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Gentrification by Design: A case study of tourism gentrification & economic disaster recovery policies in Aguadilla Puerto Rico after Hurricane Maria

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Summary

There have long been concerns about the role of gentrification as a part of urban policy and the class struggles that persist. Governments increasingly looking to balance the desire for economic growth, incorporate gentrification through revitalization, redevelopment, and regeneration projects that raise housing values, deplete affordable housing, and favor investment as a coffer for municipal budgets. This research submits that we can now add we can now add “recovery” projects to the list of “projects” that are increasingly co-opted by economic recovery and utilize gentrification as a form of fiscal pragmatism. Tourism gentrification has only recently garnered attention with the proliferation of short-term rentals and the sharing economy. Such is the case in Puerto Rico, which was devastated by Hurricane Maria in 2017.

This study employs a case study of Aguadilla Puerto Rico to explore the relationship between Puerto Rico’s recovery policies and tourism gentrification in the aftermath of Hurricane Maria. A mixed method approach of secondary data, and content analysis is enriched with qualitative resident interviews and questionnaires that describe how economic recovery policies have leveraged federal funding to fuel tourism as its primary source of economic recovery. The governments recovery plan, *Transformation and Innovation in the Wake of Devastation: An economic and disaster recovery plan for Puerto Rico*, has contributed to a surge in tourism demand, the proliferation of short-term rentals, and increasing community frustrations. In doing so, the dynamics of consumption and production have led to the emergence of tourism gentrification. The implications of this study are far reaching given the increasing urbanization of coastal areas that are vulnerable to the same processes.

The study’s findings reflect sharp increases in housing values, visitors (tourists) and short-term rentals soon after Hurricane Maria. After careful analysis of the recovery policies implemented in 2018, it is evident that these policies contribute significantly to the aforementioned tourism trends by emphasizing tourism demand and developing the visitor economy. Subsequently, what we find through analyzing community perceptions, is that not everyone is benefiting from the influx of tourism. In fact, many suggest the recovery polices have exploited residents’ trauma and colonial tensions. This study highlights how recovery has exposed class struggles and highlights the concerning implications of economic disaster recovery policies that are co-opted by economic development.

Keywords

Tourism gentrification, economic disaster recovery policies, perceptions, Aguadilla

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Abbreviations

COR ³	Central Office for Recovery Reconstruction and Resiliency
DP	Discover Puerto Rico
DT	Departamento de Turismo (Tourism Department)
EDRP	Economic Disaster Recovery Policy
EDRP 2018	Economic Disaster Recovery Plan 2018 (Transformation & Innovation in the Wake of Devastation: An economic & disaster recovery plan for Puerto Rico)
FEMA	Federal Emergency Management Agency
HSOAC	Homeland Security Operational Analysis Center
IHS	Institute for Housing and Urban Development Studies
PPP	Public Private Partnership
PR	Puerto Rico
PRCS	Puerto Rico Community Survey
STR	Short-Term Rental

Chapter 1: Introduction

1.1 Background information and problem statement

In September of 2017, Hurricane Maria (Maria) made landfall in Puerto Rico, an island territory of the U.S with a population of 3.2 million (World Bank, n.d.). The category 4 storm caused an estimated \$95 billion in damages, decimating crops, and devastating already weak infrastructure (Mercy Corps, 2019). Furthermore, Maria destroyed more than 300,000 homes, displaced an estimated 130,000 people, and ultimately claimed the lives of an estimated 2,975 people (Mercy Corps, 2018). The housing market also witnessed additional declines after Maria, with the price per square foot (PSF) of homes on the island dropping from approx. \$97 in 2016, to \$85 immediately after the Hurricane, and throughout 2018 (Hinojosa, & Melendez, 2018). This is compared to \$141 PSF in mainland U.S during the same period (Hinojosa, & Melendez, 2018). These realities are exacerbated by the economic debt of \$72 billion Puerto Rico had accrued over the previous 50 years (Ramirez, 2022). Faced with the daunting task of juggling crippling debt with recovery efforts, the Central Office for Recovery, Reconstruction, and Resiliency in Puerto Rico (COR3, 2018) rolled out the *Transformation and Innovation in the Wake of Devastation: An economic and disaster recovery plan for Puerto Rico* (EDRP 2018).

The plan's economic element promotes "a more vibrant and competitive economy, and personal advancement that produces benefits for Puerto Rico's residents..." (COR3, 2018, p. 9). The Economic Disaster and Recovery Plan aims to limit the exodus of residents from Puerto Rico and encourage economic growth (COR3, 2018). This plan aligns with the National Disaster recovery Framework (NDRF) and utilizes governance and policy adjustments to achieve its long-term objectives (COR3, 2018). As an example, Puerto Rico's state government consolidated previous Acts 20, and 22 into one tax incentive policy called Act 60-2019 (Invest Puerto Rico, 2022). This repackaging of Act 20 and 22, adopted in 2012, is meant to promote economic development in the aftermath of Maria (Bayer, 2022). Following the initial decline in home values after Hurricane Maria, the island witnessed an increase in housing values of 22% from 2018 -2021 coinciding with the adoption of the new tax policies (Lamba-Nieves, & Santiago-Bartolomei, 2022).

During this same period since 2019 however, there has been increasing concerns raised regarding the nature of the island's economic recovery, specifically the influx of short-term rentals and a reduction in affordable housing. Planner, Jose Rivera Santana (2022), notes "...a proliferation of short-term rentals, hoarding of real-estate, and land by investors" leading to displacement (as cited by Torres Nieves, 2022). While Maria forced the displacement of more than 100k residents, many leaving for Florida, the nature of displacement via economic forces is more ambiguous, presenting both forced and voluntary displacement (Marsh, 2022). Nevertheless, Murphy-Marcos, and Mazzei (2022) describe a wave of gentrification whereby affluent investors have driven up home values and further displaced residents, on an island where 43% of the population live below the U.S. federal poverty line. The negative results of displacement, and lack of affordable housing outweigh the economic benefits (Santiago-Bartolomei, 2022, as cited by Ramirez 2022). Resident admonishments that economic recovery

is working for investors, not Puerto Ricans speaks volumes (Hoxsey, 2022, as cited in Bayer 2022). The displacement of Puerto Ricans because of decreasing housing seems to be associated with an increase in short-term rentals (Rosario, 2023).

These concerns echo Glass's (1969) concept of gentrification as a neighborhood's socio-economic shift from low-income to middle-upper class often through the process of displacement (as cited in Hamnett, 2003). In Puerto Rico, the increases in short term rentals such as Airbnb, and higher property values are not benefiting the existing residents that suffered through Maria. Hurricane Maria created opportunities for cheaper land and profit making for non-Puerto Rican investors (Bayer, 2022). Furthermore, Bayer (2022) notes that the individuals who have moved to Puerto Rico invest in tourism rather than infrastructure. As well, the decline in property/home values immediately after hurricane Maria, followed by an increase in the years between 2018 and 2021 resemble Smith's (1979) rent gap theory, described as the existence of low property/land values where investment becomes appealing to realize potential land value and thus capital gains. Smith (1979) recognized these rent gaps often serve as precursors of gentrification which in contemporary times is further driven by an increase in short-term rentals.

Naomi Klein (2018), professor of climate justice at the University of British Columbia, describes what happened in the aftermath of Hurricane Maria as disaster capitalism, whereby the "rich and powerful exploit, the pain and trauma of collective shocks." Economic recovery to attract foreign investment is nothing new, nor is it inherently a problem; however, the potential leveraging of natural disasters impacts on land values as an opportunity to invite foreign investment that reduces affordable housing stock is of concern. Building on the idea of disaster capitalism, Rosario (2023) describes what is occurring in Puerto Rico after Maria, as "disaster gentrification" whereby like disaster capitalism, wealthy people (in this case non-residents) buy cheap properties and sell or rent them for profit, often displacing local communities. As such, there is the implication that economic disaster recovery policies may be co-opted by pre-existing government aspirations to spur economic growth increasingly blurring recovery, with gentrification.

1.2 Research relevance

In the aftermath of natural disasters there is a familiar claim that there is an opportunity to build back better (UN, 2016). The question of "how, and better for who?" are at the crux of this research. This study considers the role of economic disaster recovery policy (EDRP) as a driver of tourism gentrification in the aftermath of natural disasters. Tourism gentrification is particularly important in economies that rely on tourism as a source of development (Cocola-Gant, 2018) - such is the case in Puerto Rico. Economies that rely heavily on tourism face increased pressures in the aftermath of natural disasters and may be driving tourism gentrification by emphasizing it as a core part of their economic disaster recovery policies. There exists an urgency in the aftermath of natural disasters that facilitates the legitimization and implementation of economic disaster recovery with little to no resistance. This research elaborates on disaster gentrification literature which includes the various forms of

gentrification that may emerge after a natural disaster, specifically, tourism gentrification. It expands beyond the traditional production theories suggesting the rent gaps that emerge after disasters invite foreign investment, and examines the demand and consumption manifested through economic disaster recovery policies.

Accordingly, this research builds on van Weesep's (1994) call to study gentrification through a policy lens. It aims to assess policy frameworks in Puerto Rico to better understand how natural disasters, aided by policies, reshape the physical and economic landscape. It draws on existing tourism gentrification studies (see "Tourism Gentrification: The case of New Orleans' Vieux Carre, Gotham 2005), and contributes to a growing body of literature on disaster gentrification. By assessing trends in the short-term rental market as a proxy for tourism gentrification we can overlay this with economic disaster recovery policies adopted during the timelines of Maria and gain better insight into their respective relationship. This study operates on the premise that short-term rentals are a significant driver and manifestation of tourism gentrification (Robertson et al., 2020). A case study of Aguadilla Puerto Rico after Hurricane Maria will serve to highlight subsequent policies adopted, policy mechanisms, drivers of policy creation, and overall objectives that contribute to tourism gentrification. Furthermore, through interviews and questionnaires, there is an opportunity to gain rich insight into stakeholder attitudes, and perceptions regarding the relationship between these concepts. This topic deserves urgent attention given the increasing frequency and severity of natural disasters in rapidly urbanizing coastal cities, the same cities that rely heavily on tourism. The generalization of these findings can provide necessary policy insight for disaster recovery during an Anthropocene that expects increased climate activity

1.3 Research objectives

Through a case study of Aguadilla Puerto Rico, this research explores how economic disaster recovery policies contribute to tourism gentrification after Hurricane Maria. In doing so, it examines the nature of tourism gentrification and the policies that contribute to it, which further exacerbate issues of affordable housing, rising home values and sale prices, and displacement. The study explores how Hurricane Maria created a rent gap for gentrification, and subsequent economic recovery policies provided the mechanism to fill it. The extent to which tourism gentrification is a cause, or simply an effect of economic recovery demands more insight. Nevertheless, this research focuses on studying the role of mechanisms implemented by the state that drive tourism gentrification in the context of natural disasters. As such, the concepts of rent gaps, tourism gentrification, and economic disaster recovery policy are central to this study, serving as a commentary on classic consumption/production explanations in a time of unprecedented natural disasters.

1.5 Main research question and sub-questions

How are economic disaster recovery policies related to Hurricane Maria driving tourism gentrification in Aguadilla Puerto Rico?

1.5.1 Research sub-questions

1. What is the nature of tourism gentrification in Aguadilla Puerto Rico in the aftermath of Hurricane Maria?
2. How do economic disaster recovery plans contribute to tourism gentrification in Aguadilla post Hurricane Maria?
3. What are the perceptions and attitudes of local residents and stakeholders towards tourism gentrification, short term rentals, and economic disaster recovery plans in Aguadilla Puerto Rico?

Chapter 2: Literature review

What follows is a discussion of concepts at the center of this research study, utilizing existing literature and academic discourse. To begin, an overview of gentrification aims to provide historical context to how the phenomenon of gentrification has evolved, and the prevailing perspectives therein. The chapter then proceeds to discuss the emergence of short-term rentals, and the sharing economy, drawing a link to tourism gentrification. Lastly, the role of policy and state led disaster recovery will be discussed through economic disaster recovery policies and their link to disaster capitalism. In summary, the chapter explores the relationship between tourism gentrification and economic disaster recovery policies such as those implemented in Puerto Rico after Hurricane Maria.

2.1 Gentrification

Gentrification, a process coined by British sociologist Ruth Glass (1964) is used to characterize the complex process that leads to displacement (voluntary, or involuntary) of lower income working class residents by the incoming gentry, in inner-city London in the “60s (as cited by Lees et al., 2008). Fast forward to present day, and the gentry reflects the growing middle-class worldwide. The concept of gentrification has evolved at the same pace that some political economies and forms of urbanism are moving across the world (Betancur, 2014; Peck et al., 2009; Peck and Theodore, 2015; Smith, 2002, as cited by Almeida et al., 2022). Pressures from neo-liberal policies and increasing decentralization in the context of globalization have only added to the complexity of gentrification. In light of these pressures, gentrification has become a global phenomenon that has evolved well beyond what was initially a residential process. Today, society, and government’s alike must contend with a typology of gentrification that includes commercial gentrification (Cocola-Gant, 2015), rural gentrification (Phillips, 2010), environmental gentrification (Eckerd, 2010), super-gentrification (Butler & Lees, 2006; Lees, 2003) and tourism gentrification (Cocola-Gant, 2016, 2018) among others. Therefore, gentrification must be contextualized, “...just as neoliberalism and globalization unfold in different ways in different places, so too does gentrification,” (Lees et al., 2008).

More recently, government policies that fuel gentrification have been repackaged as revitalization, and regeneration projects that welcome middle-class resettlement of the inner city (Atkinson, & Bridge, 2005). The pressures of decentralization and neo-liberal policies embolden municipal governments to utilize gentrification as part of their urban policies on economic development. This includes disaster recovery plans implemented in areas that are increasingly vulnerable to natural disasters (Petak, 1985). In this way, cities can increase revenue via a higher tax base, and be better positioned against other cities for resources. Enter the middle-class and its disposable income, and what we have are rising home values, increased demand, and with it, the view that gentrification is a sign of a healthy real estate market (Lees et al., 2008). Subsequent re-investment and improvements into neighborhoods that have suffered disinvestment and devalorization can be understood as a reversal of economic decline (Smith, 2002). Thus regeneration, revitalization, redevelopment (gentrification) is a form of fiscal pragmatism, and seen by many as the solution, not the problem (Lees et al., 2008).

This is alarming trend as much of the literature indicates that price and rent increases that result from an influx of middle-class residents often displace poorer households (Atkinson, 2002; Marcuse, 1986; Smith, 1996). Displacement, whether voluntary or involuntary, is marked by invisibility (Atkinson, 2000) and although difficult to measure is a very real social cost of gentrification. Furthermore, the underlying use of gentrification in urban policy does nothing more than expose long standing class struggles. Different stakeholders experience gentrification in entirely different ways, often in opposition.

2.2 Consumption vs. production

Scholars recognize the duality of both consumption and production is important in explaining, understanding, and navigating gentrification (Hamnett, 2003; Lees et al., 2008; van Slooten, 2019). Neither consumption (demand), nor production (supply) theories alone account as the sole cause of gentrification. Debates that stress a dichotomy between these theories can feel distracting- as such, a more synthesized understanding of the relationship is more useful (Clark, 1994, as cited by Lees et al., 2008). Nevertheless, what follows is an overview of the two views that dominate the discourse around gentrification, how they differ, and how they form a symbiotic relationship.

Consumption

Early explanations of gentrification emphasize the post-war (WWII) industrial, and occupational shifts of deindustrialization (Ley (1986). Changes in class composition led to subsequent changes in cultural orientation and preferences in the middle-class which predisposed them to living in inner cities instead of suburbia (Byrnes, 2003; Hamnett, 2000). Consumption theory submits that gentrification is driven by consumer choice and preference of a middle-class searching for urban amenities and social differentiation (Jager, 1986, Warde, 1991, Ley, 1996, & Smith, 1996, as cited by Hamnett, 2003). Ley (1980, 1996), and Butler (1997) understood gentrification through this lens of cultural orientation and preferences implying an individual nature to gentrification (as cited in Hamnett, 2003). The strength of consumption theory is its recognition of middle-class agency through demand for preferences and amenities. Hamnett's (2003) analogy of an overflowing multi-bowl water fountain provides a fitting image to the consumption perspective, describing the top bowl as overflowing with middle-class demand, which spills over and replaces the lower bowls. The lower bowl's composition changes as excess demand from higher bowls replaces what was previously there (gentrification). This analogy illustrates what consumption theorists suppose middle-class demand does to neighborhoods.

Production

As an opposing view, production theory stresses the economic and social factors that produce an attractive housing supply in urban centers (Zukin, 1987). Smith (1996) argued that "Gentrification is a structural product of the land and housing markets," (p. 67). Smith (1979, 1982, 1996) made the case of gentrification being about production, or more specifically, housing market structures that increasingly incentivize middle-class residents to gentrify neighborhoods on the basis of a profit. Profit potential created by markets is the biggest driver of gentrification, not cultural preferences and demands of the growing "new" middle-class as

consumption theorists suppose (Smith, 1979). Smith (1979) saw the consumption-based argument to be a distraction from the key issues which involve the structure of the land and property market and its financing rather than changes in demand and preference. Smith's (1979) theory relied on the "rent gap" as the precursor, or mechanism by which gentrification occurs. His approach, as is production theory in general, is fundamentally rooted in Marxist theories of class struggles and the dynamics of capitalism (Smith, 1996).

Production-side arguments alone do not account for gentrification, as demand must exist for the lure of profits to be materialized (Hamnett, 2003). Arguments that emphasize the demand side theory as the root cause of gentrification almost indirectly blame the victims, in this case existing low-income residents, while ignoring that demand from these residents (usually ethnic minorities) was not what lowered demand on their part, but pervasive racism and discriminatory practices such as redlining practices in the USA. Hammet (2003), rightfully acknowledged that gentrification is about much more than just consumption and production alone, but the interplay of both, that leads to gentrification. Smith (1996) also recognized the relationship between consumption and production was in fact symbiotic. As such, the debate has found some middle ground. Regardless, existing low-income groups appear to be at the mercy of the middle-class. Zukin (1987) noted, that gentrification is an international process with larger economic, political, and social changes. Simply stated, while supply and housing market structures lure investors with unrealized profits, demand still needs to exist to materialize unrealized profits. Policies, as discussed in chapter 2.5, are often the mechanism to help make this happen.

Rent gap

The term "Rent gap" as precursor or mechanism by which gentrification occurs, was coined by Smith (1979). This concept reflects the growing gap between property values and underlying unrealized land values in inner cities. When this gap reaches a desirable level, the middle class is lured by the opportunity for profit, implying that capital not consumer demand moves people (Smith, 1979). The "rent gap" is exploited by the actions of property-based capital, estate agents, developers, and the like (Smith 1979). Smith (1979) does not go into detail about a specific profit-ratio; however, the premise of profit gap is still significant. Again, Smith argues that it is not entirely about preferences, but the potential for profit making when values are so low that they create the opportunity for unrealized values to be leveraged, as illustrated in figure 1. Smith's approach is fundamentally rooted in Marxist theories of class struggles and the dynamics of capitalism reflecting how economic growth policies strategies may see rent gaps as opportunities for investment.

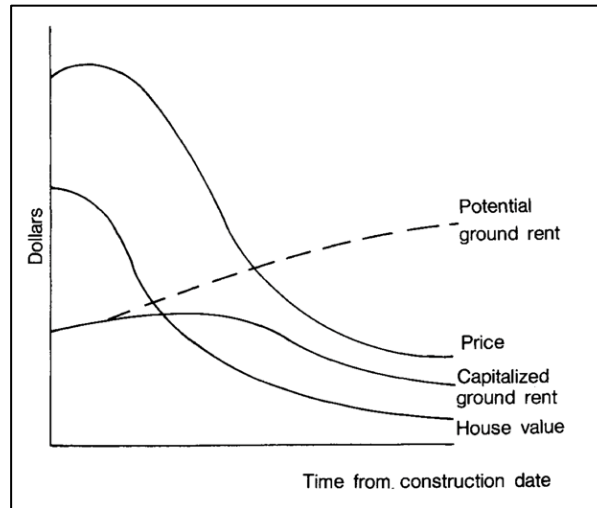


Figure 1. Rent Gap. Smith, 1979

2.3 Waves of gentrification

It is both relevant, and useful to this study to understand how gentrification has evolved into its current state. Hawkworth, and Smith (2001) note how de-industrialization, and an exodus of wealthy middle class to suburbs brought a state of decline and disinvestment to inner cities throughout the latter part of the 20th century. The disinvestment in inner cities, particularly in the United States and other Western European countries, made them targets of reinvestment for local governments (Hackworth, & Smith, 2001). Hawkworth, and Smith's (2001) *History of Gentrification* (see Figure 2) chronicles the evolution of gentrification in three waves from the late '60s and throughout the '90s. The waves describe how gentrification went from a government intervention to counteract the deterioration of inner-cities, to the active role of the state in promoting gentrification through urban policy as a way of attracting the middle class, and thus increasing their tax base, and revenue contributing to the expansion of gentrification (Hackworth & Smith, 2001). Interestingly, the transition and expansion of gentrification throughout the waves are marked by economic disruptions.

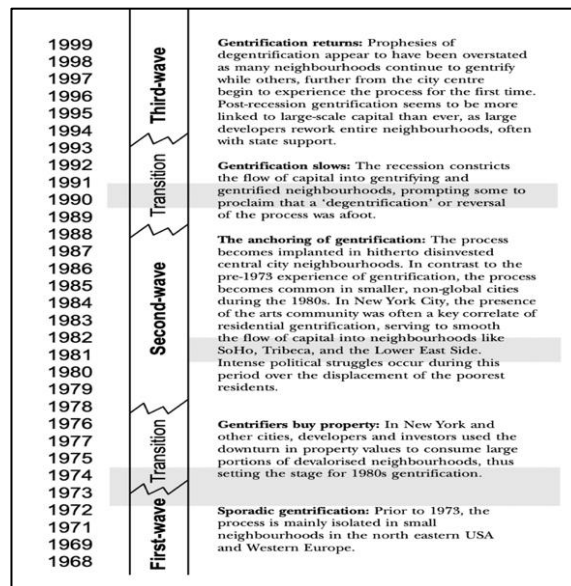


Figure 2. Schematic of Hackworth & Smith's history of gentrification

Lees et al. (2008) describe 4th and 5th waves beginning in the '2000s. These waves were marked by increasing housing commodification, and a considerable amount of politics, and policies that encouraged gentrification (Lees et al., 2008). There is a rise in risky lending practices, exponential increases in housing values, and significant capital investments in housing. This is in sharp contrast to the risk aversion of banking, and lending during the first waves of gentrification counteracted by government intervention (Lees et al., 2008). At the time of the writing, Lees et al. (2008) were foreshadowing the housing market crash that was looming with dangerously overvalued properties, and sub-prime mortgages. An economic disruption would once again mark the transition to the 5th wave of gentrification.

From 2010 on, the 5th wave witnesses the emergence of rental market speculation (Hyra et al., 2020). This makes sense given the rash of foreclosures that resulted from the risky practices taking place during the 4th wave. The estimated 9.3 million homeowners facing foreclosure during this wave (Sassen, 2014) coincides with an increase in renter households of over 9 million (Joint Center for Housing studies of Harvard University, 2020, as cited by Hyra et al., 2020). Investors and others with the means to purchase from the newly available, deeply discounted housing stock as a result of the rent gap, did so. Furthermore, all those who'd lost their homes presented increased rental demand waiting to be met, further guaranteeing a return on investment. Hence what ensues during this period is the emergence of rental market speculation.

Hyra and Lees (2021) note the emergence of a 6th wave caused by economic disasters and disruptions after the COVID-19 Pandemic in 2020. However, this skips over the impact of major natural disasters such as Hurricanes Sandy, Katrina and Maria, in New York, New Orleans, and Puerto Rico respectively. Thus, the gentrification that has emerged with the increased occurrence of natural disasters over the last ten years suggest a 6th wave of gentrification had already emerged. As such, rental speculation began to manifest itself in the form of short-term rentals facilitated through a growing sharing economy and platforms such as Airbnb and Vacation Rental by Owner (Vrbo). The proliferation of these platforms and

short-term rentals is prominent in areas that rely on tourism such as Puerto Rico. As history shows, economic disruptions brought on by natural disasters like Hurricane Maria, may be acting to usher in new waves of gentrification related to tourism.

2.4 Short-term rentals

Short-term rentals (STRs) are a form of holiday rentals best defined as housing units that are partially, or wholly rented out to others for a fee typically for a period less than 30 days (DiNatale et al., 2018). STRs are part of a phenomenon in which traditionally owned goods and services are being shared for a fee (DiNatale et al., 2018), a characterization of what Lawrence Lessig (2008) coined the “sharing economy.” In his studies of holiday rentals in Barcelona, Spain, Cocola-Gant (2016) finds an increase in holiday rentals during the late ‘90s coincides with the increasing tourism as the main industry in the city. In the 2000s the presence of STRs grew exponentially as new actors such as investors and hotel companies began investing and becoming STR owners (Cocola-Gant, 2016). “Motivated home owners are leveraging their largest asset by renting out their homes for short periods of time,” (Gottlieb, 2013, Abstract). As the phenomenon grew, the amount of long-term affordable housing options declined, being substituted by STRs as property owners increasingly converted housing into tourist accommodations (Cocola-Gant, 2016; Gotham, 2018).

Short-term rentals brokered through platforms such as Airbnb and Vrbo have been on the rise since the mid- 2010s (Wrede, 2022). These types of platforms have become facilitators of the sharing economy, whereby the internet facilitates the transaction between owner and renters on the platform. Landlords usually opt for short-term rentals when the transaction cost are low, implying a higher profit margin (Wrede, 2022). Cocola-Gant (2016) reminds us that pressures of housing conversions to tourist accommodations existed long before companies like Airbnb and Vrbo made their presence felt. Airbnb, and Vrbo are however, major actors in the proliferation of STRs over the last 15 years, particularly through the emergence of the sharing economy. Although data from Airbnb and Vrbo platforms is difficult to obtain, consultant firms such as Airdna that scrape the platforms facilitate data collection on STRs and their role in gentrification possible (Cocola-Gant, 2016; van Slooten, 2019; Wachsmuth & Weisler, 2018).

STR driven gentrification is often observed through the rent gap lens. Wachsmuth and Weisler (2018) make the case that via the emergence of the sharing economy (Lessig, 2008), rent gaps emerge which allows for very little investment to enter the profitable STR market. Furthermore, “The removal of a listing from the long-term rental market to the short- term market is explained by the existence of a rent gap” (van Slooten, 2019, p. 22). Despite this production side perspective, van Slooten (2019) notes that Wachsmuth and Weisler’s approach expands on “transnational gentrification” suggesting that rent gaps created by STRs are globally scaled, and thus the affordability issues that result from the STR (tourism) gentrification are caused by global demand (as cited by van Slooten, 2019) reinforcing the duality of consumption and production.

2.5 Tourism gentrification

The social practices of the “new urban tourist” (Maitland, 2010, as cited by Cocola-Gant, 2015) reflect the activities of the middle-class at the heart of gentrification (Cocola-Gant, 2015). Similar to residential gentrification, tourism gentrification is defined as the socio-spatial change of a neighborhood from low-income to middle-income marked by the proliferation of tourism venues such as hotels, and short-term rentals amongst others (Gotham, 2005; Cocola-Gant, 2015). Gotham (2005) describes these tourist venues as “spectacles of contestation in which opposing groups and interests battle for control of consumption, representation, and production...,” (p. 3). Tourism and gentrification exist as co-actors, and the result of strategies to bring capital and consumers back to the cities (Gotham, 2005; Judd, 1999; Mullins, 1991, as cited by Cocola-Gant, 2015). In other words, gentrified neighborhoods attract tourism, while tourism increasingly gentrifies neighborhoods (Cocola-Gant, 2015).

Gentrification and tourism emerge as part of global urban strategies (Gotham, 2018). Van Slooten (2019) argues, “increased flow of global capital combined with tourism as a whole has enhanced the importance of consumption-oriented uses of residential space (p. 18). Tourism gentrification extends beyond the traditional supply-demand theories explored thus far, but by new connections between institutions, the real estate industry and global economies (Gotham, 2005; Lees, et al., 2008). Furthermore, that demand for gentrified spaces are created and marketed rather than capital simply reacting to demand (Gotham, 2005). This is a critical contribution to any discussion regarding tourism gentrification, as it acknowledges the use of marketing and promotion as mechanisms to manipulate traditional processes of consumption and production.

The debates surrounding tourism gentrification as a positive, or negative process mirrors long-standing arguments about gentrification. Jakob’s (2013) make the all too familiar claim that tourism gentrification has the potential to create sustainable economic, and physical revitalization of neighborhoods. Additionally, Jakob’s (2013) point to the intersecting role of several processes in tourism gentrification such as “festivalization,” and “eventification” of places reminiscent of claims about the marketing and promotion as drivers of demand. While there are familiar arguments for revitalization, most concerns about tourism gentrification remain, only the medium by which it occurs changes. As properties are converted and others purchased for conversion to STRs, existing lower income residents are likely to be squeezed out of affordable housing and displaced (Horn & Merante, 2017; Barron et al., 2018; Ayoubi et al., 2020; Garcia-López et al., 2020; Koster et al., 2019; Chen et al., 2019, as cited in Wrede, 2022).

Tourism gentrification leads to a replacement of existing services and stores by higher-end amenities and stores (commercial gentrification) that meet the demands of a more affluent consumer (Cocola-Gant, 2015). As tourism gentrification causes changes in consumer demographics of neighborhoods, the demands of new, more affluent consumers emerge, exacerbating commercial gentrification. Naturally, this process creates issues of affordability both for properties, and overall cost of living (Davidson, 2008; Gonzalez & Waley, 2013; Gotham, 2005, as cited by Cocola-Gant, 2015). Importantly, Cocola-Gant (2016) points to the proliferation of STRs as a major aspect of tourism gentrification, claiming that vacation rentals represent the “new gentrification battlefield,” (p. 1).

2.6 Policy

Now, more than ever before, Wyly and Hammel's (2005) admonishment that "gentrification is incorporated into public policy" rings true (p. 35, as cited by Lees & Ley, 2008). Governments, having recognized Smith's (1979) rent gap, and urban policy as a mechanism, are increasingly leveraging the commodification of land, and property. Government interventions that facilitate gentrification are often legitimized as economic measures (Hochstenbach, 2016). Thanks to intense economic competition and policy directives from state and federal governments, cities must now be sophisticated entrepreneurs luring wealthy investors, residents, and tourists (Harvey 1989b, 2000, as cited by Lees et al., 2008, p. 165). Krijnen (2018) suggests that governments and policy elites may directly seek to create rent gaps that can later be filled via development and economic policies.

Economic development policy

Arndt (1989) noted that economic growth became synonymous with economic development, particularly in the post war years. This coincides with the occupational, and demographic shifts of the same period often used to explain consumption theories on gentrification suggesting that the processes of post-industrialization not only led to a shift in demographics and the emergence of a new middle class, but along with globalization, increased emphasis on economic development as a policy objective (Arndt, 1989). Hence economic development policies can be understood as policies that seek to facilitate economic growth as their main objective often characterized as regeneration, redevelopment, and revitalization, that incentivize investment in disinvested neighborhoods.

Economic development policy necessarily has a territorial component (Turok, 2016), which usually is spatialized through infra- structure investment and new land uses in the affected area. Higher levels of amenities and expected land rents attract new demand to these targeted areas, leading the land markets to capitalize on these new benefits as land value premiums. Higher land values would gradually displace low-income residents (Zuk et al., 2018). The question we explore here is to what degree this relationship between economic development policy and tourism gentrification can be established. This relationship informs public policy decisions and may create victims by displacing the most vulnerable people (Hess, 2018). The impetus on economic growth spills over into disaster recovery policies aimed at returning economic stability in the aftermath of natural disasters.

Economic disaster recovery policy

Economic disaster recovery (EDRP) refers to the process by which businesses and local economies return to conditions of stability following a disaster (Petak, 1985, FEMA, 2011). In the context of the USA, the Federal Emergency Management Agency (FEMA) outlines economic recovery both pre, and post-natural disaster through its National Disaster Recovery Framework (2011). FEMA (2011) describes the mission of EDRPs as "rebuilding of business, and employment, and development of opportunities that result in sustainable and economically resilient communities after large scale and catastrophic incidents" (p. 1). Although EDRPs must be contextualized to local politics and cultural dynamics, the premise remains about

economic development. However; it should be argued, that the stakes are much greater in the context of disaster recovery.

Petak (1985) noted concerns over recovery policies early on when he claimed “we have allowed immediate economic return to govern the decision-making process while ignoring potential long-range consequences. Discussions about ongoing debates over urban policies that actively utilize gentrification as an active goal as a means of economic growth are crucial here. How do governments balance the need of existing residents affected by the economic, social and environmental devastation of natural disasters, and the lure of economic growth usually fueled by an incoming middle-class? The implication here is that EDRPs may play an active role in the tourism gentrification taking place in the form of STRs. This leads to familiar issues of affordable housing, increasing costs of living, and further displacement. The intersection of urban policy, economic recovery, globalization, and increasing natural disasters, amounts to what Klein (2008) describes as disaster capitalism.

2.6 Disaster Capitalism

The aftermath of natural disasters present complex trade-offs and challenges for governments balancing economic recovery and trying to restore a sense of “normal” (Ingram, et al., 2006). They also introduce disaster capitalism whereby crises provide opportunities for usually wealthy individuals and groups to invest in devalored properties. This is described as a systematic exploitation of pain and trauma caused by collective shocks (Klein, 2008). These disasters introduce a wave of gentrification in their aftermath, which some refer to as disaster gentrification (Rosario, 2023). Tourism gentrification in the context of a natural disaster can be understood as a form of disaster gentrification and thus this study uses them somewhat interchangeably

As a prime example, studies suggest that the aftermath of Hurricane Katrina ushered in a period of gentrification (van Holm, & Wyczalkowski, 2018). The study of Katrina emphasizes the need for foresight and commitment to protecting residents once recovery is underway (van Holm, & Wyczalkowski, 2018). The reactive policies generated under urgent pressures fail to address root causes and at times amplify existing issues (Ingram et al., 2006). Thus, the role of natural disasters as opportunities for disaster capitalism has extended to include its longer-term effects on gentrification. These frustrations only fuel the ongoing debate surrounding gentrification, because again, while some note the revitalization and arrival of newcomers as a benefit, others increasingly note the adverse effects on existing communities (Miller, 2019). With the increased frequency in natural disasters, it is prudent to examine the role of natural disasters and the subsequent policies passed that are aimed at recovery.

2.7 Conceptual framework

The literature review explores the discourse surrounding the concept of gentrification from its early manifestations in the 20th century to more contemporary manifestations of tourism gentrification in the 21st century. Attention is given to the increasing role of urban policy as a tool under the guise of regeneration, renewal, and revitalization projects. Building on the

literature, this research seeks to study this relationship in the context of disaster disasters, specifically in Aguadilla Puerto Rico.

At the risk of sounding naive, natural disasters do offer the opportunity to “build back better” the question is for who (Global Facility for Disaster Reduction and Recovery, n.d.)? It could be that the rent gap may, in the aftermath of natural disasters, be luring in short-term rental investors. It is worth examining how EDRPs in Puerto Rico are facilitating this. Thus, this research considers how after natural disasters (independent variable), tourism gentrification (dependent variable) emerges, and how this is facilitated via EDRPs (moderating variable).

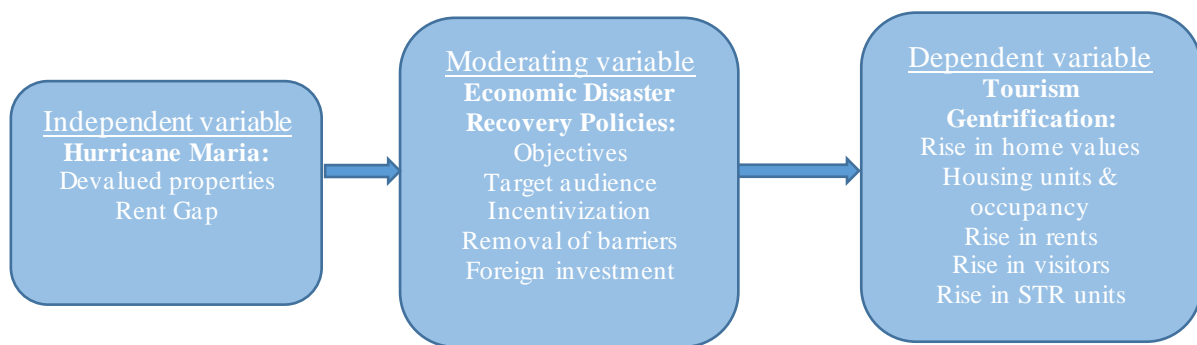


Figure 3. Conceptual framework (Author, 2023)

Chapter 3: Research design, methodology

3.1 Introduction

What continues is a description of the research strategy, and methods utilized in this study, followed by an overview of the research area, a description of the research instruments, and a definition of concepts discussed. This section concludes with an operationalization table linking the concept definitions, variables, and indicators under consideration.

3.3 Research area

Aguadilla is a coastal municipality located in the Northwest region of Puerto Rico (see Figures 4, and 5). The estimated population as of 2022 was 54 thousand, or 1.6% of general population

(3.2 million) in Puerto Rico (US Census Bureau, 2022). Aguadilla is part of the Porta del Sol (English translation is Gateway to the Sun), one of seven tourist regions identified by Puerto Rico's department of tourism and an area identified as an alternative tourism hub in Puerto Rico's Economic Disaster Recovery Plan (2018). The city is also home to the second largest airport in Puerto Rico which has also been targeted as an area for tourism investment to improve the visitor experience, and thus increase the number of tourists. STR activity also indicates an upswing in post Hurricane Maria. For these reasons amongst others, Aguadilla makes a fitting case study location.

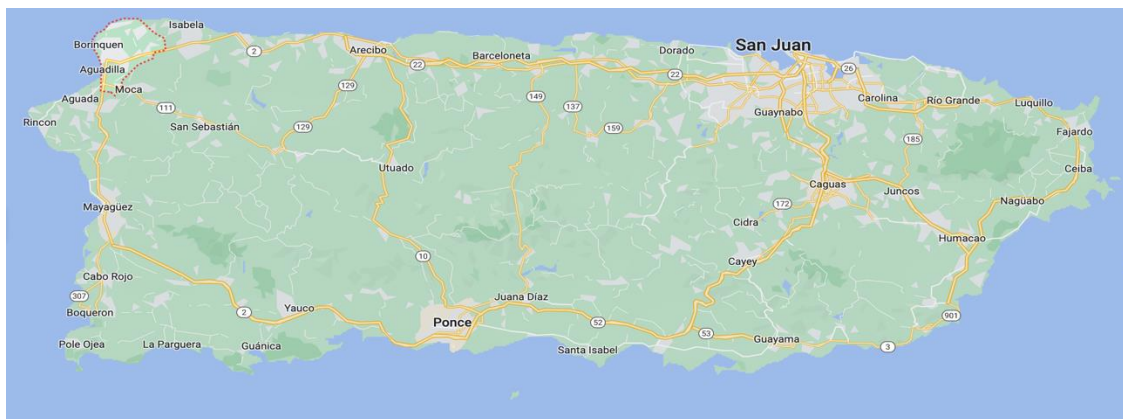


Figure 4. Aguadilla's location within map of Puerto Rico. (Google Maps, 2023)

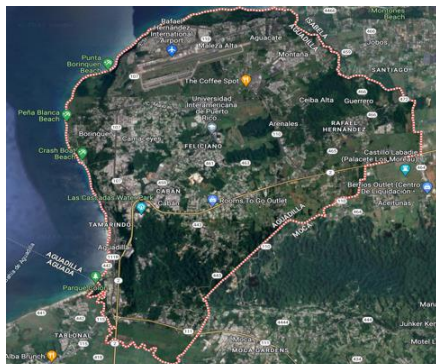


Figure 5. Satellite map of Aguadilla. (Google Maps, 2023)

3.2 Research strategy & methods

This research aims to examine the relationship between tourism gentrification, and economic disaster recovery policies in Aguadilla Puerto Rico after Hurricane Maria. The research strategy is exploratory in nature and employs a case study of Aguadilla to understand the nature of tourism gentrification, as well as an analysis of the Economic and Disaster Recovery Plan for Puerto Rico (EDRP 2018), implemented by the Central Office for Recovery, Reconstruction, and Resiliency (COR3) in response to Hurricane Maria. The study draws on a mixed method approach that includes secondary, and primary data collection. Secondary data collection is quantitative in nature, and primary data collection is qualitative in nature with a combination of content analysis, interviews, observations and a questionnaire to provide a richer portrait of change associated with tourism gentrification in the aftermath of natural disasters (Loukaitou-Sideris et al., 2019). The mixed-methods approach was

chosen because it would facilitate the triangulation of data by validating one form of data with another (Creswell, & Plano Clark, 2007).

3.4 Research instruments, data collection & analysis

Fieldwork and data collection began in earnest on May 6 continued through July 12, 2023. All Interviews, secondary data collection, and content analysis continued throughout the timeline in an effort to obtain as much data as possible. Questionnaires were also introduced, and collected in the latter stages of fieldwork. What follows is a more detailed description of data collection and analysis.

3.4.1 Secondary quantitative data

Secondary quantitative data was collected to help understand the nature of tourism gentrification in Aguadilla, Puerto Rico. The use of secondary data while needing to be scrutinized for validity and reliability (Kothari, 2004) was cost effective and less time consuming than primary collection. Tourism gentrification is analyzed utilizing indicators identified in the operationalization table (see table 1). Changes in home values, housing units and occupancy, number of visitors (tourists), and short-term rentals served as relevant indicators of tourism gentrification in Aguadilla.

Secondary data on estimated housing values, and housing units and occupancy was collected from the US Census Bureau's Puerto Rico Community Survey which is collected every year and presented as part of rolling five years estimates. Recognizing the distinction between average home values and prices, this research also collected data on average home prices from published Pont2Homes studies as well as published data by the Government of Puerto Rico. Data related to visitors (tourists) was collected from published reports provided by Puerto Rico's Department of Tourism to analyze trends before, and after Hurricane Maria. Access to reports directly from Airbnb were not feasible to due to financial limitations. However, the AirDNA site that scrapes data from Airbnb and Vrbo is commonly used by researchers (Wang et al., 2023) and thus used to collect short-term rental (STR) data. No distinction was necessary between the type of STR, and range from one bedroom, to homes with six, or more bedrooms.

3.4.2 Primary qualitative content analysis

Content analysis allows researchers to quantify the presence, meaning, and relationships of words, themes or concepts within qualitative data (Columbia University n.d.). A conceptual analysis of EDRP 2018 examined the language and discourse providing rich insight into the intent or message of the policy (Kothari, 2004). Content analysis was chosen given the focus of the research on EDRP policies and how they contribute to tourism gentrification. Triangulation with other methods discussed helped address reliability drawbacks of content analysis. Proper coding was crucial to addressing the validity of data collected.

Content analysis was conducted on Puerto Rico's economic and disaster recovery plan titled *Transformation and Innovation in the Wake of Devastation: An economic and disaster recovery plan for Puerto Rico* (EDRP 2018) (COR³, 2018). The EDRP 2018 is a collaboration

between the government of Puerto Rico, FEMA and other US federal agencies, as the result of a congressionally mandated economic disaster recovery plan in the aftermath of Maria (Burger et al., 2020). This policy was created with the assistance of the Homeland Security Operational Analysis Center (HSOAC) outlining courses of action (COAs) in line with the government of Puerto Rico's vision, and values (Burger et al., 2020). The COAs ultimately listed in the EDRP 2018 consider existing policies such as, Plan for Puerto Rico, Build Back Better, the New Fiscal Plan for Puerto Rico, and the Community Development Block Grant – Disaster Recovery Action Plan and serves as the overarching guide for recovery investment and policy (COR3, 2018). As such the EDRP 2018 provided a fitting sample for content analysis. Using an inductive coding approach, a conceptual analysis was completed based on chosen indicators (see table 1). Atlas.ti 23 facilitated the collection, coding, and data analysis. The resulting hierarchal coding structure can be seen in Appendix B).

3.4.3 Primary semi-structured interviews & questionnaire

The semi-structured approach is a flexible and powerful qualitative research tool that allows for spontaneous and in-depth responses (Ryan et al., 2009) which provide rich data and information from interviewees (Mashuri, & Sarib, 2022). Furthermore, interviews help triangulate the data extrapolated from the secondary data analysis, as well as the content analysis helping to address issues of reliability and validity. Interview questions were designed to understand stakeholder perceptions and experiences with tourism, short-term rentals and economic disaster recovery policies in Aguadilla. They included both open and closed ended questions.

Interviews were requested from various stakeholders and offered in face-to-face, and telephone format depending on availability and comfort level of participants. Despite researcher preference for face-to-face interviews, the majority (all but two) were completed via telephone calls. The interview guide (see appendix 2) developed to interview STR investors, as well as government officials, was altered during the fieldwork period to apply more broadly to all community stakeholders. The interview guides deliberately avoided the use of the term “tourism gentrification” so as to limit bias related to perceptions of the term and maintain the validity of the responses.

STR owners and hosts (4 participants)

The objective of this sample group was to better understand their perceptions about tourism and their experiences with short-term rentals. Efforts were made to draw on perceptions of the EDRPs covered in the content analysis and their influence on STR investments thus, enriching the data on how EDRPs drive tourism gentrification. A judgment sampling design was used to interview key stakeholders as it allows researchers to choose a representative sample relevant to the study (Kothari, 2004). Requests of STR owner/host interviews was done at random, without specific criteria, from STR platforms Airbnb, and Vrbo. Interview requests for short-term rental owners and hosts were completed using the messaging option on short-term rental platforms (Airbnb & Vrbo). 71 requests were ultimately made with random STR owners/hosts.

The four participants whom agreed to in-depth interviews were all existing residents of Puerto Rico prior to Hurricane Maria. No foreign investors (those that did not reside full time on the

island prior to Maria) were identified. Furthermore, utilizing the Airbnb and Vrbo platforms proved contentious with potential respondents. While some were eager to speak, others were frustrated with interview request via Airbnb, and Vrbo platforms indicating that Airbnb in particular, requires hosts to answer all communication. This proved frustrating for potential interviewees since solicitations were not reservation related. Subsequently, Airbnb provided email notification of suspension of messaging features as it was against their terms of use. As it turns out, both STR platforms try to curb communication that may lead to rental negotiation off the platform and potentially circumnavigates their fees.

Government officials (1 participant)

The aim was to interview Department of Tourism officials who are responsible for tourism affairs. Although initial contact was successful with two representatives, only one actually spoke at length about the focus of this study and refused to go on the record despite being extremely engaged in the subject. Nevertheless, the reluctance to go on the record offered some insight into the extent that STRs may be seen a criticism of the government that would jeopardize employment. Nevertheless, the aim of the interview was to better support the findings of the document and policy analysis by linking it to perceptions and attitudes of stakeholders, and also to validate, or differentiate their experience with other stakeholder interviews.

Community residents (10 participants)

Convenient sampling was utilized through several Aguadilla community Facebook groups such as Friends of Aguadilla/Amistades of Aguadilla, and Friends of Aguadilla with approx. 28 thousand, and 2000 thousand members respectively. A questionnaire was included along with interview requests in part because of members expressing their preference for one. Moreover, time efficiency, anonymity, and high return rate made questionnaires appropriate (Munn, & Drever, 1990). Subsequently, the interview guide was exported into a questionnaire titled *Tourism, Short-term Rentals, and Economic Disaster Recovery After Hurricane Maria* (see Appendix 3). The online survey platform SurveyMonkey was used to create and upload the questionnaire to the group discussion boards. A pilot test could not be conducted given time restraints; however, the questionnaire utilized the same questions as the interview guide and providing more reliability. The additional sources of data ultimately helped validate and differentiate the perceptions of other stakeholders.

3.5 Limitations

- Costs of obtaining data directly from Airbnb and Vrbo created limitations. As an alternative, data from AirDna and InsideAirbnb which scrape data from short-term rental platforms was used as part of secondary data analysis.
- STR data from Aguadilla was not available from Inside Airbnb source.
- Access to short-term rental owners and hosts was challenging because of platform (Airbnb; Vrbo) restrictions with messaging.
- Several failed requests for updated registered STR data from the Tourism Department. The published online data has not been updated since 2017.
- Reliable municipal level data for Aguadilla is available via the US Census Bureau; however, the data is presented as five-year estimates.

- Neutrality of interviewer, throughout interview process given personal perceptions and biases related to gentrification. Some difficulty at first with diverting from interview and leading.

3.6 Operationalisation

Tourism gentrification

The replacement and transition of housing tenure from owner occupied and long-term rentals to short-term (usually less than 90 days) rentals for investment (Cocola-Gant, 2018). Short-term rentals will make up the bulk of this category. Tourism gentrification is linked to revitalization strategies aimed at inviting capital and people (Cocola-Gant, 2018). Thus, economic disaster recovery policies influence and impact tourism gentrification that effectively drive up both home values, and rents and reduces affordable housing stock. Indicators for study are increases in home values, home prices, housing units and occupancy, and active STR listings.

Economic Disaster recovery policy (EDRP)

Policies designed prior to or in the aftermath of natural disasters that contribute to a framework for recovery (i.e., economic development, housing, job creation) particularly those included in economic recovery plans such as Puerto Rico’s aforementioned economic and disaster recovery plan. The content of these policies can be tailored to leverage rent gap and drive gentrification as a cause and/or an effect. Indicators to be assessed will identify objectives, target audience, incentivization, and tools and methods.

Stakeholder perceptions

“The personal manifestation of how one views the world which is colored by many sociocultural elements,” (McDonald, 2012)). EDRPs influence development, having impacts on tourism gentrification. The extent it is perceived as a positive or a negative has implications on different stakeholders. As such the relationship between EDRPs and their influence on tourism gentrification should be examined via stakeholder perceptions which may also shed light on other mediating/mitigating factors. Indicators utilized will primarily be based on perceptions, understanding, concerns and other factors identified besides EDRPs.

Table 1. Operationalisation. (Author, 2023)

Research Question	Variable	Indicators	Source
a. What is the nature of tourism gentrification in Aguadilla in the aftermath of Hurricane Maria?	Dependent: Tourism Gentrification in Aguadilla	Quantitative: Rise in home values Home units and occupancy Rise in rents Rise in visitors Rise in STR units	Secondary: US Census Bureau Puerto Rico Community Survey Discover Puerto Rico Points2Home AirDNA

<p>b. How do economic disaster recovery policies contribute to tourism gentrification in Aguadilla Puerto Rico post Hurricane Maria?</p>	<p>Independent: Nature of Economic and Disaster Recovery Policies</p>	<p>Qualitative: Background & vision Objectives Tools & methods Marketing & promotion</p>	<p>Primary Content Analysis: EDRP 2018</p>
<p>c. What are perceptions and attitudes of local residents and stakeholders towards tourism, short-term rentals, and economic disaster Economic Recovery policies after Hurricane Maria?</p>	<p>Perceptions of stakeholders/community members</p>	<p>Qualitative: Experience with housing Positive and negative aspects Short-term rental market Tourism demand Role of government Concerns Foreign investment</p>	<p>Primary Interviews & Questionnaire: Non STR community members STR owners/Hosts Government official (Department of Tourism)</p>

Chapter 4: Results, analysis and discussion

4.1 Introduction

Chapter four presents the data collected in contemplation of the research sub questions proposed, followed by an analysis and discussion of the findings:

1. What is the nature of tourism gentrification in Aguadilla Puerto Rico in the aftermath of Hurricane Maria?
2. How do economic disaster recovery plans contribute to tourism gentrification in Aguadilla post Hurricane Maria?
3. What are the perceptions and attitudes of local residents and stakeholders towards tourism gentrification, short term rentals, and economic disaster recovery plans in Aguadilla Puerto Rico?

4.2. Desktop research: Tourism gentrification in Aguadilla

Tourism gentrification, like any form of gentrification, must be contextualized (Lees et al., 2008) to better understand how it is characterized. What follows is the use of secondary data collected from various sources, along with qualitative data from interviews and questionnaires to illustrate the nature of tourism gentrification in Aguadilla between 2010- 2021. This research considers housing values, housing units and occupancy, visitors, and short-term rentals

appropriate dimensions of tourism. The occurrence of Hurricane Maria (2017) serves as a reference point in order to better interpret trends before, and after its occurrence.

4.2.1 Housing values, price, & rent

Every year, the US Census Bureau's (n.d.) Puerto Rico Community Survey (PRCS) collects municipal data that includes median home values, as well as estimated housing units and occupancy data presented as five-year rolling estimates. This means that data collected in 2014 would be an average from the years 2010-2014 combined. Data indicates the municipality of Aguadilla experienced shifts in median home values and home sale prices during the period from 2010 to 2021. While not specific by year, looking at all the five-year groupings provided useful insight into median home values, prices and rent throughout the period in question.

Median home values in Aguadilla between 2010-2014 stood at \$126,400, but as the five-year period sampled progressed, a decreasing trend in home values emerged. The decrease culminated with the sampling period 2016-2020 when average home values dropped to \$116,100. Table 3 indicates the decrease in median home values being the sharpest (-3.68%) during the five-year period 2013-2017, when 2017 data was added. 2017 data (the same year Maria occurred) caused the sharpest percent change (negative) in values relative to the previous period, but not the lowest median home values overall. Because of a rolling five-year sampling method, the full effect of 2017's decrease was not experienced until the 2016-2020 period when median values hit their lowest point of \$116,100. Subsequently, and perhaps more importantly, data indicated that Aguadilla's median home values experienced a sharp rise for the following period 2017-2021 rebounding 5.92%. This reflected a 9.6% swing from the period 2016-2020 as seen in Figure 6.

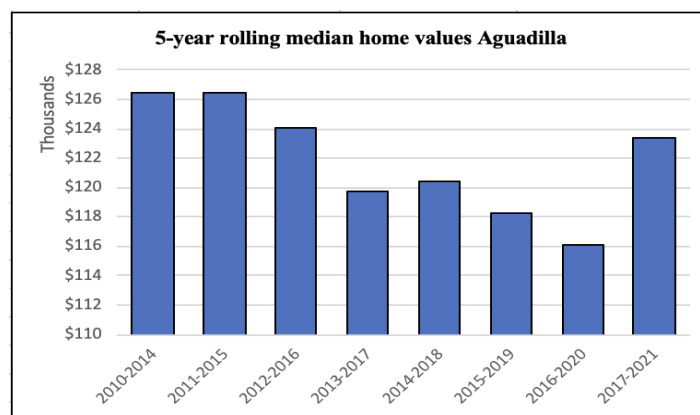


Figure 6. Aguadilla 5-year median house values Data from US Census. (Chart by Author, 2023)

Community members highlighted frustrations with rising home costs. In relation to home prices a community member poignantly stated, “Sellers are asking for \$100k over what the banks are appraising for because many people are willing to pay in cash now. I’m unable to purchase in cash or even cover that big of a difference in cash so I can’t get a mortgage even though I’ve been pre-approved for \$350,000 loan” (Questionnaire, 2023). Data from a study published in 2019 conducted by Point2Homes (2019) reflects these concerns showing the average home price shifts in Aguadilla from the year 2010 until 2019 as illustrated in Figure 7. A year-to-year

comparison was made showing the year-over-year effect was more distinct. Paying particular attention to the year 2016 to 2019, the study indicated prices bottomed out right after Hurricane Maria in 2017, falling to an average of \$99,000 in 2018, but then experiencing a sharp rise to \$124,000 in 2019. This represented a 26% increase year-over-year and reflected the first rise since 2010, the earliest date parameter of the study (see Figure 7). A subsequent report published by the Government of Puerto Rico (n.d.) on home sales for the entire year 2021 and broken down by municipality, indicated that a total of 176 housing units sold at an average price of \$169,000 in Aguadilla. This represents a 26.6% increase from the average home sale price reported by the Point2Homes study in 2019. An interesting resident observation indicated that finding housing was difficult because of low housing stock, and that new construction had decreased a lot (Questionnaire, 2023, translated from Spanish). This implies that low availability is likewise contributing to rising values

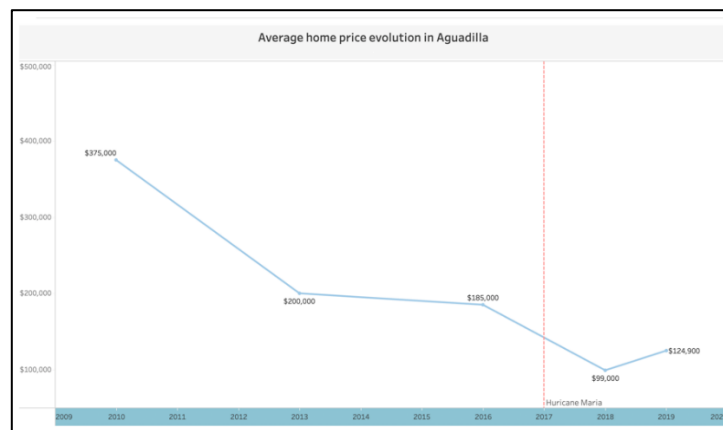


Figure 7. Average home prices in Aguadilla. (Points2Home, 2019)

As of the period 2017-2021, median rent in Aguadilla stood at \$413 a month (US Census Bureau, n.d.). Surprisingly, this was lower than in previous sampling periods, such as 2016-2020 when it was \$423 a month (US Census Bureau, n.d.). Nevertheless, recurring concerns about rising rent costs were echoed from community members. When asked about their experience finding housing, one resident admonished, “Difficult, housing is too expensive recently. Can barely afford rent” (Questionnaire, 2023). Another long-time resident and owner of six STRs, also confirmed the rising rent costs, indicating that they recently had to find housing for a family member whose rental home was being converted into an STR by the owner. They stated that they “went from paying \$500 a month to paying \$1200 for comparable housing that was also further away” (Personal communication, May12, 2023).

4.2.2 Housing units & occupancy

The PRCS also reports estimates on housing units on a rolling five-year basis. Housing units alone do not serve as an indicator of tourism gentrification; however, when looked at in consideration with occupancy it was very telling. Average housing units in Aguadilla during the 2010-2021 period experienced a shift in trends (see Figure 8). Average housing units decreased slightly between 2012-2017 at an average of .18% a year. The five-year reports that began with the inclusion of 2018 data showed a shift in this trend. For example, reports

including 2018 showed a decrease in housing units of .22% compared to .23% the year before. Because of the way data was collected for the Puerto Rico Community Survey, the three years prior to the reporting year still had a residual effect on changes. Nonetheless, starting in 2018 there was a slowdown in the decrease of housing units followed by an increase in 2019, 2020, and 2021 of .14%, .16%, and .05% respectively (see Table 2)

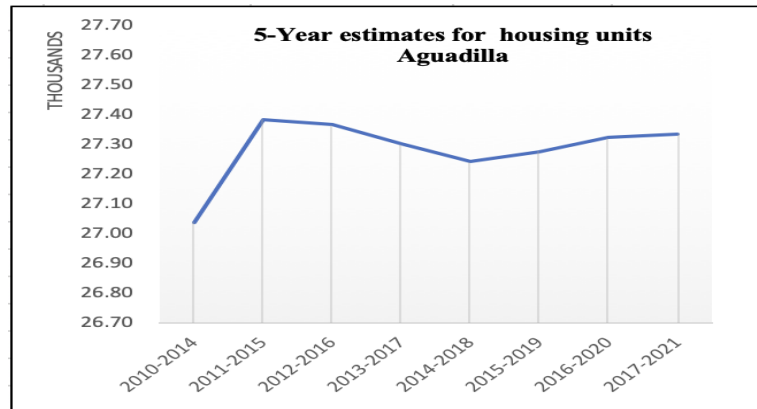


Figure 8. 5- year housing unit estimates. Data from US Census Bureau, n.d. (Chart, by Author, 2023)

Aguadilla’s occupied housing units increased steadily from 74% during the period 2010-2014, to 80% during the period 2016-2020. Inversely, unoccupied units slowly decreased from 26% in the period 2010-2014, to 20% in the period 2016-2020. Interestingly, during the most recent period of 2017-2021, when 2021 occupancy data was added, the occupied property rate shifted, dropping from 80% the prior period, to 78%. As expected, unoccupied rates during the same period reacted inversely, increasing to 22%. What stands out, is that the same period 2017-2021 experienced a minor increase of .05% in units rising to 27,336 (see table 2).

In other words, housing units somehow increased during the periods of 2016-2020, and 2017-2021 (after Hurricane Maria), but the percent of unoccupied properties increased as well (see Figure 9).

This suggests that while additional housing units are becoming available, perhaps less of them are being occupied because of a transition to short-term rentals. As one community member claimed about their previous landlord and housing, “they say they were selling it. It was a lie. They started renting Airbnb making \$3,000 a month” (Questionnaire, 2023). Furthermore, the increase in unoccupied housing units is also contributing to low available housing stock and thus perceptions that there isn’t enough construction. These trends are made more intriguing when considering that the overall population in Aguadilla declined from an estimated 55,101 2020 to 53,931 in 2022. This was a 2.1% decrease, and another potential indicator of gentrification (US Census Bureau, n.d.).

Table 2. Aguadilla %-Year Housing Units and Occupancy. (Chart by Author, 2023)

Aguadilla 5-Year avg. Housing Unit & Occupancy Rates

Period	Units	% Change in units	Occupied %	unoccupied %
2010-2014	27,040.00	na	74.00%	26.00%
2011-2015	27,386.00	1.26%	76.00%	24.00%
2012-2016	27,365.00	-0.08%	77.00%	23.00%
2013-2017	27,301.00	-0.23%	78.00%	22.00%
2014-2018	27,241.00	-0.22%	79.00%	21.00%
2015-2019	27,278.00	0.14%	79.00%	21.00%
2016-2020	27,323.00	0.16%	80.00%	20.00%
2017-2021	27,336.00	0.05%	78.00%	22.00%

Source: Data from US Census Bureau n.d. (Chart by Author, 2023)

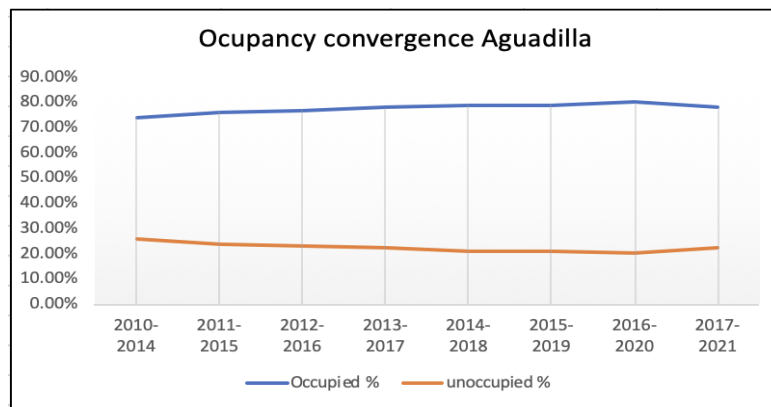


Figure 9. Occupancy convergence. Data from US Census Bureau n.d. (Chart by Author, 2023)

4.2.3 Visitors

Puerto Rico’s Tourism Department divides the island into seven tourist regions: metro; Porta Atlántico (North); Porta Caribe (South); Porta Cordillera (Central); Porta del Este (East); Porta del Este (outer islands); Porta del Sol (West). Aguadilla is categorized as Porta del Sol which translates to “Gateway to the Sun.” As the municipality with the only other international airport on the island, Aguadilla plays a major role in the region’s tourism. That said, data on lodging in the region provides important insight about tourism demand in Aguadilla. data shows that non-resident lodging registrations in Porta del Sol rose from 57,208 in 2020 to 124, 564 in 2021, a 117% increase (Compania de Turismo de Puerto Rico, 2021). These shocking results alone are inconclusive given that no other year of complete regional data is available to compare. Nevertheless, it is worth contextualizing by referring to available data on overall tourism trends in Puerto Rico to help validate the limited data. Non-resident lodging registrations in Puerto Rico between 2010 and 2021 went from 798,840, to 1,664,866 respectively (see figure 11). This represents a 108% increase which aligns with the findings of a 117% increase in the Aguadilla region during the same period.

In 2016 Puerto Rico began a steady decline in non-resident tourists from approximately 1.8 million in 2016, to 1.3 million in 2018. This represents a 38% decrease (see Figure 11). This coincides with disruptions caused by Hurricane Maria in 2017. Furthermore, data shows that this decline was followed by a sharp increase in 2019 to 1.6 million non-resident tourists. This represents a 28% increase from the decline the previous year. Notably, there is a sharp decline

in non-resident tourists from 2019 to 2020 from approximately 1.6 million to 800k respectively, indicating a drop of 50.48% (see Figure 10). This likely reflects temporary disruptions in tourism due to the COVID-19 Pandemic. The municipal and island wide tourism trends in Puerto Rico in and around the same period suggest that non-resident tourism demand declined around the time of Hurricane Maria but was subsequently followed by a sharp increase in tourism demand, illustrated best in Figure 10.

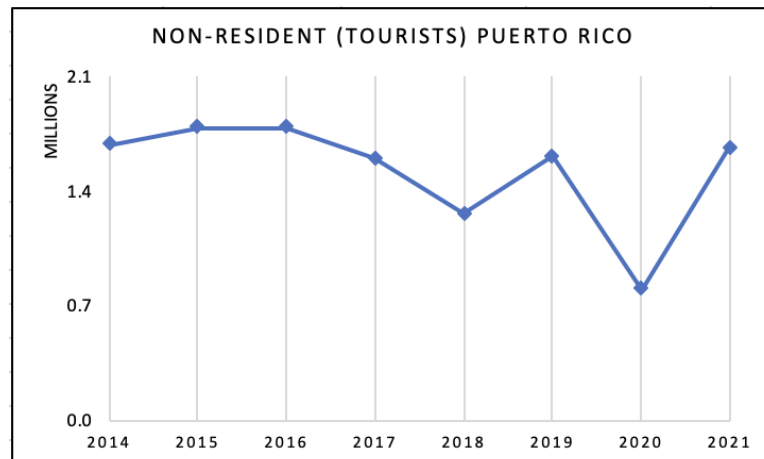


Figure 10. Non-resident tourists’ registrations in Puerto Rico.
(Chart by Author, 2023)

Understandably, reactions from community members were mixed as most see both positive and negative effects of increased tourism. In response to how tourism benefits Aguadilla, questionnaire responses acknowledge “positive impacts for the economy and the community.” This is especially true for community members that “depend on tourism,” such as STR investors, and “small business owners”. Along the same lines, other questionnaire responses note it was “very positive” for the economy. However, there were responses that described a variety of negative effects caused by increased tourism. Some highlighted that tourism was pricing them out via “increased costs”, and “rising home prices,” and that the island is “losing its people because they can’t afford it” and that Aguadilla is becoming “unreachable to their local residents due to increase in prices.” One respondent noted that there is not enough capacity and infrastructure to keep up with the increasing demand, specifically noting the condition of the local airport and traffic congestion, particularly near the beaches (Questionnaire, 2023). When asked about tourism’s effects, another resident noted, “...it’s gentrifying the area, that Puerto Ricans will get pushed out, that our culture will change and become even more Americanized, that the divide between wealthy and poor will become even stronger” (Questionnaire, 2023).

4.2.4 Short-term rentals

Puerto Rico’s tourism department publishes data on registered lodging accommodations across the island for room tax purposes, including short-term rentals. Curiously, the last published data on the department of tourism’s website is 2017. What is provided related to the room tax, does not provide a break down by municipality. As such data was collected using AirDNA, the leading provider of data collection for the short-term rental industry (AirDNA, n.d.). Historical

data from AirDNA is limited to five years, as such data analyzed reflects the period from June 2018 to May 2023.

STR listings

Historical data on STRs indicates that as of June 2018 there were approximately 196 active STR listings in Aguadilla. As of May 2023, the amount of STR listings ballooned to 648 of which 564 are entire home rentals (see Figure 11). In other words, 87% of active listings in Aguadilla are entire home rentals (AirDNA, n.d.). These homes range from 1 bedroom to homes with six bedrooms, or more. This data represents a 187% increase in STRs during this five-year period from 2018-2023, which is significant, when considering how active listings steadily rise the year immediately after Maria. An Aguadilla resident who currently owns 5 STR properties with plans for another stated they have experienced an “exponential” increase in short-term rentals, adding that on his street another STR investor whom initially owned two properties, now has 16 in the same neighborhood (Personal communication, May 9, 2023).

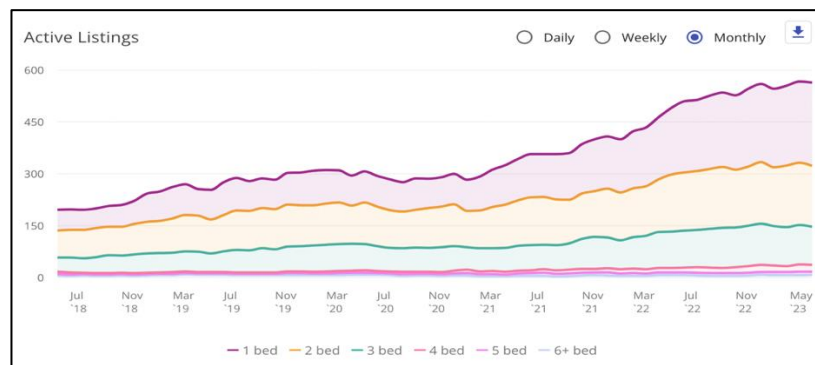


Figure 11. Active STR listings in Aguadilla (June 2018-May 2023). AirDNA, n.d.

STR investors interviewed (all existing PR residents) acknowledged the increase in foreign investors, or those who were not existing full-time residents of the island prior to Hurricane Maria and presumably benefiting from tax incentives reinforced in EDRPs (see Chapter 4.3.3). Interviewees largely agreed it felt like it was 50/50, indicating that there were a lot of Puerto Ricans investing in STRs. Other community members that were not STR investors were divided. Approximately half of all participants indicated that the increase in STRs they witnessed was attributed to foreign investors while the other half understood it was both Puerto Rico natives as well as foreign investors. Non-STR community members noted tax breaks such as “Act 20 and gentrification” suggesting that through these mechanisms they are “selling our land to foreigners, so there are no Puerto Ricans” (Questionnaire, 2023). A long-time government official whom preferred to remain off the record for fear of disciplinary action, claimed that despite an increase in foreign investors, the major concerns is how STRs are contributing to increasing rents, home prices and lack of affordable housing.

Respondents and STR investor interviewees, acknowledge concerns over affordable housing and several local STR owners discussed a conundrum of profiting and having multiple properties, while recognizing the negative impact they are having on long-term affordable housing. In interviews with STR investors as well as questionnaire respondents, there was a palpable angst regarding their role as investors in the community. One STR investor noted that their family turned their home into an Airbnb which helped them economically and with large medical bills, but they feel their neighborhood is different now, too many Airbnbs and tourists (Questionnaire, 2023)

STR booking demand

Similarly, STR booking demand has seen a steady, and significant increase as it relates to both the number of nights, and properties booked. In June 2018 the nights booked were estimated at 1,716, and the number of properties booked, at 132 (AirDNA, n.d.). As of May 2023, this stood at an estimated 7,827 nights booked, and 498 properties booked (AirDNA, n.d.). This means that the estimated number of nights and STR properties booked rose an astonishing 356%, and 277% respectively, from June 2018 to May 2023. Again, this represents a significant upward trend in bookings not even a year after Maria made landfall (see Figure 12) and speaks to the increased demand brought on by increased tourism.



Figure 12. Booking demand (nights and properties booked). AirDNA, n.d.

Interviewees and questionnaire respondents confirm the data, noting the increase in STRs in Aguadilla specifically after Hurricane Maria. Every respondent and interviewee recognized increased demand as the catalyst for the increased supply in STRs. Interviews with STR investors indicated that the increased demand offered an opportunity for profit that motivated them. Thus, it is worth noting that all STR interviewees also owned more than one STR property. A community member claimed that STR demand was increasing due to “Tourism demands, and people seeking to make an income or supplement their income” (Questionnaire, 2023) captures the duality of consumption and production at play.

4.2.5 Discussion of secondary data

The increasing visitors and associated demand after Maria contributed to similarly rising STR supply in subsequent years. Estimated housing units and occupancy rates add slightly more nuanced indicators of tourism gentrification implying that perhaps increasing housing units,

with decreasing occupancy rates suggest a transition to short-term rental properties, contributing to the exponential growth in STR during the same period. Likewise, the increase in active STR listings is directly linked to increased demand in a self-perpetuating cycle. This is indicative of classic consumption, and production elements of gentrification. The STR data helps contextualize the indicators of tourism gentrification. The interpretation and analysis describes the nature of tourism gentrification taking place in Aguadilla as it is manifested through increased tourism and the evolution of demand/supply elements related to the short-term rental market post Hurricane Maria. As Cocola-Gant (2018) argues, “Tourism accelerates the pressures of gentrification as the demands of visitors increases rent extraction possibilities” (para. 10).

Analysis of the secondary data and discussions with stakeholders offers an interesting image of the housing landscape in Aguadilla before and after Hurricane Maria in 2017. Indicators suggests that after experiencing the worst natural disaster in its history, both average home values, and prices increased the subsequent year. Similarly, the number of non-resident tourists arriving in Aguadilla also increased the subsequent year. These were not a return to trends prior to 2017, but a complete reversal of steadily declining trends prior to Hurricane Maria. It is hard to imagine how there was such rise in visitors after the devastation left from Maria, other than to presume it was a concerted campaign to drive tourism back, as will be discussed in chapter 4.3. The following questionnaire response from a resident captures concerns shared about tourism after Maria:

For the worse. Pre-Maria, tourism was held by Puerto Ricans or people who have lived in and appreciated the island, No, we are an investment opportunity for people who are benefitting from those who lost much in the hurricane” (Questionnaire, 2023).

Other findings

Shifts in STR listings and demand during the year 2020 should be noted. This is can perhaps be attributed to the COVID-19 Pandemic and is supported by an interview with an STR investor who stated their belief that demand took off exponentially when COVID -19 occurred. This is an interesting find when considering how the COVID-19 lockdowns had global impacts that caused mass scale cancellations on STR platforms like Airbnb and Vrbo. Thus, the unique position of Puerto Rico as an island territory of the U.S that was not restricted as “international travel” meant demand in Puerto Rico increased, particularly on behalf of mainland Americans seeking to get away without violating restrictions. Nevertheless, the COVID-19 Pandemic is just one disaster exacerbating another.

4.3 Content analysis: Economic Disaster Recovery Policy 2018

4.3.1 Background and vision

The EDRP 2018 was created on behalf of the HSAOC, COR³, the Governor of Puerto Rico, and FEMA support along with professionals across various disciplines and sectors (COR³, 2018). As part of a congressional mandate to provide an economic disaster recovery policy within 180 days of Hurricane Maria, the government of Puerto Rico considered it crucial to

include considerations for long-term initiatives and objectives related to economic development. The government of Puerto Rico describes the creation of the EDRP as a “moon shot opportunity to translate the difficulty of recovery into a better future,” (COR3, 2018, p. 3). As such Puerto Rico’s EDRP 2018 is intentional in leveraging existing policy and objectives such as those found in the Plan for Puerto Rico, Build Back better, and the New Fiscal Plan. The use of tourism as a strategy for economic recovery is not in question as the EDRP 2018 explicitly acknowledges the importance of tourism as a source of economic recovery, noting the importance of expanding investment in the visitor economy and tourism (EDRP, 2018).

The EDRP 2018 presents a set of nine capital investment objectives that address short-term, immediate needs, and eight future-oriented strategic initiatives (see Figure 13). The document recognizes several foundational precursors like government and local capacity building, improved data collection and reporting, support for local planning, increasing the ease of doing business, and the reduction of barriers (COR³, 2018). The plan is designed in such a way where identified precursors provide a foundation that facilitates short-term capital investment objectives, which in turn serve as the foundation for long-term strategic initiatives. As such, many of the strategies developed serve both capital investments, and strategic initiatives.



Figure 13. EDRP 2018 Plan objectives. (COR3)

It is relevant to note the political context and background the EDRP 2018. The government of Puerto Rico explicitly reminds readers of the EDRP 2018 that “Puerto Rico must advance all possible initiatives that bring us closer to statehood and that allows us to gain political and economic equality with the rest of the states of the union” (COR³, 2018, p. 21). This sentiment to become the 51st state is made clear and repeated several times as the foundation for the long-term vision of the plan. The desire to become a formal state of the union highlights how Puerto Rico’s government perceives economic growth as a mechanism for becoming an economic asset for the United States and thus resolving the controversial territorial (colonial) status it

currently holds. To that end, the plan specifically notes, “Puerto Rico’s intention to use four mechanisms (investments, exports, transfers, credit) to drive economic growth...The plan is to take steps to encourage increased investments...” (p. 22). As part of economic growth, the EDRP 2018 sets the path forward with objectives that address one of its largest industries which experienced a loss of \$547 million as a result of Hurricane Maria- tourism.

4.3.2 Objectives

The EDRP 2018 describes the importance of developing Puerto Rico’s ocean economy which comprises a range of economic sectors and policies related to fisheries, marine biotechnology, renewable energy and of course, tourism (COR³, 2018). The plan describes an ocean economy that “integrates and promotes all of Puerto Rico’s ocean dependent industries and ecosystems as a cohesive effort to promote economic growth, improve the quality of life of residents, and enhance the visitor’s experience” (COR3, 2018, p. 144). As well, the plan emphasizes the need to enhance tourism operations in its world-famous beaches as an obvious means of increasing tourism. The EDRP 2018 notes the need to cultivate the unique assets such as ocean related industries that would not only spur economic growth and development around ocean related industries, but also encourage development of tourism (COR³, 2018). Recognizing the ocean economy as a unique asset of the island, the EDRP 2018 recognizes the ocean economy as foundational in building tourism, and ultimately developing what it repeatedly refers to as the “visitor economy.”

Visitor economy was coded twenty times throughout the EDRP 2018. The plan emphasizes the importance of developing the visitor economy, ultimately suggesting a “transition from a tourism economy towards a visitor economy” although it makes no clear distinction how they differ. Furthermore, the document provides no details to describe or map the “visitor economy” in Puerto Rico, leaving much ambiguity as to what defines it in the Puerto Rican context besides ocean related industry. Nevertheless, the EDRP 2018 emphasizes improvement of visitor’s experience as a means of contributing and helping develop the visitor economy. The development of the visitor economy involves “countering the narrative of the Island as a place still in recovery and rebuilding its reputation as a destination” (COR³, 2018, p. 145). Development of the aforementioned ocean economy helps leverage ocean industry assets as a means to this end.

Importantly, the EDRP 2018 highlights the significance of both the ocean economy and the visitor economy in positioning Puerto Rico as a global destination. The desire to make Puerto Rico a global destination extends beyond just attracting visitors. Coding of the document revealed the concept of global destination was linked to a desire to make Puerto Rico a global destination for investment more often than tourism in general. The EDRP 2018 states the need to “Develop a strong visitor economy to help position Puerto Rico as a global destination of investment, production, and wealth” as one of its strategic initiatives (p. 145). As, such a pattern emerges whereby development of the ocean economy creates a foundation for an undefined visitor economy, and the sum of these delivers on the government of Puerto Rico’s endeavour to become a global destination for investment. Thus, these three objectives encompass the overall focus on tourism within the EDRP 2018.

4.3.3 Tools and methods

Coding of the EDRP 2018 document indicates several strategies that better detail how the government aims to achieve its objectives. Much of the emphasis is placed developing alternative tourism hubs, specifically identifying Aguadilla's "significant potential as alternative tourism hub" (COR³, 2018, p. 146). The development of tourism hubs is geographical in nature meaning that it involves developing tourism in alternative locations (other than San Juan) of the island as a "boon to the existing mass tourism industry" (COR³, 2018, p. 146). Moreover, to facilitate the development of alternative hubs, tourism promotion and investment is needed for their economic development. Alternative tourism and related investment were coded a total of 23 times out of 56 strategy codes identified. Alternative tourism such as arts tourism and medical tourism was identified several times in the EDRP 2018 document as a tourism opportunity within sectors related to manufacturing, economy, health and entrepreneurship.

Additional codes identified an emphasis on infrastructure improvements that facilitate the development of all tourism objectives. This includes the need to improve capacity for air traffic, and "boost tourism in Porta del Sol" (p. 111) where Aguadilla is located and is home to the second largest airport on the island (COR³, 2018). Again, the aim as per the plan, is to improve service to passengers therefore improving the visitor experience. Additional infrastructure improvements include the expansion of broadband services, improvement of landfill capacity and collection, improving the drinking water systems, and improvement of tourism facilities. These were coded several times as specifically benefiting tourism and the visitor economy. This is supported by a government official who commented on how Aguadilla's airport (Rafael Hernandez Airport) recently approved funding of \$6 million to renovate the airport to improve the visitor experience (Personal communication, May 10, 2023).

As part of the strategy to develop a visitor economy, the EDRP 2018 highlights the importance of workforce development. In order to improve the visitor experience and thus the visitor economy, the plan strategizes on providing a workforce trained in tourism and hospitality. Several codes identified "tourism workforce training" (p. 145) as a benefit to the local communities destined to benefit from a developed visitor economy (COR³, 2018). Linking with the need to develop alternative tourism hubs the document reminds its audience of the importance of workforce training. However, concerns over the accessibility of tourism industry jobs were raised by a respondent describing, "There are new jobs, but tourism jobs often go to English speaking people or others from the states" (Questionnaire, 2023). This raises concern over the nature of workforce development and equitable access to the job market.

The EDRP 2018 reiterates existing tax breaks for investment in the island via Act, 20, and Act 22 which were consolidated, repackaged, and reintroduced as part of Law 60 in 2019. These acts focus on different audiences i.e. Act 20 provides tax incentives for businesses and corporations; Act 22 similarly provides tax incentives for non-residents. Act 22 "attracts new residents to Puerto Rico by providing a total exemption for all passive income realized or accrued after such residents become residents" (COR³, 2018, p. 24). The plan specifically notes how this results in investments in the local real estate market. Of course, the real estate market is affected by increased tourism and the development of a visitor economy.

Coding reveals that investment is both a significant objective and strategy to develop the tourism industry. The aforementioned tax incentive policies are recognized as precursors to investment by EDRP 2018. Again, the EDRP 2018 describes the need for investment, particularly foreign investment, in very broad terms. Nevertheless, it is coded twelve times and reflects the emphasis placed on investment on the island. Moreover, the plan recognizes entrepreneurship as one of its strategic initiatives. Entrepreneurship is coded several times throughout the document claiming that “entrepreneurship and development of small to medium local business that can compete globally to promote economic development” (COR³, 2018, p. 14).

The use of tax incentives that drive foreign investment was an overwhelming, and contentious concern that emerged through both interviews, and the questionnaire. Community members who were not STR investors repeatedly identified some sense losing their people, being replaced or pushed out by foreign investors and highlighted the “selling of their land to foreigners,” “too many Act 20 people who disproportionately affect locals” (Questionnaire, 2023). Note, many respondents seem to confuse Act 22 for individuals, for Act 20 for corporations and business. Interestingly, STR investors interviewed recognized that foreign investors benefitted from having more purchasing power but were otherwise not as threatened by them. A local STR investor revealed concerns that tax incentives do give foreign investors more purchasing power, and thus makes them more resilient to increasing labor and construction costs on the island (Personal communication, May12, 2023).

4.3.4 Marketing and promotion

Tourism objectives and strategies in the EDRP 2018 rely on the promotion and marketing of tourism related industry. That said, three particular marketing and promotion campaigns and suggestions were identified. One campaign, and the most repeated, promoted the “Puerto Rico Open for Business” campaign to “inform the world that Puerto Rico is ready to resume receiving tourists and inviting visitors to see that the natural resources have been preserved and that the tourism industry is ready to serve them” (COR³, 2018, p. 374). Yet other marketing campaigns are suggested to promote the development of alternative tourism hubs throughout the island by catalyzing experience-based tourism in key hubs (COR³, 2018). More generally, the EDRP 2018 suggests developing a destination marketing campaign.

Puerto Rico’s tourism marketing is in the hands of a private sector entity known as the Destination Marketing Organization (DMO). “The DMO maximizes the use of available marketing funds by investing strategically and providing continuity to marketing and promotional efforts” (COR³, 2018, p. 25). The document claims that the DMO is self-funded in part by room taxes collected from the tourism, and hospitality industry. Note that this highlights the DMOs need for self-preservation via increased tourism and lodging tax revenue. Another agency known as Invest Puerto Rico (IPR) was created for the purpose of promoting and attracting investment to Puerto Rico. The emphasis on marketing and promotion cannot be understated as it had co-occurrence with seven of the other 12 codes.

Other findings

The questionnaire responses to what the perceived role of government policies was in contributing to tourism offered symbolic information. The majority of responses indicated a distrust for the government as “corrupt” claiming they “steal money given to the island” (Questionnaire, 2023). Others claim policies should control tourism, but it is too much of an economic benefit for them. One response in particular claims, “the tax breaks and subsidies for state-side investors to come down instead of empowering and providing benefits to locals” (Questionnaire, 2023). These echo concerns highlighted in chapter 1; however, there is a lack of empirical data to distinguish the proportion of tourism investments that are foreign vs. local. As one interviewee claimed, the outcry over foreign investment may be part of a populist movement tied to the politics of Puerto Rico (Personal communication, May 9, 2023). The interviewee implied that because the administration in office when the EDRP 2018 was implemented made known its goal of becoming the 51st state, (a hotly contested issue), opposing party members have roused supporters who reject statehood by associating statehood with foreign takeover.

4.3.5 Discussion of content analysis

The EDRP leverages the opportunity for federal funding from FEMA to springboard from short-term capital investment objectives, to long-term strategic initiatives. This contributes to Puerto Rico’s long-term desire for economic growth and recognition as a global destination for investment. These are objectives the government of Puerto Rico perceives as bringing it closer to becoming the 51st state of the union. These circumstances contextualize the EDRP 2018 within the complex circumstances of colonialism, a topic that demands more research. As such, the EDRP 2018 is fundamentally about politics-rightfully so. At face value, the EDRP 2018 makes considerations for sustainable tourism that address environmental, social and economic elements; however, certain aspects raise concern. The plan remains rather ambiguous and absent details. An Aguadilla community member notes the lack of a clear policy... “no vision to support a sound future” while another notes “tourism money seems to be going into individual pockets instead of the betterment of the city” (Questionnaire, 2023).

It is true that the EDRP 2018 incentivizes foreign investors, and by doing so offers them more purchasing power. But, the EDRP 2018 also incentivizes existing residents to open small businesses via entrepreneurship programs. Given the EDRP2018’s success in increasing visitors to the area, existing residents are also investing in STRs. This is supported by interviews with stakeholders in Aguadilla discussed in chapter 4.4. That said, valuable empirical data is lacking to differentiate between existing residents who own STRs and those that became residents lured by investment opportunities. The plan focuses quite heavily on the development of the visitor economy and the need to bring in more visitors. The focus on increasing tourism demand is concerning because with it come increased demand pressures that ultimately impact consumption patterns in local economies. As the number of tourists increases the supply of amenities and services for this new demographic almost certainly must increase. The attraction of visitors accelerates the pressures of gentrification (Cocola-Gant, 2018).

The plan’s emphasis on investment and incentivization as a core element of the recovery plan imply it is also affecting the supply needed to meet the increased tourism demand. A portion

of investments must certainly be manifesting themselves as STR property investments reflected in the aforementioned STR demand and supply data discussed in chapter 4.2.4. The decline in median home values and the sheer number of distressed properties after Maria provided an inventory of properties for STR investment that promised a return on investment. All but one of the questionnaire respondents (none were STR investors) claimed that the increased investments in STRs are foreign in nature implying there is a real fear and perception that through policies and incentives, the government is deliberately replacing them for a higher tax base. In this sense the EDRP 2018 functions a new form of urban policy to manipulate demand (consumption) by increasing tourism, and the supply (production) by incentivizing investments. It represents the duality of consumption and production dynamics that contribute to gentrification (Hamnett, 2003).

Chapter 5: Conclusions

5.1 Introduction

This research study aimed to explore the relationship between tourism gentrification in Aguadilla Puerto Rico, and the economic disaster recovery policies that contributed to it in the aftermath of Hurricane Maria. Using the occurrence of Hurricane Maria in 2017 as a point of reference, a case study of Aguadilla was conducted that examined the nature of tourism

gentrification along with an analysis of policies such as Puerto Rico's disaster recovery plan titled *Transformation and Innovation in the Wake of Devastation: An economic and disaster recovery plan for Puerto Rico* (COR³). This study utilized a mixed methods approach that included secondary data analysis, primary qualitative content analysis, primary qualitative interviews, and primary qualitative questionnaire. What follows is a summary of the study's findings and insight as they address the research sub-questions and ultimately the main research question.

5.2 Answering the research questions

Sub-question 1

What is the nature of tourism gentrification in Aguadilla Puerto Rico in the aftermath of Hurricane Maria?

This secondary data examined in this research highlights the nature of tourism gentrification in Aguadilla after Hurricane Maria in 2017, through the duality of consumption and production theories of gentrification (Hamnett, 2003). The devastation from Hurricane Maria introduced a rent gap (Smith, 1979) in Aguadilla, making it an appealing point of entry for potential investors. These investments are in large part reflected in private housing markets through the proliferation of short-term rental properties. Furthermore, a substantial increase of visitors (tourists) after Maria helped to drive demand for STRs and make it a more appealing for investments. Thus, what results is the exponential growth of short-term rentals (STRs) after Hurricane Maria. The ensuing tourism gentrification is reflected in a rise in median home prices and values, median rents, and housing occupancy rates.

The proliferation of tourism and STRs in Aguadilla is fueled by Puerto Rico's Economic Disaster Recovery Plan 2018, which emphasizes an increase in tourism, and visitors as a primary source of economic growth for the island. As tourism and visitors increase, so too does supply and demand for STRs. We are reminded that the processes of tourism and gentrification are co-actors, and as such, tourism tends to gentrify an area, and gentrified areas tend to attract more tourism (Cocola-Gant, 2015). Hurricane Maria marks the recent emergence of tourism gentrification in Aguadilla, reflecting the broader concepts of disaster gentrification (Gluck, 2013), and disaster capitalism (Klein 2007). This study contributes insight to the growing literature on both. Moreover, being vulnerable to severe natural disasters, Aguadilla uniquely contextualizes tourism gentrification and highlights the geography of gentrification (Lees, 2012).

Sub-question 2

How do economic disaster recovery plans contribute to tourism gentrification in Aguadilla post Hurricane Maria?

Puerto Rico's EDRP 2018 is contributing to tourism gentrification by substantially leveraging tourism as a source of economic growth. Naturally, the loss of \$547 (COR³) million in tourism revenue presented an immediate area of opportunity for Puerto Rico's EDRP 2018 in the aftermath of Hurricane Maria. The plan stresses a clear desire to develop the tourism industry,

moving from a tourism economy to a “visitor” economy. It repeatedly reinforces the objective to attract more visitors, increase tourism and become a global destination. The EDRP 2018 leverages federal funding made available from FEMA during the recovery of Hurricane Maria to develop capital investments and strategic initiatives related to tourism towards driving economic growth and becoming a global destination as a means of achieving statehood.

As part of its strategy, the EDRP 2018 emphasizes the importance of attracting investments by, reintroducing tax incentives as precursors for achieving development and economic growth. The EDRP 2018 catalyzed the rent gaps (Smith, 1979) that emerged after Hurricane Maria devastated housing stock and values (see Chapter 4.2.1) by simultaneously incentivizing investment and manipulating demand. As such, the EDRP 2018 implemented to facilitate recovery after Hurricane Maria in Puerto Rico was co-opted by longstanding economic growth objectives. This reality increasingly blurs the recovery process with tourism gentrification through policies that are more easily legitimized in the urgency brought on in after natural disaster strikes.

Sub-question 3

What are the perceptions and attitudes of local residents and stakeholders towards tourism gentrification, short term rentals, and economic disaster recovery plans in Aguadilla Puerto Rico?

The interviews and questionnaire utilized to understand perceptions and attitudes of community residents and stakeholders towards tourism, STRs, and EDRPs after Hurricane Maria were significant. They revealed the differing experiences that stakeholders have with tourism gentrification and the role of government policies. The residents and stakeholders all acknowledge the government’s emphasis on tourism as a source of economic growth, but there is real division as to who is benefiting from it. Some understand tourism and STRs as a positive phenomenon and largely attribute the re-investment, economic growth, and improvements into neighborhoods as an overall reversal of economic decline, suggesting it benefits everyone.

Others expressed how tourism and STRs negatively affect them via, increased costs, lack of affordable housing, and perhaps more importantly a general fear that they are being replaced by a foreign middle-class. Concerns abound over tax incentives the government extends to foreign investors. There are very real fears amongst some locals that they are being pushed out via an influx of incoming foreign gentrifiers and investors, reminiscent of a revanchist process of capitalist appropriation (Lees, et al., 2008). Similarly, STR investors are concerned over the purchasing power that tax incentives included in EDRP 2018 offer foreign investors. There was also a general distrust related to the EDRP 2018 amongst some community members. Some theorized about the political and economic agendas that favour foreign investors over local residents. As the literature contends, both the positive and negative takes on gentrification have validity (Lees, et al., 2008). This is precisely what makes tourism gentrification such a wicked problem.

Main question

How are economic disaster recovery policies related to Hurricane Maria driving tourism gentrification in Aguadilla Puerto Rico?

“Devising and implementing policy and action for economic recovery in the wake of a natural disaster is messy and complicated” (UN, 2016). Hurricane Maria left a path of devastation in its wake when after making landfall in Puerto Rico in September of 2017. The storm caused a significant loss of life and devastated the island’s natural resources, infrastructure and its economy. In response the Government of Puerto Rico implemented *Transformation and Innovation in the Wake of Devastation: An economic and disaster recovery plan for Puerto Rico* (COR³).

Reeling from the economic devastation, particularly the \$547 (COR3) million loss in tourism, the government opportunistically leveraged FEMA funds into an Economic Disaster Recovery Plan that emphasizes tourism and investment. The plan takes a broad approach to improving tourism ensuring infrastructure such as airports, water systems, sanitation and broadband services in order to improve the visitor experience, and thus the visitor economy. By fueling tourist demand for Aguadilla, the government incentivized both local residents and foreign investors to provide the supply needed to meet demand. The rent gaps that emerged after Maria, provided a convenient point of entry for many investors because properties values were suddenly discounted (see Chapter 4, Figure 7; 8).

5.3 Recommendations for future research and practice

The study’s findings bear witness to how tourism gentrification emerged in the aftermath of Hurricane Maria, and how economic disaster recovery policy contributed to increased tourism with varying effects on stakeholders. “We have allowed immediate economic return to govern the decision-making process while ignoring potential long-range consequences,” (Petak, 1985). Additional data on displacement would have provided a richer portrait of tourism gentrification Aguadilla, but due to the difficulty in accessing displacees, along with time and resource constraints, this was not possible. Access to foreign investors that receive the contested tax incentives would have also provided a more balanced representation of the findings.

On the matter of foreign investments, the study raises new line of inquiry for research as it relates to the proportion of foreign investment in Puerto Rico’s STR market, relative to existing residents. Data is either lacking, or unavailable to conduct empirical research on the recurring claims that Puerto Rico’s government is prioritizing foreigners over residents. Consequently, this is leading to community speculation, further emphasizing the need for future studies. Building on the findings of the EDRP 2018, there is a responsibility to evaluate the redistribution of room taxes collected via the government, specifically the DMO agency assigned to handle tourism marketing and promotion.

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Appendix 1: Coding hierarchy

Code Manager		+ v		No Grouping		List	
Economic Disaster Recovery Plan 2018 (COR3).		New		Delete		Grouping	
Codes	^	33	Comment	Creator			
Marketing & promotion	10			Javier Rivera			
Campaigns	7			Javier Rivera			
Destination management office	2			Javier Rivera			
Invest Puerto Rico	1			Javier Rivera			
Objectives	42			Javier Rivera			
Global Destination	3			Javier Rivera			
Ocean economy	19		7/4/23, 12:15 AM, merged with Tourism: Coasta...	Javier Rivera			
Visitor economy	24		7/4/23, 12:28 AM, merged with Tourism: Redesi...	Javier Rivera			
Political context & vision	5			Javier Rivera			
Strategies	51			Javier Rivera			
Alternative tourism	13		7/2/23, 1:02 AM, merged with Tourism: Tourism...	Javier Rivera			
Arts tourism	3			Javier Rivera			
entrepreneurship	5			Javier Rivera			
incentivization	1		7/5/23, 8:11 PM, merged with tax breaks	Javier Rivera			
Infrastructure	9			Javier Rivera			
Investment	13			Javier Rivera			
Medical tourism	4			Javier Rivera			
workforce development	5			Javier Rivera			
Worlding City	2			Javier Rivera			
Z -Other	7			Javier Rivera			

Appendix 2: STR investor interview guide (English and Spanish)

Interview Guide

Short-term rentals post Hurricane Maria (hosts/owners)

Good afternoon (respondent's name). First and foremost, thank you so much for taking the time to participate in this interview. My name is Javier, and I am currently a student in the Urban Management and Development Master's program at the Institute for Housing and Urban Studies at Erasmus University Rotterdam. Currently, I am researching the short-term rental market in Aguadilla Puerto Rico. I am interested in understanding the short-term rental market after Hurricane Maria, the impact on long-term and affordable housing stock, and the role of economic recovery policies, hence my interest in interviewing you.

Purpose of the interview:

The purpose of this interview is to gain insight into the experience of hosts/owners of short-term rental properties in Aguadilla and the major factors that influence the decision to invest by assessing the following:

- Your experience deciding to invest in short-term rental properties in Aguadilla.
- The major drivers and influences that led to your decision to invest in Aguadilla
- The extent that government policies and regulations affected your decision.
- Changes and trends you are witnessing in the short-term rental market in Aguadilla.

Format:

The interview will take approximately 15-20 min and will consist of both open ended and closed ended questions followed by some time to discuss any questions, or thoughts you may have. Throughout the interview you may see me making notes. If for any reason you are uncomfortable with any question you do not have to answer, and we can just move on. Furthermore, if you would like to stop the interview for any reason simply inform me. The goal is to understand your experience, as such, there are no good or bad answers, and you should feel comfortable.

I understand the importance of privacy and protecting one's identity. I want to assure you that this interview is NOT being recorded although I will be making notes throughout our conversation. The entire interview will be confidential and anonymized, and your identity protected throughout the interview and subsequent analysis. Should you be interested, a copy of the interview and the data collected can be provided at the conclusion of the assignment. Also, while there are currently no plans to use the interviews, those plans may change thus we respectfully ask your consent to use the results for scientific research and education. Do you consent to this use?

Informed Consent:

We've discussed the purpose of this interview, its format, what you can expect and most importantly the protection of your identity and privacy. Remember, you can withdraw your consent at any time and the data collected will be deleted. Do you still consent to participate in this interview?

Are there any questions or concerns you may have before we begin?

Opening question:

How has your experience as a short-term rental owner/host in Aguadilla been thus far?

- 1. Are you currently a short-term rental owner, host or both?**
- 2. How long have you been a short-term rental owner/host?**
- 3. How many properties do you currently manage/own?**
- 4. Which platforms are they currently listed on?**
- 5. If more than one, were any properties purchased after 2017?
If so, how many?**
- 6. Do you occupy any of the rental properties in Aguadilla for over 6 months of the year? If not, where is your primary residence located?**
- 7. How long had you considered investing in short-term rental properties in the Aguadilla area before you finally did so?**
- 8. How do you feel tourism has changed after Hurricane Maria?**
- 9. How do you feel government policies and impact tourism and the STR market?**
- 10. Closing question**
- 11. Since you have invested in short-term rental properties, what are some of the trends and concerns you are witnessing in the market?**

For example:

**Have you witnessed an overall increase in short-term rental listings/properties?
Is there a larger proportion of outside investors, real estate groups, local residents, etc.?**

Appendix 2.1: Government official interview guide

Interview Guide Short-term rentals post Hurricane Maria (tourism and government officials)

Good afternoon (respondent's name). First and foremost, thank you so much for taking the time to participate in this interview. My name is Javier, and I am currently a student in the Urban Management and Development Master's program at the Institute for Housing and Urban Studies at Erasmus University Rotterdam. Currently, I am researching the short-term rental market in Aguadilla Puerto Rico. I am interested in understanding the short-term rental market after Hurricane Maria, the impact on long-term and affordable housing stock, and the role of economic recovery policies, hence my interest in interviewing you.

Purpose of the interview:

The purpose of this interview is to gain insight into the short-term rental market in Aguadilla, and how it has changed post Hurricane Maria. I am also interested in gaining your insight into your experience of the tourism industry, particularly the short-term rental market from 2018 to present by assessing the following:

- Your experience with tourism trends in the last five years, and how this may differ from the period prior to 2018.
- What you understand to be the drivers of change in short term rentals over the last five years.

Format:

The interview will take approximately 15-20 min and will consist of both open ended and closed ended questions followed by some time to discuss any questions, or thoughts you may have. Throughout the interview you may see me making notes. If for any reason you are uncomfortable with any question you do not have to answer, and we can just move on. Furthermore, if you would like to stop the interview for any reason simply inform me. The goal is to understand your experience, as such, there are no good or bad answers, and you should feel comfortable.

I understand the importance of privacy and protecting one's identity. I want to assure you that this interview is NOT being recorded although I will be making notes throughout our conversation. The entire interview will be confidential and anonymized, and your identity protected throughout the interview and subsequent analysis. Should you be interested, a copy of the interview and the data collected can be provided at the conclusion of the assignment. Also, while there are currently no plans to use the interviews, those plans may change thus we respectfully ask your consent to use the results for scientific research and education. Do you consent to this use?

Informed Consent:

We've discussed the purpose of this interview, its format, what you can expect and most importantly the protection of your identity and privacy. Remember, you can withdraw your consent at any time and the data collected will be deleted. Do you still consent to participate in this interview?

Are there any questions or concerns you may have before we begin?

Opening question:

How was your experience with Hurricane Maria? Were you and your family able to make it through ok?

Background:

1. What is your title?
2. How long have you been in this position?

Questions:

3. What changes have you seen in the tourism industry as it relates to short-term rentals in Aguadilla?
(are you witnessing an increase in short-term registrations?)
4. How does this compare to the period before Hurricane Maria?
5. Can you describe the type of short-term rental investors interested in Aguadilla?
(are they local residents or foreign investors?)
6. What are some of the primary influences you feel are driving these changes?
7. What role if any do you feel government policies and regulations play in the changes experienced within the short-term rental market?
8. What are some concerns you may have about the short-term rental market?
9. What impacts do you feel the short-term rental market is having on long term rentals and affordable housing in Aguadilla?

Appendix 2.3: Non-STR community interview guide

Interview Guide

Short-term rentals and tourism and economic disaster recovery policies post Hurricane Maria (community members)

Good afternoon (respondent's name). First and foremost, thank you so much for taking the time to participate in this interview. My name is Javier, and I am currently a student in the Urban Management and Development Master's program at the Institute for Housing and Urban Studies at Erasmus University Rotterdam. Currently, I am researching tourism in Aguadilla Puerto Rico post Hurricane Maria. Essentially, I want to see understand the relationship between Economic disaster recovery policies implemented in response to natural

disasters and their relationship with tourism in Aguadilla. As such I am interested in understanding your perceptions of tourism, the short-term rental market (i.e. Airbnb, VRBO), and economic disaster recovery policies after Hurricane Maria. Furthermore, I would like to gain insight on the impacts to long-term and affordable housing stock, and hence my interest in interviewing you.

Purpose of the interview:

The purpose of this interview is to gain insight into the perceptions and experiences of community members with tourism, the short-term rental market in Aguadilla, and economic disaster recovery policies post Hurricane Maria. I am also interested in gaining your insight into some of the impacts of tourism after Hurricane Maria and concerns you may share by assessing the following:

- Your experience with tourism and its impacts before and after Hurricane Maria (affordable housing, rents, home values, costs of living, etc.).
- Your perception of economic disasters recovery tools and policies and their relationship with tourism in Aguadilla particularly short-term rentals?

Format:

The interview will take approximately 15-20 min and will consist of both open ended and closed ended questions followed by some time to discuss any questions, or thoughts you may have. Throughout the interview you may see me making notes. If for any reason you are uncomfortable with any question you do not have to answer, and we can just move on. Furthermore, if you would like to stop the interview for any reason simply inform me. The goal is to understand your experience, as such, there are no good or bad answers, and you should feel comfortable.

I understand the importance of privacy and protecting one's identity. I want to assure you that this interview is NOT being recorded although I will be making notes throughout our conversation. The entire interview will be confidential and anonymized, and your identity protected throughout the interview and subsequent analysis. Should you be interested, a copy of the interview and the data collected can be provided at the conclusion of the assignment. Also, while there are currently no plans to use the interviews, those plans may change thus we respectfully ask your consent to use the results for scientific research and education. Do you consent to this use?

Informed Consent:

We've discussed the purpose of this interview, its format, what you can expect and most importantly the protection of your identity and privacy. Remember, you can withdraw your consent at any time and the data collected will be deleted. Do you still consent to participate in this interview?

Are there any questions or concerns you may have before we begin?

Opening question:

How was your experience with Hurricane Maria?

Were you and your family able to make it through ok?

Background:

How long have you lived in Aguadilla?

Are you originally from Aguadilla?

If not where are you from?

Questions:

Do you own or rent?

- 1) How long have you owned or rented?**
- 2) How was your experience finding housing?**
- 3) How do you feel tourism has changed in Aguadilla since Hurricane Maria?**
- 4) Are you aware of what short-term rentals (Airbnb, VRBO) are?**
- 5) Have you witnessed an increase in short-term rentals in Aguadilla?
after Hurricane Maria**
- 6) What do you feel is causing the increase in short-term rentals?**
- 7) What types of owners /investors of short-term rentals are you witnessing?
Puerto Rican Residents or foreign investors?**
- 8) Do you currently own a short-term rental property?**
- 9) Have you ever considered investing in short-term rental properties?
If yes, what are some of the barriers that may be preventing you from doing so?**
- 10) What role do you feel the government of Puerto Rico, and Aguadilla play in
tourism?**
- 11) Which political party do you identify with?**
 - A. Partido Nuevo Progresista (PNP)**
 - B. Partido Popular Democratico (PPD)**
 - C. Partido Independentista Puertorriqueño (PIP).**
 - D. Other_____**
 - E. Prefer not answer**

Closing question:

What concerns do you have about tourism in Aguadilla moving forward?

Appendix 3: Questionnaire (English)

Tourism, Short-Term Rentals, and Economic Disaster Recovery After Hurricane Maria

Welcome to My Survey

Thank you for participating in our survey. Your opinion is important. The purpose of this questionnaire is to collect information related to tourism, short-term rentals, and economic disaster recovery policies after Hurricane Maria. It should take approximately 5-10 minutes to complete. All responses are anonymous and there is no obligation to answer any questions that you are not comfortable with. If you are interested, a copy of the research can be provided to you upon its completion. Additionally, while there are currently no plans for using the surveys, those plans may change, so we respectfully ask for your consent to use the results for scientific research and education.

We have provided an overview of the purpose of this questionnaire, its format, what you can expect, and most importantly, the protection of your identity and privacy. Remember that you can withdraw your consent at any time and the data collected will be deleted.

* 1. Do you agree to the above terms? By clicking Yes, you agree that you are willing to answer the questions in this survey. ☞ 0

Yes

No

2. How long have you lived in Aguadilla? ☞ 0

3. Are you originally from Aguadilla?
If not where are you from? ☞ 0

4. Do you own or rent? ☞ 0

Own

Rent

Other

Other (please specify)

5. How long have you rented, or owned? ☞ 0

6. How was your experience finding housing? ☞ 0


7. How do you feel tourism has changed in Aguadilla since Hurricane Maria? ☞ 0

8. How do you feel tourism after Hurricane Maria is affecting Aguadilla?  0

9. Are you aware of what short-term rentals (Airbnb, VRBO) are?  0

Yes


No

10. Have you witnessed an increase in short-term rentals in Aguadilla?
After Hurricane Maria  0

Yes

No

Maybe

11. If your answer to the previous question is yes, what do you think is fueling the increase in short-term rentals?
 0

12. What types of owners /investors of short-term rentals are you witnessing?
Puerto Rican Residents or foreign investors?  0

Puerto Rican residents

Foreign investors


Other


Other (please specify)

13. Do you currently own a short-term rental property?  0

Yes

No

14. Have you ever considered investing in short-term rental properties?
If yes, what are some of the barriers that may be preventing you from doing so?  0

15. How do you feel tourism is benefitting Aguadilla?  0

16. What concerns do you have about tourism in Aguadilla ?  0

17. What role do you feel the government policies in Puerto Rico, and Aguadilla play in contributing to tourism?
🗨 0

18. Which political party do you identify with 🗨 0

- Partido Nuevo Progresista (PNP)
- Partido Independentista Puertorriqueño (PIP).
- Prefer not answer

Other (please specify)


Appendix 3.1: Questionnaire (Spanish)

Turismo, alquileres a corto plazo y recuperación económica de desastres después del huracán María

Bienvenidos a mi encuesta

Gracias por participar en nuestra encuesta. Su opinión es importante. El propósito de este cuestionario es recopilar información relacionada con el turismo, los alquileres a corto plazo y las políticas económicas de recuperación ante desastres después del huracán María. Debe tomar aproximadamente de 5 a 10 minutos para completarse. Todas las respuestas permanecerán anónimas y no hay obligación de responder ninguna de las preguntas con las que no se sienta cómodo. Si está interesado, se le puede proporcionar una copia de la investigación al finalizar. Además, aunque actualmente no hay planes para usar las encuestas, esos planes pueden cambiar, por lo que le pedimos respetuosamente su consentimiento para usar los resultados para la investigación científica y la educación.

Brindamos una descripción general del propósito de esta entrevista, su formato, lo que puede esperar y, lo que es más importante, la protección de su identidad y privacidad. Recuerda que puedes retirar tu consentimiento en cualquier momento y los datos recabados serán eliminados.

* 1. ¿Está de acuerdo con los términos anteriores? Al hacer clic en Sí, acepta que está dispuesto a responder las preguntas de esta encuesta.  0

Sí

No

2. ¿Cuánto tiempo ha vivido en Aguadilla?

3. ¿Eres originario de Aguadilla?

Sí

No

otro

otro

4. ¿Eres dueño/a o alquila su hogar?

Dueño/a

Alquilo

otro

5. ¿Cuánto tiempo ha estado alquilando o siendo dueño de su casa?

6. ¿Cómo fue tu experiencia encontrando vivienda?

7. ¿Cómo cree que ha cambiado el turismo en Aguadilla desde el huracán María?

8. ¿Cómo cree que el turismo después de María afecta Aguadilla?

9. ¿Conoce qué son los alquileres a corto plazo (Airbnb, VRBO)?

Si

No

10. ¿Ha experimentado un aumento en los alquileres a corto plazo en su Aguadilla después del huracán María?

Si

no

11. Si su respuesta a la pregunta anterior es afirmativa, ¿qué cree que está impulsando el aumento de los alquileres a corto plazo?

12. ¿Qué tipos de propietarios/inversores de alquileres a corto plazo está observando?

Residentes puertorriqueños

inversionistas extranjeros

otro

13. ¿Actualmente posee una propiedad de alquiler a corto plazo?

Si

No

14. ¿Ha considerado alguna vez invertir en propiedades de alquiler a corto plazo?
En caso afirmativo, ¿cuáles son algunas de las barreras que pueden estar impidiéndole hacerlo?

15. ¿Cómo cree que el turismo está beneficiando a Aguadilla?

16. ¿Qué inquietudes tiene sobre el avance del turismo en Aguadilla?

17. ¿Qué papel cree que juegan las políticas gubernamentales en Puerto Rico y Aguadilla en la contribución al turismo?

18. ¿Con qué partido político se identifica?

- Partido Nuevo Progresista (PNP)
- Partido Popular Democrático (PPD)
- Partido Independentista Puertorriqueño (PIP).
- Ninguno
- Prefiero no contestar
- otro


Otro

...

Turismo, alquileres a corto plazo y recuperación...

Modified 07/12/2023

Status
Closed

 8 responses


Analyze results

...

Tourism, Short-Term Rentals, and Economic...

Modified 07/11/2023

Status
Closed

 7 responses

Analyze results

Appendix 4: IHS copyright form

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By signing this form, you agree that you are the sole author(s) of the work and that you have the right to transfer copyright to IHS, except for those items clearly cited or quoted in your work.

Criteria for publishing:

1. A summary of 400 words must be included in the thesis.
2. The number of pages for the thesis does not exceed the maximum word count.
3. The thesis is edited for English.

Please consider the length restrictions for the thesis. The Research Committee may elect not to publish very long and/or poorly written theses.

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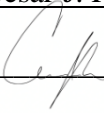
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Thank you for your contribution to IHS.

Date : July 13, 2023

Your Name(s) : Cesar J. Rivera

Your Signature(s) : 

Please direct this form and all questions regarding this form or IHS copyright policy to:

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