



# An Economic Impact Analysis of Rent Control

A Joint Project by the Florida Association of Realtors  
and the Florida Apartment Association

Prepared by the Regional Economic Consulting Group

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February 2023

## Executive Summary

Florida's population is growing by almost one-thousand people per day, and coupled with rising inflation, owning or renting a home has become very expensive. Some jurisdictions wish to alleviate the ensuing pressure on multifamily rent by considering imposing rent controls. The Regional Economic Consulting Group (The Group) has developed a model within this study to address whether such a policy makes sense and, if it does not, provide insight into solutions that would equally help alleviate rental price pressures.

The recent pandemic has significantly changed the United States (U.S.) economy and Florida. The U.S. Gross Domestic Product (GDP) plummeted when State and Local Governments effectively shut the economy down across the country. Low interest rates and U.S. government-provided stimulus money encouraged economic growth in the face of a shutdown. Still, individuals postponed home purchases during the pandemic due to economic uncertainties. When the economy opened, housing demand rose in Florida as net migration from other states increased. The sudden increase in demand for housing coupled with low mortgage rates created upward pressures on median home prices and rent.

This study focuses on the middle-income and low-income households, representing the population with fewer housing options resulting in stronger political pressure to implement some form of rent control. The focus is on five Metropolitan Statistical Areas (MSAs): Miami-Fort Lauderdale-West Palm Beach MSA, Orlando-Kissimmee-Sanford MSA, Tampa-St. Petersburg-Clearwater MSA, Jacksonville MSA, and Naples-Immokalee-Marco Island MSA. These MSAs account for 72% of Florida's population. The study separates the population most likely to experience rent controls within a single MSA. Households earning less than \$125,000 annually typically experience fewer housing options and more significant financial stress. The study estimates two scenarios: a baseline scenario without rent control and one with rent control, to measure the impact of rent control as a policy. The difference between the two scenarios represents the economic impact.

Three impacts are estimated: construction, recurring rent, and revenue loss to the multifamily businesses. The Group estimates the direct, indirect, and induced impacts on employment, labor income, value-added to regional GDP, and economic output. Tax impacts on the state and local governments are also calculated. The Group developed a static model simulating supply and demand market forces to show normal and abnormal market conditions with price controls implemented on rent.

*The findings show that vacancy influences rent and rent influences construction. Rent control breaks that relationship where vacancy cannot influence rent, and rent is unable to influence*

*construction. The result is a drop in supply, tighter vacancy rates as populations grow, and no mechanism to alleviate pressure on open market prices.*

For even one year, rent control creates major disruptions in the market, resulting in significant adverse economic and fiscal impacts. Imposing rent control discourages investors and developers and leads to fewer units available; rent will keep rising as the population or the number of households grows. Rent control will exacerbate the already tight housing supply situation.

The findings confirm that a scenario without rent control is a better policy because it allows rent to adjust naturally according to the market supply and demand for housing units. Such a policy will encourage developers to build additional units as long the average rent covers their costs and profit margins. With more units, vacancy rates will increase and push the rent down. The study quantitatively shows the devastating effects of rent control on the five MSAs targeted.

16,564 fewer multifamily units would be constructed over five years due to implementing a single year of rent control. These unconstructed units result in forgone construction expenditures of \$4.5 billion that developers will never spend in the economy. The forgone rental revenue is \$727 million. These are streams of revenue that are never realized because of rent control. Multifamily businesses will lose \$1.9 billion. Except for the impact on the tenants, most of the forgone expenditures and revenues have tremendous negative impacts on Florida's economy caused by the disruption of just one year of rent control.

**Rent control leads to an opportunity loss of 80,296 jobs for all MSAs over five years, losing \$4.2 billion in labor income. The total value-added GDP loss amounts to \$7.8 billion, and the total economic output is reduced by \$10.5 billion. For State and Local governments, reduced economic activity translates to \$473.3 million in forgone tax revenue collections, of which \$294.3 million originate from the local level.**

Based on the findings and analysis, it is safe to conclude that rent control is not the answer to the current problem. By 2025, much of the current pricing pressure will be on a path toward improvement as more supply comes online naturally. Rent control exacerbates shortages, restricts additional supply development, reduces vacancy rates, and further increases rent down the line. Most importantly, the tremendous economic negative effects will devastate those MSAs that rely on construction activities.

Policy looking to alleviate high rent should focus on increasing the supply of housing units to meet the rising demand. Housing programs to increase supply, governments providing tax incentives, and waiving impact and permit fees could give a more reasonable outcome. The only way to combat rising rent is not to force the market into price control schemes but rather work with the market to expand supply.

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## Introduction

The recent pandemic has ushered in significant structural change to the U.S. economy. U.S. single housing starts improved from -4% in 2019 to -0.8% in 2020, while multifamily starts declined from -6.5% to -7.4% units year over year.<sup>1</sup> The U.S. Gross Domestic Product (GDP) plummeted from 2.4% to -0.9% when State and Local Governments effectively shut the economy down. The shutdown resulted in a dramatic rise in unemployment from 3.8% to 6%.<sup>2</sup>

At the same time, interest remained low to encourage economic growth. The 30-year conventional mortgage rate was low at 3.53% in 2020 from 4.43% in 2019. The U.S. government provided stimulus money to help people who suffered and prevent the economy from contracting even further. Because of these phenomena, pent-up demand for housing grew and continued to build after the pandemic. Those planning to purchase homes postponed their plans during the pandemic due to economic uncertainties. When the economy opened, housing demand rose as net migration from other states increased. The sudden demand for housing and low mortgage rates created pressures upward on median home prices and rent.

Florida is an attractive state for many reasons. While other states experienced a similar trend in migration, Florida pushed forward with higher population growth. Florida has a beautiful climate and relaxing lifestyle, and the state follows it up with no state income tax and a healthy and friendly business climate. People moving from the north do not have to worry about shoveling snow or frigid temperatures. Friendlier tax climates encourage New York, Massachusetts, and California companies to move to Florida. The migration to Miami, Orlando, Tampa, and other Florida towns and communities brings additional home buyers to Florida with deeper pockets and more substantial purchasing power.

Another major factor driving migration to Florida is the varying responses and lockdowns nationwide to the covid pandemic. Florida reopened earlier than most other states nationwide.<sup>3</sup> Two sets of migratory pressures to Florida exist from states locked down. The first was the more apparent effects for businesses and the benefit of having an open market.<sup>4</sup> The second migratory pressure came from the quality of life under lockdowns. Increasing mental effects were experienced based on the severity of the lockdown imposed. Higher symptoms of depression

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<sup>1</sup> National Economic Estimating Conference, July 15, 2022, page 9.

<sup>2</sup> Ibid, page 8

<sup>3</sup> Documenting Florida's path to recovery from the coronavirus (COVID-19) pandemic, 2020-2021, [https://ballotpedia.org/Documenting\\_Florida%27s\\_path\\_to\\_recovery\\_from\\_the\\_coronavirus\\_\(COVID-19\)\\_pandemic,\\_2020-2021](https://ballotpedia.org/Documenting_Florida%27s_path_to_recovery_from_the_coronavirus_(COVID-19)_pandemic,_2020-2021)

<sup>4</sup> Small business group praises Gov. DeSantis for plan to begin reopening State, <https://floridapolitics.com/archives/330482-small-business-group-praises-reopening/>

were associated with more onerous restrictions.<sup>5</sup> The combination of these factors has led to continuing migration, especially from the Northeast to our state.<sup>6</sup>

After the 2008 Great Recession, Florida's population has steadily increased, with most of the increase coming from net migration. In 2021, the population increased by 1.67%, adding 360,748 or 989 people per day. The number of households increased to 8,676,264 in 2021 from 8,529,067 in 2020, or 147,197 more households.<sup>7</sup> Net migration, the primary driver of population increase, rose from 352,000 to 400,800 from FY2018-19 to FY2020-21, a 14% increase over the year.<sup>8</sup> With a low-interest rate of 3.53%, the housing market for the sale of single-family homes jumped 24.1%, and median housing prices rose 17.2% in 2021. The price is further expected to increase by 20.3 % in the next year.<sup>9</sup> The sale of condominiums rose 42.6%, and the median price jumped 16.6% in 2021. The median price is expected to increase by 22.6%.<sup>10</sup>

Before the pandemic, Florida was moving upward in housing supply and income growth. In 2020, total housing starts grew by 14.4% and would continue to grow by 20.9% in 2021.<sup>11</sup> Single-family housing starts added 99,200 units (+8.8%) in 2020 and will increase to 132,500 units (+3.6%) in 2021. Multifamily is experiencing similar robust growth, with 69,200 units (+23.5%) in 2020 to 71,600 units (+2.9%) in 2021.<sup>12</sup> Personal income grew 5.8% in 2019 and slowed to 5.5% in 2020.<sup>13</sup> A more robust increase of 7.9% occurred in 2021 as the economy reopened and the federal government supplied additional stimulus money. In 2022 housing starts are expected to finish the year strong, and total starts are expected to grow by 17.1%.<sup>14</sup> Of that amount, single-family starts will see as many as 137,800 starts.<sup>15</sup> Multifamily starts are expected to hit 101,200 units (+41.4%).<sup>16</sup>

The combination of pent-up demand, low mortgage rates, higher income, and higher net migration creates pressure on the housing market, resulting in increased median price and rent. As a result, individuals and families are adversely affected as rent dramatically rises. Local Floridians with traditionally lower incomes are crowded out as wealthier Americans migrating

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<sup>5</sup> One year on What we have learned about the psychological effects of COVID-19 social restrictions: A meta-analysis, <https://www.sciencedirect.com/science/article/pii/S2352250X22000252>

<sup>6</sup> STARTLING EXODUS TO FLORIDA ACCELERATING DESPITE NY REOPENING AFTER COVID RESTRICTIONS, <https://www.bdb.org/news/2022/05/24/financial-services-news/startling-exodus-to-florida-accelerating-despite-ny-reopening-after-covid-restrictions/>

<sup>7</sup> Florida Demographic Estimating Conference, July 18, 2022

<sup>8</sup> Ibid, page 3

<sup>9</sup> Florida Economic Estimating Conference, Long-run Tables, July 22, 2022

<sup>10</sup> Ibid, page 9

<sup>11</sup> Ibid, page 9

<sup>12</sup> Florida Economic Estimating Conference Lon-run, July 22, 2022, page 9

<sup>13</sup> Ibid, page 1

<sup>14</sup> Ibid, page 9

<sup>15</sup> Ibid, page 9

<sup>16</sup> Ibid, page 9

from out of state drive up the cost of living, particularly housing.<sup>17</sup> Rent takes explicitly larger and larger percentages of income. To tackle this problem, larger municipalities, particularly Orange County, began discussions around imposing rent control to try and alleviate the current situation.

The Florida Association of Realtors and the Florida Apartment Association approached the Regional Economic Consulting Group (Group) to develop a methodology to measure the economic impact of imposing rent controls in the following MSAs: Miami-Fort Lauderdale-West Palm Beach MSA, Orlando-Kissimmee-Sanford MSA, Tampa-St. Petersburg-Clearwater MSA, Duval County, and Naples-Immokalee-Marco Island MSA. The five MSAs account for 72% of Florida's total population.

The Group developed a methodology around the two separate scenarios, with and without rent control, and built static and dynamic impacts. Under both scenarios, the static impacts are direct expenditure changes to developers, and businesses. The dynamic impacts measure the economic ripple effects of the change in job creation, labor income, value-added to the regional economy, and economic output. Lastly, the Group projected the tax ramifications of such policies on the affected areas.

In addition, the Group provided policy considerations to increase the housing supply and examine the impacts of an alternative scenario of a general increase in housing stock to alleviate upward pressure on the rise in rental costs for the average Floridian.

## Regional Economic Consulting Group Background

The Regional Economic Consulting Group is a research group measuring the economic impacts of public and private sector projects. They build impact studies and provide statistical validation to public policy, economic development strategies, and investment. The Group covers a wide-ranging field spanning economic outlooks to demographic and labor market studies and uses the latest econometric modeling and methodologies techniques.

The Group uses various analytical tools; REMI modeling, IMPLAN, cost-benefit analysis, general input-output analysis, and econometric modeling. Impacts can come from jobs created or lost and fiscal impacts examining dollars gained or lost for projects and initiatives. The Group has experience producing studies and presenting them publicly.

The Group's economists bring a unique perspective from the Florida Government's economic units and have firsthand knowledge of the Florida economy. That competitive advantage affords them an intimate familiarity with Florida-specific economic mechanisms. The Group brings that ability to the private sector to better position impacts and promotes initiatives for the future.

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<sup>17</sup> Florida's Affordable Housing Crisis, Florida Policy Institute, <https://www.floridapolicy.org/posts/floridas-affordable-housing-crisis>



## Background

In 2022, Orange County was the first local government to consider implementing rent control. Currently, no counties or municipalities have rent control policies in Florida. Section 125.0103, Florida Statutes, provides the following (summarized):

- a. General prohibition on adopting an ordinance that has the effect of imposing price control upon a lawful business activity unless expressly provided by general law.
- b. No ordinance which would impose controls on rents shall be adopted except as provided herein and unless it is found and determined that such controls are necessary and proper to eliminate an existing housing emergency that is so grave as to constitute a serious menace to the general public.
- c. Any ordinance that imposes controls on rents shall terminate and expire within one year and shall not be extended or renewed except by the adoption of a new measure.

Current law allows a local government to pass a rent control ordinance when very specific criteria are met. The measure, once adopted by a local government, must be approved by a majority of the voters within that jurisdiction before the measure can go into effect. In addition, once in effect, the measure can only be in place for one year before the process begins again. The statute includes an exclusion for luxury apartments.<sup>18</sup>

In recent months, some municipalities have signaled interest in revisiting potential rent controls in their respective jurisdictions. Within the State Legislature, an amendment to cap rent increases at 3% per 12-month period was introduced.<sup>19</sup> Originally, Orange County leaders met to discuss a one-year cap using either the consumer price index or a 5% increase.<sup>20</sup> Orange County ultimately drafted and passed an ordinance relying on the consumer price index to limit rent increases, but was later successfully challenged.<sup>21</sup> Other local governments, Hillsborough and Miami-Dade, have pursued landlord and tenant related reforms such as increase noticing requirements for rent increases.<sup>22</sup>

Considering the recent movements by state and local governments, the study aims to quantify the impact of putting rent controls in place for the largest metropolitan areas in the State. Specifically, the study would examine economic impacts under a baseline no rent control scenario and a rent control scenario.

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<sup>18</sup> Florida Statutes, <https://www.flsenate.gov/Laws/Statutes/2021/0166.043>

<sup>19</sup> Florida senator pushing to cap rent increases, <https://www.wesh.com/article/florida-cap-rent-increases/40091480#>

<sup>20</sup> Orange County leaders meet for special session on rising rent costs, <https://www.mynews13.com/fl/orlando/news/2022/06/23/orange-county-rent-special-session>

<sup>21</sup> Orange County commissioners vote to appeal court ruling blocking rent stabilization, <https://www.mynews13.com/fl/orlando/news/2022/11/17/orange-county-commissioners-to-debate-what-s-next-on-rent-control>

<sup>22</sup> Cocoa city council members discuss proposal requiring landlords to give more notice of rent increase, <https://www.wesh.com/article/cocoa-city-council-members-proposal-renters-notice/39960903>

## Objectives

The study measures both the economic impacts of rent control and increasing housing supply on the following: Miami-Fort Lauderdale-West Palm Beach MSA, Orlando-Kissimmee-Sanford MSA, Tampa-St. Petersburg-Clearwater MSA, Jacksonville MSA, and Naples-Immokalee- Marco Island MSA.

The study measures the impacts through direct, indirect, and induced costs. Impacts will take the form of changes in direct spending by multifamily businesses and construction expenditures by developers and their effects on jobs, labor income, value-added to the regional GDP, and economic output. Finally, the study determines the tax ramifications for both scenarios.

The study concludes with the net impacts of the two policies, without and with rent control, and potential policy concepts to improve the housing supply situation.

## Market Analysis

The market divides between the five MSAs, and splits into households and income. Using data from the U.S. Census Bureau, total households filter to households earning less than \$125,000, and of those households, the number occupying multifamily units. Households earning less than \$125,000 belong in the mid to low-income (mid-low) category. According to the Census data, mid to low-income renter households represent 93.3% of all renters statewide. They represent 92.5% of all renters within the five specific MSAs.

Middle-income and low-income households are the focus of the study because these households are most likely to experience rent control policies at the local government level. The study approaches rent control at the MSA level, which includes several different regions, counties, and cities across Florida. An MSA is not a single jurisdiction and, therefore, would not be able to enact widespread control to implement a single policy like rent control. If Orange County had instituted rent control, all incomes would have been affected. However, the study also acknowledges that communities with higher income levels have fewer price pressures and more housing options. Households with higher income have more significant gaps between affordable rent and the actual rent and are less likely to be subject to the effects of rent control measures. To better represent the lack of policy uniformity and political pressures within a single MSA, the study limits the population to households earning \$125,000 or less.

**Table 1: Income Brackets****Median Income**

	<b>Low Income</b>	<b>Middle Income</b>	<b>High Income</b>
Jacksonville, FL	\$25,000	\$75,200	\$178,000
Miami-Fort Lauderdale-West Palm Beach, FL	\$23,400	\$75,450	\$189,000
Naples-Immokalee-Marco Island, FL	\$25,400	\$77,050	\$226,000
Orlando-Kissimmee-Sanford, FL	\$25,700	\$76,400	\$177,250
Tampa-St. Petersburg-Clearwater, FL	\$25,300	\$73,700	\$179,600

Table 1 details the split into income brackets. Low income shows the median income of households earning less than \$45,000. Middle-income is the median income of households earning less than \$125,000; finally, High-income represents the median income of households earning more than \$125,000.

Miami MSA experiences the lowest median earnings under Low-income and the second highest median earnings for high-income. Orlando and Tampa MSAs follow a similar track; while the Naples MSA is within the vicinity of other MSAs for middle-income and low-income brackets, it has by far the highest high-income bracket.

Households earning \$125,000 or less represent middle-income to low-income households, the population most likely to experience rent control policies at the local government level. \$125,000 was derived by splitting each MSA into quantiles and selecting the 75<sup>th</sup> percentile and lower as the most likely candidates. \$125,000 was the optimal earnings level across all MSAs. All middle-income and low-income households are considered to represent the general market, whether they currently occupy multifamily units or not. Multifamily developments will attract multifamily occupants from across the spectrum and not limit themselves to cannibalizing other multifamily developments for their tenant base.

**Table 2: Gap between Affordable Rent and Actual Rent****Maximum Affordable Rent minus Historical Rent**

	2016	2017	2018	2019	2020
<b>Historical Rent</b>					
Jacksonville, FL	\$881	\$896	\$949	\$974	\$1,036
Miami-Fort Lauderdale-West Palm Beach, FL	\$1,186	\$1,227	\$1,269	\$1,313	\$1,353
Naples-Immokalee-Marco Island, FL	\$1,156	\$1,166	\$1,208	\$1,228	\$1,364
Orlando-Kissimmee-Sanford, FL	\$992	\$1,036	\$1,082	\$1,154	\$1,219
Tampa-St. Petersburg-Clearwater, FL	\$963	\$980	\$1,027	\$1,052	\$1,142
<b>Maximum Affordable Rent</b>					
Jacksonville, FL	\$1,230	\$1,225	\$1,225	\$1,249	\$1,252
Miami-Fort Lauderdale-West Palm Beach, FL	\$1,208	\$1,208	\$1,218	\$1,238	\$1,236
Naples-Immokalee-Marco Island, FL	\$1,225	\$1,250	\$1,256	\$1,240	\$1,281
Orlando-Kissimmee-Sanford, FL	\$1,219	\$1,210	\$1,248	\$1,251	\$1,276
Tampa-St. Petersburg-Clearwater, FL	\$1,196	\$1,205	\$1,225	\$1,238	\$1,238
<b>Affordability Gap</b>					
Jacksonville, FL	\$350	\$329	\$275	\$275	\$217
Miami-Fort Lauderdale-West Palm Beach, FL	\$22	(\$20)	(\$52)	(\$75)	(\$118)
Naples-Immokalee-Marco Island, FL	\$69	\$84	\$48	\$12	(\$84)
Orlando-Kissimmee-Sanford, FL	\$227	\$174	\$166	\$98	\$57
Tampa-St. Petersburg-Clearwater, FL	\$233	\$225	\$198	\$186	\$95

Table 2 is separated into columns representing each MSA. It shows the historical rent for all MSAs. The “Maximum Affordable Rent” is calculated based on 30% of the household median income divided by 12 months. The “Affordability Gap” is the difference between the maximum affordable rent minus actual monthly rent. The values are the remaining affordable income left over after rent is paid each month.

All five MSAs are declining, with the Miami-based MSA becoming unaffordable as early as 2017. The Naples MSA recently reached unaffordable territory in 2020, and the remaining MSAs are rapidly approaching the same outcome.

**Table 3: Market Conditions**

	2016	2017	2018	2019	2020
<b>Households</b>					
Jacksonville, FL	537,582	548,336	562,856	571,058	592,623
Miami-Fort Lauderdale-West Palm Beach, FL	2,091,692	2,095,985	2,134,424	2,178,669	2,208,296
Naples-Immokalee-Marco Island, FL	139,523	144,355	144,170	140,578	148,183
Orlando-Kissimmee-Sanford, FL	840,645	851,754	857,267	864,577	881,696
Tampa-St. Petersburg-Clearwater, FL	1,191,648	1,209,517	1,227,328	1,228,480	1,286,237
<b>Middle &amp; Low Income Households (Households Earning Less than \$125,000 Annually)</b>					
Jacksonville, FL	455,367	463,960	462,241	457,787	465,552
Miami-Fort Lauderdale-West Palm Beach, FL	1,762,566	1,744,971	1,747,840	1,748,225	1,732,760
Naples-Immokalee-Marco Island, FL	109,366	111,004	106,814	102,346	102,722
Orlando-Kissimmee-Sanford, FL	727,414	720,439	717,019	704,138	693,903
Tampa-St. Petersburg-Clearwater, FL	1,029,127	1,033,452	1,034,164	1,020,532	1,032,893
<b>Occupied Multi-family Units</b>					
Jacksonville, FL	101,059	100,141	110,446	100,633	101,810
Miami-Fort Lauderdale-West Palm Beach, FL	565,275	563,069	564,232	595,403	565,180
Naples-Immokalee-Marco Island, FL	25,332	25,599	23,579	19,183	21,295
Orlando-Kissimmee-Sanford, FL	192,990	191,367	192,791	198,444	181,539
Tampa-St. Petersburg-Clearwater, FL	246,595	229,268	249,107	233,448	229,322
<b>Median Income</b>					
Jacksonville, FL	\$49,220	\$49,000	\$48,990	\$49,950	\$50,100
Miami-Fort Lauderdale-West Palm Beach, FL	\$48,330	\$48,300	\$48,700	\$49,500	\$49,425
Naples-Immokalee-Marco Island, FL	\$49,000	\$50,000	\$50,225	\$49,600	\$51,225
Orlando-Kissimmee-Sanford, FL	\$48,750	\$48,400	\$49,900	\$50,050	\$51,050
Tampa-St. Petersburg-Clearwater, FL	\$47,850	\$48,200	\$49,000	\$49,500	\$49,500
<b>Vacancy Rates</b>					
Jacksonville, FL	8.0%	7.5%	5.7%	4.5%	7.1%
Miami-Fort Lauderdale-West Palm Beach, FL	7.3%	7.6%	8.1%	7.3%	5.8%
Naples-Immokalee-Marco Island, FL	8.7%	8.8%	8.3%	8.7%	6.9%
Orlando-Kissimmee-Sanford, FL	5.0%	8.1%	4.0%	10.3%	7.3%
Tampa-St. Petersburg-Clearwater, FL	11.6%	7.8%	9.0%	8.8%	7.7%

Shown in Table 3 are the critical variables of existing market conditions, including household dynamics and median income. Total households represent all families living in a specific MSA. Middle-income and low-income households are grouped by household earnings less than the \$125,000 threshold. Finally, occupied units are the qualifying middle-income and low-income households occupying a multifamily unit.

Middle-income to low-income, depending on the location, represent anywhere from 69% to 83% of total households in the forecast period. Between 20% to 30% of the households within that income threshold reside inside multifamily units. Thus, historical supply can be considered as the number of units occupied by families earning less than \$125,000 and their ability to afford a unit. Demand is contingent on their income level.

Table 3 also includes vacancy rates for middle-income and low-income households. Vacancy rates illustrate the gap between total units and occupied units. The higher the value, the more supply outpaces demand, and the lower the value, the tighter the gap between supply and demand. Across most MSAs, the vacancy rates have been declining. The Orlando MSA is the outlier; however, Orlando has also experienced much more volatility in its history than the other MSAs.

Households are growing across all MSAs, while middle-income and low-income households are flat or declining. Middle-income and low-income households in fast growing metropolitan areas face extreme price pressure that sees either a migration between income brackets or a crowding-out effect. Occupied multifamily units for Miami and Jacksonville are flat, and Naples, Orlando, and Tampa have seen declines. Lastly, the median income for the middle-income and low-income brackets are flat in the face of rising costs of living from urbanization.

Where does the rent pressure come from when historically, households and income for middle-income and low-income earners have been flat? Migration to Florida has predominantly come from high-income households across the nation.<sup>23</sup> A surge of high-income earners are migrating to Florida; with the historically low vacancy rates in single-family housing, there is rapidly growing demand in the rental housing market.<sup>24</sup> As a result, downward pressure is created on vacancy, driving increasing rents at a faster pace.

High-income households are crowding out mid-to-low-income households from the ability to rent. However, while migration exacerbates increasing rents, migration is just one of the drivers. Single-family and multifamily housing construction has just seen one of the slowest decades in new construction.<sup>25</sup> For migration to be the primary driver, single-family and multifamily construction would have needed to have finished one of the strongest decades in construction.

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<sup>23</sup> Where High-Earning Households Are Moving – 2022 Study, <https://smartasset.com/data-studies/where-high-earning-households-are-moving-2022>

<sup>24</sup> Housing Vacancies and Homeownership, <https://www.census.gov/housing/hvs/index.html>

<sup>25</sup> New Privately-Owned Housing Units Started: Single-Family Units, <https://fred.stlouisfed.org/series/HOUST1F#0>

**Table 4: Market Outlook**

	2021	2022	2023	2024	2025
<b>Occupied Units</b>					
Jacksonville, FL	104,009	106,248	108,565	110,939	113,260
Miami-Fort Lauderdale-West Palm Beach, FL	572,573	580,337	589,542	598,600	607,156
Naples-Immokalee-Marco Island, FL	21,707	22,063	22,343	22,690	23,226
Orlando-Kissimmee-Sanford, FL	186,444	191,557	196,852	202,225	207,590
Tampa-St. Petersburg-Clearwater, FL	233,865	238,425	243,288	248,527	254,901
<b>Middle and Low Income Vacancy Rates</b>					
Jacksonville, FL	6.7%	5.8%	6.8%	12.0%	16.7%
Miami-Fort Lauderdale-West Palm Beach, FL	5.5%	4.9%	4.8%	6.9%	8.6%
Naples-Immokalee-Marco Island, FL	6.6%	5.8%	8.6%	10.5%	11.0%
Orlando-Kissimmee-Sanford, FL	6.0%	4.2%	4.3%	4.7%	4.7%
Tampa-St. Petersburg-Clearwater, FL	6.4%	5.5%	6.3%	9.0%	11.1%
<b>Average Rent</b>					
Jacksonville, FL	\$1,206	\$1,391	\$1,494	\$1,486	\$1,361
Miami-Fort Lauderdale-West Palm Beach, FL	\$1,548	\$1,927	\$2,188	\$2,243	\$2,158
Naples-Immokalee-Marco Island, FL	\$1,662	\$2,212	\$2,534	\$2,433	\$2,438
Orlando-Kissimmee-Sanford, FL	\$1,369	\$1,701	\$1,947	\$2,035	\$2,087
Tampa-St. Petersburg-Clearwater, FL	\$1,410	\$1,735	\$1,946	\$1,967	\$1,850
<b>Total Units</b>					
Jacksonville, FL	110,955	112,376	115,960	124,300	132,178
Miami-Fort Lauderdale-West Palm Beach, FL	603,839	608,531	617,845	639,916	659,531
Naples-Immokalee-Marco Island, FL	23,140	23,335	24,269	25,074	25,781
Orlando-Kissimmee-Sanford, FL	197,578	199,658	205,294	211,635	217,291
Tampa-St. Petersburg-Clearwater, FL	251,171	254,146	263,999	273,417	282,142

Table 4 is the market outlook of four separate variables, occupied units, middle-income and low-income vacancy rates, average rent, and the total number of units forecasted through 2025. Occupied units are the same variable shown in Table 3; however, in Table 4, it is a forecast over five years. Rents are the forecast of average rental rates for mid-to-low-income households.

The vacancy history for mid-to-low-income households is used as an input to develop a forecast for vacancy rates over five years. It uses the responsiveness of rent for middle-income and low-income household rent to vacancy. The relationship between vacancy rate and rents paid by mid-

to-low-income households creates a special trend, creating a forecast for vacancy rates that is just for purely middle-income and low-income households.

In general, lower vacancy rates lead to higher rental rates, which leads to an expansion in supply. Vacancy rates are a market demand indicator influenced by household growth, household income growth, and available multifamily units. Comparing the Orlando MSA forecast to the Miami MSA forecast, Miami experienced a lower vacancy in 2021 and a higher vacancy in the forecast period as the growth in rent stabilizes and more supply comes online. Orlando's vacancy rate declines and flattens in the forecast as the number of households increases. But the rent steadily increases and nearly reaches a Miami-based price point before supply gradually increases to meet demand.

These variables represent a forecast outlook of market demand that the study uses to compare an open free market to one with price control. Outlook on occupied units, vacancy, rent, and total supply is the coming together of supply and demand through the price of rent to give a rounded view of the nature of each market throughout Florida.

The four tables together illustrate the current market trends. As a rule, rent has become increasingly unaffordable for middle-income and low-income households. From 2016 to 2020, the number of occupied units by middle-income and low-income households has been relatively slow growing or flat, while the middle-income and low-income households have grown faster. With migration taking hold, single-family homes price will be higher, and the number of occupied multifamily units will decrease vacancy rates. Rents, in response, will increase and signal the expansion of multifamily developments. By 2025, much of the current pricing pressure will be on a path toward improvement as more supply comes online. The historical trend as far back as 2005 proves decreasing vacancy rates lead to increasing rent and multifamily development. Increasing multifamily development leads to increasing vacancy rates and decreasing rent.

The forecast models depict a gradual increase in occupied units by middle-income and low-income households for two reasons, post covid effects and new single-family housing inventory. As the national economy gradually returns to normal, expectations are that migration to Florida will slow and the wave of high-income migration will subside.<sup>26</sup> Single-family housing starts have grown at historically high rates from 2020 to 2022, with 2021 growing at 33.1%.<sup>27</sup> It would be expected to see a shift of high-income earners from renting to homeownership, thereby increasing the number of occupied rental units by middle-income and low-income earners.

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<sup>26</sup> Demographic Estimating Conference Florida Demographic Forecast, <http://edr.state.fl.us/Content/conferences/population/index.cfm>

<sup>27</sup> Economic Estimate Conference, Florida Economy, July 2022, <http://edr.state.fl.us/Content/conferences/fleconomic/index.cfm>



## Economic Profiles

The Economic Profile provides a brief description of relevant economic information and condition for each MSA. The data comes from IPUMS U.S. Census Bureau.

### Jacksonville, FL MSA

In the 2015-2020 period, the Jacksonville-centered MSA households continue to grow at the average annual rate of 2.5% from 518,000 to 593,000. The population has grown by 2.12% per year, from 1.397 million to 1.58 million. The density, a measure of persons per square mile, is 5,500 per sq mile and remains relatively flat, growing at 0.08% per year. Employment grew from 2015 from 634,000 to 724,000, averaging 2.7% per year, while the unemployment rate was 2.5% as of December 1, 2022. The income per household has maintained a slow growth trend over the five years, averaging 0.43% growth from \$73,000 to \$75,200 per year.

The housing market stock has been increasing over the past five years. The five-year average growth in single-family homes is 4.4%, from 279,000 to 346,000 units. Multifamily housing grew at a five-year average of 1.21%, from 120,600 to 117,400 units.

Single-family homes break into three categories based on income brackets. Low-income single-family homes grew at a five-year average of 2.35% since 2015, from 82,200 to 88,500 units. Middle-income single-family homes have grown over the five years at 2.96% per year, from 144,500 to 151,900 units. High-income single-family homes have increased by 9.64% on average from 64,600 to 105,600 units.

Multifamily homes are broken down into three categories as well. Low-income multifamily homes are declining yearly at a rate of 1.46% over the five years, from 74,600 to 68,500 units. Middle-income multifamily homes are increasing on average at 3.6% per year, growing from 34,900 to 41,100 units. High-income multifamily homes are increasing the strongest, averaging 25.4% annually, starting at 2,000 to 7,800 units.

For the Low-income group, rent grows by 4.36% per year over the five years, starting at \$726 and growing to \$861. The average rent for the middle-income Group grows 4% per year, from \$1,032 to \$1,210. The average rent of the high-income group increases by 2.35% yearly during the five years from \$1,507 to \$1,637.

### Miami-Fort-Lauderdale-West Palm Beach MSA

During the 2015-2020 period, the Miami-Fort Lauderdale-West Palm Beach MSA has seen a growth in households averaging 1.31% per year, starting at 2.07 million households and growing

to 2.2 million. The population continues growing at 0.81% per year over the five years, from 5.86 million to 6.2 million. The density, a measure of persons per square mile, is 18,400 people per square mile. The income per household has kept a growth trend over the five years, averaging 0.72% per year from \$72,000 to \$75,500 per year. Employment grew 2.1% per year from 2.6 million to 3 million, while unemployment remained low at 2.1% as of December 1, 2022.

Over the five years, the housing stock has experienced an increasing trend. Total single-family homes have grown 1.79% per year from 792,000 to 866,000 units. Similarly, total multifamily homes have increased from 284,000 to 321,000 units averaging 2.67% growth per year.

Single-family homes are broken down into three categories based on income brackets. Over the five years, low-income single-family homes have declined, averaging 3% per year, beginning at 223,000 to 191,000 units. Middle-income single-family homes has remained flat from 356,000 to 365,000 units, at a yearly average of 0.5%. High-income single-family homes has grown from 213,000 to 309,000 units annually by 7.7%.

Multifamily homes are broken down into three income categories as well. From 2015 to 2020, low-income multifamily homes have decreased from 371,000 to 323,000 units, a 3% annual decline. Middle-income multifamily homes have grown from 186,000 to 242,000 units, a 5.6% yearly growth. High-income multifamily homes have increased from 23,000 to 50,800 units, or 24.2% growth per year. The average monthly rent of the low-income group grows 3.9% per year from \$956 to \$1,156. The average rent for the middle-income group grows at 2.76% per year from \$1,353 to \$1,550. The average rent for the high-income group increases by 2.61% annually from \$1,959 to \$2,222.

### Naples-Immokalee-Marco Island County MSA

Over the 2015-2020 period, the Naples-Immokalee-Marco Island MSA households continue to grow, averaging 1.94% per year, beginning at 134,900 to 148,200. The population has also increased, averaging 2.42% annually, from 343,800 to 387,500. The density, a measure of persons per square mile, averages 5,100 persons per sq mile with slow declining growth of 0.21% per year. Employment grew from 2015 from 141,000 to 159,700, averaging 2.5% per year growth over the five years, while unemployment was 2.9% as of December 1, 2022. The income per household averaged 1.38% per year over the five years, from \$72,000 to \$77,100 per year.

The housing market stock has shown low average growth in the past five years. Single-family homes' growth rate averages 0.5% per year, growing from 59,400 to 60,700 units. This low average growth oversimplifies the peaks and troughs in the housing market, where growth in 2018 peaked at 6.39%, then offset by a decline of 4.28% in 2019.

The multifamily housing market grew considerably in 2016 and 2017 but was offset by contractions in 2018 and 2019. It ended in 2020 with robust growth, leading to a flat six-year average decline of 0.31% between 2014 and 2020, beginning from 26,800 to 25,700 units.

Single-family homes are broken down into three categories based on income brackets. Low-income single-family homes declined at a five-year average of 1.75% since 2015, beginning at 14,300 and falling to 12,800. Middle-income single-family homes have declined over the five years at an average of 3.9% from 28,000 to 22,600 units. High-income single-family homes have grown by an average 9.6% per year over the five years, growing from 16,800 to 25,300 units.

Multifamily homes are broken down into three income categories as well. Low-income multifamily homes are increasing yearly at a rate of 1.54% for the five years, from 13,500 to 13,700. Middle-income multifamily homes are decreasing on average at 3.6% per year, dropping from 11,400 to 9,150 units. High-income multifamily homes are increasing the strongest, averaging 51% per year over the five years, starting from 1,300 to 2,800 units.

For the Low-income group, rent grows an average of 5.99% per year over the five years, starting from \$848 to \$1,184. The average rent for the middle-income group grows by 5.66% per year over the five years, starting from \$1,177 and growing to \$1,544. The average rent for the high-income group increases 10.2% per year over the five years, starting from \$1,864 to \$2,823.

#### Orlando-Kissimmee-Sanford MSA

During the 2015-2020 period, the Orlando-Kissimmee-Sanford MSA has seen a growth in households from 823,000 to 881,700, averaging 1.37% per year. The population has similarly grown by 0.81% per year, from 5.95 million to 6.2 million. The density, a measure of persons per square mile at 7,100 per person per square mile, remained flat at 0.23% per year. Employment grew from 1.07 million to 1.26 million, averaging 3.35% per year, while the unemployment rate was 2.8% as of December 1, 2022. The income per household has kept positive growth year over year from 2015 to 2020, averaging 1.21% per year and growing from \$72,000 to \$76,400 a year.

The housing market stock has increased in the past five years. Growing from 427,000 to 475,000 units, the five-year growth rate in Single-Family homes is 2.2%. Similarly, the total number of multifamily homes grew at a five-year average of 3.4%, from 23,100 to 25,400 units.

Single-family homes are broken down into three categories based on income brackets. Low-income single-family homes have declined from 128,000 to 105,000 units, averaging 3.6% per year. Middle-income single-family homes have grown over the five years averaging 1.44% annually, from 210,000 to 226,000 units. High-income single-family homes have increased by 10.4% over the five years, from 88,500 in 2015 to 144,000 units.

Multifamily homes are broken down into three income categories as well. Low-income multifamily homes are declining yearly at a rate of 5.7% for the five years, from 127,000 to 94,7000 units. Middle-income multifamily homes are increasing on average at 5.6% per year, growing from 67,000 to 87,000 units. High-income multifamily homes are rising at an average rate of 39.4% over the five years, starting at 2,000 to 4,600 units.

For the Low-income group, rent grows 5.11% per year within five years, starting at \$834 to \$1,070. For the middle-income group, the average rent grows an average of 4.8% per year, from \$1,081 to \$1,368. The average rent for the high-income group increases by 3.8% yearly during the five years from \$1,492 to \$1,790.

### Tampa-St. Petersburg-Clearwater MSA

The Tampa-St. Petersburg-Clearwater MSA households continued to grow from 2015-2020, averaging 1.98% per year, from 1.1 million to 1.3 million. Similarly, the population has grown at a five-year average of 1.73%, from 2.9 million to 3.2 million. The density, a measure of persons per square mile, is at 8,600 people per square mile and has remained relatively flat at 0.09% per year. Employment grew from 2015 from 1.25 million to 1.47 million, averaging 2.8% per year, while unemployment was 2.6% as of December 1, 2022. The income per household has maintained growth from 2015 to 2020, averaging 0.47%, starting from \$72,000 to \$73,700 per year.

The housing market stock has been increasing year the past five years. The five-year average growth in single-family homes is 4%, from 553,600 to 676,000 units. Multifamily housing grew at a five-year average of 0.14%, from 261,000 to 266,000.

Single-family homes are broken down into three categories based on income brackets. Low-income single-family homes grew at a five-year average of 0.7% since 2015, from 178,800 to 183,600 units. Middle-income single-family homes have grown at a five-year average of 2.3%, from 265,000 to 297,000 units. High-income single-family homes have increased by 9.8% on average, from 114,100 to 195,000 units.

Multifamily homes are broken down into three categories as well. Low-income multifamily homes are declining year over year at a rate of 3.4% over the five years, from 175,000 to 144,000 units. Middle-income multifamily homes are increasing on average at 4.21% per year, growing from 78,000 to 105,000 units. High-income multifamily homes are increasing the strongest, averaging 12.3% annually, starting from 8,500 to 17,700 units.

For the low-income group, rent grows 5.21% per year over the five years, starting at \$752 and growing to \$987. The average rent for the middle-income group grows 3.89% per year, starting

from \$1,032 to \$1,298. The average rent of the high-income group increases by 3.09% yearly during the five years from \$1,460 to \$1,818.

## Methodology and Assumptions

### The Model Concept

The REC Group has developed a model to show the relationships of relevant variables. The study uses the economic concept of elasticity to measure how responsive the dependent variable is to a change in the independent variable. The calculated elasticities per MSA make the model dynamic and measure how rent responds to changes in variables such as household income, number of households, and vacancy rates. It also measures how construction responds to changes in rent. The study estimates the following elasticities and relationships for each MSA:

- **The responsiveness of rent to the change in household income per capita.** Rent is assumed to be affected by the change in household income. If income goes up, the tenants can afford the higher rent. Rent tends to rise as income increases and vice versa.
- **Responsiveness of rent to change in the number of households.** As the number of households increases, there is more pressure on the demand for multifamily units. As a result, rent goes up assuming no rent control and vice versa.
- **Responsiveness of rent to the change in vacancy rates.** The vacancy rate highly affects rent. If vacancy increases, this implies more units available for rent. Rent adjusts downward with a lag. If the vacancy rate declines, the supply of available units is tight due to pressure from the demand. Thus, rent goes up.
- **Responsiveness of construction of multifamily homes to the change in rent.** Higher rent is a significant factor that drives construction activities if the rent can cover the cost of construction and operation. If the rent is high, developers will be encouraged to build more units because of a greater return. If the rent is low, developers will likely not build or will postpone the construction of new units.

The Group uses historical data from 2005 for each MSA to measure responsiveness between vacancy and rent and responsiveness between rent and multifamily expansion. The model found that for every 10% decrease in the vacancy rate, there is a 1.4% increase in rent one year later. For multifamily housing supply, a 10% increase in rent leads to a 5% increase in supply three years later.

The model uses the responsiveness of vacancy today to project rent the following year. Rent the following year is used to project supply growth in multifamily development three years later. The three-year period represents the completion of constructing multifamily complex from start to

finish. This includes one year of planning and two years of construction. The new multifamily supply is compared to the growth in households occupying multifamily units to develop a new vacancy rate that, in turn, projects new rental values.

## Assumptions

Below are the general assumptions for the study's foundation. The data came from the IPUMS survey databases administered by the U.S. Census. It is important to note that the study uses conservative assumptions to arrive at more realistic results.

- The population most affected by the increase in rent are those belonging to the middle and low or "mid-low" income categories.
- Income is based on income per household. It uses the moving average methodology to predict future growth in income.
- Total households were based on the U.S. Census Bureau data.
- Assumes a mid-low household ratio of roughly 70% to 80% depending on MSA to determine the number of mid-low households.
- The mid-low multifamily ratio is considered at 20% to 30% per MSA based on the historical percentage of mid-low-income families living in multifamily homes. The mid-low multifamily ratio, therefore, is the demand for multifamily units.
- Affordability is based on 30% of the mid-low-income of the targeted population.
- The middle and low vacancy rates are calculated by the ratio of the total occupied mid-low multifamily homes to the total mid-low multifamily units.
- Total multifamily units represent the supply.
- Assumes a capitalization rate of 7.5% as the minimum return by which developers are encouraged to build.
- Assumes a one-year lag between vacancy and rent to represent a one-year lease.
- Assumes a three-year lag between planning and completion of new multifamily units.
- Rent control is assumed to have happened in 2021.
- Rent control assumes a 5% limit on rent increase.
- A 10% change in vacancy rate equals a decline of 1.4% in rent one year later. In addition, a 10% change in rent equals a 5% change in multifamily housing supply three years later.
- Housing unit deficits are the difference between the total multifamily housing units available under rent control scenario and the total multifamily housing units under no rent control scenario using all the elasticities or responsiveness calculated in the model.

## Static Impact

The study's approach establishes the state of the market. Then it breaks down the impact of rent control on three specific impacts: the impact on construction, forgone rent, and loss to multifamily businesses. All impacts extend reciprocating effects on job creation, labor income, value added or subtracted from regional GDP, changes in economic output, and implications for future tax revenue.

The methodology establishes the context and extent of supply and demand of housing within the largest metropolitan areas of the State of Florida: Miami-Fort Lauderdale-West Palm Beach MSA, Orlando-Kissimmee-Sanford MSA, Tampa-St. Petersburg-Clearwater MSA, Jacksonville MSA, and Naples-Immokalee-Marco Island MSA. Together, these MSAs account for 72% of Florida's population. The total number of middle-to-low income or "mid-low" income households who rent multifamily homes per MSA is the demand. Supply is a combination of occupied units grossed up using vacancy rates to determine the total number of available units.

High-income levels are excluded from the study because they are less likely to experience acute financial stress and would not provide the political pressure to encourage rent control policies at the local government level. High-income earners have more housing options than middle-income and low-income earners, and they represent approximately 7.5% of all renters. The mid-low-income category is the population that will most likely be affected by any proposed rent control. Roughly 70% to 80% of the population falls into the mid-low range, with approximately 20% to 30% occupying multifamily units. The average income per mid-low household is about \$50,000 per year.

The model measures the effect of a change in household income, the number of households, and vacancy rates on rent. It also measures the relationship between rent and the construction of new multifamily homes. Theoretically, if household income increases, tenants can afford a higher rent. If the number of households increases, pressure from demand relative to the supply of homes and rent also increases. With higher demand for housing due to increased population, vacancy declines, reducing the gap between supply and demand for housing and thereby pushing the rent up. Construction positively correlates with rent, where higher rent encourages developers to build more housing units. The study uses the concept of elasticity to measure the responsiveness of rent to changes in the factors mentioned above to capture these relationships.

The impact of vacancy on rent assumes a single-lagged period representing the previous year's leasing season. Multifamily businesses base today's rent on last year's occupancy levels and market demand. Market demand is a combination of total households and their corresponding income levels. Rent increases when a combination of available supply tightens, decreasing vacancy rates, and market demand increases with greater purchasing power.

Developers notice changing price signals as potential developments become more economically viable and expect higher returns on investment. The study uses capitalization rates to base the foundational concept of higher rents driving greater supply. The capitalization rate is the percentage of income earned to the total value of the property. Increasing rents with market standard capitalization rates suggest the entire property's value has increased.

Increased property values incentivize developers to engage in a three-year process of expanding market supply. The first year is considered a planning period as developers work with local jurisdictions and financing before breaking ground. The following two years are considered the construction phase. The mechanics rely on a one-year lag using the prior year's market conditions to decide the rent for the current year. The current year's rent signals developers to engage in a three-year process to produce more multifamily units.

The study provides a further limitation based on average construction expenditures statewide and caps the total funding available for multifamily. There are only so many dollars to chase construction projects; regardless of how high or variable rents may be, surplus capital will dry up at some point. For all construction projects, public and private, \$92.7 billion is expected to be spent in 2022 and \$94 billion in 2023. Total aggregate construction expenditures are expected to experience a slight decline after that.<sup>28</sup> Furthermore, many dollars chase multifamily projects replacing or repairing the current stock of units. The depreciation schedule in the IRS' Publication 527, regarding residential rental property is 27.5 years.<sup>29</sup> That would suggest that approximately 3.6% of the existing inventory is repaired or replaced yearly.

The four major effects estimated are construction impacts, forgone rent, a rent loss to the multifamily businesses, and a positive impact on the tenants. These four components are static or direct impacts. Construction impact is the number of multifamily starts deficits from comparing the difference between two scenarios: with and without rent control. The supply under a rent control scenario is compared to an open market scenario predicted by the model. The gap between the scenarios is aggregated into lost construction expenditures. The unrealized market rent that is no longer collected each month because of construction deficits represents a loss to the multifamily business' expenditures in forgone rent. Business expenditures are further reduced with a forgone loss or inability to raise the rent.

The return on investment is defined as the percentage of profits relative to the total investments. In this study, the capitalization rate is interchangeably referred to as the return on investment. It is also used to estimate the average value per unit to find the value of the construction unit deficits. Capitalization rates range from 5% to 10% across the State. As the median, the study uses a 7.5% capitalization rate to estimate the average value per unit. Multiplying the construction housing starts deficits or gap, by the average value per unit produces the total loss

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<sup>28</sup> Economic Estimating Conference, Florida Economy, July 2022, <http://edr.state.fl.us/Content/conferences/fleconomic/index.cfm>

<sup>29</sup> Publication 527, Residential Rental Property, <https://www.irs.gov/pub/irs-pdf/p527.pdf>



in construction expenditures. If rent is frozen, to keep a proper capitalization rate, the market's aggregate property value for existing and future development will flatten or diminish. The model's elasticity captures the responsiveness of the developers to the average value per unit and their decision to build more units and expand supply.

The study applies the elasticity product to project changes to growth in construction caused by rent controls, to create a gap or deficit in units. The deficit are the units that were never constructed. They will not collect future rent that would have otherwise been expected. The loss in construction is compounded with a rental income loss to current businesses and signals a lower return on investment for future development. Conversely, policies encouraging greater supply could positively affect construction with more units built, provide rent from the newly developed units, and encourage a market wide stabilization in rent growth.

A free or a no rent control market with increased supply would lead to lower rent and have reciprocating effects on property and enterprise value to stay in line with typical market capitalization rates. Greater supply would permanently lower rents and put extra dollars in the tenants' pockets that could further stimulate the economy repeatedly. Rent control has an economic benefit to the tenant, however the effects are temporary and are offset by a greater loss to multifamily businesses and the economy at large. Furthermore tenants would experience negative effects due to decreasing supply and quality of housing long term. Policies encouraging more construction will lower rents and provide the same economic benefits to the tenants and their spending. They would also alleviate the supply situation and convert the economic benefit to the tenant from a temporary one to a more permanent solution.

### Dynamic Impact

The next phase of the study is to determine the dynamic impacts of the policy change. Dynamic impacts are the change in one variable leading to change in others. The concept of the economic input-output model shows the interdependencies between different sectors of a national economy or different regional economies. The model depicts inter-industry relationships within an economy, leading to how the output from one industrial sector may become an input to another industrial sector. A change in one industry could affect other industries directly, indirectly, or induced. Direct, indirect, and induced effects are the cornerstones of an economic impact. An essential cornerstone of dynamic analysis is to select a series of multipliers to illustrate direct spending by one industry and its effect on other sectors. Doing so makes it possible to measure the number of jobs produced, income earned, and value-added to the regional Gross Domestic Product (GDP) and the total economic output.

Economic output is the final piece of the impact and is the total aggregate spending across the economy by the industry itself, its corresponding supply chains, and its employees. It is the total value of goods and services produced in each period, including intermediate products. While the local value-added, or Regional GDP, estimates the value of the goods and services produced in a state, excluding intermediate products. GDP is the net value of all goods and services produced in the economy over a year.

The dynamic phase will independently measure each scenario's ripple effects on the broader economy. The results are direct, indirect, and induced effects that sum to a total economic impact. Direct is any spending by developers, multifamily businesses, and tenants. Indirect and induced spending is more nuanced and considers the supply chain and consumption associated with direct expenditures. For example, suppose the developer is directly spending on construction. The immediate impact is the actual cost of material, and the indirect would be the costs associated with the delivery and provision of said material related to the supply chain. The induced effects are impacts falling out of consumer spending because of the employee's paycheck earned after being paid to construct or provide material. Together those three components add up to a total economic impact and give the baseline. The study uses IMPLAN, a well-accepted economic model that captures the direct, indirect, and induced effects on employment, labor income, value added to the regional Gross Domestic Product (GDP), and economic output.<sup>30</sup>

IMPLAN is a widely accepted software model. At the heart of the model is an input-output dollar flow table. For a specified region, the input-output table accounts for all dollar flows between different sectors of the economy. Using this information, IMPLAN models how a dollar injected into one sector is spent and re-spent in other sectors of the economy, generating waves of economic activity or so-called "economic multiplier" effects. The model uses national industry and county-level economic data to create a series of multipliers, estimating the total economic implications of economic activity.<sup>31</sup>

The dynamic phases' goals are to estimate jobs created, labor income produced, value added to the local economy, and changes in economic impact across direct, indirect, and induced levels. The impacts will be singularly displayed and then netted out for the scenarios to show the effect of one policy versus the other. Lastly, the study provides insight and estimated collections on property tax, impact fees, and permitting from the change in the property's local value and supply. It also estimates tax impacts on state revenues, particularly construction sales tax.

The study provides potential policy concepts beyond rent control. Possible policy concepts include state and local housing programs and waiving local permit and impact fees as well as tax incentives. Local and state governments can offer financial incentives for developers to engage

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<sup>30</sup> IMPLAN, <https://www.implan.com>

<sup>31</sup> IBID

in more projects to alleviate the housing pressure. These policy concepts aim to line up with the impacts of the study and help prevent a negative outcome.

## Sources of Data

- Florida Demographic Estimating Conference
- IPUMS U.S. Census Bureau
- Bureau of Labor Statistics
- Florida Economic Estimating Conference
- ApartmentList.com
- Section 125.0103, Florida Statutes
- Florida Apartment Association
- IMPLAN Economic Model

## Results, Findings, and Analysis

### Static Impacts- Direct Expenditures

**Table 5: Static Impacts**

5 Year Aggregate Impact occurring from a Single Year of Implemented Rent Control Policies (\$Millions)

	Jacksonville, FL	Miami-Fort Lauderdale-West Palm Beach, FL	Naples- Immokalee- Marco Island, FL	Orlando- Kissimmee- Sanford, FL	Tampa-St. Petersburg- Clearwater, FL	Totals
<b>Construction Impact (Opportunity Loss)</b>						
Constructed Units Deficit	-5,626	-6,709	-194	-1,237	-2,798	-16,564
Average Value Per Unit	\$217,805	\$345,263	\$390,103	\$333,988	\$282,666	\$313,965
Construction Expenditures Impact (Opportunity Loss)	(\$1,255.5)	(\$2,072.0)	(\$68.6)	(\$338.4)	(\$736.6)	(\$4,471.1)
<b>Recurring Rent Loss Impact</b>						
Unconstructed Units	-5,441	-6,625	-198	-1,209	-2,819	-16,292
Rent	\$1,361	\$2,158	\$2,438	\$2,087	\$1,767	\$9,811
Recurring Revenue Impact to Multifamily	(\$185.9)	(\$349.9)	(\$11.6)	(\$59.8)	(\$119.8)	(\$727.0)
<b>Non-recurring Rent Loss Impact</b>						
Multifamily Business Loss	(\$157.2)	(\$921.7)	(\$63.6)	(\$210.9)	(\$509.6)	(\$1,863.1)

The study presents two scenarios, one with rent control and one without rent control. Once the direct impacts of the two scenarios are determined, they are netted out. Table 5 presents a five-year aggregate of the net effect of the 5% cap scenario for all MSAs. There are three categories of impacts: Construction Impact, Recurring Rent Impact, and Non-recurring Rent Loss Impact. The study assumes rent control to have taken effect in 2021 and expires after a year, simulating the provisions of s.125.0103, F.S.

If rent controls are imposed in all five MSAs at a 5% cap on rent increases, it would create a total constructed units deficit of 16,564 units. Developers would be disincentivized to build additional units, thus constricting the housing supply. The deficit is an opportunity loss of construction expenditures for a total of \$4.5 billion for all MSAs, with the Miami-Fort Lauderdale-West Palm Beach MSA being the highest at \$2.1 billion over five years.

The outlier is the Jacksonville MSA. All five MSAs experience tremendous price pressure to incentivize construction. In the model, all MSAs reach maximum construction potential in an open market setting. Jacksonville, however, has a unique situation where its population is growing like the rest of the State. Still, supply is having more difficulty keeping pace than any other MSAs in years past. Tight market supply would naturally encourage high levels of supply growth in 2024. Without rent control in 2021, Jacksonville multifamily stock would be expected, based on the output, to grow by 7.5%. With rent control, supply would increase by 2.5%, creating a more significant deficit in multifamily starts.

The recurring rent impact is uncollected revenue from unconstructed units. The units are not built, and the opportunity loss of potential rent is \$727 million for all MSAs over five years. The Miami MSA has the greatest impact at \$349.9 million, followed by the Jacksonville MSA at \$185.9 million. The Tampa MSA comes in third with a loss of \$119.8 million, and Orlando MSA's is \$59.8 million. The Naples MSA has the lowest loss at \$11.6 million.

The non-recurring rent loss impact, or the change from market rent to controlled rent, projects a total loss of \$1.9 billion. Rent control is limited to one year, so the markets would only see twelve months of rent revenue loss.

## Dynamic Impacts

The second phase of the study is dynamic analysis. The direct impacts in the static analyses are utilized as inputs in the dynamic analysis for the five MSAs. The dynamic phase estimates the ripple effects of the activities from construction, and lost rental income within MSAs. Using IMPLAN, a well-accepted economic model, the direct, indirect, and induced effects on employment, labor income, value added to the regional GDP, and economic output are calculated. Total loss is the sum of all these impacts.<sup>32</sup>

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<sup>32</sup>IMPLAN, <https://www.implan.com>

## Construction Opportunity Loss

**Table 6: Dynamic Impact of the Opportunity Loss to Construction**

Five Year Aggregate (\$Millions)

	Jacksonville, FL	Miami-Fort Lauderdale-West Palm Beach, FL	Naples-Immokalee-Marco Island, FL	Orlando-Kissimmee-Sanford, FL	Tampa-St. Petersburg-Clearwater, FL	Totals
<b>Employment (Jobs)</b>						
Direct	-15,745	-25,986	-860	-4,244	-9,238	-56,073
Indirect & Induced	-7,660	-12,641	-419	-2,064	-4,494	-27,278
Total	-23,405	-38,627	-1,279	-6,308	-13,732	-83,351
<b>Labor Income</b>						
Direct	(\$893.5)	(\$1,474.7)	(\$48.8)	(\$240.8)	(\$524.3)	(\$3,182.1)
Indirect & Induced	(\$379.7)	(\$626.6)	(\$20.8)	(\$102.3)	(\$222.8)	(\$1,352.2)
Total	(\$1,273.2)	(\$2,101.3)	(\$69.6)	(\$343.2)	(\$747.0)	(\$4,534.3)
<b>Value-add (Regional GDP)</b>						
Direct	(\$1,059.3)	(\$1,748.3)	(\$57.9)	(\$285.5)	(\$621.5)	(\$3,772.6)
Indirect & Induced	(\$698.8)	(\$1,153.4)	(\$38.2)	(\$188.4)	(\$410.0)	(\$2,488.8)
Total	(\$1,758.2)	(\$2,901.7)	(\$96.1)	(\$473.9)	(\$1,031.6)	(\$6,261.4)
<b>Economic Output</b>						
Direct	(\$1,331.1)	(\$2,196.9)	(\$72.7)	(\$358.8)	(\$781.0)	(\$4,740.5)
Indirect & Induced	(\$1,252.5)	(\$2,067.1)	(\$68.5)	(\$337.6)	(\$734.9)	(\$4,460.6)
Total	(\$2,583.6)	(\$4,264.0)	(\$141.2)	(\$696.4)	(\$1,515.9)	(\$9,201.1)

Table 6 shows the dynamic effects of the opportunity loss to construction. It is important to note that the impact of construction is temporary but ends once construction is completed. The opportunity loss to construction is based on the number of multifamily units not built due to rent control. The five-year aggregate employment opportunity loss to construction is 83,351 jobs for all MSAs, with Miami MSA having the highest loss at 38,627 jobs, followed by Jacksonville MSA's with 23,405 jobs lost. Because of the tremendous number of jobs lost, labor income experienced an opportunity loss of \$4.5 billion over five years. Miami MSA is experiencing the most significant loss at \$2.1 billion, and Jacksonville MSA at \$1.3 billion. Tampa MSA's labor income loss is \$747

million, and Orlando MSA's loss is \$343.2 million. Naples MSA, being the smallest, loses \$69.6 million.

Another critical aspect of the dynamic analysis is its ability to capture construction impacts on the value-added regional GDP. The opportunity loss to GDP amounts to a total of \$6.3 billion, with Miami MSA having the highest at \$2.9 billion, followed by Jacksonville MSA's \$1.8 billion. Tampa MSA loss comes in third at \$1 billion, with Orlando MSA's \$473.9 million, and Naples MSA is last at \$96.1 million over five years.

The aggregate opportunity loss in economic output totals \$9.2 billion over five years, with Miami having the highest at \$4.3 billion, followed by Jacksonville MSA's \$2.6 billion. Tampa MSA's opportunity loss is \$1.5 billion, followed by Orlando MSA's \$696.4 million. Again, Naples MSA came in last with a loss of \$141.2 million.

It is important to emphasize that the economic losses from construction due to rent control are substantial and will have lasting effects on these MSAs through fewer units.

### Recurring Rent Loss

The "Recurring Rental Income Loss Impact" is the rent that is never collected because of the unconstructed units. The units were not built, incurring a recurring opportunity loss in potential rent amounting to \$727 million across all five MSAs. Multifamily businesses would have realized the rental revenues under the no-rent control scenario. The dynamic effects of rental opportunity loss are displayed in Table 7.

**Table 7: Dynamic Impact of Recurring Rent Loss**

Five Year Aggregate (\$Millions)

	Jacksonville, FL	Miami-Fort Lauderdale-West Palm Beach, FL	Naples-Immokalee-Marco Island, FL	Orlando-Kissimmee-Sanford, FL	Tampa-St. Petersburg-Clearwater, FL	Totals
<b>Employment (Jobs)</b>						
Direct	-420	-791	-26	-135	-271	-1,644
Indirect & Induced	-195	-367	-12	-63	-126	-763
Total	-616	-1,159	-38	-198	-397	-2,407
<b>Labor Income</b>						
Direct	(\$8.3)	(\$15.7)	(\$0.5)	(\$2.7)	(\$5.4)	(\$32.6)
Indirect & Induced	(\$10.7)	(\$20.2)	(\$0.7)	(\$3.5)	(\$6.9)	(\$42.0)
Total	(\$19.1)	(\$35.9)	(\$1.2)	(\$6.1)	(\$12.3)	(\$74.6)
<b>Value-add (Regional GDP)</b>						
Direct	(\$172.5)	(\$324.7)	(\$10.8)	(\$55.5)	(\$111.1)	(\$674.6)
Indirect & Induced	(\$17.6)	(\$33.1)	(\$1.1)	(\$5.7)	(\$11.3)	(\$68.7)
Total	(\$190.0)	(\$357.8)	(\$11.8)	(\$61.2)	(\$122.5)	(\$743.3)
<b>Economic Output</b>						
Direct	(\$191.9)	(\$361.3)	(\$12.0)	(\$61.8)	(\$123.7)	(\$750.7)
Indirect & Induced	(\$33.8)	(\$63.7)	(\$2.1)	(\$10.9)	(\$21.8)	(\$132.4)
Total	(\$225.8)	(\$425.0)	(\$14.1)	(\$72.7)	(\$145.5)	(\$883.1)

Over five years, the total recurring impact of rental income loss on employment is 2,407 jobs for all MSAs. The Miami MSA is expected to lose 1,159 jobs, followed by the Jacksonville MSA with 616 jobs. Tampa is expected to lose 397 jobs, with Orlando MSA at 198 jobs. Naples MSA being the smallest loses 38 jobs. Because of these jobs lost, aggregate labor income is expected to forgo \$74.6 million for all MSAs. The Miami-based MSA has the highest loss at \$35.9 million, followed by Jacksonville MSA's \$19.1 million. Tampa MSA is expected to lose \$12.3 million; Orlando MSA's \$6.1 million. Naples MSA comes in last with a loss of \$1.2 million over five years.

The forgone rent is a significant recurring loss of \$743.3 million to the value-added GDP. Miami MSA's GDP loss is estimated at \$357.8 million, followed by Jacksonville MSA's \$190 million. The

Tampa MSA's loss to value-added GDP is \$122.5 million, and Orlando MSA forgoes \$61.2 million in GDP. The Naples MSA has the lowest loss at \$11.8 million.

The forgone rent's impact on economic output is even greater at \$883.1 million lost opportunity. Being the largest MSA, Miami is expected to lose \$425 million in economic output, followed by Jacksonville's MSA of \$225.8 million. Tampa MSA is expected to lose \$145.5 million, with Orlando MSA's \$ 72.7 million. Naples MSA comes in last with a loss of \$14.1 million in economic output over five years.

### Non-recurring Business Loss

Imposing rent control policies result in a change from market rent to rent with an artificially controlled price point. In some instances, those effects can be positive, while the impact can be negative in other cases. Even though aggregate spending by the tenant is 80% of all spending after debt service, they can stack up favorably against multifamily spending. The discrepancies lie in the multipliers and the types of goods and services each side typically buys.

Unlike the previous dynamic impacts of forgone construction and rent, these impacts represent a single year. Any loss, or benefit, garnered by rent control immediately goes away the following year as rent control is assumed not to be renewed, and rental rates return to typical market rates. As a result, the values in Table 8 represent a one-time loss of rental income.



**Table 8: Dynamic Impact of Non-recurring Rent Loss**

Net Impact (\$Millions)

	Jacksonville, FL	Miami-Fort Lauderdale-West Palm Beach, FL	Naples-Immokalee-Marco Island, FL	Orlando-Kissimmee-Sanford, FL	Tampa-St. Petersburg-Clearwater, FL	Totals
<b>Employment (Jobs)</b>						
Direct	-355	-2,084	-144	-477	-1,152	-4,213
Indirect & Induced	816	4,786	331	1,096	2,647	9,676
Total	461	2,702	187	618	1,494	5,462
<b>Labor Income</b>						
Direct	(\$7.0)	(\$41.3)	(\$2.9)	(\$9.5)	(\$22.8)	(\$83.5)
Indirect & Induced	\$39.1	\$228.9	\$15.8	\$52.4	\$126.6	\$462.8
Total	\$32.0	\$187.6	\$13.0	\$42.9	\$103.8	\$379.3
<b>Value-add (Regional GDP)</b>						
Direct	(\$145.9)	(\$855.3)	(\$59.1)	(\$195.7)	(\$472.9)	(\$1,728.8)
Indirect & Induced	\$76.0	\$445.8	\$30.8	\$102.0	\$246.5	\$901.2
Total	(\$69.8)	(\$409.4)	(\$28.3)	(\$93.7)	(\$226.4)	(\$827.6)
<b>Economic Output</b>						
Direct	(\$162.3)	(\$951.7)	(\$65.7)	(\$217.8)	(\$526.3)	(\$1,923.9)
Indirect & Induced	\$131.5	\$770.7	\$25.2	\$176.4	\$426.2	\$1,530.0
Total	(\$30.9)	(\$181.0)	(\$40.5)	(\$41.4)	(\$100.1)	(\$393.9)

The five-year aggregate net effect on employment is positive, with 5,462 jobs for all MSAs. As with the other dynamic impacts, the Miami-based MSA has the highest net effect on employment adding 2,702 jobs followed by the Tampa MSA's 1,494 jobs. The Orlando MSA comes in third with a net employment effect of 618 jobs, and the Jacksonville MSA adds 461 jobs. Naples came in last, adding 187 jobs. Total labor income generates \$379.3 million for all MSAs, with Miami MSA adding \$187.6 and the Tampa MSA coming in at \$103.8 million in labor income. The Orlando MSA adds \$42.9 million, Jacksonville MSA adds \$32 million, and Naples rounds out the five MSAs at \$13 million.

Value added to the regional GDP equals a net opportunity loss of \$827.6 million. The most extensive loss is in Miami MSA at \$409.4 million, Tampa MSA falls \$226.4 million, and Orlando

MSA loses \$93.7 million. Jacksonville MSA and Naples MSA each lost \$69.8 million and \$28.3 million, respectively. All five MSAs face a similar decline in Economic Output for an aggregate total of \$393.9 million in economic loss. Miami MSA is at a \$181 million loss, followed by Tampa MSA at \$100.1 million, Orlando MSA at \$41.4 million, Naples MSA at \$40.5 million, and Jacksonville MSA at \$30.9 million over five years.

## Tax Impacts

**Table 9: Tax Collections Impact**

Five Year Aggregate (\$Millions)

	Jacksonville, FL	Miami-Fort Lauderdale-West Palm Beach, FL	Naples- Immokalee- Marco Island, FL	Orlando- Kissimmee- Sanford, FL	Tampa-St. Petersburg- Clearwater, FL	Totals
<b>State Tax Collections Impact</b>						
State Sales Tax -Building Materials (Opportunity Loss)	(\$26.3)	(\$43.3)	(\$1.4)	(\$7.1)	(\$15.4)	(\$93.5)
State Indirect & Induced	(\$33.0)	(\$38.2)	(\$0.4)	(\$4.8)	(\$9.1)	(\$85.4)
Total State Collections	(\$59.2)	(\$81.5)	(\$1.9)	(\$11.8)	(\$24.5)	(\$178.9)
<b>Local Government Collections Impact</b>						
Permit Fees (Opportunity Loss)	(\$1.4)	(\$1.7)	(\$0.0)	(\$0.3)	(\$0.7)	(\$4.1)
Impact Fees (Opportunity Loss)	(\$25.4)	(\$14.8)	(\$0.2)	(\$6.1)	(\$12.0)	(\$58.5)
Property Tax (Opportunity Loss)	(\$39.9)	(\$62.4)	(\$2.0)	(\$10.1)	(\$23.5)	(\$137.8)
Local Government Indirect & Induced	(\$31.9)	(\$37.1)	(\$0.4)	(\$15.7)	(\$8.8)	(\$94.0)
Total Local Collections	(\$98.6)	(\$115.9)	(\$2.7)	(\$32.1)	(\$45.0)	(\$294.3)
Total State & Local Collections	(\$157.8)	(\$197.4)	(\$4.6)	(\$44.0)	(\$69.5)	(\$473.3)

Taxes are broken down into state and local collections. State tax collections are primarily concerned with sales tax incurred from purchasing building materials. Indirect and induced collections represent a variety of taxes associated with the supply chain and general consumption. Local government collections feature permit fees, impact fees, property tax,<sup>33</sup> and indirect and induced collections.

<sup>33</sup> Property Tax in this case is the value of unconstructed multi-family units multiplied by an average millage rate.

Table 9 presents the forgone sales tax from construction. The total state tax collections loss amounts to \$178.9 million over five years for all MSAs. Miami MSA is estimated to lose state revenues to \$81.5 million in total collections, followed by Jacksonville MSA's \$59.2 million. Tampa MSA came in third with a \$24.5 million loss and Orlando MSA with \$11.8 million. Naples MSA is expected to lose \$1.9 million under the rent control scenario over five years.

Over five years, local tax revenue forgone is estimated at \$294.3 million for all MSAs. The most significant loss is property tax, totaling \$137.8 million for all MSAs, followed by local government indirect and induced tax of \$101 million. The total impact fee loss is \$58.5 million, with permit fees being the lowest at \$4.1 million. Local governments derive the bulk of their collections from property tax. Without the added developments constructed, local governments are reducing their tax base and suffering recurring property tax losses. If the Miami MSA implemented a rent control policy, the MSA could expect to remove more than \$62 million in property tax from their projected baseline. Using Miami as an example, when coupling the hit to the general supply chain from a lack of construction activity and recurring multifamily operations, the Miami MSA could expect to lose another \$37.1 million. The Miami MSA would be without \$115.9 million in total because of the rent control policy.

The paper "Modeling the Impacts of Rent Control" found a second set of potential impacts not included in this study.<sup>34</sup> The rent cap tends to lead to depressive pressures on the property value. Property values, using capitalization rates, are a function of the income they produce. When the income is capped or when a property is sold, the new value appraised by the local governments for property tax purposes is lower. Local governments could experience impacts beyond what is outlined above where existing inventory will carry lower values and thereby lower property tax collections.

To summarize, the total state and local taxes forgone amount to \$473.3 million across all five MSAs over the five years.

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<sup>34</sup> Modeling the Impacts of Rent Control, [https://www.naahq.org/sites/default/files/naa-documents/modeling\\_the\\_impacts\\_of\\_rent\\_control.pdf](https://www.naahq.org/sites/default/files/naa-documents/modeling_the_impacts_of_rent_control.pdf)

## Summary Table

<b>Table 10: Summary</b>						
<b>Five Year Aggregate (\$Millions)</b>						
	<b>Jacksonville, FL</b>	<b>Miami-Fort Lauderdale-West Palm Beach, FL</b>	<b>Naples-Immokalee-Marco Island, FL</b>	<b>Orlando-Kissimmee-Sanford, FL</b>	<b>Tampa-St. Petersburg-Clearwater, FL</b>	<b>Totals</b>
<b>Static Impacts</b>						
Construction Expenditures Impact (Opportunity Loss)	(\$1,255.5)	(\$2,072.0)	(\$68.6)	(\$338.4)	(\$736.6)	(\$4,471.1)
Recurring Revenue Impact to Multifamily	(\$185.9)	(\$349.9)	(\$11.6)	(\$59.8)	(\$119.8)	(\$727.0)
Multifamily Business Loss	(\$157.2)	(\$921.7)	(\$63.6)	(\$210.9)	(\$509.6)	(\$1,863.1)
<b>Dynamic Impacts</b>						
Total Employment (Jobs)	-23,559	-37,083	-1,131	-5,888	-12,635	-80,296
Total Labor Income	(\$1,260.3)	(\$1,949.6)	(\$57.8)	(\$306.4)	(\$655.6)	(\$4,229.6)
Total Value-add (Regional GDP)	(\$2,018.1)	(\$3,668.8)	(\$136.2)	(\$628.8)	(\$1,380.4)	(\$7,832.3)
Total Economic Output	(\$2,840.3)	(\$4,870.0)	(\$195.8)	(\$810.5)	(\$1,761.5)	(\$10,478.1)
<b>Tax Collections Impact</b>						
Total State Collections	(\$59.2)	(\$81.5)	(\$1.9)	(\$11.8)	(\$24.5)	(\$178.9)
Total Local Collections	(\$98.6)	(\$115.9)	(\$2.7)	(\$32.1)	(\$45.0)	(\$294.3)
Total State & Local Collections	(\$157.8)	(\$197.4)	(\$4.6)	(\$44.0)	(\$69.5)	(\$473.3)

Table 10 summarizes all the direct, indirect, and induced economic impacts of rent control over five years. Construction expenditures lose \$4.5 billion due to the units not being built. Forgone rental revenue experiences losses amounting to \$727 million. These are streams of revenue that local economies and governments will never realize because of rent control. The direct loss to the multifamily businesses from a loss of rental income is \$1.9 billion.

Rent control results in a loss of 80,296 jobs for all MSAs over five years and a loss of \$4.2 billion in labor income. The total value-added to GDP loss amounts to \$7.8 billion, and the total economic output is reduced by \$10.5 billion. For state and local governments, reduced economic

activity translates to \$473.3 million in forgone collections, of which \$294.3 originate from the local level.

## Proposals to Increase Housing Supply

### A Theoretical Simulation of Increasing Supply

What would happen if state and the local government instituted policies and programs that encouraged supply expansion in place of rent controls? The limited stimulus and economic costs of rent control could be replaced with greater supply leading to more significant economic activity and new spending in the local economies by the tenants and the multifamily businesses. Furthermore, the benefits of greater supply provide endless economic benefits in perpetuity.

Table 11 depicts a theoretical framework addressing the economic impacts of a greater supply of multifamily units. The model allows for the effects of forecasting a rent-controlled market and comparing it back to a normal market baseline, as well as increasing supply and comparing that before to a typical economic baseline. In this scenario, the study projects a market supply driven by incentives to grow by 1% on top of the current open market growth. The effects are limited to a single year to present the recurring benefits expected yearly.

**Table 11: Recurring Impact of 1% Increase in Supply**

Aggregated 5 Years of Recurring Impacts (\$Millions)

	Jacksonville, FL	Miami-Fort Lauderdale-West Palm Beach, FL	Naples-Immokalee-Marco Island, FL	Orlando-Kissimmee-Sanford, FL	Tampa-St. Petersburg-Clearwater, FL	Totals
<b>Static Impact</b>						
Additional Constructed Units	1,243	6,399	251	2,116	2,734	12,743
Annual Rent Savings (\$Dollars)	\$411	\$839	\$524	\$834	\$385	\$599
<b>Dynamic Impacts</b>						
Total Employment (Jobs)	25	225	7	73	58	388
Total Labor Income	\$1.3	\$12.2	\$0.4	\$4.0	\$2.8	\$20.6
Total Value-add (Regional GDP)	\$1.5	\$7.3	\$0.7	\$2.1	\$5.8	\$17.4
Total Economic Output	\$3.2	\$23.9	\$1.3	\$7.5	\$9.9	\$45.9
<b>Tax Collections Impact</b>						
State Indirect & Induced	\$0.1	\$1.2	\$0.0	\$0.4	\$0.3	\$2.1
Total State Collections	\$0.1	\$1.2	\$0.0	\$0.4	\$0.3	\$2.1
Property Tax	\$9.5	\$73.6	\$3.5	\$23.4	\$27.5	\$137.4
Local Government Indirect & Induced	\$0.1	\$1.2	\$0.0	\$0.4	\$0.2	\$2.0
Total Local Collections	\$9.6	\$74.8	\$3.5	\$23.8	\$27.8	\$139.4
Total State & Local Collections	\$9.7	\$76.0	\$3.5	\$24.2	\$28.1	\$141.5

The above table pursues encouraging supply above the current open market baseline and examining the economic ramifications. Table 11 is the net effect of three different impacts: the impact of new rents collected from the additional supply, the impact on the multifamily businesses when market forces mitigate rent increases, and the gain to the tenants as market forces mitigate rent increases. Collectively, multifamily businesses would gain additional rents from the new supply, but market forces limit how much a company can increase future rents. Likewise, tenants would save extra dollars because of greater competition in the marketplace. A

1% increase in supply would equate to 12,743 units for middle-income and low-income households across all MSAs. The Miami MSA would expect the most significant share at 6,399 units, followed by the Tampa MSA at 2,734 units. On average tenants would see an annual recurring savings of \$599, with most savings experienced in the Miami and Orlando MSAs at \$839 and \$834 respectively.

The theoretical simulation shows how policies encouraging a 1% increase in supply affect each MSA at different magnitudes. The larger the multifamily base, the greater the absolute impact. Across the board, more supply equals more jobs, labor income, and more robust economic activities. The Miami MSA features the largest gains at \$23.9 million in additional economic output, and the Naples MSA has the lowest increases at \$1.3 million. It is important to note that the benefits above are recurring and represent an annual impact as the supply is not going away. No temporary ordinance or legislation is needed to keep the effects in place. Therefore, the gains from pure supply growth are magnitudes larger over the forecast horizon. How would a Local Government go about achieving these impacts? Two options present themselves, one in the form of local tax incentives and the other in the form of strengthening the State of Florida's existing housing programs.

### Incentives for Developers

Impact fees are one-time fees administered by local governments and applied to new construction. They provide revenue for capacity-producing capital improvements to accommodate the demand for those improvements generated by new development. The fees fund services such as transportation, water, fire, law, parks, and schools.<sup>35</sup> Impact fees are governed through a combination of constitutional and statutory authority and case law. Developers can be granted waivers or deferrals from impact fees for affordable housing development.<sup>36</sup> Usually, impact fees are determined based on the size of the new development, the cost of implementing it, and how much it will impact the surrounding area.<sup>37</sup> HB 337 was passed in the Florida Legislature to ensure restraint and allows local governments to increase impact fees by more than 12.5% annually or by more than 50% over four years.<sup>38</sup>

Impact fees are a high cost to developers. They vary across different counties (anywhere from \$1,000 to \$10,000) for an average of \$5,000 per unit at 850 sq ft per unit.<sup>39</sup> In highly developed counties with a large population, impact fees tend to be higher than in smaller counties. In areas with a critically low supply of housing units, counties need to consider providing incentives to

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<sup>35</sup> Impact Fees, [https://www.ircgov.com/communitydevelopment/applications/Impact\\_Fee/Index.htm](https://www.ircgov.com/communitydevelopment/applications/Impact_Fee/Index.htm)

<sup>36</sup> Overview of Impact Fees and Affordable Housing, [https://www.floridahousing.org/docs/default-source/aboutflorida/august2017/october2017/TAB\\_3.pdf](https://www.floridahousing.org/docs/default-source/aboutflorida/august2017/october2017/TAB_3.pdf)

<sup>37</sup> IBID

<sup>38</sup> Florida Statutes, [http://www.leg.state.fl.us/statutes/index.cfm?App\\_mode=Display\\_Statute&URL=0100-0199/0163/Sections/0163.31801.html](http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&URL=0100-0199/0163/Sections/0163.31801.html)

<sup>39</sup> REC Group calculated the average cost of impact fees for the 5 MSAs and weighed them by population.

developers. They can grant impact fee waivers or deferrals to developers. Permit fees can also be waived in cases of financial hardship. Counties have the option of discounting property taxes as well. Lower costs on the property tax bill would encourage developers by providing a greater return on their investment either directly, or indirectly when selling a constructed property to a multifamily management company. Reducing property tax, and waiving impact fees and permit fees, entices developers to build more housing units. Ordinances can be designed based on the size of total investments and development structures.

If counties implement impact fee deferrals, they can spread them over time. The objective is to attract developers and encourage them to address the critical housing problem. The only way to solve the housing problem without disrupting the supply and demand dynamics is to increase the supply of housing units. As shown in the study, even one year of rent control can cause major economic disruptions and devastations to the market.

Salisbury, Maryland, has recently enacted the “Here is Home” comprehensive housing program to help encourage an increase in housing supply and greater affordability. To increase supply, the program makes use of waiving development fees assuming the projects can stay on a predefined timeline.<sup>40</sup> To address affordability, the program establishes a minimum payment in lieu of taxes for the creation of any subsidized housing in the city.<sup>41</sup> Within 90 days, the city received applications to build 8,049 more homes, apartments, assisted living units and townhomes.<sup>42</sup>

### Strengthen State Housing Programs

Florida currently has a housing program to help very low-income, low-income, and moderate-income families. The two programs that provide this income-based assistance are The State Housing Initiative Partnership Program (SHIP) and the State Apartment Incentive Loan Program (SAIL).<sup>43</sup> SHIP and SAIL programs span from homelessness to the moderate-income essential workforce.

According to the Florida Housing Finance Corporation, SHIP provides funds to local governments as an incentive to create partnerships that produce and preserve affordable homeownership and multifamily housing.

- Local governments establish a housing assistance program and develop a housing assistance plan and housing incentive strategy.

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<sup>40</sup> Here is Home Salisbury, <https://salisbury.md/09/30/2021/salisbury-announces-here-is-home-comprehensive-housing-initiative>

<sup>41</sup> Ibid

<sup>42</sup> Could Salisbury’s ‘Here is Home’ program be the solution to Maryland’s housing crisis? | GUEST COMMENTARY, <https://www.baltimoresun.com/opinion/op-ed/bs-ed-op-0329-salisbury-housing-20220328-fl77phlsizfanbvjyp476klwgu-story.html>

<sup>43</sup> Florida Housing Finance Corporation, <https://www.floridahousing.org/programs>



- Local Governments can amend land development regulations, establish local policies to implement incentive strategies, form partnerships, and combine resources to reduce housing costs.
- Local governments must ensure that rent or mortgage payments within the targeted areas are at most 30 percent of the area median income limits unless authorized by the mortgage lender.<sup>44</sup>
- Low-income individuals may use SHIP dollars to fund emergency repairs, new construction, rehabilitation, down payment and closing cost assistance, impact fees, construction and gap financing, mortgage buy-downs, acquisition of property for affordable housing, matching dollars for federal housing grants and programs, and homeownership counseling.<sup>45</sup>
- SHIP funds may be used to assist units that meet the standards of chapter 553.<sup>46</sup>

The State Apartment Incentive Loan program (SAIL) is a low-interest loan program dispersed on a competitive basis to affordable housing developers each year.<sup>47</sup> SAIL dollars are available to individuals and organizations that propose the construction or substantial rehabilitation of multifamily units affordable to low-income individuals and families.<sup>48</sup> The program dollars often serve to bridge the gap between the development's primary financing and the total cost of the development.

- Loan interest rates are set at zero for those developments that maintain 80 percent of their occupancy for farmworkers, commercial fishing workers, or homeless people.
- The interest rates are set at 1% for all other developments.
- Loans are issued for a maximum of 15 years unless housing credit syndication requirements or Fannie Mae requirements dictate longer terms.<sup>49</sup>
- In most cases, the SAIL loan can be at most 25 percent of the total development cost and can be used in conjunction with other state and federal programs.<sup>50</sup>

Funding comes from documentary stamps tax revenues distributed to the State Housing Trust Fund and the Local Government Trust Fund. The William E. Sadowski Affordable Housing Act was created in 1992 as a reliable source of revenue from documentary stamps tax collections for affordable housing. Thirty percent (30%) of this collection goes into the State Housing Trust Fund,

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<sup>44</sup> Florida Housing Finance Corporation, [https://www.SHIP - State Housing Initiatives Partnership Program \(floridahousing.org\)](https://www.SHIP - State Housing Initiatives Partnership Program (floridahousing.org))

<sup>45</sup> Florida Housing Finance Corporation, [\(floridahousing.org\)](https://www.SHIP - State Housing Initiatives Partnership Program (floridahousing.org))

<sup>46</sup> Ibid

<sup>47</sup> Florida Housing Finance Corporation, [www.floridahousing.org/programs/developers-multifamily-programs/state-apartment-incentive-loan](http://www.floridahousing.org/programs/developers-multifamily-programs/state-apartment-incentive-loan)

<sup>48</sup> Ibid

<sup>49</sup> Florida Housing Finance Corporation, [www.floridahousing.org/programs/developers-multifamily-programs/state-apartment-incentive-loan](http://www.floridahousing.org/programs/developers-multifamily-programs/state-apartment-incentive-loan)

<sup>50</sup> Ibid

and 70% goes into the Local Government Housing Trust Fund.<sup>51</sup> The intent and purpose of these programs are to supplement the market aimed at increasing the number of housing units but not necessarily solving Florida's housing crisis.

## Conclusion

The plan to impose rent control in any of the MSAs considered in the study creates disruptions in the market that will result in significant adverse economic and fiscal impacts. Using conservative assumptions, the study was able to arrive at this conclusion. Utilizing the relationships between relevant economic drivers like changes in household income, the number of households, and vacancy rates and how they affect rent, the study's findings clearly show how rent control affects the supply of housing units. Imposing rent control discourages investors and developers from building more units. With fewer units available in the market, rent continues to grow as the population and the number of households grow.

Rent control produces the opposite of the intended effects. It destroys the relationship between vacancy rates and rent, disrupting the market's natural expansion. As a result, rent control policies create supply distortions that cannot be overcome without a similar abnormal run-up in rent. Rent control creates long-lasting adverse effects on a market for the temporary benefit of rent savings to the tenant. By encouraging supply, local governments can still achieve the financial benefit to the tenant. Supply increases can extend the economic stimulus of tenant spending across time, not just for a year.

Because of rent control, developers will not build 16,564 multifamily units. Unconstructed units result in direct forgone construction expenditures of \$4.5 billion. The forgone rental revenue loss is \$727 million. Streams of revenues are never realized because of rent control. The direct loss to the multifamily businesses because of the rental income loss is \$1.9 billion. Most of the forgone expenditures and revenues have tremendous negative impacts on Florida's economy caused by the disruption of just one year of rent control.

**Overall, its effect on total employment is even worse, causing a loss of 80,296 jobs for all MSAs over five years. Salaries, wages, and benefits lose \$4.3 billion in labor income. The total value-added GDP loss is \$7.8 billion, with a total economic output reduced by \$10.5 billion. The State of Florida and local governments are estimated to forgo \$473.3 million in taxes, an amount that could fund substantial state and local projects. While this study did not explore statewide impacts of rent control, the five MSAs account for 72% of the total households in the State.**

*Vacancy influences rent and rent influences construction. Rent control breaks that relationship where vacancy cannot affect rent, and rent is unable to influence construction. The result is a drop*

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<sup>51</sup> The Florida Housing Finance Corporation (FHFC) Collections, Appropriations, and Sweeps summary. January 29, 2020. Collections were based on the Revenue Estimating Conference, August 2019.

*in supply, tighter vacancy rates as populations grow, and no mechanism to alleviate pressure on open market prices.*

According to the findings and analysis, it is safe to conclude that rent control is not the answer. Rent control exacerbates the problem because it will restrict the supply of more housing units. Is rent control the solution to the current rental issues? With less supply than demand, it will reduce vacancy rates, pushing the rent up even faster. What then? Do local governments enact additional rent control measures and pursue a downward spiral of economic loss?

In retrospect of this report, the focus should never be on controlling markets and imposing well-meaning intentions with disastrous side effects. There are other paths to lower rents, especially by encouraging supply. Housing development programs and cutting through red tape can help local governments achieve the notable goal of alleviating rental rates for middle-income and low-income households. Providing tax incentives as well as waiving impact fees and permit fees under certain conditions could help. Working with market forces will make the tenant better off, as well as the multifamily businesses. This study shows everyone loses through the disruption of market forces, lost economic activity, and more severe housing shortages.

## Appendix – Static Impacts

**Table 1.1: Static Impacts**

Jacksonville, FL

	2021	2022	2023	2024	2025
<b>Construction Impact (Opportunity Loss)</b>					
Constructed Units Deficit	0	-5,441	0	-202	16
Average Value Per Unit	\$192,889	\$222,594	\$239,099	\$237,737	\$217,805
Construction Expenditures Impact (Opportunity Loss)	\$0.0	(\$1,211.0)	\$0.0	(\$48.0)	\$3.5
<b>Recurring Rent Loss Impact</b>					
Unconstructed Units	0	0	0	-5,441	0
Rent	\$1,206	\$1,391	\$1,494	\$1,486	\$1,361
Recurring Revenue Impact to Multifamily	\$0.0	\$0.0	\$0.0	(\$97.0)	(\$88.9)
<b>Non-recurring Rent Loss Impact</b>					
Multifamily Business Loss	(\$157.2)	\$0.0	\$0.0	\$0.0	\$0.0

**Table 1.2: Static Impacts**

Miami-Fort Lauderdale-West Palm Beach, FL

	2021	2022	2023	2024	2025
<b>Construction Impact (Opportunity Loss)</b>					
Constructed Units Deficit	0	-6,625	0	0	-84
Average Value Per Unit	\$247,683	\$308,365	\$350,046	\$358,915	\$345,263
Construction Expenditures Impact (Opportunity Loss)	\$0.0	(\$2,043.1)	\$0.0	\$0.0	(\$29.0)
<b>Recurring Rent Loss Impact</b>					
Unconstructed Units	0	0	0	-6,625	0
Rent	\$1,548	\$1,927	\$2,188	\$2,243	\$2,158
Recurring Revenue Impact to Multifamily	\$0.0	\$0.0	\$0.0	(\$178.3)	(\$171.6)
<b>Non-recurring Rent Loss Impact</b>					
Multifamily Business Loss	(\$921.7)	\$0.0	\$0.0	\$0.0	\$0.0

**Table 1.3: Static Impacts**

Naples-Immokalee-Marco Island, FL

	2021	2022	2023	2024	2025
<b>Construction Impact (Opportunity Loss)</b>					
Constructed Units Deficit	0	-198	0	0	4
Average Value Per Unit	\$265,883	\$353,890	\$405,431	\$389,327	\$390,103
Construction Expenditures Impact (Opportunity Loss)	\$0.0	(\$70.1)	\$0.0	\$0.0	\$1.5
<b>Recurring Rent Loss Impact</b>					
Unconstructed Units	0	0	0	-198	0
Rent	\$1,662	\$2,212	\$2,534	\$2,433	\$2,438
Recurring Revenue Impact to Multifamily	\$0.0	\$0.0	\$0.0	(\$5.8)	(\$5.8)
<b>Non-recurring Rent Loss Impact</b>					
Multifamily Business Loss	(\$63.6)	\$0.0	\$0.0	\$0.0	\$0.0

**Table 1.4: Static Impacts**

Orlando-Kissimmee-Sanford, FL

	2021	2022	2023	2024	2025
<b>Construction Impact (Opportunity Loss)</b>					
Constructed Units Deficit	0	-1,209	0	0	-28
Average Value Per Unit	\$218,995	\$272,211	\$311,475	\$325,642	\$333,988
Construction Expenditures Impact (Opportunity Loss)	\$0.0	(\$329.2)	\$0.0	\$0.0	(\$9.2)
<b>Recurring Rent Loss Impact</b>					
Unconstructed Units	0	0	0	-1,209	0
Rent	\$1,369	\$1,701	\$1,947	\$2,035	\$2,087
Recurring Revenue Impact to Multifamily	\$0.0	\$0.0	\$0.0	(\$29.5)	(\$30.3)
<b>Non-recurring Rent Loss Impact</b>					
Multifamily Business Loss	(\$210.9)	\$0.0	\$0.0	\$0.0	\$0.0

**Table 1.5: Static Impacts**

Tampa-St. Petersburg-Clearwater, FL

	2021	2022	2023	2024	2025
<b>Construction Impact (Opportunity Loss)</b>					
Constructed Units Deficit	0	-2,819	0	0	21
Average Value Per Unit	\$218,992	\$263,447	\$288,207	\$283,874	\$282,666
Construction Expenditures Impact (Opportunity Loss)	\$0.0	(\$742.6)	\$0.0	\$0.0	\$6.0
<b>Recurring Rent Loss Impact</b>					
Unconstructed Units	0	0	0	-2,819	0
Rent	\$1,369	\$1,647	\$1,801	\$1,774	\$1,767
Recurring Revenue Impact to Multifamily	\$0.0	\$0.0	\$0.0	(\$60.0)	(\$59.8)
<b>Non-recurring Rent Loss Impact</b>					
Multifamily Business Loss	(\$509.6)	\$0.0	\$0.0	\$0.0	\$0.0

## Appendix – Dynamic Tables Construction Opportunity Loss

**Table 2.1: Dynamic Impact of the Opportunity Loss to Construction**

Jacksonville, FL (\$Millions)

	2021	2022	2023	2024	2025
<b>Employment (Jobs)</b>					
Direct	0	-15,188	0	-601	44
Indirect & Induced	0	-7,388	0	-293	21
Total	0	-22,576	0	-894	65
<b>Labor Income</b>					
Direct	\$0.0	(\$861.9)	\$0.0	(\$34.1)	\$2.5
Indirect & Induced	\$0.0	(\$366.3)	\$0.0	(\$14.5)	\$1.1
Total	\$0.0	(\$1,228.1)	\$0.0	(\$48.6)	\$3.6
<b>Value-add (Regional GDP)</b>					
Direct	\$0.0	(\$1,021.8)	\$0.0	(\$40.5)	\$3.0
Indirect & Induced	\$0.0	(\$674.1)	\$0.0	(\$26.7)	\$1.9
Total	\$0.0	(\$1,695.9)	\$0.0	(\$67.2)	\$4.9
<b>Economic Output</b>					
Direct	\$0.0	(\$1,284.0)	\$0.0	(\$50.8)	\$3.7
Indirect & Induced	\$0.0	(\$1,208.2)	\$0.0	(\$47.8)	\$3.5
Total	\$0.0	(\$2,492.2)	\$0.0	(\$98.7)	\$7.2

**Table 2.2: Dynamic Impact of the Opportunity Loss to Construction**

Miami-Fort Lauderdale-West Palm Beach, FL (\$Millions)

	2021	2022	2023	2024	2025
<b>Employment (Jobs)</b>					
Direct	0	-25,622	0	0	-363
Indirect & Induced	0	-12,465	0	0	-177
Total	0	-38,087	0	0	-540
<b>Labor Income</b>					
Direct	\$0.0	(\$1,454.0)	\$0.0	\$0.0	(\$20.6)
Indirect & Induced	\$0.0	(\$617.9)	\$0.0	\$0.0	(\$8.8)
Total	\$0.0	(\$2,071.9)	\$0.0	\$0.0	(\$29.4)
<b>Value-add (Regional GDP)</b>					
Direct	\$0.0	(\$1,723.9)	\$0.0	\$0.0	(\$24.5)
Indirect & Induced	\$0.0	(\$1,137.2)	\$0.0	\$0.0	(\$16.1)
Total	\$0.0	(\$2,861.1)	\$0.0	\$0.0	(\$40.6)
<b>Economic Output</b>					
Direct	\$0.0	(\$2,166.2)	\$0.0	\$0.0	(\$30.7)
Indirect & Induced	\$0.0	(\$2,038.2)	\$0.0	\$0.0	(\$28.9)
Total	\$0.0	(\$4,204.4)	\$0.0	\$0.0	(\$59.6)



**Table 2.3: Dynamic Impact of the Opportunity Loss to Construction**

Naples-Immokalee-Marco Island, FL (\$Millions)

	2021	2022	2023	2024	2025
<b>Employment (Jobs)</b>					
Direct	0	-880	0	0	19
Indirect & Induced	0	-428	0	0	9
Total	0	-1,308	0	0	29
<b>Labor Income</b>					
Direct	\$0.0	(\$49.9)	\$0.0	\$0.0	\$1.1
Indirect & Induced	\$0.0	(\$21.2)	\$0.0	\$0.0	\$0.5
Total	\$0.0	(\$71.1)	\$0.0	\$0.0	\$1.6
<b>Value-add (Regional GDP)</b>					
Direct	\$0.0	(\$59.2)	\$0.0	\$0.0	\$1.3
Indirect & Induced	\$0.0	(\$39.0)	\$0.0	\$0.0	\$0.9
Total	\$0.0	(\$98.2)	\$0.0	\$0.0	\$2.2
<b>Economic Output</b>					
Direct	\$0.0	(\$74.4)	\$0.0	\$0.0	\$1.6
Indirect & Induced	\$0.0	(\$70.0)	\$0.0	\$0.0	\$1.5
Total	\$0.0	(\$144.4)	\$0.0	\$0.0	\$3.2

**Table 2.4: Dynamic Impact of the Opportunity Loss to Construction**

Orlando-Kissimmee-Sanford, FL (\$Millions)

	2021	2022	2023	2024	2025
<b>Employment (Jobs)</b>					
Direct	0	-4,129	0	0	-115
Indirect & Induced	0	-2,008	0	0	-56
Total	0	-6,137	0	0	-171
<b>Labor Income</b>					
Direct	\$0.0	(\$234.3)	\$0.0	\$0.0	(\$6.5)
Indirect & Induced	\$0.0	(\$99.6)	\$0.0	\$0.0	(\$2.8)
Total	\$0.0	(\$333.9)	\$0.0	\$0.0	(\$9.3)
<b>Value-add (Regional GDP)</b>					
Direct	\$0.0	(\$277.8)	\$0.0	\$0.0	(\$7.8)
Indirect & Induced	\$0.0	(\$183.2)	\$0.0	\$0.0	(\$5.1)
Total	\$0.0	(\$461.0)	\$0.0	\$0.0	(\$12.9)
<b>Economic Output</b>					
Direct	\$0.0	(\$349.0)	\$0.0	\$0.0	(\$9.7)
Indirect & Induced	\$0.0	(\$328.4)	\$0.0	\$0.0	(\$9.2)
Total	\$0.0	(\$677.5)	\$0.0	\$0.0	(\$18.9)

**Table 2.5: Dynamic Impact of the Opportunity Loss to Construction**

Tampa-St. Petersburg-Clearwater, FL (\$Millions)

	2021	2022	2023	2024	2025
<b>Employment (Jobs)</b>					
Direct	0	-9,313	0	0	75
Indirect & Induced	0	-4,531	0	0	37
Total	0	-13,844	0	0	112
<b>Labor Income</b>					
Direct	\$0.0	(\$528.5)	\$0.0	\$0.0	\$4.3
Indirect & Induced	\$0.0	(\$224.6)	\$0.0	\$0.0	\$1.8
Total	\$0.0	(\$753.1)	\$0.0	\$0.0	\$6.1
<b>Value-add (Regional GDP)</b>					
Direct	\$0.0	(\$626.6)	\$0.0	\$0.0	\$5.1
Indirect & Induced	\$0.0	(\$413.4)	\$0.0	\$0.0	\$3.3
Total	\$0.0	(\$1,040.0)	\$0.0	\$0.0	\$8.4
<b>Economic Output</b>					
Direct	\$0.0	(\$787.4)	\$0.0	\$0.0	\$6.4
Indirect & Induced	\$0.0	(\$740.9)	\$0.0	\$0.0	\$6.0
Total	\$0.0	(\$1,528.2)	\$0.0	\$0.0	\$12.3

## Appendix – Dynamic Tables Recurring Rent Loss

**Table 3.1: Dynamic Impact of Recurring Rent Loss**

Jacksonville, FL (\$Millions)

	2021	2022	2023	2024	2025
<b>Employment (Jobs)</b>					
Direct	0	0	0	-219	-201
Indirect & Induced	0	0	0	-102	-93
Total	0	0	0	-321	-294
<b>Labor Income</b>					
Direct	\$0.0	\$0.0	\$0.0	(\$4.3)	(\$4.0)
Indirect & Induced	\$0.0	\$0.0	\$0.0	(\$5.6)	(\$5.1)
Total	\$0.0	\$0.0	\$0.0	(\$10.0)	(\$9.1)
<b>Value-add (Regional GDP)</b>					
Direct	\$0.0	\$0.0	\$0.0	(\$90.0)	(\$82.5)
Indirect & Induced	\$0.0	\$0.0	\$0.0	(\$9.2)	(\$8.4)
Total	\$0.0	\$0.0	\$0.0	(\$99.2)	(\$90.9)
<b>Economic Output</b>					
Direct	\$0.0	\$0.0	\$0.0	(\$100.2)	(\$91.8)
Indirect & Induced	\$0.0	\$0.0	\$0.0	(\$17.7)	(\$16.2)
Total	\$0.0	\$0.0	\$0.0	(\$117.8)	(\$108.0)

**Table 3.2: Dynamic Impact of Recurring Rent Loss**

Miami-Fort Lauderdale-West Palm Beach, FL (\$Millions)

		2021	2022	2023	2024	2025
<b>Employment (Jobs)</b>						
	Direct	0	0	0	-403	-388
	Indirect & Induced	0	0	0	-187	-180
	Total	0	0	0	-591	-568
<b>Labor Income</b>						
	Direct	\$0.0	\$0.0	\$0.0	(\$8.0)	(\$7.7)
	Indirect & Induced	\$0.0	\$0.0	\$0.0	(\$10.3)	(\$9.9)
	Total	\$0.0	\$0.0	\$0.0	(\$18.3)	(\$17.6)
<b>Value-add (Regional GDP)</b>						
	Direct	\$0.0	\$0.0	\$0.0	(\$165.5)	(\$159.2)
	Indirect & Induced	\$0.0	\$0.0	\$0.0	(\$16.9)	(\$16.2)
	Total	\$0.0	\$0.0	\$0.0	(\$182.3)	(\$175.4)
<b>Economic Output</b>						
	Direct	\$0.0	\$0.0	\$0.0	(\$184.2)	(\$177.2)
	Indirect & Induced	\$0.0	\$0.0	\$0.0	(\$32.5)	(\$31.2)
	Total	\$0.0	\$0.0	\$0.0	(\$216.6)	(\$208.4)

**Table 3.3: Dynamic Impact of Recurring Rent Loss**

Naples-Immokalee-Marco Island, FL (\$Millions)

	2021	2022	2023	2024	2025
<b>Employment (Jobs)</b>					
Direct	0	0	0	-13	-13
Indirect & Induced	0	0	0	-6	-6
Total	0	0	0	-19	-19
<b>Labor Income</b>					
Direct	\$0.0	\$0.0	\$0.0	(\$0.3)	(\$0.3)
Indirect & Induced	\$0.0	\$0.0	\$0.0	(\$0.3)	(\$0.3)
Total	\$0.0	\$0.0	\$0.0	(\$0.6)	(\$0.6)
<b>Value-add (Regional GDP)</b>					
Direct	\$0.0	\$0.0	\$0.0	(\$5.4)	(\$5.4)
Indirect & Induced	\$0.0	\$0.0	\$0.0	(\$0.5)	(\$0.5)
Total	\$0.0	\$0.0	\$0.0	(\$5.9)	(\$5.9)
<b>Economic Output</b>					
Direct	\$0.0	\$0.0	\$0.0	(\$6.0)	(\$6.0)
Indirect & Induced	\$0.0	\$0.0	\$0.0	(\$1.1)	(\$1.1)
Total	\$0.0	\$0.0	\$0.0	(\$7.0)	(\$7.0)

**Table 3.4: Dynamic Impact of Recurring Rent Loss**

Orlando-Kissimmee-Sanford, FL (\$Millions)

	2021	2022	2023	2024	2025
<b>Employment (Jobs)</b>					
Direct	0	0	0	-67	-69
Indirect & Induced	0	0	0	-31	-32
Total	0	0	0	-98	-100
<b>Labor Income</b>					
Direct	\$0.0	\$0.0	\$0.0	(\$1.3)	(\$1.4)
Indirect & Induced	\$0.0	\$0.0	\$0.0	(\$1.7)	(\$1.8)
Total	\$0.0	\$0.0	\$0.0	(\$3.0)	(\$3.1)
<b>Value-add (Regional GDP)</b>					
Direct	\$0.0	\$0.0	\$0.0	(\$27.4)	(\$28.1)
Indirect & Induced	\$0.0	\$0.0	\$0.0	(\$2.8)	(\$2.9)
Total	\$0.0	\$0.0	\$0.0	(\$30.2)	(\$31.0)
<b>Economic Output</b>					
Direct	\$0.0	\$0.0	\$0.0	(\$30.5)	(\$31.3)
Indirect & Induced	\$0.0	\$0.0	\$0.0	(\$5.4)	(\$5.5)
Total	\$0.0	\$0.0	\$0.0	(\$35.9)	(\$36.8)

**Table 3.5: Dynamic Impact of Recurring Rent Loss Impact**

Tampa-St. Petersburg-Clearwater, FL (\$Millions)

	2021	2022	2023	2024	2025
<b>Employment (Jobs)</b>					
Direct	0	0	0	-136	-135
Indirect & Induced	0	0	0	-63	-63
Total	0	0	0	-199	-198
<b>Labor Income</b>					
Direct	\$0.0	\$0.0	\$0.0	(\$2.7)	(\$2.7)
Indirect & Induced	\$0.0	\$0.0	\$0.0	(\$3.5)	(\$3.5)
Total	\$0.0	\$0.0	\$0.0	(\$6.2)	(\$6.1)
<b>Value-add (Regional GDP)</b>					
Direct	\$0.0	\$0.0	\$0.0	(\$55.7)	(\$55.5)
Indirect & Induced	\$0.0	\$0.0	\$0.0	(\$5.7)	(\$5.6)
Total	\$0.0	\$0.0	\$0.0	(\$61.4)	(\$61.1)
<b>Economic Output</b>					
Direct	\$0.0	\$0.0	\$0.0	(\$62.0)	(\$61.7)
Indirect & Induced	\$0.0	\$0.0	\$0.0	(\$10.9)	(\$10.9)
Total	\$0.0	\$0.0	\$0.0	(\$72.9)	(\$72.6)



## Appendix – Tax Impact

**Table 4.1: Tax Collections Impact**

Jacksonville, FL (\$Millions)

	2021	2022	2023	2024	2025
<b>State Tax Collections Impact</b>					
State Sales Tax -Building Materials (Opportunity Loss)	\$0.0	(\$25.3)	\$0.0	(\$1.0)	\$0.1
State Indirect & Induced	\$3.9	(\$34.8)	\$0.0	(\$1.7)	(\$0.2)
Total State Collections	\$3.9	(\$60.2)	\$0.0	(\$2.7)	(\$0.2)
<b>Local Government Collections Impact</b>					
Permit Fees (Opportunity Loss)	\$0.0	\$0.0	\$0.0	(\$1.4)	\$0.0
Impact Fees (Opportunity Loss)	\$0.0	\$0.0	\$0.0	(\$25.4)	\$0.0
Property Tax (Opportunity Loss)	\$0.0	\$0.0	\$0.0	(\$19.9)	(\$19.9)
Local Government Indirect & Induced	\$3.7	(\$33.7)	\$0.0	(\$1.7)	(\$0.2)
Total Local Collections	\$3.7	(\$33.7)	\$0.0	(\$48.4)	(\$20.2)
Total State & Local Collections	\$7.6	(\$93.9)	\$0.0	(\$51.2)	(\$20.3)

**Table 4.2: Tax Collections Impact**

Miami-Fort Lauderdale-West Palm Beach, FL (\$Millions)

	2021	2022	2023	2024	2025
<b>State Tax Collections Impact</b>					
State Sales Tax -Building Materials (Opportunity Loss)	\$0.0	(\$42.7)	\$0.0	\$0.0	(\$0.6)
State Indirect & Induced	\$22.7	(\$58.8)	\$0.0	(\$0.7)	(\$1.5)
Total State Collections	\$22.7	(\$101.5)	\$0.0	(\$0.7)	(\$2.1)
<b>Local Government Collections Impact</b>					
Permit Fees (Opportunity Loss)	\$0.0	\$0.0	\$0.0	(\$1.7)	\$0.0
Impact Fees (Opportunity Loss)	\$0.0	\$0.0	\$0.0	(\$14.8)	\$0.0
Property Tax (Opportunity Loss)	\$0.0	\$0.0	\$0.0	(\$31.2)	(\$31.2)
Local Government Indirect & Induced	\$21.9	(\$56.9)	\$0.0	(\$0.6)	(\$1.4)
Total Local Collections	\$21.9	(\$56.9)	\$0.0	(\$48.3)	(\$32.6)
Total State & Local Collections	\$44.6	(\$158.4)	\$0.0	(\$49.0)	(\$34.7)

**Table 4.3: Tax Collections Impact**

Naples-Immokalee-Marco Island, FL (\$Millions)

	2021	2022	2023	2024	2025
<b>State Tax Collections Impact</b>					
State Sales Tax -Building Materials (Opportunity Loss)	\$0.0	(\$1.5)	\$0.0	\$0.0	\$0.0
State Indirect & Induced	\$1.6	(\$2.0)	\$0.0	(\$0.0)	\$0.0
Total State Collections	\$1.6	(\$3.5)	\$0.0	(\$0.0)	\$0.1
<b>Local Government Collections Impact</b>					
Permit Fees (Opportunity Loss)	\$0.0	\$0.0	\$0.0	(\$0.0)	\$0.0
Impact Fees (Opportunity Loss)	\$0.0	\$0.0	\$0.0	(\$0.2)	\$0.0
Property Tax (Opportunity Loss)	\$0.0	\$0.0	\$0.0	(\$1.0)	(\$1.0)
Local Government Indirect & Induced	\$1.5	(\$2.0)	\$0.0	(\$0.0)	\$0.0
Total Local Collections	\$1.5	(\$2.0)	\$0.0	(\$1.3)	(\$1.0)
Total State & Local Collections	\$3.1	(\$5.4)	\$0.0	(\$1.3)	(\$0.9)

**Table 4.4: Tax Collections Impact**

Orlando-Kissimmee-Sanford, FL (\$Millions)

	2021	2022	2023	2024	2025
<b>State Tax Collections Impact</b>					
State Sales Tax -Building Materials (Opportunity Loss)	\$0.0	(\$6.9)	\$0.0	\$0.0	(\$0.2)
State Indirect & Induced	\$5.2	(\$9.5)	\$0.0	(\$0.1)	(\$0.4)
Total State Collections	\$5.2	(\$16.4)	\$0.0	(\$0.1)	(\$0.6)
<b>Local Government Collections Impact</b>					
Permit Fees (Opportunity Loss)	\$0.0	\$0.0	\$0.0	(\$0.3)	\$0.0
Impact Fees (Opportunity Loss)	\$0.0	\$0.0	\$0.0	(\$6.1)	\$0.0
Property Tax (Opportunity Loss)	\$0.0	\$0.0	\$0.0	(\$5.0)	(\$5.0)
Local Government Indirect & Induced	\$5.0	(\$20.7)	\$0.0	(\$0.1)	\$0.1
Total Local Collections	\$5.0	(\$20.7)	\$0.0	(\$11.5)	(\$5.0)
Total State & Local Collections	\$10.2	(\$37.0)	\$0.0	(\$11.6)	(\$5.5)

**Table 4.5: Tax Collections Impact**

Tampa-St. Petersburg-Clearwater, FL (\$Millions)

	2021	2022	2023	2024	2025
<b>State Tax Collections Impact</b>					
State Sales Tax -Building Materials (Opportunity Loss)	\$0.0	(\$15.5)	\$0.0	\$0.0	\$0.1
State Indirect & Induced	\$12.6	(\$21.4)	\$0.0	(\$0.2)	(\$0.1)
Total State Collections	\$12.6	(\$36.9)	\$0.0	(\$0.2)	\$0.1
<b>Local Government Collections Impact</b>					
Permit Fees (Opportunity Loss)	\$0.0	\$0.0	\$0.0	(\$0.7)	\$0.0
Impact Fees (Opportunity Loss)	\$0.0	\$0.0	\$0.0	(\$12.0)	\$0.0
Property Tax (Opportunity Loss)	\$0.0	\$0.0	\$0.0	(\$11.7)	(\$11.7)
Local Government Indirect & Induced	\$12.1	(\$20.7)	\$0.0	(\$0.2)	(\$0.0)
Total Local Collections	\$12.1	(\$20.7)	\$0.0	(\$24.7)	(\$11.8)
Total State & Local Collections	\$24.7	(\$57.6)	\$0.0	(\$24.9)	(\$11.7)

## Appendix – Biographies

### Dr. Clyde L. Diao

#### Managing Partner & Economist

Dr. Clyde Diao is an economist with 34 years of experience. His expertise includes forecasting and analyzing tax issues; managing, developing, and conducting economic research projects on development and environmental issues; econometric and regional economic analysis; and developing large econometric models for the State of Florida.

Dr. Diao served as the Deputy Policy Coordinator with the Florida Executive Office of the Governor. His primary responsibility included analyzing the US Economy and forecasting Florida's economy and demographics as the bases for Florida's state revenues. He developed the State of Florida's econometric models that forecast and analyze Florida's employment, income, housing, construction, tourism, and transportation.

As the Deputy Policy Coordinator, he also worked on various tax policy issues relating to corporate income tax, documentary stamps tax, intangibles tax, communication services, gross receipts taxes, highway safety taxes, tobacco taxes, and estate tax, among others. Using sophisticated regional modeling techniques, Dr. Diao conducted analyses to determine the economic impacts of various state policies — some of which are highly controversial issues that would require Dr. Diao's expert advice for the Executive Office of the Governor.

In 2010, Dr. Diao was appointed by Gov. Charlie Crist to be the Census Liaison for the State. He was instrumental in developing the strategy for the 2010 Census, which saw a sharp increase in participation from 65% to 74% and added two more congressional seats for Florida. Florida became a model to the nation in the 2010 Census.

He is also the former Chief Economist at the Florida Department of Environmental Protection, where he was involved in various aspects of environmental regulation policy. He has appeared in court as an expert witness for the State of Florida.

Dr. Diao has been a vocal proponent of Asian American issues outside the office. He is the founder of the Asian Coalition of Tallahassee and served as Chairman for ten years. ACT is the umbrella organization that aims to unite Asian Americans in the region. He was also the leader of the Big Bend Filipino American Association for ten years, the BBFAA's longest-serving president. Dr. Diao has fought for issues that impact the Asian American community, such as eliminating the Alien Land Law in Florida's constitution and the State's declaration of the Asian American Heritage Month.

Dr. Diao is from Cagayan de Oro City, Philippines. He graduated from Xavier University/Ateneo de Cagayan, a Jesuit institution with honors, and received his MS and PhD in Economics at Florida State University as a World Bank scholar.

## Jared Parker

### Managing Partner & Economist

Jared Parker is a founding partner and economic consultant at the Regional Economic Consulting Group. He comes from an economics career within the State of Florida's Government and maintains a wide range of experience in state policy impacts.

Before founding the Regional Economic Consulting Group, Jared Parker worked in the Florida Legislative Office of Economic and Demographic Research (EDR) and the Tax Research Unit of the Florida Department of Revenue. He was responsible for projecting revenues and determining the fiscal impacts of pending bills to the Legislatures' Revenue Estimating Panel. His policy experience includes sales tax exemptions, corporate income, insurance premium taxes and credits, Communication Services, Documentary Stamps, Intangibles taxes, and electric and gas utilities.

Jared Parker was involved with many long-term impact projects for general state policy while at EDR. He participated in the State's analysis and committee hearings featuring the Patient Protection and Affordable Care Act and the later attempt to expand Medicaid under Florida's Health Insurance Exchange. He was involved with the BP Oil Spill impacts of 2010, hurricane disaster impacts, and numerous Constitutional Amendments.

Jared Parker received his MS in Applied Economics from Florida State and has a broad range of experience on various topics about local, State, and regional economies. With many years of hands-on experience in measuring the state economy for the Legislature, he has been a part of the revenue estimating process that both the Governor and the Legislature depend on to create their budgets for the past decade.

He brings to the REC Group invaluable experience in producing in-depth outlooks and impacts and can deliver results clearly and concisely.