



# WPI

## **Housing as a Factor in Social Exclusion: Venice Case Study**

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## **Authorship**

The authors of this final report are Abigail Hodges, Joseph Hurley, and Eric Montiverdi. Abigail completed the writing portions for the paper, Joseph completed the slides for the presentation and Eric developed the Data Repository. Each student contributed to researching editing of this report and other deliverables.

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## **Abstract**

Collecting a complete and accurate set of data on housing in Venice will give future researchers and residents what they need to compare past and future trends. This is important, as many researchers are investigating if and how changes in housing stock and pricing has played into the recent depopulation of the city. For this project, we expanded on a 2021 WPI research project that began to explore this question (Bolduc, Redgate, Sesma, Walsh, 2021). We consulted as many primary resources as possible—government housing and tax records, real estate websites, listings of tourist rentals and publications from accredited authors. We used this data to answer the following questions: What are the types of housing in the historic city? How much stock is there for each type? How available and affordable is housing in Venice for its Venetian residents? We developed an online data repository to organize our data and key trends so that researchers--including those working alongside the SmartDest European Union project (2020)--can better inform their understanding of the ways residents in tourist-centric cities may experience social exclusion.

# Introduction

The historic city of Venice has undergone significant changes since the 1950s due to an increase in tourism. There have been major shifts to the job market, an increased cost of living, a new housing market, and challenges in public transportation. Residents have been migrating out of the city since this shift, leaving only 49,852 Venetian residents in the historic city as of 2022 (Comune di Venezia, 2022). Venetian researchers are actively working to understand if there is a relationship between these changes and the depopulation of the city. We worked alongside SerenDPT, a Venetian organization conducting a case study on Venice; they will contribute our research on housing to SmartDest (2020), a European Union funded project studying social exclusion due to over-tourism in eight European cities.

Unfortunately, there is no centralized resource with the current, accessible, and comprehensive data on housing, mobility, job diversity, depopulation and tourism, making it difficult to study the relationships between these factors. A WPI student research team made a start, however, creating an online repository to organize data on these topics (Bolduc, Redgate, Selma, Walsh, 2021). Our project focused specifically on housing. Our goal was to build a complete, accurate and updated collection of data on the housing stock in the historic city of Venice. The data and records of our primary sources were stored in an updated housing data repository that researchers and Venetian residents will have complete access to in the future. We set out to address these questions:

1. What are the types of housing in Venice?
2. How many homes are there in Venice?
3. How much of the total stock is available to residents?
4. Are the homes that are available also affordable?

These questions will be addressed throughout the remainder of this paper and will help readers to understand housing and the impact it has on the depopulation of the city.



# The Context and Nature of Housing in Venice

In this section, we will describe the different housing types within the historic city of Venice. The amount and type of housing is a result of Venice’s unique geography and a number of factors that may be related to the rise in tourism over the past 70 years or so, so we begin with that context.

Venice is comprised of 117 small islands and 150 canals that are connected by 391 bridges (Venezia Autentica, 2022). Many of its buildings are historic, dating back 800 years or more, and many need continual maintenance. Venice was constructed by driving long wooden piles into the lagoon to create a foundation for larger buildings. Then, workers stacked planks of wood and stone over the top of this base foundation. Many of these buildings are eroding because of water damage and age, and many are in need of renovation (Cessi, 2022). Due to the historical importance of its structures and the compact size of the city, it is extremely difficult and costly to build new housing or expand on old structures.

Since the original founding of Venice, its culture and trade have flourished, attracting more and more tourists every year. Inversely, since the 1950s, the population of Venice has been on the decline. The population reached roughly 174,808 in 1951 and dropped to just below 60,000 by 2018 as shown in Figure 1 (Salerno, 2020). The population as of November, 2022 was 49,852 (Comune di Venezia, 2022).

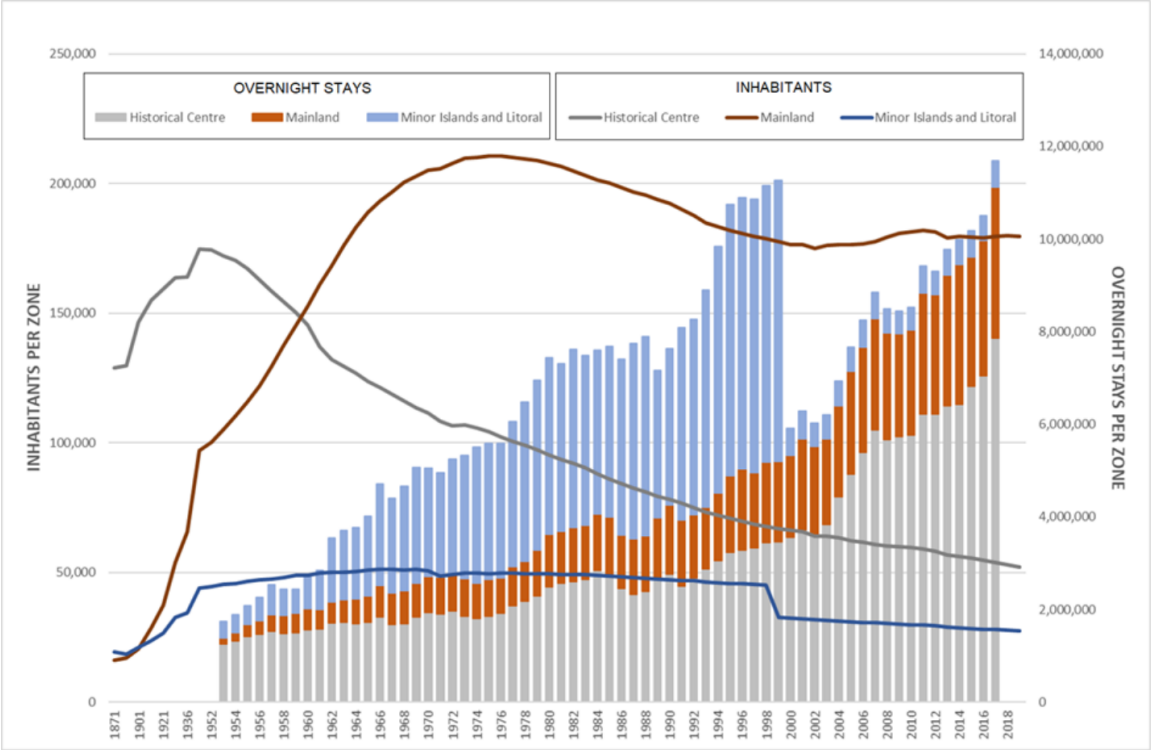


Figure 1: Resident population of Venice compared to the number of tourist stays (Salerno, 2020)

With the growth of tourism in Venice, more tourism-related jobs became prevalent, and housing began to shift from resident occupied homes and long-term rentals to short-term and

tourist rentals (Bolduc, Redgate, Selma, Walsh, 2021). As a result of the tourist numbers increasing, crowding in the narrow streets and on city boats has increased, slowing commute times for many residents, especially those who must travel to the mainland (Pisani, 2014). Since the expansion of tourism, the focus of local shops and businesses in Venice have shifted toward tourist goods and services, elevating prices and creating financial challenges for those with limited low-wage tourist based jobs (Bolduc, Redgate, Selma, Walsh, 2021).

Within this dynamic context, we defined 8 different types of housing in Venice, shown in Figure 2, which became our categories of analysis.

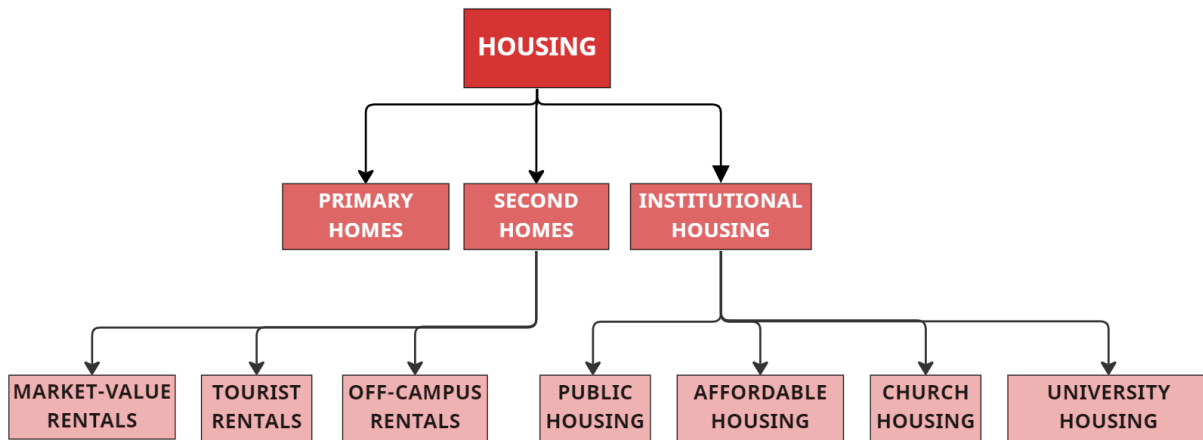


Figure 2: Types of Housing in the Historic City

## Primary Homes

Primary homes are owned and occupied by Venetian residents. These homes are used as their main address and are not typically rented out. These homes can be found within all seven districts of the historic city, the majority of which are in Cannaregio (Engel & Voelkers, 2020).

## Second Homes

Second homes are owned but not occupied by the owner. The owner of these homes may or may not be a resident of Venice. Their use can vary from owner to owner. Second homes can be used for long-term market value rentals (typically rented to other Venetians), for short-term tourist rentals such as Airbnb's, or as off-campus rentals for students. Second homes can be distinguished from primary homes by looking at their tax rates (Abruzzo Realty, 2015).

Considered a luxury, second homes are subjected to a higher Imposta Municipale Unica (IMU) tax, which is a property tax that is higher than that of primary residences.

### *Market-Value Rentals*

Market-value rentals are homes or apartments rented out to those who can afford the current prices of the housing market. These prices often fluctuate as the cost of living changes and are determined by the owner of the property who is choosing to rent it out. To rent, renters



sign a lease for a specific period of time and renew when the lease has ended. The most common lease in the historic city is the ‘four plus four’ lease which is a lease that is signed for four years. At the end of the four years, the renter has the option to sign for another four years later on (Teunissen, 2022). There are also other lease options for renters as well, such as ‘three plus two’, however the ‘four plus four’ is the most common.

### ***Tourist Rentals***

Tourist rentals are houses or apartments that are specifically rented out to tourists visiting Venice who are in need of accommodations for one night or more. These rentals are scattered throughout all 7 districts of the historic city and are rented from travel agencies or rental websites such as Airbnb, Vrbo, and Expedia. These platforms have made tourist rentals easily advertised and accessible to tourists and since 2016, there are almost 1,900 more Airbnb’s in the city as of 2022 (InsideAirbnb, 2022). These rentals are most commonly not given a minimum night stay, so tourists have the ability to stay for a single night then move to their next travel destination. This causes Airbnb’s to potentially go unused for a number of days, and yet the space is not accessible to residents because comparatively, it is far too expensive as compared to long term rentals (Inside Airbnb, 2022).

### ***Off-Campus Student Units***

Off-Campus student living refers to living accommodations for students interested in living options not supplied by the university. The main universities found in Venice are Università Ca’ Foscari and the Università luav di Venezia. Students use real estate sites such as STURENT to find off-campus apartments. The duration of these rentals can vary from one month to a year.

## **Institutional Housing**

Institutional housing is housing that is supplied, owned and controlled by an overarching institution and is considered “off-market”; residents would need to apply for this housing and/or meet specific criteria. The three main institutions that supply housing in Venice are the church, universities, the city, and public housing authorities. There are special requirements to qualify for this type of housing and residents are required to submit applications to qualify.

### ***Affordable Housing***

Affordable homes are properties sold below market-value to residents who are unable to compete with the market value rates. The government mandates that a certain percentage of homes in a region be designated as affordable; however, these are not government-owned (Nieuwenhuijzen, 2017). Affordable housing is intended to promote more equitable home ownership for Venetians.

### ***Public Housing***

Public housing is for residents with financial, social, or health disadvantages. They must make less than €20,755 per year, apply and be accepted for the housing (Housing Europe, 2010). There are two main organizations that manage public housing: ATER (l’Azienda territoriale per

l'Edilizia Residenziale di Venezia) and Comune ERP (Edilizia Residenziale Pubblica). ATER is an instrumental public economic body that rents houses at subsidized rents and contributes to creating housing officers to help meet the needs of those who can not afford to keep up with the private real estate market (ATER, 2022). ATER is the main public housing authority across Italy. The second is the ERP, a private entity that is hired by ATER to manage the public housing within the municipality of Venice. There are also organizations such as IPAV(IRE) and IVE.

### ***Church-Owned Housing***

Church-owned housing is owned by the CURIA or other religious institutions related to the church. It is not listed under market value rentals like other properties since it is managed and rented out by the church. These properties are rented to a variety of individuals including long term renters, short term tourists and students in need of housing. To receive church housing there is an application that must be filled out, and occupants must be selected (Patriatico di Venezia, 2022).

### ***University-Owned Housing***

University-Owned housing is owned, rented and controlled by the specific university a student attends. Only students attending the specific university are eligible for this housing type. The main universities found in Venice are Università Ca' Foscari and the Università luav di Venezia. There are various configurations including dorms or larger units, and students have the ability to choose what price and style works best for them. These dormitories can be found throughout the entire historic city except for Giudecca. (Università Ca' Foscari Venezia, 2022).

## **Primary Sources for Data on Various Housing Types**

One challenge of inventorying housing across the city is that the information is not located in one place. Table 1 provides links to the sources we used throughout our data collection. Whenever possible, we used primary sources and used the most current data available at the time of this project. We note below where a source was not a primary source and include dates to emphasize which housing types may need to be updated when the information becomes publicly available. For more detail on specifically where and how certain data was extracted from on these sites, an appendix with our step-by-step process is linked on our [Data Repository](#).



<b>Housing Type</b>	<b>Source</b>	<b>Date Accessed</b>	<b>Notes</b>
Primary Homes	<a href="#">IMU Tax</a> <a href="#">Comune of Venice</a> <a href="#">Immobiliare.it</a> <a href="#">Idealista.it</a>	2016 From 2021 Updated daily Updated daily	We were able to find the IMU tax data in an old folder from the 2016 Housing team.
Second Homes	<a href="#">IMU Tax</a>	2016	Second homes were identified by finding homes listed with higher tax rates. Using the IMU data we found the total number of second homes. We were able to find the IMU tax data in an old folder from the 2016 Housing team.
Affordable Housing	<a href="#">ATER affordable housing</a>	From 10/16/2022	
Market-Value Rentals	<a href="#">immobiliare.it</a> <a href="#">Idealista.it</a>	Updated daily Updated daily	
Public Housing	<a href="#">ATER- Real Estate Assets</a> <a href="#">Public Housing from Comune ERP</a> <a href="#">Istituzioni Pubbliche di Assistenza Veneziane (IPAV)</a> <a href="#">IRE data</a> <a href="#">Map of Public Housing</a>	From 10/29/2019 From 2021 From 2013 Various years	IRE was updated to be IPAV in 2013. We have data from IRE from 2013 and the most recent comes from IPAV  Created by Professor Laura Freg and her students from Università luav di Venezia. Includes her sources and years data was collected from 2015 for the Comune, 2011 for ATER, and 2016 for IRE.
Church-Owned Housing	<a href="#">Patriarcato di Venezia</a> <a href="#">Il Patriarcato si da al business immobiliare</a>	From 2022 From 12/04/2010	
Short term rentals for tourists	<a href="#">InsideAirBNB</a> <a href="#">AirDNA</a> <a href="#">Citta di Venezia Tourist Map</a>	Updates Monthly Updates Monthly From 10/3/2021	This map is for the entire city of Venice, not just the historic city. You can filter out regions however to look at only the historic city.
Student Housing	<a href="#">ESU-ARDSU Venezia</a>	From 08/30/2022	University website listings

<a href="#">Ca' Foscari University of Venice</a>	From 11/29/2022	University website listings
<a href="#">STURENT</a>	Updates Daily	Off-Campus listings
<a href="#">Venice Apartments</a>	Updates Daily	Off-Campus listings

Table 1: Sources of Data for each Housing Type

# What is the Housing Inventory & Stock in Venice?

At the start of this project, we estimated that there were 40,000 housing units in the city. This estimation was based on the current population of 49,852 people and the median household size of 1.8 occupants (Comune di Venezia, 2022). In 2020, there was an estimated bed count that would accommodate 131,250 people in the historic city (Salerno, 2020). Using the data from table 1, **we calculated that there are around 36,739 housing units in the historic city**, which is slightly over 3,000 less than we originally estimated. The majority of these units—21,900—are primary residences, which comprise 60% of the total housing stock. The next largest percentage is second homes, which make up 26% of the total housing stock or 9,526 total units. We assume that second homes are commonly rented—either long term to locals or short term, to tourists or students. We identified 5,872 tourist rentals (InsideAirBnb, 2022). Subtracting this from the total stock of second homes, we estimated that the number of homes left for long term market rentals and student renters was 3,654 units.

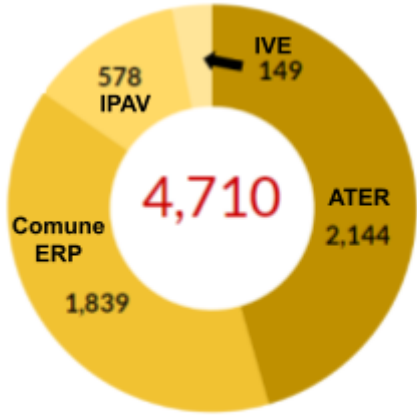


Figure 3: Number of Units Owned by 4 Different Public Housing Organizations (Comune ERP, 2015) (ATER, 2011) (IRE, 2016) (IVE, 2022)

Next, we found 4,710 public housing units. Of these, 2,144 units are managed by ATER, 149 units are managed by IVE, 578 units are managed by IPAV, and 1,839 homes are managed by Comune ERP (Freg, 2016). We also found 208 instances of affordable housing.

We finally found there are about 365 units controlled by the church; and 8 units dedicated to university dorms.

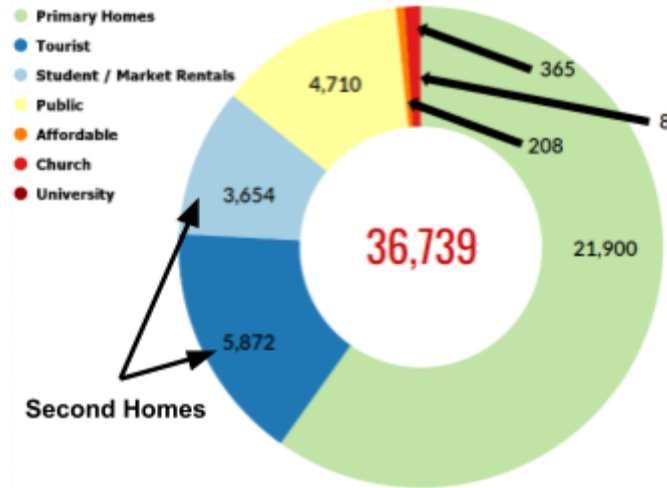


Figure 3: Total Stock of Housing by types (IMU Tax, 2016) (Inside AirBNB, 2022) (STURENT, 2022) (VeniceApartment.com, 2022 ) (IRE, 2011) (ATER, 2015) (Comune ERP, 2015) (IRE, 2011)(OCIO, 2022) (Patriarco di Venezia, 2022) (Universita Ca' Forscari, 2022)

## How Much Housing is Available to Venetian Residents?

### *How many units for personal occupancy may be Available for Purchase by Venetian Residents?*

The two housing types Venetians would theoretically be able to buy and live in are primary and affordable homes, numbering 22,108. This represents 60.8% of the total stock, meaning that over half of the entire stock is theoretically available for residents to purchase and live in. However, those who do not qualify for one of the 208 affordable housing units, have 59.6% of the housing stock available to them, or 21,900 homes.

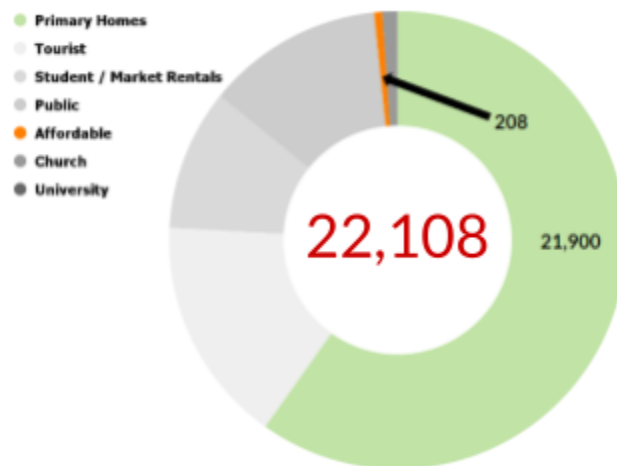


Figure 4: Number of Units that can be Owned and lived in by Venetian Residents

## *How many long-term rental units may be available for Venetians to live in?*

Assuming the current stock and the usage of second homes, **the total number of on-term rentable units available to Venetian residents is 8,749**. If you include the current stock of market value rentals, public housing and some church housing; this is about 24% of the total housing stock. However, 4,710 units of those units are reserved for those who qualify for public housing. Much of the 365 church housing units are broken down into beds and/or also limited to individuals meeting certain requirements. 3,674 units are potentially left for the market-value rental pool, which is 10% of the overall housing stock.

Despite qualifying for 23.1% of the total stock, those who qualify for church or public housing would struggle to keep up with the market value rentals, so applying for public or church housing would be their best option. Unfortunately, public housing has been an issue for many interested in applying due to the lack of funding and the strenuous waitlist process. ATER reported that of their 296 accommodations planned for 2018, only 21 were completed by the year's end, 19 were in progress, 172 were rescheduled for 2019-2021 and 84 of them did not receive enough funding (ATER, 2018). Going along with the unguaranteed housing, applicants who qualify for public housing are put on a waitlist. There is no published data on how long applicants will stay on the waitlist for, however in conversing with locals, we have heard instances in which applicants have waited years before getting off the waitlist. Similarly, church housing is not easily attainable either. To qualify for church housing, those interested must apply through their parish by a private process that is not publicly disclosed (Patriarcato di Venezia, 2022).

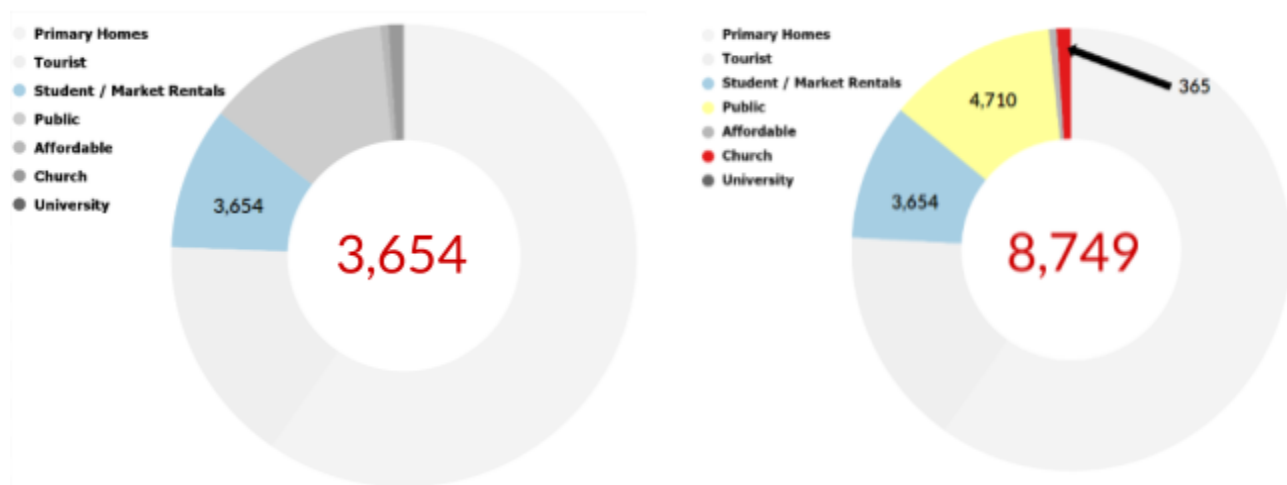


Figure 5: Number Rentals Available to Middle Income (> €20,755) Venetian Residents (*Left*) and Number of Rentals Available to Venetians with Salaries > €20,755 (*Right*)

## ***Church-Owned Housing Availability***

There are a total of 365 units owned and controlled by the catholic church located throughout the historic city. Specific locations of 13 church-owned residences, with about 694 beds total, are presented in Figure 6 (Patriarca Di Venezia, 2022). These residences specifically have multiple purposes besides housing for residents, so these units are unavailable to them. There is an application process for those who are interested or feel that they qualify for church-owned housing, but the process of doing this has not been made public.

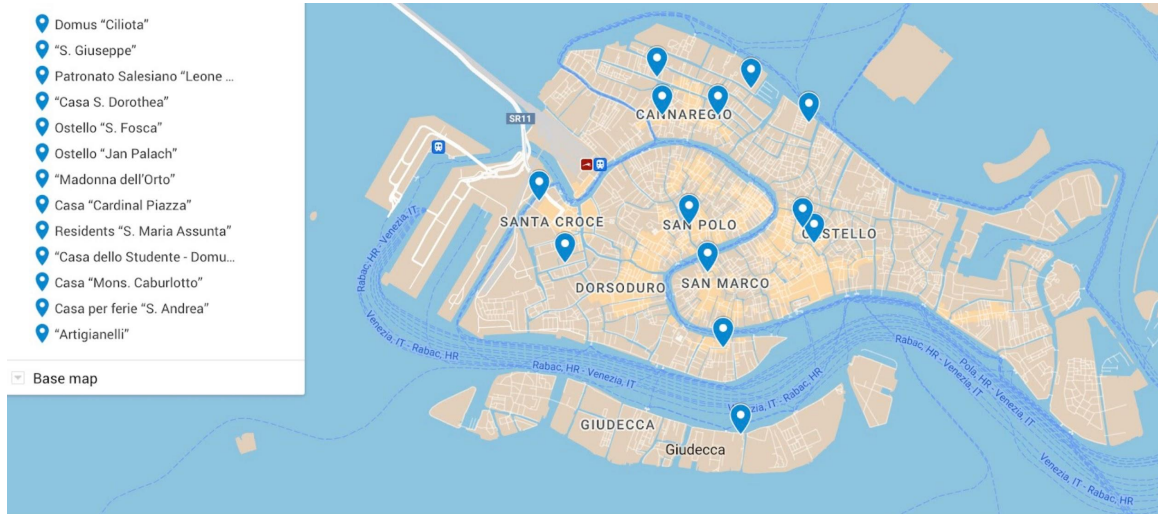


Figure 6: Map of church owned housing (Patriarcato di Venezia, 2022)

## ***Off-Campus vs. University Owned Housing Availability***

There are more off-campus living options for students in Venice in comparison to on-campus options. The majority of housing specifically listed by universities is found in San Polo, Dursoduro and Cannaregio, near the main campus of Università Ca' Foscari. One external option suggested to find off campus housing is from a source called STURENT. STURENT is a real estate website for students who are interested in finding off campus apartment options. The website is easy to use and includes information on location, cost, bed count, area in m<sup>2</sup>, and lease details. There are always at least 20-30 listings on the website at a time (STURENT, 2022). The majority of on-campus dorms are found all throughout the city, farther from the campus, with the exception of one dorm. The university helps students find what living option works best for them. Information on the listings from STURENT as of November 10, 2022 and different dorm listings as of November 29, 2022 can be found on Figure 7.



Figure 7: Map of student housing options Università Ca' Foscari and STURENT.

## How Affordable is Venetian Housing for Residents?

The median gross salary of a Venetian worker is around €28,000 per year and a dual-income household would take in a combined €56,000 per year. Based on this salary, the monthly income for a single resident would be €2,333 a month and would be €4,668 a month for a dual-income (VeneziaToday, 2016). Experts advise that individuals should not spend more than  $\frac{1}{3}$  of their income on housing, a single-income household would spend a maximum of €778 per month and a dual-income household would spend a maximum of €1,556 per month on housing payments.

In terms of buying a home, however, there are other related costs, such as down payments that can affect how much residents can spend for their living accommodation. The current interest rate for a home in Venice is 3.36% at 20 years. For a single income paying the maximum monthly payment, the maximum mortgage would be €135,000 with a €33,750 (20%) down payment (Idealista.it, 2022). Similarly, for a dual-income, the maximum mortgage would be €270,000 with a €67,500 down payment. **Based on this, the maximum priced home a single income resident can afford is €168,750 and a dual income family can afford up to €337,500 for their home.**

### *Affordability of Primary Homes for Venetians*

We found on Immobiliare.it that there are 1,529 homes available for sale as of November 24<sup>th</sup>, 2022. Of these homes the median price was €450,000, the median area was 100 m<sup>2</sup> and the median number of rooms was 4 (Immobiliare.it, 2022). Based on our calculations of a single



resident making the median salary and paying a **maximum price of €168,750, there are 32 homes** on Immobiliare.it that are affordable and available for residents. From the same 1,529 homes, a dual-income household making the median salary paying the **maximum home price of €337,500, there are 420 listings** available on Immobiliare.it that are affordable and available for these residents. For these 420 listings, the median area drops from 100 m<sup>2</sup> to 65 m<sup>2</sup>, the number of rooms drops from 4 to 3 and most listings may require some form of renovation.

Salaries are a huge factor on the size, location and cost of a home that an individual or couple are able to purchase. We calculated that from the cost of the median home on the market-€450,000-the 20% down payment would be €90,000. With a loan principle of €360,000 and an interest rate of 3.36% for 20 years, the monthly mortgage would be €2,060. Multiplying this by 12 (12 months in a year), **the minimum salary needed to purchase a median priced home in Venice is €74,160.** This is €18,160 more than the median dual salary and is €46,160 more than the median single resident salary needed to buy a home.

### ***Affordability of Market-Value Rentals for Venetians***

As of November 22<sup>th</sup>, there were 124 listings found on Immobiliare.it available as market-value, long term rentals. Of these listings, the median rent was €1,275 per month, the median area was 75 m<sup>2</sup> and the median number of rooms was 3 per apartment (a one-bedroom unit). Based on the median salary, the maximum rent a single income resident could afford would be €778 per month. However, we found that **of the 124 listings, only 12 were available and affordable at this price.** For a dual-income at median salary renting a maximum of €1,556 per month, **78 of the 124 listings are available and affordable.**

The cost for market-value rentals may continue to rise due to the incentive of second homeowners to rent these homes as more expensive short-term tourist rentals. Market-value rentals and tourist rentals are both second homes on the market to be rented. The number of tourist rentals has increased on the market, resulting in the number of market-value rentals to decrease. **The median cost of an AirBNB is €166 per night,** a €46 increase from 2016. If a second home owner rents to a tourist for 19 days out of a month, they would make €3,154, before taxes. This means that second home owners could, by renting to tourists, earn €1,879 or more per month in comparison to the median monthly income for a market value rental of €1,275 (InsideAirBnb, 2022). The city of Venice is planning to limit the number of days that tourist rentals can be rented per year to 120 days a year (Campaign for a living Venice, 2022). Assuming rent per night of an Airbnb is still €166, renting to tourists could bring in €19,920 a year. If they decided to rent in the market-value rental pool, they would only take in €1,275 per month, which would bring in much less-€15,300 before taxes and other payments. So even only renting tourist rentals for 120 days, second home owners would still make more than renting to residents for a year. For second home owners who wish to stay in the market value rentals market, raising their rent prices would be the only way to increase their yearly income. Since most residents can not even compete with the current market, an increase to the median rent per month would drive the number of rentals that are available and affordable.

## Affordability of by Location

There are different sale and rental prices in Venice depending on the location and amenities of each apartment. We compared the sale and rental price per m<sup>2</sup> over the past eight years to see how the costs per neighborhood have changed. As of 2022, San Marco is the most expensive neighborhood to purchase a home in, with homes going for an average of €593,600. The least expensive homes can be found in parts of Castello for an average of about €419,800. Figure 8 shows that over the past eight years, San Marco has consistently been the most expensive area to purchase a home or rent an apartment. In comparison to the less expensive apartments and homes for sale, Giudecca and parts of Castello have been the least expensive (Immobiliare.it, 2022).

**Average Sale Price of a 100 m<sup>2</sup> Home Over Last 8 Years**

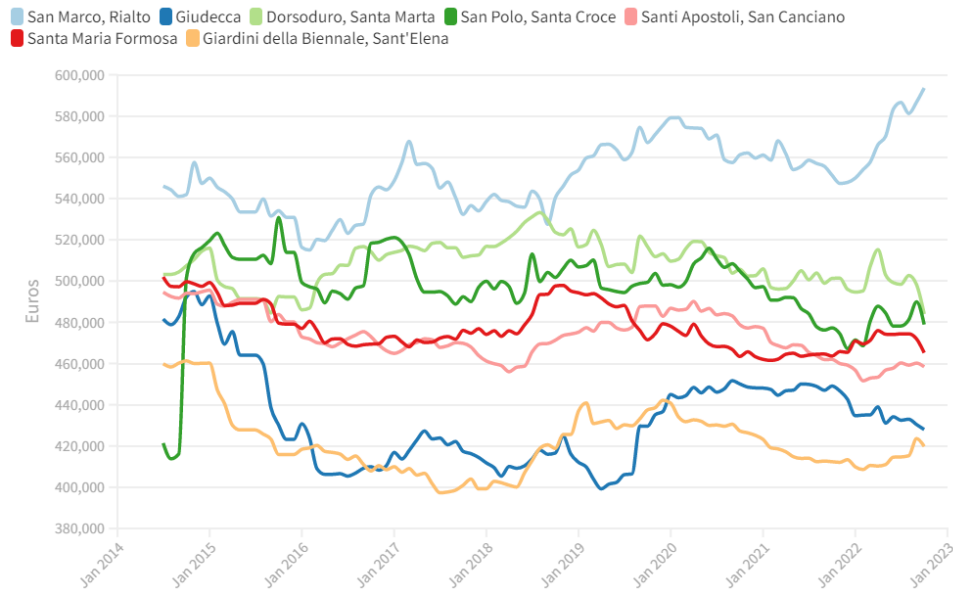


Figure 8: Average sale price of a 100 m<sup>2</sup> home over the last eight years (Immobiliare.it, 2022)

We then used the same 8 years and 100 m<sup>2</sup> to compare the average monthly rental price of apartments in all the neighborhoods of Venice. Between 2020 and about halfway through 2021, the monthly rental cost was on a constant decline for each neighborhood. The highest peak of almost all apartments occurred in June of 2018. At this point, San Marco was the most expensive neighborhood and had the most expensive rentals in any neighborhood. The monthly rent sat at about €2,070 a month, which was followed by an immediate drop in September to €1,710. As of October 2022, the San Polo and Dorsoduro areas were the most expensive with the monthly rent at €1,865 euros per month. The cheapest to rent is Giudecca having a monthly rent of about €1,478 euros per month. This is €127 less expensive than the second cheapest location of Santa Maria Formosa (Immobiliare.it, 2022).

### Average Monthly Rent Price of a 100 m<sup>2</sup> Home Over Last 8 Years

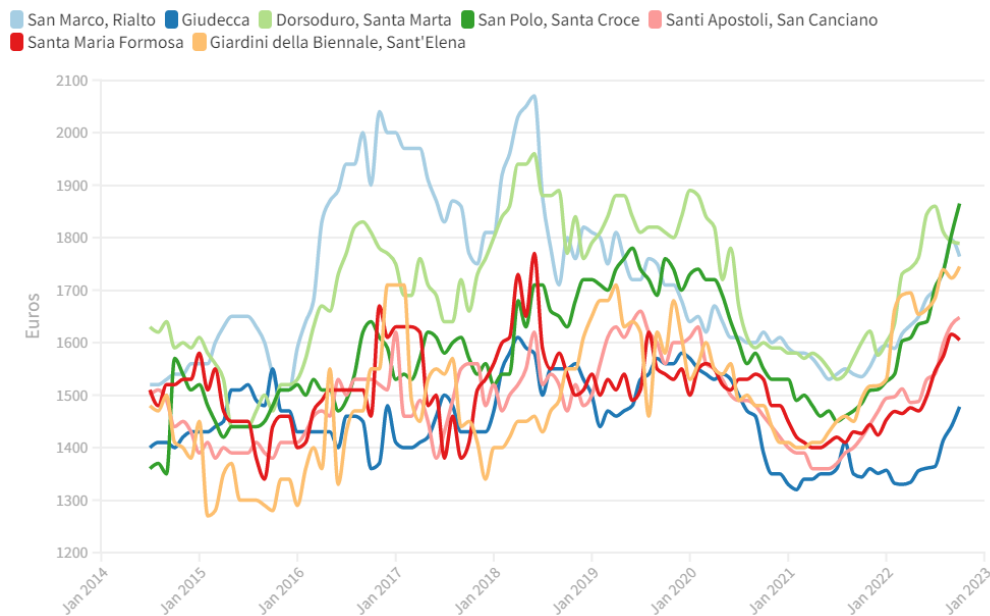


Figure 9: Average rental price of a 100 m<sup>2</sup> home over the last eight years, (Immobiliare.it, 2022)

## ***Church Homes Affordability***

For those who qualified for church-owned housing, we found that the cost of these units is about  $\frac{2}{3}$  less than that of the market value costs (Tanucci, 2010). Knowing that church housing is a lot less than the market value rentals, we can classify church owned housing as a type of affordable housing that is distributed through the church. The church has the power to control the affordability and renters of their housing, similar to how the government has the power to mandate a certain amount of affordable housing.

## ***University Housing Affordability***

There are more affordable options for students optioning for on campus living situations due to different rates the universities offer. For example, Università Ca' Foscari offers dorms at different rates, one being scholarship rates and the second being social rates. Those who qualify for scholarships pay less than those on social rates, how much less is dependent on the dormitory. There are various living styles with numerous amenities depending on each student's needs and budget. For example, a twin room dorm in a mixed gender residence can go for €281 per month and a single in the same building would be €318 per month on scholarship rate (Università Ca' Foscari, 2022). For these prices in this residence hall, there would be basic accommodations such as common areas, private bathrooms and kitchenettes. For dormitory options with different accommodations and amenities, the price will vary.

## Off-Campus Living Affordability

Cost of off campus living is not dependent on location, but on the area that the apartment has. We assumed that off campus apartments closer to the university would be more expensive than those farther away but we found that there is a variety of apartments in each neighborhood that are both expensive and inexpensive. The average cost for off campus living is about €1,200 per month; the average area is 80 m<sup>2</sup> and the average room size is 1 room. The more expensive apartments had more space and more rooms in comparison to the less expensive apartments that had less space and less rooms.

## Conclusion & Recommendations

Through our research, we identified **36,739 dwellings** within the historic city of Venice. Out of the total stock, we identified 21,900 primary homes, 9,526 second homes, and 5,313 institutional homes. Of the 9,526 second homes, we found 5,872 tourist rentals and estimated there are a remaining 3,654 student and/or long term market value rentals for residents. Out of the 5,313 institutional homes, 4,710 are public housing units, 208 are affordable homes, 365 are church housing, and 8 are university dormitory complexes. This led us to the conclusion that on the surface, there appears to be plenty of housing for residents; however, residents—particularly those with an income between €20,755 and €28,000—may face challenges in finding affordable, long-term rentals and homes. In looking at actual listings available in the month of November 2022, we noted that there were very few units priced for residents making median-range salaries. In general, whether for rent or purchase, many of the listed homes that would be affordable to Venetians making salaries in this range are small and not conducive to families needing several bedrooms. Moreover, residents wanting to purchase a home would need a 20% downpayment, which may present obstacles to those living on the median income. Residents earning below €20,755 can apply for the public housing; however, we had difficulty extracting the exact number of units currently filled. In speaking informally with some Venetians, we have learned there may be long waiting lists for these homes. It is not surprising that most rentable homes are being used for tourist B&B simply because homeowners are able to make a good income from this, better in fact, than the income they could make from renting to locals.

After analyzing the average salaries compared to the average rent and sale prices, it can be concluded that the cost of housing is just too high for Venetians, and the selection, especially of long-term rentals for those making median salaries, may be lean. We therefore support the city's move to regulate the number of Airbnbs or cap the number of days these can be rented per year throughout the city. Airbnb's are a high income option for those who own more than one property as we have noted; however many Airbnb's are owned by larger companies not residing within the city, and they typically own more than one unit (Inside Airbnb, 2022). Regulating the number or rental periods of Airbnb's, might free up some of this stock for long-term rentals by locals. These regulations would likely decrease the number of Airbnb's in the city and open more affordable rental options for Venetian residents. Our study also shows the importance of various

support systems (e.g., low interest loans for down payments, etc) for Venetians who make between €20,755 and €28,000 who want to purchase homes. With the 20% downpayment of a median cost home being €90,000, many Venetians may struggle to afford this cost. Government support may make down payments more reasonable and affordable.

Moving forward, we suggest future research teams collect more current and reliable data on public housing. Agencies overseeing institutional housing may not always publicly provide all the data or updated data, so this will be a challenge. Specifically, it would be useful to complete research on the waitlist about how many people are on the list, how long they have been on the waitlist for and if or how many are typically turned away. Data on the public housing waitlist would help confirm the number of how many public homes are available to Venice residents who have low incomes and how accessible these homes actually are. It would also be interesting for future groups to find information on the number of vacant homes throughout the city and who owns them. This would again help to clarify the actual availability of homes throughout the city. We also recommend focusing heavily on any housing type in which the data is not as recent as 2020. We made our best effort to get the most recent data we could find for each housing type, but in some cases the data was up to seven years old.

With the information gathered in this study, we were able to organize a [Data Repository](#) on housing on the Venice Project Center’s website (see figure 10). The [VPC Socio-Economics](#) webpage specifically centralizes data which can be found under the “Housing” tab. Users can filter for specific aspects of housing by using the interactive graphs and maps that appear on the site, and they can find more about the sources we used.

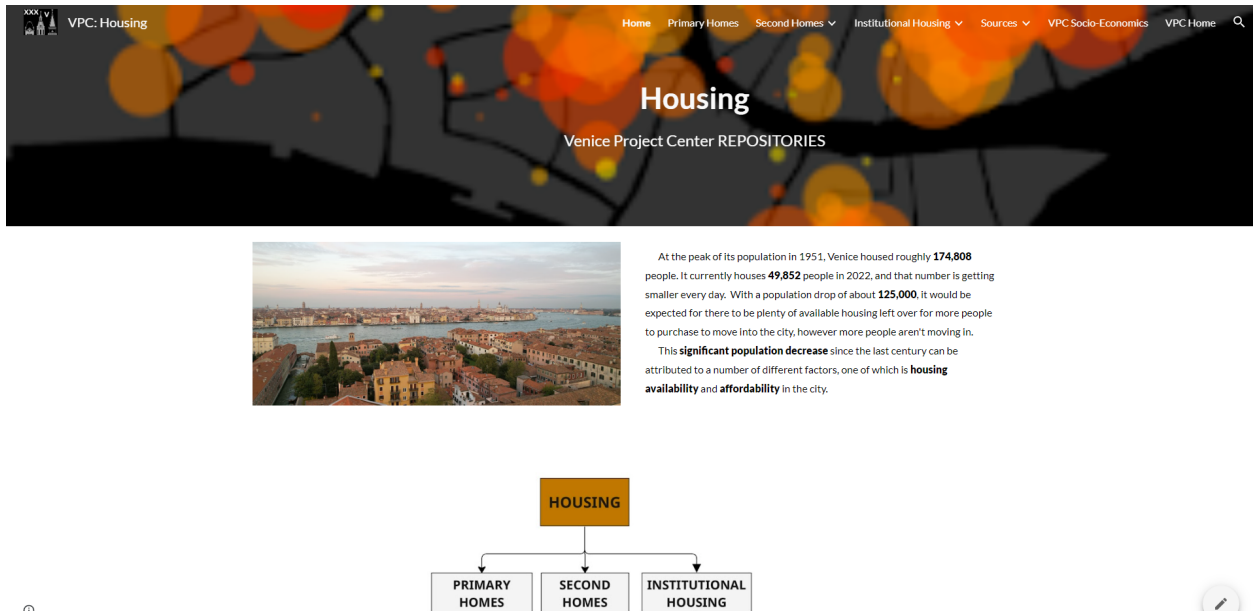


Figure 10: Homepage of our data repository

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