the adjacent island of Vieques, at below market prices, displaced hundreds of families, who lost their livelihoods and were relocated to areas where they were unable to support themselves. This created a crisis that forced the central government to acquire land in other areas of Puerto Rico to relocate so-called “landless” residents of Ceiba, and the adjacent island municipality of Vieques, after they were displaced. A study showed that the Navy had appraised the properties expropriated in Ceiba and Vieques at prices significantly lower than the actual value of the land. All of this left a sense of grievance among remaining residents that persisted for generations and ultimately contributed to the closure of the base in 2004.

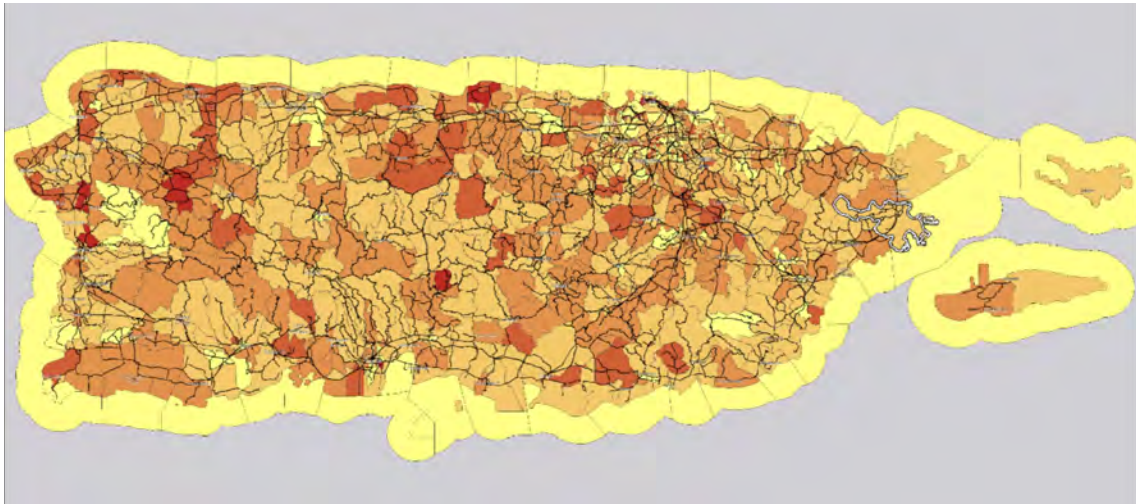
Grievance aside, when the naval base ceased operations, Ceiba was deprived of the main source of employment in the area (about 6,000 jobs), resulting a decrease in the number of residents and visitors, and a significant decline in overall economic activity. The economic activity lost was approximately \$300 million annually (equates to \$500 million in 2022 dollars).<sup>cix</sup>

Since the departure of the U.S. Navy in 2004 there is very little economic opportunity in Ceiba. Only 45% of the population are employed. Some are under-employed; others participate in the informal economy; others have dropped out of the labor force entirely. Many have emigrated whether to San Juan or entirely off the island. Those who chose to remain may face long commutes to where jobs are available, or are employed in low-income jobs, municipal government jobs, or work in small businesses stunted by a shrinking economy.

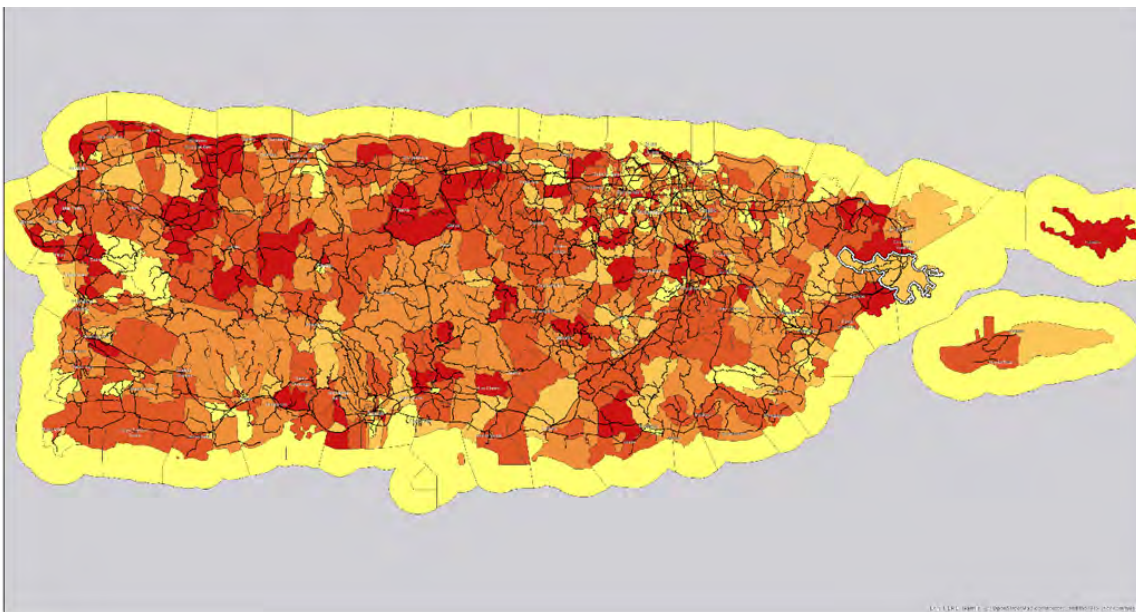
The remaining population is older and less productive, and close to two thirds of the population are dependent on the government for retirement or disability payments, food stamps or other welfare benefits. Half (50%) of resident population's mortgage or rental payments surpass 30% of household gross income in house costs.<sup>cx</sup> This is not because local housing costs are "high", even relative to Puerto Rico's averages, but because median household income is around \$20,000 vs. the U.S. median of almost \$70,000.<sup>cx</sup>

*Map 8 and Map 9: Neighborhood Trend Analysis*

Updated Neighborhood Trend Analysis  
2011-2021



Neighborhood Trend Analysis  
2011-2021



When observing Ceiba (outlined in white) on both neighborhood trend analyses (NTA), it is noted that it has remained relatively unchanged. Having a low score means its household incomes, home values, gross rents, education rates, and/or racial demographics have remained consistent in the last decade. Additionally, STRs represent a low proportion of properties in the area. Under the NTA, Ceiba's residents have a low risk of displacement. Therefore, a municipality like Ceiba is currently a great place to implement housing developments that safeguard equitable housing access and economic development. If successful, communities in Ceiba can benefit equally from change, and any successful strategies can be replicated and implemented in other regions.

## **4.2. THE FUTURE ECONOMIC VISION FOR CEIBA**

In 2013, the U.S. transferred most of the land to the Government of Puerto Rico, and the Roosevelt Roads Local Redevelopment Authority (LRA) was created to design a Reuse Plan for the territory and its development. Almost two decades after the base closure, in 2021, the Federal government invested \$12.5 million towards the development of a Marine Business, Research & Innovation Center. The Center aims to stimulate near \$81 million of private investment in the blue economy and is intended to foster scientific and technological advances enable Ceiba to provide technical assistance in Blue Economy to foster the creation of ocean-dependent agricultural and fishing industries in Puerto Rico to develop new commercial products and helping to diversify its local economy.

The long-delayed redevelopment of Roosevelt Roads could radically alter Ceiba's social and economic landscape. Significant investments in infrastructure and tourism-related projects could bring both social and economic opportunities to the depressed economy of Ceiba.

The land area of Roosevelt Roads can become a critical anchor asset for the Eastern region given the diversity of its resources assets: protected natural areas, virgin beaches, the airport with an 11,000' concrete runway at the José Aponte de la Torre Airport, a hospital, a deep-water port that once accommodated the largest naval vessels in the world, the Ferry terminal serving the municipalities of Vieques and Culebra, the Eastern Ecotourism Center, golf courses, historical forts and still salvageable residential areas, among others.

Ceiba has the potential to become the hub of a significant tourism destination for eastern Puerto Rico over the next decade. It represents a novel opportunity to incorporate equitable development principles and sustainable strategies from the early stages of development to ensure economic opportunities in the visitor economy grow together with residents' well-being. During 2020-21, Foundation for Puerto Rico led a participatory planning process with community stakeholders in the Ceiba and Naguabo municipalities to develop a regional destination plan. The plan includes a set of comprehensive and strategic investment and policy priorities to improve the community assets that make this region unique and attractive to visitors. The approach is comprehensive because growing

travel activity sustainably is a complex process requiring multiple projects and initiatives to achieve equitable community development results.

Development plans should consider housing affordability so more people can live and work in the area. Information, data, and community participation in planning processes are vital to reaching a consensus and a shared vision among key stakeholders. Despite the decreasing population in Ceiba in the last decade, the municipality should consider the importance of developing affordable housing units, especially in the urban center. Housing availability will promote the repopulation of the area and increase the community's income which is the intended result of their current tourism investment efforts.

However, this opportunity for economic transformation has yet to be realized because few of the large-scale plans for Ceiba are moving forward, so there is time to do this right. We see Ceiba as a perfect proving ground for how economic development can help resolve poverty and affordable housing issues instead of conflicting with each other.



# 5. CONCLUSIONS

Housing is an essential part of people's lives. It is where people feel secure, have access to their most basic needs and possessions, and often share lives with the people they love. Housing not only provides physical shelter but also satisfies deep-rooted psychological needs. It is fundamental for people to thrive. The physical and psychological influence of housing shapes societies and builds communities. It affects overall economic development and social dynamics, and its impact can be felt for generations.

This study sought to understand the underlying causes of the growing challenge of housing affordability in Puerto Rico and to identify solutions with the highest impact. We identified three underlying problems – first, a sudden reduction in the supply of habitable housing stock after the devastation of multiple natural disasters - second, a long economic decline following the elimination of a federal manufacturing incentive that caused massive loss of well-paying jobs in the areas of the island that had been dependent on that industry and - third a decades-long suburban and car-centric planning that constraints land use.

These problems are linked because most of the remaining well-paying jobs and new economic growth are occurring in the San Juan metropolitan area, where there is the greatest housing scarcity. In contrast, in the other, generally more rural areas, there may be more housing stock but little economic activity or jobs.

Tourism is a critical source of sustainable economic growth; local tourism is a powerful community economic multiplier; short-term rentals accommodate a significant proportion of Puerto Rico's visitors and are the only source of visitor lodging in many regions. In certain areas, gentrification from weekend homes and short-term rentals for tourism visitors has begun to add to upward pressure on housing costs. Any measures to curtail short-term rentals should be localized and limited and focused on ensuring that short-term rentals continue to be a source of income for individual local owners participating in the sharing economy and of jobs for residents rather than becoming a vehicle for the financialization of housing.

Housing is a highly complex topic because we are all stakeholders when it comes to housing. It should never be examined from one perspective, problem, or solution. Many jurisdictions worldwide have successfully implemented solutions to affordable housing challenges from which we can learn. Some local community-level models need to be expanded or emulated. The time to devise solutions that apply to our society's context is now.

There is much evidence that the supply effect has the greatest impact on reducing housing prices, so strategies to increase housing stock are critical. A high priority must be given to growing the supply of affordable housing, focusing on areas where it is most needed. Archaic, exclusionary zoning must be modified, and sprawling suburbs of single-family houses must give way to higher-density, lower-cost housing close to where jobs are happening.

We must identify, catalog, and prioritize rehabilitating deteriorated structures and “greyfield lands” and repurpose them as modern, efficient, affordable housing. The government, the private sector, communities, and non-profit organizations all have a role to play. Federal housing programs, including Low-Income Housing Tax Credits, must be optimally used. Partnerships between local government, land trusts, and land banks must be enabled and expanded. Property titles and rights must be granted to tens of thousands of people promptly to improve their homes.

Solutions and strategies should be applied at all levels, so future generations have equitable access to housing and an opportunity to prosper in Puerto Rico. Ideas to consider when planning for equitable development should include:

1. Increasing communities’ income is crucial for housing affordability. Diverse economic development strategies, including the visitor economy, should continue to be supported. STRs represent an income-generating opportunity for many, generating employment and increasing people’s income.
2. Zoning legislation that promotes mixed use and densification in already impacted areas. Multifamily developments should be encouraged in contrast to single family housing.
3. Inclusionary zoning policies and flexible, efficient, innovative housing designs should be implemented that foster diversity and increase affordability for low- and medium-income households.
4. Rent controls can protect existing tenants until housing supply grows at a time when rent prices have increased drastically.
5. Supporting non-profit organizations like CHDOs that develop and create affordable housing opportunities.
6. Improving community technical capacity to replicate successful housing community initiatives such as land trusts and land banks.

If strategies like those mentioned above are applied, they can lead to fundamental urban transformation of our cities and towns. They can operate more efficiently, leaving more budget for essential services like healthcare and education. High-opportunity spaces (e.g., metropolitan areas) can thus more easily meet the high demand for housing, and society can be better integrated with people from diverse backgrounds, incomes, and races. Diverse and denser societies lead to prosperous and healthier communities with higher economic activity, enhancing their residents’ quality of life.



# 6. METHODOLOGY

The methodology used in this paper takes a qualitative and inductive approach. Data related to STRs was acquired from Transparent Inc. It collects lodging listings from major platforms such as AirBnB, TripAdvisor, HomeAway and Booking.com. It uses machine learning to remove duplicate properties. Some “properties” are individual rental units within a single structure or location. Transparent does not collect data from local platforms (e.g., JoinaJoin) or properties promoted on their own, but many of these properties are also listed on the major platforms where Transparent collects its data; therefore, we adjudge the impact of any missing properties to be small. Transparent was utilized to analyze the impact short-term rentals have on the Puerto Rico housing market.

An important source of overall housing unit data is the U.S. Census Bureau. The census housing data has limitations to the extent that its primary focus is on estimating population rather than properties. Additional data sources included HUD, FEMA, Yahoo Finance, Promatcher, and Federal Housing Finance Agency. Incorporating information gathered with a sociological approach permitted an understanding of the housing market’s context in society. This approach allowed us to identify factors and trends that impact the housing market. Our findings concluded that STR’s were a small part of the elevation housing costs at the national level but deserve more attention in some communities. Other structural factors that have limited the development of affordable homes in high-opportunity areas, such as zoning and land use, increased construction costs, economic recession, inflation, and natural disasters, are significant contributors to the housing crisis. Based on the multiple contributors, recommendations were identified to counteract them.

Some recommendations were identified by information provided through a stakeholder engagement process where we interviewed organizations, experts, and stakeholders dedicated to affordable and accessible housing, real estate professionals, government agencies, and real estate and tourism professionals. The recommendations are based on learning from models that other jurisdictions have implemented to stabilize or increase access to housing. Successful community housing models in Puerto Rico are used as examples of potential and viable solutions for other communities. Our research found that increasing housing inventory and population density in areas with high economic activity, access to jobs, and public services has the highest impact on price and rent reduction and promotes economic development. Therefore, our primary recommendation is to continue to promote economic development strategies that increase household income and raise the inventory of housing on the island, specifically in high-opportunity areas.

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