

# COMPREHENSIVE HOUSING MARKET ANALYSIS

# Puerto Rico

**U.S. Department of Housing and Urban Development,**  
Office of Policy Development and Research

As of July 1, 2019



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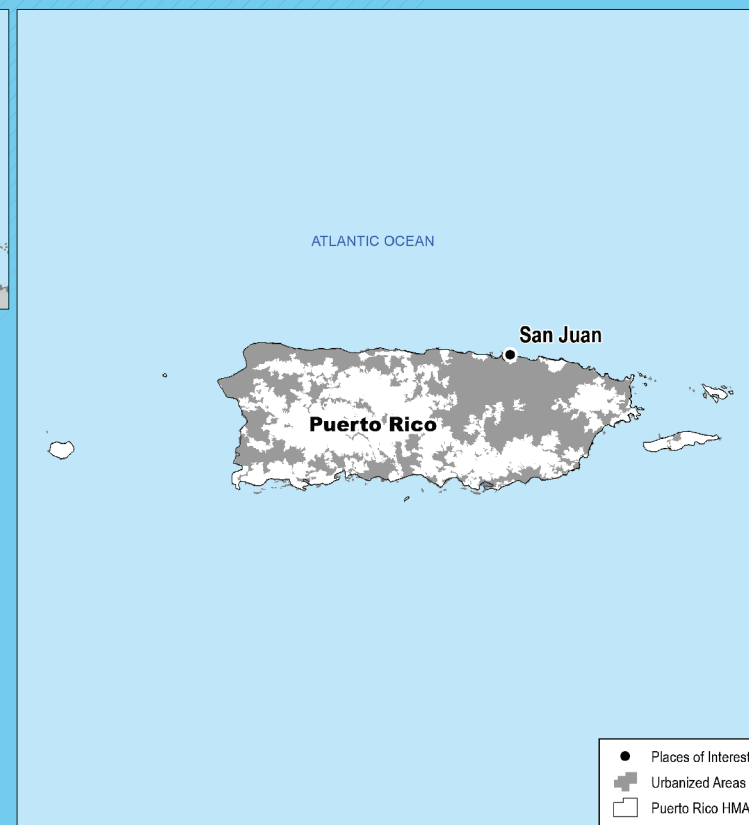


# Executive Summary

## Housing Market Area Description

The Commonwealth of Puerto Rico (hereafter, Puerto Rico) is an archipelago made up of the main island of Puerto Rico and several smaller islands on the eastern edge of the Caribbean Sea. Puerto Rico is divided into 78 county-equivalent areas called “municipios”. Christopher Columbus arrived in Puerto Rico on November 19, 1493, during his second voyage. On August 8, 1508, Juan Ponce de León founded the first Spanish settlement at Caparra, slightly west of the city of San Juan.

During September 2017, two hurricanes, Irma and Maria, impacted Puerto Rico, with Hurricane Maria being the more damaging storm. An estimated 358,000 housing units, or 22 percent of the total housing inventory, have sustained moderate to major damage or were destroyed by the hurricanes (FEMA [Federal Emergency Management Agency]—most recent estimates as of May 11, 2018).



## Tools and Resources

Find interim updates for this metropolitan area, and select geographies nationally, at PD&R's [Market-at-a-Glance tool](#). Additional data for the HMA can be found in this report's [supplemental tables](#). For information on HUD-supported activity in this area, see the [Community Assessment Reporting Tool](#).



## Market Qualifiers

### Economy



**Weak, but Improving:** During the 12 months ending June 2019, total nonfarm payrolls increased by 13,600, or 1.6 percent, to 869,800, marking the first time since 2012 when total nonfarm payrolls have increased.

Even with the most recent gains, total nonfarm payrolls are 181,400, or approximately 17 percent, below the all-time peak of 1.05 million jobs during 2005. During the 12 months ending June 2019, job gains occurred in 10 of the 11 payroll sectors in Puerto Rico. The unemployment rate is currently 8.4 percent, down from 10.3 percent 1 year earlier and a peak of 16.4 percent in 2010. The declining unemployment rate is due to the decreasing population of working-age people in Puerto Rico. Nonfarm payrolls during the forecast period are expected to increase by 0.4 percent annually as Puerto Rico recovers from the hurricanes and a prolonged economic downturn.

### Sales Market



**Very Soft:** Mortgage originations totaled 13,700 during the 12 months ending June 2019, up by 1,900, or nearly 16 percent, during the previous 12 months, but are still 85 percent below the peak level of 92,700 mortgages originated during 2005.

The sales housing market in Puerto Rico is currently very soft because the declining population has resulted in many vacant units on the market. The current sales vacancy rate is estimated at 3.7 percent, up from 2.8 percent in 2010 and 1.7 percent in 2000. Since 2010, the estimated number of owner households has declined by an average of 14,650, or 1.1 percent, annually. With continued population and household decline, there is no demand for additional sales units during the forecast period. An estimated 350 sales units are currently under construction in Puerto Rico. An estimated 325,000 other vacant units are not actively on the market at this time and are not included in the vacancy rate.

### Rental Market



**Very Soft:** Despite a shift in tenure mix from owning to renting, the number of renter households has continued to decline.

The rental market in Puerto Rico is currently very soft with a 12.3-percent vacancy rate, up from 10.0 percent in 2010 and 7.4 percent in 2000 due to continued population loss resulting in an increasing number of vacancies. With the prolonged economic downturn, the share of renter households increased in Puerto Rico limiting the overall decline in renter households since 2010 to an average of 2,875 a year, or 0.8 percent, annually. Currently, 260 rental units are under construction in Puerto Rico. There is no demand for additional rental units during the next 3 years because of continued population and household decline.

## TABLE OF CONTENTS

- Economic Conditions 4
- Population and Households 9
- Home Sales Market Conditions 12
- Rental Market Conditions 15
- Terminology Definitions and Notes 17

3-Year Housing Demand Forecast		
	Sales Units	Rental Units
Puerto Rico	Total Demand	0
	Under Construction	350

Notes: Total demand represents estimated production necessary to achieve a balanced market at the end of the forecast period. Units under construction as of July 1, 2019. The forecast period is July 1, 2019, to July 1, 2022.  
Source: Estimates by the analyst



# Economic Conditions

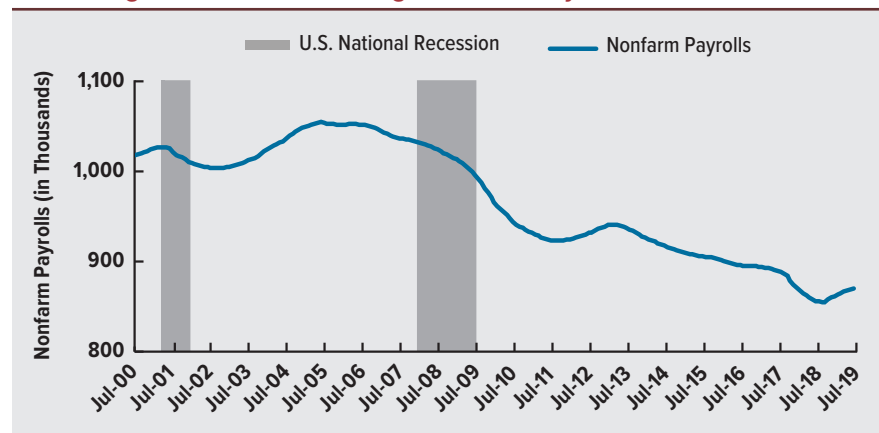
## Largest sector: Government

The government sector accounts for more than 23 percent of total nonfarm payroll jobs in Puerto Rico.

## Primary Local Economic Factors

Economic conditions have improved during the past year but remain weak in Puerto Rico, which has been in a prolonged economic downturn. Since peaking in 2005, total nonfarm payrolls declined every year through 2018 except for a brief increase during 2012. Figure 1 shows nonfarm payrolls from 2000 through the current date. Several factors caused this long-term downturn, including a change in the U.S. tax law. Enacted in 1976, Section 936 of the U.S. tax code granted U.S. corporations a tax exemption on income earned in U.S. territories. This law made it attractive for U.S. firms to invest in Puerto Rico. In 1996, legislation was enacted that phased out Section 936 during a 10-year period.

**Figure 1. 12-Month Average Nonfarm Payrolls in Puerto Rico**



Note: 12-month moving average.  
Sources: U.S. Bureau of Labor Statistics; National Bureau of Economic Research

The Section 936 exemption fully expired in 2006, and an international economic downturn followed that exacerbated the effects of the tax law change in Puerto Rico. When the U.S. economy began to add jobs again in 2011, Puerto Rico was still in a recession. Net out-migration to the mainland United States increased causing a population decline and further depressing economic conditions as demand for goods and services in Puerto Rico declined. The declining population, along with the local economic downturn, put enormous strain on Puerto Rico’s governmental finances when tax revenues continued to decline sharply. As a result, government spending and employment has been sharply curtailed further contributing to the economic downturn.

Through most of the second half of the 20th century, Puerto Rico had a strong manufacturing base because lower costs and easy access to the U.S. market attracted many firms. There was also a significant number of pharmaceutical and electronic manufacturing firms with operations in Puerto Rico. Manufacturing began to decline on the island due to the changes in tax laws and the passage of NAFTA (North American Free Trade Agreement). In 1990, nearly 19 percent of all nonfarm payroll jobs in Puerto Rico were in the manufacturing sector but by 2006, manufacturing payrolls were down to 11 percent of all nonfarm payroll jobs as they declined by more than 30 percent from 158,700 in 1990 to 109,800 during 2006.

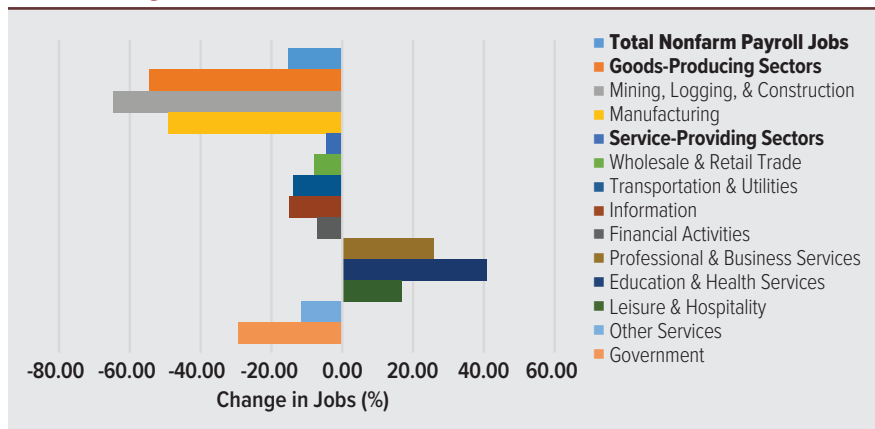
Because Puerto Rico is located in the Caribbean Sea with a warm tropical climate, tourism has also been an important economic factor on the island. According to data from the Puerto Rico Tourism Company, more than 4 million people visit the island annually, including more than 1.6 million people who arrive by cruise ship to visit Old San Juan. Tourism accounts for nearly 7 percent of Puerto Rico’s gross domestic product.

## Nonfarm Payroll Sector Trends

From 2001 to the current date, 8 of the 11 employment sectors in Puerto Rico lost jobs (Figure 2). The largest percentage decline has been in the mining, logging, and construction sector, which has declined more than 64 percent since 2001 due



**Figure 2. Sector Growth in Puerto Rico, 2001 to Current**



Source: U.S. Bureau of Labor Statistics

in part to population loss limiting demand for new housing. The only three sectors to have net job growth in Puerto Rico since 2001 have been the education and health services, the leisure and hospitality, and the professional and business services sectors. The education and health services sector has been the sector with the most job growth because the aging population has increased demand for medical services. Since 2001, employment in the education and health services sector has increased by an average of 1,800, or 1.9 percent, annually. Since 2011, however, the professional and business services sector has been the fastest growing employment sector in Puerto Rico—increasing by an average of 2,300 annually.

### Current Conditions—Nonfarm Payrolls

During the 12 months ending June 2019, total nonfarm payrolls increased by 13,600, or 1.6 percent, to 869,800 (Table 1). Nonfarm payrolls increased in 10 of the 11 sectors, with job growth being led by the professional and business services sector, which increased by 4,500 jobs or 3.8 percent. The mining, logging, and construction sector had the biggest percentage gain, increasing 16.9 percent, adding 3,900 jobs, because the post-hurricane rebuilding efforts increased demand for workers in this sector. During the 12 months ending

**Table 1. Nonfarm Payroll Jobs (1,000s) in Puerto Rico, by Sector**

	12 Months Ending June 2018	12 Months Ending June 2019	Absolute Change	Percentage Change
<b>Total Nonfarm Payroll Jobs</b>	856.3	869.8	13.6	1.6
<b>Goods-Producing Sectors</b>				
Mining, Logging, & Construction	23.3	27.2	3.9	16.9
Manufacturing	70.8	72.7	1.9	2.7
<b>Service-Providing Sectors</b>	762.2	769.8	7.7	1.0
Wholesale & Retail Trade	149.1	153.5	4.4	3.0
Transportation & Utilities	15.7	16.9	1.2	7.5
Information	17.1	17.7	0.6	3.4
Financial Activities	41.6	42.4	0.8	1.9
Professional & Business Services	119.2	123.7	4.5	3.8
Education & Health Services	115.7	117.7	1.9	1.7
Leisure & Hospitality	74.4	77.3	2.9	3.9
Other Services	17.2	17.6	0.4	2.2
Government	212.2	203.3	-9.0	-4.2

Notes: Based on 12-month averages through June 2018 and June 2019. Numbers may not add to totals due to rounding. Data are in thousands.

Source: U.S. Bureau of Labor Statistics

August 2017, which immediately preceded the hurricanes impacting Puerto Rico, jobs in the mining, logging, and construction sector totaled 21,900; since that date they have increased by an average of 2,900, or 12.5 percent, annually to 27,200 jobs.

The wholesale and retail trade sector added the second most jobs during the past 12 months, increasing by 4,400 jobs or 3.0 percent. The largest employer in Puerto Rico is Walmart Inc., which is included in this sector, with 15,000 employees (Table 2). The wholesale and retail trade sector is also the second-largest payroll sector in Puerto Rico, with 153,500 jobs, accounting for 18 percent of all nonfarm payroll jobs. Figure 3 shows the share of nonfarm payroll jobs by sector in Puerto Rico.

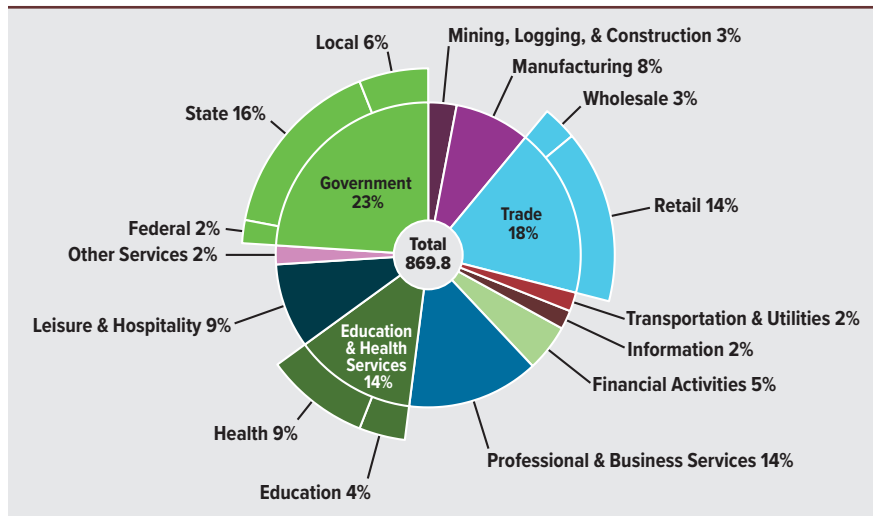
**Table 2. Major Employers in Puerto Rico**

Name of Employer	Nonfarm Payroll Sector	Number of Employees
Walmart Inc.	Wholesale & Retail Trade	15,000
Banco Popular	Financial Activities	7,200
Supermercados Econo	Wholesale & Retail Trade	6,500
Genesis Security Systems LLC	Professional & Business Services	4,700
Walgreen Co.	Wholesale & Retail Trade	4,500
Metro Pavia Health System, Inc.	Education & Health Services	4,400
Grupo Hima–San Pablo	Education & Health Services	4,250
Medtronic	Manufacturing	4,175
St. James Security Systems	Professional & Business Services	3,850
Ana G. Méndez University System	Education & Health Services	3,500

Note: Excludes local school districts.  
 Source: *Caribbean Business Book of Lists*

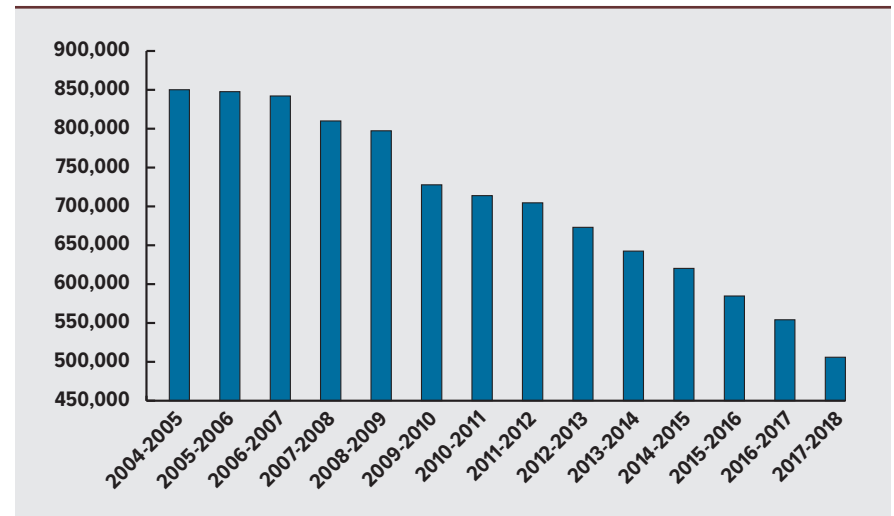
During the 12 months ending June 2019, the government sector was the only sector to decline in nonfarm payrolls as continued population loss, especially amongst the school age population, has reduced the demand for government services. The government sector declined by 9,000 jobs, or 4.2 percent, during the past year. The sharpest decline was in the state government subsector, which administers the public-school system in Puerto Rico, where nonfarm payrolls declined by 9,200 jobs, or 6.3 percent. During 2005, there were 851,100 children in Puerto Rican public schools. By 2018, enrollment decreased to 506,100, an average decline of 26,550, or 3.9 percent, annually. Figure 4 shows student enrollment in Puerto Rico from 2005 through 2018. State government payrolls peaked at 230,800 jobs in 2004, and payrolls in the subsector have declined since then by an average of 6,500, or 3.5 percent, annually. A significant factor in this reduction was state government educational services, which has declined significantly in response to decreasing student enrollment.

**Figure 3. Share of Nonfarm Payroll Jobs in Puerto Rico, by Sector**



Notes: Total nonfarm payroll is in thousands. Percentages may not add to 100 percent due to rounding.  
 Source: U.S. Bureau of Labor Statistics

**Figure 4. Student Enrollment Trends in Puerto Rico Public Schools**



Source: U.S. Census Bureau



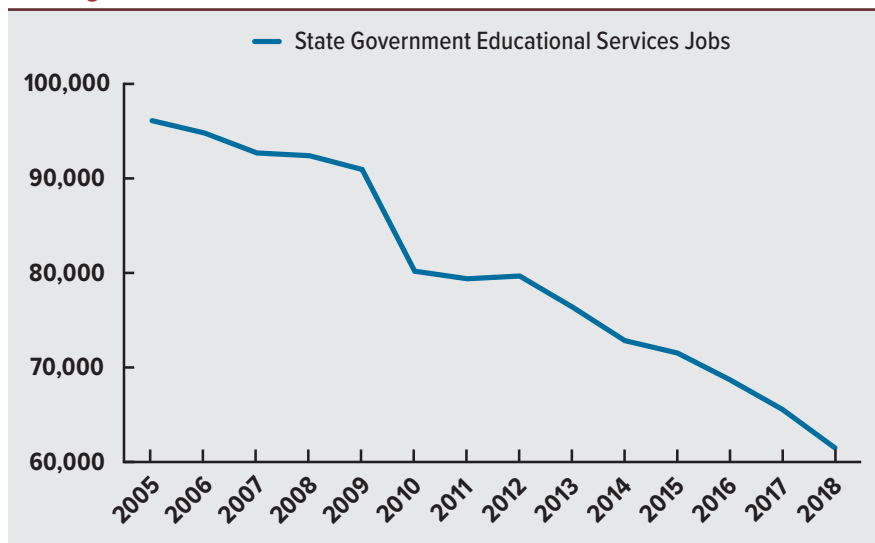
During 2005, nonfarm payrolls in state government educational services averaged 96,100 and by 2018, this was down to 61,500—an average decline of 2,650, or 3.4 percent, annually. Figure 5 shows the trend in payrolls in state government educational services from 2005 through 2018. The decline in government sector jobs from the state government subsector was partly offset by an increase of 1,000 jobs, or 6.6 percent, in nonfarm payroll jobs in the federal government subsector. Most of this increase in federal government payrolls in Puerto Rico is part of ongoing hurricane recovery efforts. Even with the recent declines in payrolls, government remains the largest sector in Puerto Rico, with 203,300 nonfarm payroll jobs accounting for more than 23 percent of all nonfarm payroll jobs on the island.

### Current Conditions—Unemployment

The unemployment rate in Puerto Rico is currently 8.4 percent, down from 10.3 percent one year earlier. The unemployment rate has been declining

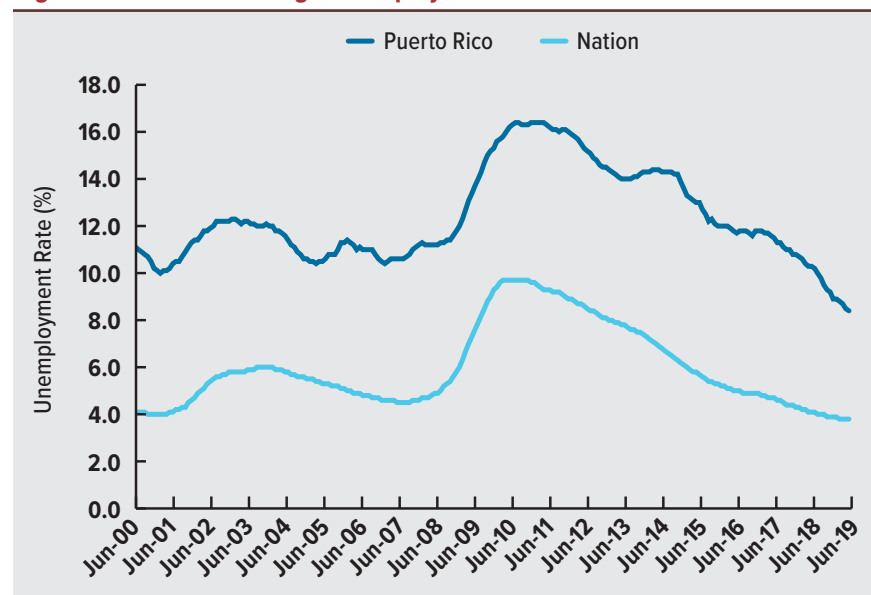
every year since peaking in 2010 at 16.4 percent. The main factor causing this decline is that the labor force has declined faster than resident employment. Since 2010 the labor force in Puerto Rico has declined by an average of 22,250, or 1.9 percent, annually, while resident employment has declined by an average of 8,550, or 0.8 percent, annually. Since 2000, the 12-month average unemployment rate in Puerto Rico has consistently been significantly higher than the national average. The current spread of just 460 basis points is the closest the two unemployment rates have been to each other since 2000. The furthest apart the two rates have been was during the 12 months ending November 2013 when the spread was 790 basis points. At that point in time, Puerto Rico’s unemployment rate was 14.2 percent and the national unemployment rate was 6.3 percent. Figure 6 shows the 12-month average unemployment rate in Puerto Rico and the nation since 2000.

**Figure 5. State Government Educational Services Jobs in Puerto Rico**



Source: U.S. Bureau of Labor Statistics

**Figure 6. 12-Month Average Unemployment Rate in Puerto Rico and the Nation**



Source: U.S. Bureau of Labor Statistics



## Economic Periods of Significance

### 2000 through 2005

In 2000, total nonfarm payrolls amounted to slightly less than 1.03 million jobs, but when the U.S. economy entered a recession in 2001, payrolls in Puerto Rico declined by an average of 10,100, or 1.0 percent, from 2001 through 2002. Job losses were most acute in the manufacturing sector, where nonfarm payrolls declined by an average of 10,800, or 7.9 percent, annually. The transportation and utilities sector also had significant job losses because the decline in manufacturing in Puerto Rico resulted in fewer goods needing to be moved—impacting jobs at companies that transported the manufactured products. From 2001 through 2002, nonfarm payrolls in the transportation and utilities sector declined by an average of 1,000, or 5.2 percent, annually. Job losses during these years were partially offset by gains in government payrolls, which increased by an average of 4,600, or 1.6 percent, annually. At the time that the overall U.S. economy began to recover from the recession, job growth began again in Puerto Rico. From 2003 through 2005, nonfarm payrolls in Puerto Rico increased by an average of 15,400, or 1.5 percent, annually, to reach an all-time peak of more than 1.05 million jobs in 2005. Job growth during these years was led by the education and health services sector, which increased by an average of 4,800 jobs, or 5.2 percent, annually. The leisure and hospitality sector also increased when tourism to Puerto Rico increased during these years. Job growth in this sector averaged 2,500 jobs, or 3.6 percent, annually.

### 2006 through 2016

The long economic downturn for Puerto Rico started in 2006 as the repeal of Section 936 took full effect and nonfarm payrolls began to decline. From 2006 through 2008, total nonfarm payrolls declined by an average of 12,500, or 1.2 percent, annually, but when the U.S. economy began to lose jobs, the pace of job losses in Puerto Rico accelerated. From 2009 through 2011, nonfarm payrolls declined by an average of 29,800, or 3.0 percent, annually. During 2012, nonfarm payrolls increased by 15,900 jobs, or 1.7 percent, as economic conditions in the U.S. mainland improved. The bettering conditions on the U.S. mainland led to an increase in tourism to the island. The leisure and hospitality sector added 2,900 jobs, or 4.0 percent, during 2012 as the economy responded to the increased levels of tourism.

During 2012, the professional and business services sector led all sectors in growth, increasing by 4,800 jobs, or 4.5 percent. This economic upswing was short-lived and by 2013, nonfarm payrolls began to decline once more. By 2016, nonfarm payrolls totaled only 894,000, an average decline of 11,500, or 1.2 percent, annually. Payrolls in the government sector contracted severely during these years when declining population and strained government finances resulted in job losses. From 2013 through 2016, nonfarm payrolls in the government sector declined by an average of 7,900, or 3.2 percent, annually, which accounted for more than two-thirds of all job losses during this time.

## Employment Forecast

During the 3-year forecast period, job growth in Puerto Rico is expected to remain positive, with nonfarm payrolls increasing an average of 0.4 percent annually. Growth is expected to be the strongest during the first year of the forecast period because of continuing hurricane recovery efforts. Job growth is expected to

moderate each successive year of the forecast period as recovery efforts come to an end. With an aging population, job growth will be strongest in the education and health services sector as demand for medical care increases.





# Population and Households

Current population: 3.18 million

Continued out-migration of younger people has contributed to an overall decline in population and negative net natural change (resident births minus resident deaths), where the number of deaths is now greater than the number of births annually in Puerto Rico.

## Population Trends

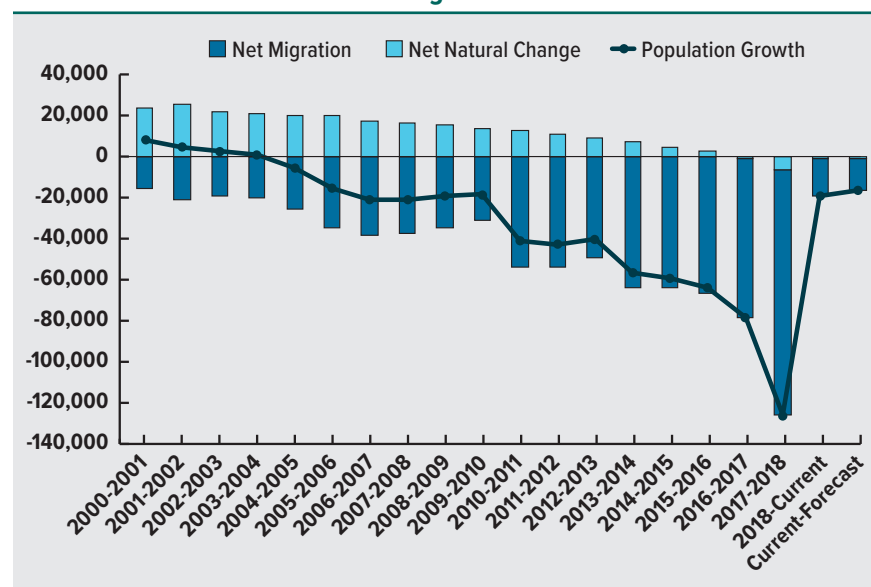
With the prolonged economic downturn in Puerto Rico, the population has been steadily declining since 2010 when Puerto Rico had a population of 3.73 million (Table 3). Since 2010, the population of Puerto Rico has declined by an average of 59,550, or 1.7 percent, annually with net out-migration averaging 64,200 people annually. By comparison, the population of Puerto Rico declined much more slowly during the previous decade at an average annual decline of 8,275, or 0.2 percent. Net out-migration during this period averaged 28,450 people annually. Since 2010, net natural change averaged 4,650 a year, which is well below the 2000 to 2010 average of 20,175 people annually. Figure 7 shows the components of population change from 2000 through the forecast period.

**Table 3. Puerto Rico Population and Household Quick Facts**

	2010	Current	Forecast	
<b>Population Quick Facts</b>	<b>Population</b>	3,725,789	3,175,000	3,122,000
	Average Annual Change	-8,275	-59,550	-17,600
	Percentage Change	-0.2	-1.7	-0.6
<b>Household Quick Facts</b>	<b>Households</b>	1,376,531	1,241,000	1,227,000
	Average Annual Change	11,500	-14,650	-4,575
	Percentage Change	0.9	-1.1	-0.4

Notes: Average annual changes and percentage changes are based on averages from 2000 to 2010, 2010 to current, and current to forecast. The forecast period is from the current date (July 1, 2019), to July 1, 2022. Sources: 2000 and 2010—2000 Census and 2010 Census; current and forecast—estimates by the analyst

**Figure 7. Components of Population Change in Puerto Rico, 2000 Through the Forecast**



Notes: Net natural change and net migration totals are average annual totals over the time period. The forecast period is from the current date (July 1, 2019), to July 1, 2022. Sources: U.S. Census Bureau; current to forecast—estimates by the analyst

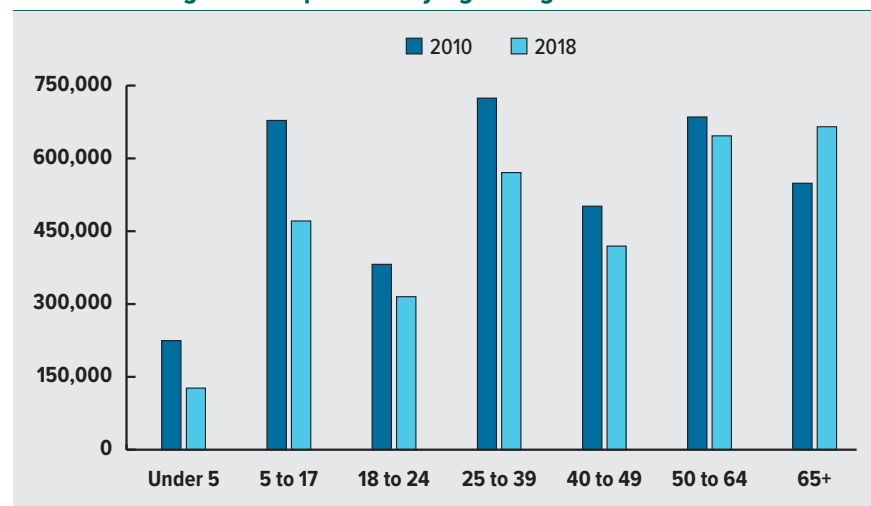
The rate of population decline has accelerated during much of the period since 2000. From 2000 to 2004 there was an increase in the population on the island of an average of 4,300, or 0.1 percent, annually. This was due to net natural change, which averaged 23,700 people per year, offsetting the average net out-migration of 19,400 annually. In 2005 the population began to decline as net out-migration increased due in large part to out-migration of younger, working-age residents. From 2005 to 2009 the population of Puerto Rico declined by an average of 20,250, or 0.5 percent, annually. Net natural change declined nearly 25 percent to 17,450 annually as the number of births declined. Net out-migration during these years increased more than 80 percent to 37,700 a year. From 2009 to 2012 the rate of population decline accelerated once more as improving economic conditions on the mainland of the United States attracted



more workers from Puerto Rico. During this period, the population declined by an average of 35,300, or 1.0 percent, annually; net natural change declined to an average of 12,650, and net out-migration accelerated to an average of 47,950 annually. With economic conditions on the U.S. mainland rapidly improving, out-migration from Puerto Rico increased again, contributing to an increase in the rate of population decline. From 2012 to 2017, population loss in Puerto Rico averaged 61,900, or 1.8 percent, annually with net out-migration averaging 66,550, and net natural change declining to just 4,625 people annually.

The declining rate of net natural change is tied to the high levels of out-migration from Puerto Rico since 2010. Many of the young adults in Puerto Rico have migrated to the mainland in search of job opportunities because of the prolonged economic downturn. As of July 1, 2018, there were 880,872 people between the ages of 18 and 39 living in Puerto Rico, which accounts for approximately 28 percent of Puerto Rico’s total population (2018 Puerto Rico Community Survey [PRCS]). This number is down from the 1,099,538 people in this age group in 2010, when they accounted for nearly 30 percent of Puerto Rico’s population. Because the group of people in this prime childbearing age-cohort declined in Puerto Rico, the number of children age 5 and younger also dropped. In 2010, 223,247 people under the age of 5 resided in Puerto Rico—accounting for nearly 6 percent of the population—but by 2018, that number declined to 125,796 and accounted for slightly less than 4 percent of Puerto Rico’s total population. The number of children age 5 and younger has declined by 43 percent since 2010, while the number of children ages 5 through 17 has declined by 31 percent since 2010. This decline in the number of children has impacted school-enrollment levels throughout the island, limiting the demand for teachers and eventually impacting future population growth rates. Figure 8 shows population by age range in Puerto Rico in 2010 and 2018. Currently, only 27.1 percent of all households in Puerto Rico include a child under the age of 18, which is lower than the national U.S. average of 30.3 percent. Table 4 shows selected data for population and households in Puerto Rico compared to the nation.

Figure 8. Population by Age Range in Puerto Rico



Source: 2010 and 2018 Puerto Rico Community Survey, 1-year data

Table 4. Selected Population and Household Demographics in Puerto Rico

	Puerto Rico	Nation
Population Age 18 and Under	18.6%	22.4%
Population Age 65 and Over	20.7%	16.0%
Median Age	42.9	38.2
Bachelors Degree or Higher	26.7%	32.6%
Less Than a High School Diploma	22.5%	11.7%
Households Earning Less Than \$25,000 Per Year	58.0%	15.6%
Households That Speak Only English	5.3%	78.1%
Foreign Born Population	2.7%	13.7%
Households With a Computer	71.4%	91.8%
Median Household Income	\$20,296	\$61,937
Households With One or More Children Under Age 18	27.1%	30.3%

Source: 2018 Puerto Rico Community Survey



Conversely, the population age 65 and older has continued to increase. In 2010, 545,721 people ages 65 and older lived in Puerto Rico, accounting for nearly 15 percent of the total population. By 2018, the number had increased to 661,216 or nearly 21 percent of the total population. The median age of the population increased from 37.2 years in 2010 to 42.9 in 2018. All these demographic trends are a continuation from the previous decade.

## Population Trends in the Aftermath of Hurricanes Irma and Maria

The two hurricanes to hit Puerto Rico in September 2017 had a pronounced impact on the island population. Between July 1, 2017 and July 1, 2018, net out-migration from Puerto Rico was estimated at 123,400 people, which was an increase of more than 53 percent from the period of July 1, 2016 to July 1, 2017. The population drop in the post-hurricane period was especially large in the younger population of Puerto Rico. The population under 18 years of age declined by 62,784, or nearly 9.6 percent, from 2017 to 2018. In this 1 year, the median age of Puerto Rico increased from 41.4 years of age in 2017 to 42.9 years of age in 2018. During the same year the population in Puerto Rico ages 65 and over increased by 2,461, or nearly 0.4 percent. This increase was the result of aging in place as more people joined this age cohort, with those over the age of 65 more reluctant to leave Puerto Rico following the hurricanes. Since 2017 the population of Puerto Rico has declined by an average of 74,950, or 2.3 percent, annually. Net natural change became negative during this time period, there were more deaths than births on the island, and net out-migration averaged 71,100 people annually.

## Household Trends

The number of households in Puerto Rico is currently estimated at slightly more than 1.24 million, an average decline of 14,650, or 1.1 percent, annually since 2010. Large levels of out-migration have reduced the number of households on the island. From 2000 through 2010 the number of households increased by an average of 11,500, or 0.9 percent, annually, as a much smaller rate of decline in the population allowed for new household formation with a smaller average household size. In 2018, the proportion of households that moved into their current housing unit before 1990 was 30.9 percent in Puerto Rico, compared to 12.4 percent nationally (PRCS and ACS).

## Forecast

During the next 3 years, the population of Puerto Rico is expected to continue to decline while the mainland United States, which has more robust job growth, will continue to attract younger residents from the island. The rate of population decline is expected to average 17,600, or 0.6 percent, annually during the next 3 years, which is a 70 percent drop in the rate of population decline from 2010 to the current date, but still more than double the rate of population decline from 2000 to 2010. The number of households is also expected to continue to decline during the next 3 years because the reduced number of young people living in Puerto Rico will limit new household formation. The number of households is expected to decline by an average of 4,575, or 0.4 percent, annually. The declining number of households will also limit housing demand during the next 3 years.



# Home Sales Market Conditions

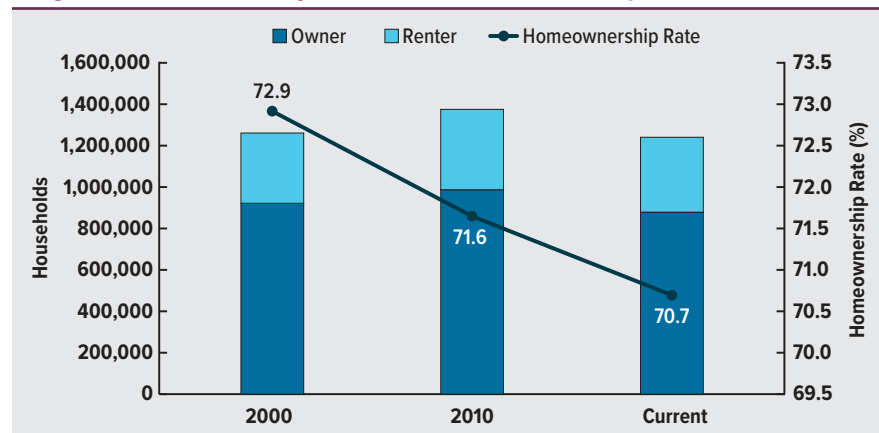
## Market Conditions: Very Soft, but Improving

During the past 12 months, the house price index and the number of mortgages both increased in Puerto Rico for the first time since the second quarter of 2012.

## Current Conditions

The home sales market in Puerto Rico is currently very soft, with a 3.7-percent vacancy rate—up from 2.8 percent in 2010 and 1.7 percent in 2000. Continued population loss has resulted in a significant number of vacant homes. The homeownership rate has continued to decline because the prolonged economic downturn has made homeownership more difficult. Currently, the homeownership rate is estimated at 70.7 percent, down from 71.6 percent in 2010 and 72.9 percent in 2000 (Figure 9). The continued population decline, which has contributed to the increased number of vacant homes, has put downward pressure on home values since 2010. According to the 2018 PRCS,

**Figure 9. Households by Tenure and Homeownership Rate in Puerto Rico**



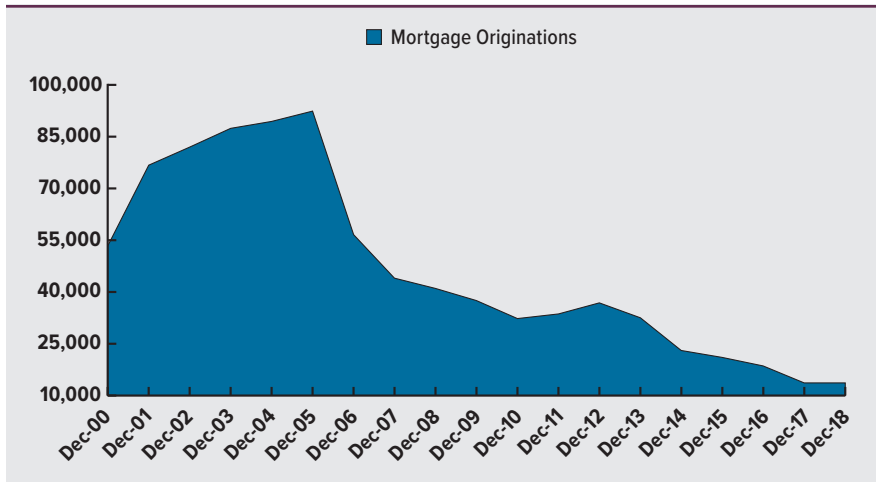
Sources: 2000 and 2010—2000 Census and 2010 Census; current—estimates by the analyst

the median value of an owner-occupied unit was \$110,800, a decline of \$9,500, or 8 percent, from the median value of \$120,300 in 2010. Even though vacancies are up since 2010, and home values and sales are down since 2010, there has been some improvement in the housing market as Puerto Rico has begun to recover from the impacts of the recent hurricanes. The 2018 PRCS median home value, while down since 2010, represents an increase of \$1,000, or less than 1 percent, from the 2017 median home value. Mortgage originations and the home price index have also increased during the past year while the island slowly recovers from the hurricanes and a prolonged economic downturn.

## Home Sales

New and existing home sales data are not readily available for Puerto Rico, so the discussion of home sales relies upon mortgage origination data as a proxy for home sales. During the 12 months ending June 2019, mortgage originations in Puerto Rico totaled 13,700, an increase of 1,900, or approximately 16 percent, from 11,800 during the previous 12 months (Commissioner of Financial Institutions of Puerto Rico). Because of the declining population and prolonged economic downturn limiting demand for homes, the current level of mortgage originations is down approximately 85 percent from the all-time peak of 92,700 in 2005. During 2001, approximately 77,050 mortgages were issued in Puerto Rico, and the number of mortgages issued increased during the next 4 years by an average of 3,925, or 5 percent, annually, to reach a peak of 92,700 mortgages issued in 2005. During 2006, with the start of the long economic downturn in Puerto Rico, mortgage originations declined sharply and continued to decline for the next 5 years. By 2010, mortgage originations totaled 32,450, an average decline of 12,050, or nearly 19 percent, annually. During the next 2 years, mortgage originations had a slight uptick, and by 2012, a year of economic growth, they totaled 36,950, an average increase of 2,250, or nearly 7 percent, annually. Beginning in 2013, the number of mortgage originations began to decline once more by an average of 4,600, or 16 percent, annually, to only 18,600 by 2017. Figure 10 shows the number of mortgage originations from 2000 through 2018. According to the 2018 PRCS, 61.9 percent of owner-occupied units do not have a mortgage, which is significantly higher than the national average of 38.1 percent.

**Figure 10. Annual Mortgage Originations in Puerto Rico**



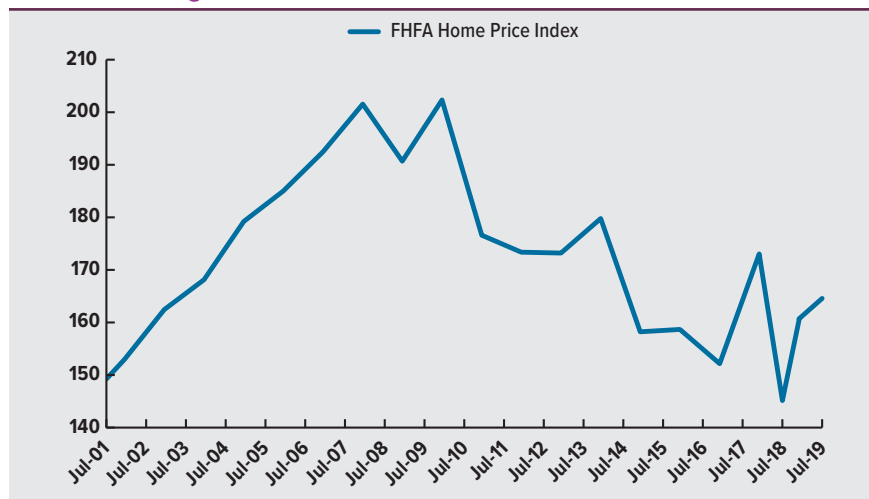
Source: Commissioner of Financial Institutions of Puerto Rico

## Home Prices

The Federal Housing Finance Agency (FHFA) quarterly, purchase-only, non-seasonally adjusted house price index measures changes in home sales prices for Puerto Rico. In this house price index, 1995 is the base year with a value of 100. During the second quarter of 2019, this index was 164.32, which was an increase of nearly 14 percent from the second quarter of 2018. Even with the recent increase in the house price index in Puerto Rico, it is still nearly 22 percent below the peak of 209.67 in the fourth quarter of 2007. When home sales were generally increasing, the house price index increased steadily from 144.14 during the fourth quarter of 2000 to reach 202.15 during the fourth quarter of 2007, an average annual increase of 5 percent. The house price index declined by nearly 6 percent and by the fourth quarter of 2008 was down to 191.01 as the beginning of the long economic downturn impacted home prices. The house price index rebounded to 202.94 in the fourth quarter of 2009, a 6 percent increase from 1 year earlier, despite deteriorating economic conditions and decreasing mortgage originations. Beginning in 2010,

when out-migration from Puerto Rico increased, the house price index began a 3-year decline and by 2012, fell to 173.15—an average annual decrease of more than 5 percent. Following the 1-year improvement in the economy in 2012, the FHFA house price index had a 1-year increase of almost 4 percent when it rose to 179.88 in 2013. During the next 2 years, when economic conditions and homes sales continued decreasing, home prices declined significantly and by the fourth quarter of 2015 the house price index was down to 156.7, an average decline of more than 7 percent annually. Figure 11 shows the trend in the FHFA house price index since 2001.

**Figure 11. FHFA House Price Index in Puerto Rico**



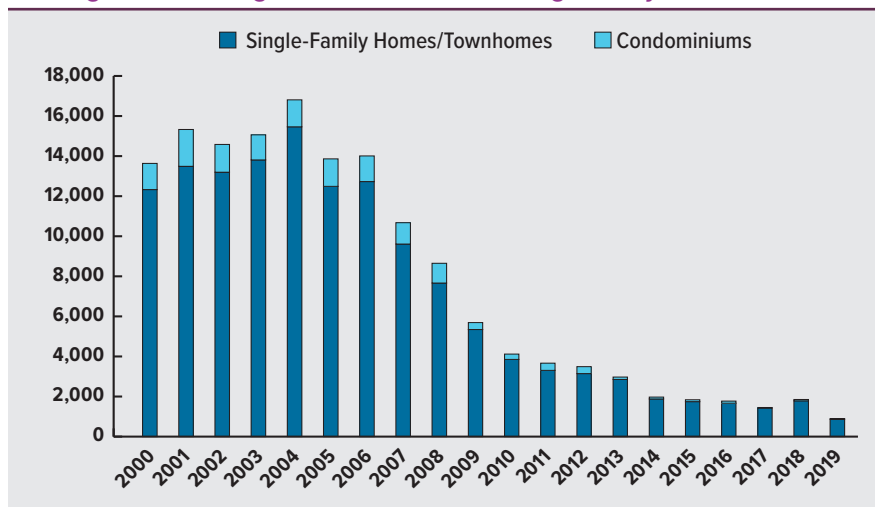
FHFA = Federal Housing Finance Agency.  
Source: Federal Housing Finance Agency

## Sales Construction Activity

Home sales construction activity, as measured by the number of single-family homes, townhomes, and condominiums with building permits issued for owner occupancy, has been limited during the long economic downturn because an increasing number of vacant available homes and declining population limited

the need for new housing. In the period following Hurricane Maria, new home building has been limited because materials and other resources have been directed to repairing the existing housing stock damaged by the hurricane. During the 12 months ending June 2019, sales construction activity totaled 1,775 homes, an increase of 175, or nearly 11 percent, from the previous 12 months. Despite the slight uptick during the past year, building activity is well below previous levels due to very limited demand. From 2000 through 2006, an average of 14,750 homes were permitted for owner occupancy annually in Puerto Rico. When the local economy began contracting, housing production slowed significantly during the next 4 years, declining by an average of 2,475 homes, or 26 percent, annually from 2007 through 2010, to 4,125 homes. From 2011 through 2016, declines in home construction for owner occupancy continued but at a slower pace. During this time, declines averaged 380 homes, or 13 percent, annually and by 2016, only 1,775 homes were permitted for owner occupancy. Figure 12

**Figure 12. Average Annual Sales Permitting Activity in Puerto Rico**



Notes: Includes single-family homes, townhomes, and condominiums. Data for 2019 are through June 2019. Sources: U.S. Census Bureau, Building Permits Survey; 2000 through 2017—final data and estimates by the analyst; 2018 and 2019—preliminary data and estimates by the analyst

shows the number of sales units permitted annually in Puerto Rico from 2000 to the current date. Not all home construction in Puerto Rico is permitted, however. Government officials estimate that one-half of the Puerto Rican housing stock, or approximately 800,000 units, was built informally without permits and oversight. Many homes are built without permits on government-owned land for which the residents do not have titles or leasing rights. An estimated 48,000 homes are built on government-owned land.

### Forecast

During the forecast period, the large number of vacant homes is expected to satisfy the demand for sales units (Table 5). In addition, if sales demand is higher than expected in this forecast, demand could be met for several years by some of the 327,000 other vacant units not currently in the sales market.

**Table 5. Demand for New Sales Units in Puerto Rico During the Forecast Period**

Sales Units	
<b>Demand</b>	No Units
<b>Under Construction</b>	350 Units

Note: The forecast period is from the current date (July 1, 2019), to July 1, 2022. Source: Estimates by the analyst



# Rental Market Conditions

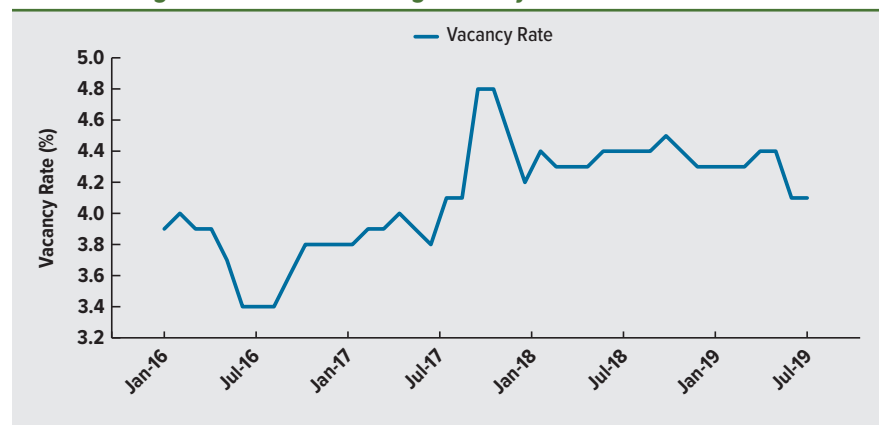
## Market Conditions: Very Soft

The overall rental market remains very soft, with a vacancy rate of 12.3 percent, up from 10.0 percent in 2010.

## Current Conditions and Recent Trends

The rental market in Puerto Rico remains very soft because population and household decline have left many vacant units on the island. The overall rental vacancy rate is currently 12.3 percent, down from 10.0 percent in 2010 and 7.4 percent in 2000. The supply of market-rate apartment properties is limited on the island, and PRPHA manages a large portion of rental housing in Puerto Rico. PRPHA is the second largest social housing agency in the United States, following New York City Housing Authority, based on the number of units operated. PRPHA has a portfolio of 334 rental properties, with 53,545 units in Puerto Rico. During June 2019, the average vacancy rate was 4.1 percent for these properties, down from 4.4 percent during June 2018 (Figure 13).

Figure 13. Public Housing Vacancy Rates in Puerto Rico



Source: Puerto Rico Public Housing Authority

In addition, PRPHA provided nearly 33,000 renter households with Section 8 housing choice vouchers in June 2019. Affordable rental housing is also available in the 91 properties with 5,204 units that are financed under the Office of Rural Development Section 515 program (U.S. Department of Agriculture). The Low-Income Housing Tax Credit (LIHTC) Program is also an important source of affordable rental housing in Puerto Rico that offers more than 17,000 units on the island. Since 2010, 4,318 LIHTC units have been placed in service in Puerto Rico.

According to the 2018 PRCS, only about 26 percent of all renter households live in rental units with five or more units per building, which is considerably lower than the national rate of 45 percent. Approximately 52 percent of all renter households who live in a rental unit with five or more units reside in rental units administered by PRPHA. Most of the remaining portion of renter households in buildings with five or more units rent condominiums originally built for owner occupancy from owners who rent these units out individually. Table 6 provides quick facts about the rental market in Puerto Rico.

Table 6. Rental and Apartment Market Quick Facts in Puerto Rico

	2010 (%)	Current (%)
<b>Rental Vacancy Rate</b>	10.0	12.3
<b>Occupied Rental Units by Structure</b>		
Single-Family Attached & Detached	61	64
Multifamily (2–4 Units)	13	10
Multifamily (5+ Units)	25	26
Other (Including Mobile Homes)	0	0
	Current	YoY Change
<b>Apartment Vacancy Rate</b>	4.1%	-0.3
<b>Fair Market Rent</b>		
Studio	\$416	-4%
One-Bedroom	\$451	-2%
Two-Bedroom	\$531	-4%
Three-Bedroom	\$706	-3%

YoY = year over year.

Notes: HUD Fair Market Rents are for the San Juan Metropolitan Statistical Area, which is about 70 percent of Puerto Rico’s total population. The current date is July 1, 2019.

Sources: American Community Survey, 1-year data; HUD Fair Market Rent Documentation system



## Rent Growth

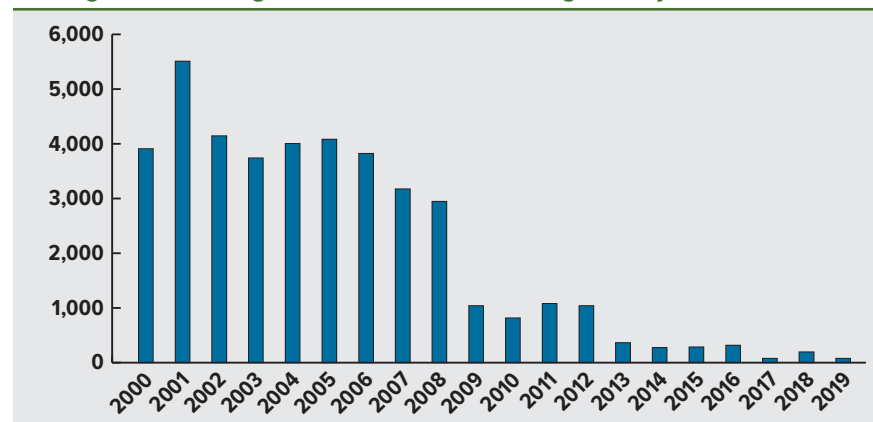
According to the 2018 PRCS, the median gross rent paid in Puerto Rico was \$484 a month, which was about 54 percent lower than the median gross rent in the United States of \$1,058 (2018 American Community Survey 1-year data). Rent growth in Puerto Rico has been much slower compared to rent growth in the United States overall. In 2010, the median monthly rent paid was \$429 in Puerto Rico, a number that increased by an average of 2 percent, or \$7, annually from 2011 through 2018. In comparison, the median monthly rent paid increased an average of 3 percent in the United States during the same time period. According to the 2018 PRCS, more than 39 percent of all renter households pay no rent, which is up from 37 percent in 2010, and is significantly higher than the national average of nearly 5 percent in 2018. Of the renter households in Puerto Rico who paid rent in 2018, 55.7 percent paid more than 30 percent of their income on rent, up from 53.6 percent in 2010. Nationally, 49.7 percent of all renter households who paid rent spent more than 30 percent of income on rent.

## Rental Construction Activity

Rental construction activity, as measured by the number of building permits issued for rental occupancy, remains limited because high vacancy rates and a declining population limit the need for new rental housing. During the 12 months ending June 2019 there were an estimated 180 units permitted for rental occupancy, up by 30 units, or 20 percent, from the previous 12 months. Even with losses to the rental inventory from the hurricanes in 2017, new construction has not increased because most construction activity has focused on repairing existing units that were damaged. From 2000 through 2006, an average of 4,175 rental units were permitted annually but from 2007 through 2008, permitting activity declined by an average of 440 units, or 12 percent, annually, to 2,950 units permitted in 2008. During 2009, rental construction activity declined even further due to a prolonged economic downturn and an increased rate of population loss limiting the need for new rental housing. From 2009 through 2012, building activity for rental units averaged 1,000 annually. Permitting activity continued to decline with the population and from 2013 through 2016,

an average of only 310 rental units were permitted annually. Figure 14 shows the number of rental units permitted in Puerto Rico from 2000 to the current date.

**Figure 14. Average Annual Rental Permitting Activity in Puerto Rico**



Notes: Includes apartments and units intended for rental occupancy. Data for 2019 are through June 2019. Sources: U.S. Census Bureau, Building Permits Survey; 2000 through 2017—final data and estimates by the analyst; 2018 and 2019—preliminary data and estimates by the analyst

## Forecast

During the forecast period the large number of vacant rental units is expected to satisfy the demand for rental housing (Table 7). In addition, if rental demand is higher than expected in this forecast, demand could be met for several years by some of the 327,000 other vacant units not currently in the rental market.

**Table 7. Demand for New Rental Units in Puerto Rico During the Forecast Period**

Rental Units	
Demand	No Units
Under Construction	260 Units

Note: The forecast period is from the current date (July 1, 2019), to July 1, 2022. Source: Estimates by the analyst





# Terminology Definitions and Notes

## A. Definitions

<b>Demand</b>	The demand estimates in the analysis are not a forecast of building activity. They are the estimates of the total housing production needed to achieve a balanced market at the end of the 3-year forecast period given conditions on the as-of date of the analysis, growth, losses, and excess vacancies. The estimates do not account for units currently under construction or units in the development pipeline.
<b>Forecast Period</b>	7/1/2019–7/1/2022—Estimates by the analyst
<b>Other Vacant Units</b>	In this analysis conducted by the U.S. Department of Housing and Urban Development (HUD), other vacant units include all vacant units that are not available for sale or for rent. The term therefore includes units rented or sold but not occupied; held for seasonal, recreational, or occasional use; used by migrant workers; and the category specified as “other” vacant by the U.S. Census Bureau.
<b>Rental Market/ Rental Vacancy Rate</b>	Includes apartments and other rental units such as single-family, multifamily, and mobile homes.
<b>Home Sales/ Home Sales Prices</b>	Includes single-family home, townhome, and condominium sales.
<b>Building Permits</b>	Building permits do not necessarily reflect all residential building activity that occurs in an HMA. Some units are constructed or created without a building permit or are issued a different type of building permit. For example, some units classified as commercial structures are not reflected in the residential building permits. As a result, the analyst, through diligent fieldwork, makes an estimate of this additional construction activity. Some of these estimates are included in the discussions of single-family and multifamily building permits.



**B. Notes on Geography**

1.	Urbanized areas are defined using the U.S. Census Bureau’s 2010 Census Urban and Rural Classification and the Urban Area Criteria.
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**C. Additional Notes**

1.	This analysis has been prepared for the assistance and guidance of HUD in its operations. The factual information, findings, and conclusions may also be useful to builders, mortgagees, and others concerned with local housing market conditions and trends. The analysis does not purport to make determinations regarding the acceptability of any mortgage insurance proposals that may be under consideration by the Department.
2.	The factual framework for this analysis follows the guidelines and methods developed by the Economic and Market Analysis Division within HUD. The analysis and findings are as thorough and current as possible based on information available on the as-of date from local and national sources. As such, findings or conclusions may be modified by subsequent developments. HUD expresses its appreciation to those industry sources and state and local government officials who provided data and information on local economic and housing market conditions.
Cover Photo	iStock

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