Sheltering in Place? A Closer Look at Pandemic Rental Instability in Six Southeastern States

Sarah Stein
Senior adviser
Federal Reserve Bank of Atlanta

Pearse Haley
Senior research analyst
Federal Reserve Bank of Atlanta

Grace Meagher
Research analyst
Federal Reserve Bank of Atlanta

Primary issue:
Many renter households across the Southeast experienced housing instability resulting from COVID-19-related economic disruption. Focusing on data in six southeastern states, we explore federal policy and programs designed to mitigate these instabilities and observe disparate outcomes across geographies suggesting that localized conditions may have impeded recovery for many renter households.

Key findings:
Unprecedented federal pandemic policies designed to assist renter households relied heavily on state and local governments for implementation. Based on available data, the effectiveness of the policies to stabilize renters varied greatly by geography and relied upon their efficient implementation, a consistent return of jobs, and stable rent prices. However, employment return in the Southeast was not equally experienced across all places. Rent increased significantly in southeastern states and metros, destabilizing renter households further. Overall, across the Southeast, policies designed to stabilize renter households did not achieve the same impact as observed at the national level.

Takeaways for practice:
Employment shocks can quickly destabilize renter households. Design and evaluation of federal policy should account for variation in regions and states where policies are implemented. National indicators may mask hardships experienced in regions where tenants have limited access to assistance and protections. Policies intending to protect renter households from losing housing should consider efficient implementation adaptable to diverse local environments. The design and analysis of programs and policies aimed at stabilizing rental households would benefit from improved data collection and access to data that track both rental housing and employment indicators. These data should be available at small geographies and in rural areas and should collect racial and ethnic identifications.

The Federal Reserve Bank of Atlanta’s Community & Economic Development (CED) Discussion Paper Series addresses emerging and critical issues in community development. Our goal is to provide information on topics that will be useful to the many actors involved in community development—governments, nonprofits, financial institutions, and beneficiaries. Find more research, use data tools, and sign up for email updates at atlantafed.org/commdev.
Sheltering in Place? A Closer Look at Pandemic Rental Instability in Six Southeastern States

Abstract:
From a federal policy standpoint, the plan to stabilize renter households through the COVID-19 pandemic hinged on two actions: the implementation of a nationwide eviction moratorium and the disbursement of emergency rental assistance. This plan relied on four key expectations. First, a federal eviction moratorium was expected to prevent the displacement of renters during the pandemic. Second, it was anticipated that rental relief funds needed to quickly reach households in need to offset growing arrearages. Third, it was assumed that working members of renter households would resume their previous jobs after a relatively quick disruption. Finally, rent was expected to remain relatively stable over the course of the pandemic in order for households to resume covering payments. In this paper we explore a variety of data to assess how these expectations played out. We focus on six southeastern states as our study area, finding that across these states eviction moratoria appear to have been less effective while Emergency Rental Assistance disbursement experienced delays. We also look at the dynamic between local job and housing markets to discuss places within these states where deeper employment losses, slower recovery, and steeper rent increases produced a particularly difficult environment for lower-wage renters to stay in place during and after the pandemic.

JEL classification: H73, H76, H77, H83, I3, R1, R2, R3, R5

Key words: Affordable housing, Emergency Rental Assistance, eviction, rental instability, COVID-19, CARES Act, CDC moratorium, Unemployment Insurance, rent, rent increases,
housing cost, employment loss, economic recovery, housing data, employment data, data limitations

DOI: https://doi.org/10.29338/dp2023-02

About the Authors:

**Sarah Stein** is a senior adviser on affordable housing and neighborhood stabilization on the Federal Reserve Bank of Atlanta’s Community and Economic Development team.

**Pearse Haley** is a senior research analyst for the Federal Reserve Bank of Atlanta’s Community and Economic Development team.

**Grace Meagher** is a research analyst for the Federal Reserve Bank of Atlanta’s Community and Economic Development team.

Acknowledgments:
The authors would like to thank the following people for their valuable insight and direction in the shaping of this paper: Leah Cabrera, Ann Carpenter, Dontá Council, Chris Cunningham, Lauren Offenberg, Anne Ray, Elora Raymond, Liz Strom, and Erik Woodworth. The authors also thank our Atlanta Fed colleagues in Public Affairs. The views expressed here are the authors’ and not necessarily those of the Federal Reserve Bank of Atlanta or the Federal Reserve System. Any remaining errors are the authors’ responsibility.

*Comments to the corresponding authors are welcome at sarah.stein@atl.frb.org, pearse.haley@atl.frb.org, and grace.meagher@atl.frb.org.*
1 Introduction

In the early days of the COVID-19 pandemic, concerns about housing stability rose as the spreading virus shut down businesses and slashed household earnings. Congress swiftly passed the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), providing streamlined access to forbearance plans made available to most struggling homeowners with a mortgage.\(^1\) Another area of vulnerability was rental instability. Renter households were comparatively more cost-burdened—meaning housing costs made up 30 percent or more of their household income—than homeowners during the first year of the pandemic.\(^2\) The majority of renter households at risk of pandemic job loss earned less than $50,000 per year and were cost-burdened heading into the pandemic.\(^3\) Concerns grew that the economic effects of the pandemic would destabilize renter households, which—if unable to pay rent—could lose their housing and have to move into overcrowded living conditions where the virus could spread quickly.\(^4\) Some jurisdictions began to implement eviction moratoria, and parallel concerns arose that prolonged, widespread nonpayment of rent would ripple into broader effects within the rental housing market, spreading economic hardship to housing providers, their mortgage companies, and the counties, towns and cities where they paid taxes.\(^5\)

In response to these concerns, a two-prong policy approach to rental housing instability emerged in many places: implement policies that would allow people to remain in their homes and provide funding that would cover accruing rent.\(^6\) From a federal policy


6Mark Tresco, Solomon Greene, Olivia Fiol, and Anne Junod, “Eviction Prevention and Diversion Programs: Early Lessons from the Pandemic,” Housing Crisis Research Collaborative (Urban Institute,
standpoint, the plan to stabilize renter households through the COVID pandemic hinged on two actions: first, the implementation of a nationwide eviction moratorium and, second, the disbursement of emergency rental assistance. Ideally, the pandemic would recede and people could return to their jobs, resuming rental payments where they left off.

This plan relied on four key expectations. First, a federal eviction moratorium—or any eviction moratorium—was expected to prevent the displacement of renters during the pandemic. Second, it was anticipated that rental relief funds needed to quickly reach households to offset growing arrearages. Third, it was assumed that working members of renter households would return to their previous jobs after a temporary disruption. Finally, rent was expected to remain relatively stable over the course of the pandemic in order for households to resume covering payments.

The first two expectations relied on the feasibility and performance of policy interventions. The second two relied on a particular path of economic recovery that reflects a temporary shock and a symmetrical recovery curve. As we explore in this paper, data from across the Southeast and the United States indicates that the expectations underlying the rental stabilization plan did not entirely align with the unpredictable pandemic climate. In this discussion paper, we evaluate these expectations with available data, analyzing how renter households fared during the pandemic with a particular focus on the southeastern United States.

2 Motivation and Review of Literature

This paper explores the economic and policy landscape in which renter households navigated the pandemic. We track state and local implementation of federal policies designed to stabilize renters through the public health and economic disruptions of COVID-19 while also considering employment levels and housing costs. Geographically, we focus on six states in the Southeast, drawing localized and regional takeaways that provide deeper insights into this region than previous analyses offer. Our findings contribute to a growing body of research assessing the landscape of hardship and support that renter households experienced during the pandemic.

Much of the existing analysis of renter experiences during COVID-19 approaches the issue from a national perspective. Some of these analyses estimated projections of national rent debt from economic disruptions, arriving at figures that ranged from $274 million⁷ to $7.1

---

billions per month. Other nationwide work has found that even after increased awareness and rollout of emergency rental assistance, lower-income renters were disproportionately behind on rent, analyzed trends in rental assistance application and receipt among renter households experiencing hardship, and explored demographic trends in nationwide access to rental assistance at the neighborhood-level.

A smaller number of studies have used more localized or granular data either by focusing on specific geographies (such as Los Angeles, New York State, and California) or by drawing a national picture using a patchwork of locally available data from across the country. These studies have examined the relationship between various eviction moratoria and


eviction numbers, and assessed the rollout of COVID-19 rental assistance across geographies. No studies to date have focused entirely on the Southeast.

Analyses of pandemic rental instability that provide insights into federal policy at the national level often fall short in accounting for more granular differences and regional effects where the contours of state and local policy environments and economic patterns shape the housing and employment opportunities available to renter households. It is in these local contexts where renters must navigate their household balance sheets, find a place to live, and travel to and from their place of employment. Importantly, while previous studies have provided valuable information about the rollout and implementation of pandemic renter stabilization policies, they do not always capture the localized experiences that the Atlanta Fed’s contacts across the Southeast have communicated.

We offer a closer look at the Southeast, an area of the country that existing literature has flagged as particularly precarious for renters. One report noted that renters in the South

18 In a district-wide listening study, contacts expressed concern that the design of many federally funded COVID aid programs resulted in instances of mismanagement. They expressed concern about the varied implementation of the eviction moratorium across jurisdictions and noted that the increase in housing demand, rising home values, and higher rents had made it difficult for low-income families to stay in place and had put home ownership further out of reach. Donta Council, Ann Carpenter, and Janelle Williams, “Navigating a Crisis: An Uneven Recovery for Communities and Organizations in the Southeast” (Federal Reserve Bank of Atlanta, 2021), https://www.atlantafed.org/-/media/documents/community-development/publications/special/2021/12/03/navigating-a-crisis-an-uneven-recovery-for-communities-and-organizations-in-the-southeast.pdf. For takeaways from contact impressions of Emergency Rental Assistance programs see Sarah Stein, Donta Council, and Grace Meagher, “Emergency Rental Assistance Insights from the Southeast- Federal Reserve Bank of Atlanta,” Partners’ Update (Federal Reserve Bank of Atlanta, September 2, 2022), https://www.atlantafed.org/community-development/publications/partners-update/2022/09/02/emergency-rental-assistance-insights-from-the-southeast.
were disproportionately affected by rental arrears during COVID-19, finding that 16 percent of households were behind in rent, owing an estimated $8.4 billion in July 2021.\(^{19}\) Another analysis similarly found that renters in the South were most likely to be behind in rent by September 2021.\(^{20}\) In its national analysis of neighborhood characteristics and COVID-19 economic hardship, the Harvard Joint Center for Housing (Joint Center) also found that compared to other regions, the southern United States had the highest share of renters behind on rent, and experienced the highest COVID-19 income losses.\(^{21}\) Income losses in southern, high-poverty neighborhoods were the deepest of any region or neighborhood type in the study. Furthermore, in its 2022 *State of the Nation’s Housing*, the Joint Center noted that year-over-year increases in rent in southern markets were among the largest in the nation, with the greatest increases concentrated in Florida.\(^{22}\)

When existing studies have conducted subnational analyses, they have focused on places or combinations of places with relatively more tenant-friendly landlord-tenant legal regimes than many of the states we include in this analysis. The landlord-tenant relationship is shaped by laws that are largely formed at the state level and may be further defined at the local level, such as when state law allows for municipalities to enact rent-control measures. The laws that shape issues like eviction, rent increases, lease termination, and rental housing conditions can differ greatly from place to place, so insights derived from areas with more tenant protections may not be universally applicable to those with less protective environments.

In a 2017 paper, Megan Hatch proposed a tripartite classification system for state landlord-tenant legal regimes.\(^{23}\) Hatch classifies each state as either having pro-business, contradictory, or protectionist landlord-tenant legal regimes based on an analysis of state landlord tenant laws. Applying these classifications to the six states included in our study, none of the states we focus on are considered to have legal regimes classified as protectionist toward tenants, 33 percent of them are understood to be contradictory in approach (meaning

---

21 Alexander Hermann, Sophia Wedeen, Whitney Airgood-Obrycki, and Christopher Herbert, “The Geography of Renter Financial Distress and Housing Insecurity During the Pandemic.”
that these states have both pro-renter and pro-landlord legislation,24 and 67 percent are described as pro-business.25 Comparatively, other research that explores pandemic renter distress and rental assistance focus on places that have protectionist legal regimes (such as New York or California) or analyze collections of states with different landlord-tenant policy compositions than the Southeast, each of which included a majority of states classified as having either protectionist or contradictory legal regimes.26 States in our study fall under a more pro-business legal regime on landlord-tenant matters, offering relatively fewer underlying legal tenant protections going into the pandemic. Our research into these southeastern states can offer insight into policy implementation and overall experience of renter households situated in a more pro-business landlord-tenant legal environment.

As we explore evidence of renter instability during the pandemic, we include an analysis of employment loss and recovery. Drawing from literature formulating the “double precarity” of unstable housing and employment,27 we seek to deepen the understanding of southeastern renter household experiences by exploring localized employment data. In their work on double precarity in Australia, Bentley, Baker and Aiken found that households with a higher risk of job loss were five times more likely to also experience limited capacity to find and pay for housing.28 Research has shown that during the pandemic, employment loss disproportionately affected women, young adults, Black adults, and individuals with lower

24 The two states that fall in the Hatch study’s contradictory regime are Alabama and Tennessee.
25 The four states that fall in the Hatch study’s pro-business regime are Florida, Georgia, Mississippi, and Louisiana.
26 See, for example, a study by the Terner Center that reviewed available data from across 22 states and included 41 percent of states with protectionist laws, 27 percent that were contradictory, and 32 percent that were pro-business, in Kneebone and Underriner, “An Uneven Housing Safety Net”; a study completed for the National Council of State Housing Agencies reviewed eight states, 25 percent of which had protectionist state law, 63 percent were contradictory, and 13 percent were pro-business, in Abt Associates, “Lessons from Eight States Regarding Factors That Have Contributed to States’ ERA1 Spending Rates”; and a study by the Urban Institute, which found that ERA programs had “strengthened the renter safety net,” explored state and local rental assistance programs in five states, two protectionist, two contradictory, and one pro-business, in Boshart, Champion, and Popkin, “Pandemic Rental Assistance Funding Strengthened the Renter Safety Net.”
28 Ibid. Elsewhere, Goodman and Wachter interpreted mixed evidence as a sign that job loss was not a significant source of distress among renters during the pandemic but that lower-income renters who entered the pandemic already cost-burdened experienced higher levels of distress and benefited least from government programs intended to ameliorate pandemic-driven economic strain. Laurie S. Goodman and Susan Wacher, “Lessons Learned from Housing Policy during COVID-19, Part II: Support for Renters” (The Hamilton Project, April 27, 2022), https://www.hamiltonproject.org/publication/paper/lessons-learned-from-housing-policy-during-covid-19/.
levels of education. We draw on a large body of research that estimates the impacts of early pandemic employment loss on workers in specific industries to inform our analysis of local employment data, gleaning insight into how job loss may have amplified housing instability in southeastern geographies. In doing so, we seek to add this regional context to existing work that has assessed job loss and renter distress at a national level.

To provide this analysis of southeastern states, we used data and methods that break down the rollout and impact of pandemic renter stabilization policies across this geography at the regional, state, and local level. This was not without difficulty, as many applicable survey data sources are unavailable at smaller geographies, and other localized data may not be collected or exist in an accessible, analyzable form. In particular, localized analyses of racial disparities can be difficult to conduct because of lack of granular data that includes information about race and ethnicity at small geographies. We delve into these challenges deeper in our data and methods section below.

3 Overview of Pandemic Policies

A number of federal policies inform our exploration of rental instability during the COVID-19 pandemic. This includes the previously mentioned eviction moratoria and emergency rental assistance (ERA) as well as expanded unemployment insurance (UI). This section provides an overview of the federal policies discussed in this paper.

3.1 Eviction Moratoria

Over the course of the pandemic, two federal efforts undertook to prevent the filing of evictions. The first was a legislative moratorium set out in the CARES Act. The second was an administrative action executed through decree of the Center for Disease Control and Prevention (CDC) moratorium. Each of the moratoria are outlined below.

---


Congress enacted the CARES Act, which included a 120-day eviction moratorium, set to be in effect until July 25, 2020.31 The “covered properties” under the CARES Act moratorium included any occupied rental property that had been subsidized, financed, insured, guaranteed, or otherwise supported by the federal government.32 Therefore it did not cover all rental properties nationwide. A previous Federal Reserve Bank of Atlanta study estimated that it covered between 28.1 percent and 45.6 percent of occupied rental units nationally.33

Not long after the expiration of the CARES Act eviction moratorium, the CDC issued a broad eviction moratorium on September 4, 202034 that was initially scheduled to expire December 31, 2020. The moratorium prohibited landlords from evicting “any covered person from any residential property in any state or US territory in which there are documented cases of COVID-19.” A “covered person” included people who could not afford to pay their rent due to a COVID-19-related economic hardship. Congress extended the moratorium through January 2021 in the Consolidated Appropriations Act of 2021.35 After that time the CDC extended the order three more times through March, June, and July 2021. The order expired July 31, 2021, but the CDC announced another order on August 3, 2021, narrowing its applicability to counties where the COVID-19 spread exceeded a determined threshold.36

Implementation of the CDC’s eviction moratorium resulted in a nationwide patchwork of practices that differed by county and sometimes by judge.37 It also was met with legal

32 The list of “covered properties” can be found in the sec. 4024 (a)(2), CARES Act.
37 A letter from the American Civil Liberties Union and National Housing Law Project to the US Department of Justice and CDC documents some of the discrepancies and disparate practices across the country. Susan Park and Eric Dunn, “Letter to Matthew Colangelo of the US Department of Justice and Rochelle Walensky of the Centers for Disease Control and Prevention Re: Federal Eviction
challenges. Ultimately a group of landlords and realtors led by the Alabama Realtors Association successfully contested the moratorium in federal court. On August 26, 2021, the Supreme Court ruled that the CDC did not have authority to issue the moratorium under existing law and stated that Congress would have to expressly authorize such a moratorium for it to stand.

3.2 Emergency Rental Assistance

Although some jurisdictions used funding provided in the CARES Act for housing stability, the bulk of available emergency rental assistance funding came from federal disbursements to states and qualified localities through the Emergency Rental Assistance (ERA) program, administered by the US Department of the Treasury. This infusion of funds totaled $46.55 billion across two similar programs.

Congress allocated ERA funding through two different legislative acts. Congress created the original ERA funding, commonly known as ERA 1, in December of 2020 as part of the Consolidated Appropriations Act. In March 2021, Congress supplemented ERA 1 with a second tranche of funds, commonly referred to as ERA 2. Fund eligibility differs between the two ERA pools, with ERA 2 funds having eligibility requirements that are slightly more flexible. State and local programs within the states we focus on in this paper—Florida, Georgia, Alabama, Mississippi, Louisiana, and Tennessee—were collectively allocated over $3 billion. Just over a quarter of these funds nationally and in our study area were allocated to local cities and counties with populations exceeding 200,000. The remainder of the funds were allocated to state governments. In August 2021, the Treasury department noted that some programs were not following Treasury guidelines intended to quickly disburse funds, and later that month


For analysis of legal challenges and interpretations of the CDC eviction moratorium, see the National Housing Law Project’s CDC Moratorium information page: https://www.nhlp.org/covid/cdc-eviction-moratorium/.


For example, 38 states used CARES Act funding to provide housing relief, according to a tracking project conducted by the National Council of State Legislatures: AK, CO, CT, DE, FL, HI, ID, IL, IN, IA, KA, KY, ME, MD, MA, MI, MN, MS, MO, MT, NV, NH, NJ, NM, NY, ND, OH, OK, OR, PA, SD, TX, UT, VT, VA, WA, and WI. “State Actions on Coronavirus Relief Funds” (National Conference of State Legislators, accessed June 9, 2023), https://www.ncsl.org/fiscal/state-actions-on-coronavirus-relief-funds.


announced that ERA 1 funds that were not obligated by September 2021 could be reallocated to jurisdictions that had obligated at least 65 percent of their original allocation.43 The Treasury department released its first ERA fund reallocation guidelines on October 4, 2021.44

3.3 Federally Expanded Unemployment Insurance Benefits

Federal stimulus and other assistance programs provided cash to households and workers. Among these, expansions to unemployment insurance were targeted for the displaced workers of concern in this analysis. These programs were designed to provide additional support to households that lost employment income during the pandemic, so long as an eligible employee knew about the expanded benefits, understood they were eligible, and successfully applied and received those benefits.

Federally expanded unemployment benefits took the form of three central policies, each established in the CARES Act and then amended, extended, or reauthorized through other legislation.45 Federal Pandemic Unemployment Compensation allotted $600 per week in supplemental benefits for each recipient of unemployment insurance who lost work due to a COVID-19 related reason.46 This program initially expired July 25, 2020, but was later extended at a reduced amount of $300 per week in late December 2020, running through September 3, 2021.47 Pandemic Unemployment Assistance expanded unemployment coverage to workers who lost work but who would not ordinarily be eligible for unemployment assistance under state rules. These workers included part-time employees and “gig workers,” among others.48 Finally, Pandemic Emergency Unemployment Compensation provided additional weeks of benefits to workers actively seeking employment who had exhausted their state and federal allotments. This program extended benefits to a maximum coverage of 49 weeks.49

Although these programs were authorized and funded at the federal level, they were implemented by state departments of labor, each with its own processes and systems for

46 Ibid.
47 Ibid.
48 Ibid.
49 Ibid.
applicants. This appears to have resulted in variation in the uptake of unemployment benefits across the country. The share of unemployed workers who received benefits varied from state to state, with states with more stringent eligibility requirements tending to have lower rates of receipt.\textsuperscript{50} For example, Bell et al. found that in December 2020, Florida and Tennessee both had a recipiency rate of less than 25 percent for unemployment insurance, compared with 60 percent across all states.\textsuperscript{51} Georgia and Alabama capped benefits at 14 weeks, compared with 26 weeks in most other states. States also varied in the maximum weekly benefit, with Louisiana having a cap of $221 compared with $850 in Massachusetts. Adding to the variability of unemployment benefit access, although expanded unemployment benefits were federally authorized and funded through September 2021, 25 states—including each of the six states we focus on in this paper—discontinued all or some of their programs earlier than this date.\textsuperscript{52} While expanded UI programs allowed some households to endure loss of income, the level of funding did not account for preexisting housing stress arising from factors such as unemployment and poverty.\textsuperscript{53}

4 Methods and Data

In this paper, we perform an exploratory analysis of the effectiveness of federal policies in stabilizing American renter households through the COVID-19 pandemic by examining the expectations and rollout of the policies alongside shifts in the employment and rental markets. To do this, we draw from a variety of time series data disaggregated by geography. Our employment data focuses on the first year of the pandemic, 2020, while our rental data ranges from 2020 through 2022.

In section 5.1, Keeping Renters in Place, we examine eviction moratoria by drawing from data collected from the Atlanta Region Eviction Tracker and Eviction Lab. Eviction data for


\textsuperscript{52} Whittaker and Isaacs, “Unemployment Insurance (UI) Benefits: Permanent-Law Programs and the COVID-19 Pandemic Response.”

Clayton, Cobb, DeKalb, Fulton, Gwinnet, and Henry counties in the Atlanta metro (herein referred to as the inner Atlanta metro area) were collected by researchers at the Atlanta Fed, the Georgia Institute of Technology’s School of City and Regional Planning, and the Atlanta Regional Commission are available in the Atlanta Region Eviction Tracker. Eviction data for other localities, both in the six southeastern states that fully or partially make up the Atlanta Fed’s district (Alabama, Florida, Georgia, and parts of Louisiana, Mississippi and Tennessee) and nationwide, were obtained from Eviction Lab’s Eviction Tracking System. Atlanta Region Eviction Tracker data are collected monthly from public court records and aggregated to the census tract level. Eviction Lab data are collected from local partners at varying time intervals and aggregated to either the census tract or ZIP code level. Both sources provide eviction filings rather than judgments. We calculate filing rates, or the number of eviction filings per 100 renter households in an area, by normalizing the number of filings by renter-occupied housing unit estimates from the US Census Bureau 2015–2019 American Community Survey (ACS) 5-Year Estimates. We use eviction filings rather than eviction judgments due to greater data availability and given that filings are a commonly used proxy for housing distress.

In section 5.2, Paying Rent and Covering Arrears, we explore the disbursement of ERA funding. We use reporting data publicly available from the US Department of the Treasury. This section also incorporates eviction filing data for the inner Atlanta metro area to compare eviction filings in the area with the number of households receiving ERA.

We also explore data from the US Census Bureau’s Household Pulse Survey (HPS), which captured the impact of the COVID-19 pandemic on individuals and households. We

56 An eviction filing indicates that a landlord has initiated a legal action to remove a tenant. It does not indicate the resolution or outcome of the case. A judgment in an eviction case would determine the ultimate outcome. Eviction filings can be determined through a simple count of cases that use the court system’s code for an eviction. Information about judgments is not always accessible in court filing data, and when it is, it can be difficult to decipher or evaluate in a standardized way.
focus on a question that asked respondents how confident they were in their ability to make their next rent payment on time. We use the Household Pulse Public Use Files in our calculations to create customized variables and data cuts.59

In section 5.3, Regaining Employment, we explore employment data to understand the potential ability of workers to return to work (and thus resume paying rent without assistance), in the first year of the pandemic. We focus on this timeframe to understand the relative depth of impact that the initial wave of pandemic unemployment had by geography as well as the subsequent rate of early recovery. This approach allows us to approximate employment-related pressure on household ability to pay rent during the period before emergency rental relief was available.

To estimate the employment vulnerability and housing insecurity of working renters leading into the pandemic, we use microdata from the 2019 American Community Surveys (ACS) 1-Year Estimates disaggregated by racial and ethnic groups.60 We estimate the number of workers employed in vulnerable industries using industry sectors cited as heavily impacted by COVID-19 job loss in the literature.61

In our analysis of job loss and recovery in the first year of the pandemic, we use the US Census Bureau’s Quarterly Workforce Indicators (QWI) job count data, which provide geographic, demographic, and temporal granularity.62 We elected to use QWI data, which is populated by employer-reported administrative data, in addition to ACS and HPS data due to well-documented pandemic effects on survey response rates.63 Employment data have

---


60 2019 American Community Survey 1-year Public Use Microdata Samples (US Census Bureau, 2019), https://www2.census.gov/programs-surveys/acs/data/pums/2019/1-Year/

61 An example of industry sectors frequently cited as most vulnerable to pandemic job loss is found in Mary K. Cunningham, Laurie Goodman, and Jung Hyun Choi, “Don’t Overlook the Importance of Unemployment Benefits for Renters.”


significant noise, limitations, and tradeoffs between survey and administrative data during relatively stable economic periods, and the pandemic has magnified these challenges.⁶⁴ Surveys such as the HPS can provide valuable insights into pandemic employment and housing trends at the individual and household level, despite sampling and weighting limitations.⁶⁵

To uncover micro trends in places with greater pandemic employment disruptions, we identified metro areas that saw both relatively large drops in employment at the onset of the pandemic and slower recovery of jobs during the following months compared to national trends. We used the percent difference in QWI employment from the first to the second quarter of 2020 to measure the impact of the initial wave of unemployment. We categorize geographies that had percent changes in employment below the national average during this period as “hardest hit.” We also use the percent change in employment for the third and fourth quarters of 2020 to measure the subsequent recovery of employment. We categorize geographies that fell below the national average during this period as “slow to recover.”

In section 5.4, Navigating Rent Increases, we use Apartment List median rent estimates to understand changes in rent during the pandemic. Apartment List data are publicly available, updated monthly, available at multiple levels of geography (including state, metro area, county, and city), and include rent information based on unit size. Apartment List median rent estimates are calculated using ACS rent statistics for recent movers. These statistics are then extrapolated forward using a growth rate based on transactions on the Apartment List platform to offer a current estimate of median rent prices. Apartment List median rent figures are corrected to address potential sources of bias due to variation in the composition of available inventory, the gaps between list prices and transaction prices, and luxury bias that may result from the types of properties that are more or less likely to use a platform like Apartment List.⁶⁶ Using the resulting median rent estimate data from Apartment List, we calculate a relative percentage change in median rent value for various geographies. For each of our six southeastern states, we calculate a renter-population weighted average of the percent change in median rent for the given period for each state. Our weighting is based on renter population data from the ACS 2015–2019 5-Year Estimates.⁶⁷

⁶⁷ “Total Population in Occupied Housing Units by Tenure,” 2015-2019 American Community Survey 5-Year Estimates (US Census Bureau, 2019),
Also in 5.4, we compare QWI and Apartment List quarterly data at the metro level. As in the previous section 5.3, we identified areas that experienced more severe changes in rent and employment than other metro areas in our six southeastern states or the national average to better understand micro trends at smaller geographies within the Southeast.

5 Findings

We have divided our findings into four sections. Section 5.1 explores eviction moratoria efforts to keep renters in place during the spread of COVID-19. Section 5.2 examines the allotment and disbursement of emergency rental assistance dollars that flowed from the federal government through local and state programs, asking how and whether these dollars reached households in need in time to prevent displacement. In Section 5.3 we look at job loss and recovery, linking it to housing instability at the local level—the level where workers have ties to employers and networks and where renter households are making budget decisions and experiencing rent pressures. In this section we identify places where local job markets had relatively deep losses and took longer to recover. We focus on these places as having been particularly difficult markets for renter households to maintain their housing. Finally, in Section 5.4 we look at the local rental housing market contexts and identify places we refer to as hard to stay. Hard to stay places experienced deeper job market losses, slower job market recovery, and higher rent increases. Renters in these places are likely to have experienced deeper challenges than other places in the Southeast, which may be diluted when examining the same data at larger geographic levels.

5.1 Keeping Renters in Place

At the onset of the pandemic, many states and local governments quickly instituted eviction moratoria and other policies intended to prevent a possible wave of shutdown- and layoff-induced housing displacement. The federal government also took action with the limited-scope CARES Act moratorium in March 2020 and later the CDC’s eviction moratorium, discussed in detail above. After the end of the CDC moratorium in August 2021, the United States experienced the spread of both the Delta and Omicron COVID variants, resulting in record-setting case counts and hospitalization numbers, as well as widespread disruption to

https://data.census.gov/table/ACSDT5Y2019.B25008?q=Owner/Renter+(Tenure)&g=040XX00US01,12,13,22,28,47&y=2019&moe=false


schools, childcare facilities, and some in-person work.\textsuperscript{70} Some local jurisdictions maintained eviction moratoria, but most expired by the end of 2020 with four known to be active into 2021 and 2022.\textsuperscript{71}

While nationwide research analyzing eviction filings from available cities indicates that the moratoria reduced eviction filings significantly from previous years,\textsuperscript{72} eviction legal environments vary by state. As we discussed above, most states in our six-state study area region are considered relatively unprotective of tenants.\textsuperscript{73} Federal eviction moratoria operated within a complexity of state and local laws. For this reason, a policy that may seem uniform—like a nationwide eviction moratorium—had uneven results in practice. Landlord-tenant law that governs this relationship is generally formed at the state level with some degree of delegation to local jurisdictions. The eviction process itself takes place in local courts, each with its own processes and rules. For example, some courts may offer eviction diversion programs or require parties to participate in mediation before adjudicating on a case. Accordingly, although the CDC’s moratorium provided a national policy to halt eviction activity during the pandemic, filing volumes tracked by Princeton University’s Eviction Lab\textsuperscript{74} and other sources\textsuperscript{75} from localities across the country demonstrate variation by geography. It’s difficult to disentangle the effects of the federal moratorium from those of state or local moratoria, but localities with their own filing and hearing bans tended to maintain lower eviction filing

---


\textsuperscript{72} Peter Hepburn, Olivia Jin, Joe Fish, Emily Lemmermen, Anna Kat Alexander, and Matthew Desmond “Preliminary Analysis: Eviction Filing Patterns in 2021” (Eviction Lab, March 8, 2022), https://evictionlab.org/us-eviction-filing-patterns-2021/.

\textsuperscript{73} Hatch, “Statutory Protection for Renters.”


\textsuperscript{75} “Similar Resources,” \textit{Acknowledgements} (Eviction Lab, September, 2023), https://evictionlab.org/eviction-tracking/acknowledgements/.
numbers than jurisdictions where only a federal moratorium applied, based on a study of 44 cities and counties.\textsuperscript{76}

Furthermore, an eviction moratorium can only be effective at stabilizing renters if legal eviction filings represent the principal pathway for renter displacement. However, even where an eviction moratorium may have been in place, other avenues of renter displacement likely still existed and are more difficult to track because they do not leave an official, public paper trail. Eviction data do not capture instances when tenants, possibly unaware of the moratorium or fearing longer-term consequences of missing rent—such as having an eviction filing on record, which could impede their ability to secure housing later—chose to move out voluntarily. Additionally, they do not encompass situations when landlords may have intimidated renters into moving or even acted to remove them illegally by changing the locks, often called a “lock out.” Finally, the lease agreement (express or implied) between a landlord and tenant is term-limited, meaning that at some point—whether a month or a year—the lease will expire, and landlords can choose not to renew, displacing the tenant without the need for an eviction filing, unless the tenant refused to leave. In many jurisdictions, eviction filings against tenants whose leases were not renewed but who stayed in place (often referred to as a “tenant holding over”) were not interpreted as falling under the protections of the CDC moratorium.\textsuperscript{77} As the pandemic stretched out for months, more renter households risked losing eviction protections simply by virtue of staying past the term of their initial lease. For these reasons, eviction filing volume alone cannot provide a full picture of renter instability during the pandemic. However, it can serve as a valuable proxy when more comprehensive data on involuntary moves aren’t available.\textsuperscript{78}

Figure 5.1.1 displays available eviction filing rate data for local jurisdictions across our study area (N=11) and for local jurisdictions in all other areas of the nation (N=34) to gain


\textsuperscript{78} The city-level data in Eviction Lab’s Eviction Tracking System cover approximately 22.6 percent of rental households nationwide. Even more data are available at older vintages through Eviction Lab. Peter Hepburn, Renee Louis, and Matthew Desmond, Eviction Tracking System: Version 1.0 (Princeton: Princeton University, 2020), www.evictionlab.org.
insight into how renters may have been experiencing displacement over the course of the pandemic. Filing rate represents the number of filings per 1,000 occupied renter households.

Figure 5.1.1: Monthly Pandemic Eviction Filing Rates, Inside and Outside the Six Southeastern State Study Area

The blue line in figure 5.1.1 combines select cities outside our southeastern study area for which filing data are available through Eviction Lab. The green line represents available eviction filing data from within our study area, which includes cities within the six southeastern

Sources: Metro Atlanta Evictions Data Collective Database, “American Community Survey 2015–2019 5-Year Estimates” and Eviction Lab

---

79 See above, note 54.
80 See above, note 60.
81 Eviction Lab sites included: Albuquerque, NM; Austin, TX; Boston, MA; Bridgeport, CT; Charleston, SC; Cincinnati, OH; Cleveland, OH; Columbus, OH; Dallas, TX; Fort Worth, TX; Gainesville, FL; Greenville, SC; Hartford, CT; Houston, TX; Indianapolis, IN; Jacksonville, FL; Kansas City, MO; Las Vegas, NV; Miami, FL; Memphis, TN; Milwaukee, WI; Minneapolis-Saint Paul, MN; Nashville, TN; New Orleans, LA; New York, NY; Philadelphia, PA; Phoenix, AZ; Pittsburgh, PA; Providence, RI; Richmond, VA; South Bend, IN; St Louis, MO; Tampa, FL; Wilmington, DE. The limited availability of eviction data results from the practices of the local courts where evictions are filed. Eviction Lab reports data for places where the court electronically tracks those filings and grants public access to those records. Many places either do not make this information public, or it is available in a format that is difficult to retrieve at the scale and pace necessary to regularly track.
states that make up the Atlanta Fed’s district (in whole or in part), including Jacksonville, Tampa, Miami, and Gainesville in Florida, five metropolitan Atlanta, Georgia, counties, New Orleans, Louisiana, and Memphis, Tennessee. The filing rate increase that can be seen between July and August of 2020 represents over 4,500 additional eviction filings within our six-state study area and 15,000 filings in the combined cities outside of our study area. Eviction filing trends inside and outside of the six southeastern states largely track one another, with those cities within our six states maintaining a higher rate after bouncing back from a significant drop in eviction filings during the CARES Act moratorium. As noted, during this initial pandemic period there were also a number of state and local moratoria in place across the country, including one in Florida. For this reason, it is difficult to isolate the impact that the CARES Act’s limited eviction moratorium had on eviction filing activity. The decrease in filings at the end of 2021 followed by a sharp increase at the beginning of 2022 is consistent with historic seasonal patterns in eviction filings data overall, as landlords tend to file fewer evictions leading up to and during the December holiday season.

Based on the cities for which we have available data, as the CARES Act moratorium ended, eviction filing rates rose across the country from August 2020 to November 2020, but they rose higher and faster inside the cities in our six-state study area. Outside of our study area eviction filing rates plateaued once the CDC moratorium took effect, but cities inside the six southeastern states maintained overall higher rates of eviction filings. These increased eviction filing rates level in late 2020 and seem to plateau for several months. However, in spring and summer 2021 eviction filings pick up pace again. We can see that while it was in place, the CDC moratorium may have slowed the pace of eviction filings, but it did not prevent them altogether.

Our data demonstrate that the federal eviction moratorium did not universally prevent tenant displacement. While the moratorium may have had some effect on the volume of filings, the idea that all renters could avoid displacement in the midst of an ongoing pandemic did not

---

82 While the city of Memphis, TN, is not in the Atlanta Fed’s district, we include it here because a portion of the state of Tennessee is inside the district. From a policy perspective, state boundaries provide more meaningful boundaries than Reserve Bank district lines. This holds true for any analysis we do at a more local level: if part of the state is included in our district, we include state-wide data and any metro areas or local jurisdictions across the whole state in our analysis.


84 It’s important to note again that each of these filings does not represent an actual dispossession—the act of legally removing a tenant from a property. The actual rate of dispossessions for these filings remains unknown, but tenants facing an active eviction case often move before they are forced by a court to do so. Tenants who did remain in place probably were able to do so for longer than the ordinary pace of an eviction case would allow, because in many places local policies and court backlogs slowed the usual pace.
fully materialize. Furthermore, by breaking out data in our Southeast study area, we see detectably higher eviction rates in this region compared to areas in the rest of the United States. After the expiration of the moratorium, to remain stably housed, those renters who had previously benefited from eviction protections needed to quickly access emergency rental assistance, rebound from employment loss, and be able to afford rent. We explore data that address those elements of pandemic renter household stability in the following sections.

5.2 Paying Rent and Covering Arrears

The bulk of emergency rental assistance funding has come in the form of the Emergency Rental Assistance (ERA) program through the US Department of the Treasury. As discussed in detail previously in this paper, the Treasury disbursed these federal funds to each state and to select local entities that serve a population of 200,000 or more.85 Recipient governments, or “grantees,” developed and launched their own ERA programs, shaped by rules and guidance provided by the Treasury.86 The guidelines and design of the programs themselves vary; for example, 62 percent of programs allowed applicants to self-attest to at least one eligibility requirement and 12 percent of programs allowed applicants to self-attest for proof of tenancy,87 despite Treasury guidance that all programs allow both of these practices.88 Beyond eligibility requirements, housing programs varied in what they would cover in “other expenses” related to housing—22 percent of programs covered late fees, while 11 percent covered hotel or motel stays. Another variation: 35 percent of programs allowed payments to be paid directly to tenants.89 Alongside this variation in program design and implementation, the pace with which these programs disbursed funds among households and landlords also varied.

Although evidence suggests that rental assistance reached many households nationwide,90 ERA reporting data across the Southeast indicate that households in our states

88 “Treasury Reiterates Call for State and Local Governments to Follow Treasury Guidance on Eliminating Undue Documentation Burdens to Speed the Delivery Emergency Rental Assistance.”
89 While the ERA 1 guidelines allowed jurisdictions to choose whether or not to make direct payments to tenants, ERA 2 fund guidelines required programs offer direct payments to tenants. “Treasury Emergency Rental Assistance (ERA) Dashboard.”
90 Whitney Airgood-Obrycki, “The Short-Term Benefits of Emergency Rental Assistance” (Harvard Joint Center for Housing Studies, June 2022),
may not have received assistance as quickly as other areas in the country, despite apparent need. In September of 2021—nine months after the program was established—Treasury reporting data revealed that state-run ERA programs across the Southeast lagged behind nationwide state-level expenditure ratios (see figure 5.2.1). Although locally run programs in these states kept relative pace with local programs across the nation (see figure 5.2.2), local programs only accounted for 27 percent of initial ERA 1 fund allocation across the southeastern states in the study. The slower disbursement of funds from state-run programs impacted renters living in rural locations or cities and counties with populations of fewer than 200,000 who applied to their state’s program to receive assistance. Research suggests that, nationally, ERA funds reached high proportions of very low-income renters as well as Black renters and that Hispanic renters were disproportionately less likely to apply for rental assistance, based on self-reported survey data.


91 The Treasury calculates program expenditure ratios by taking the cumulative sum of all funds spent in the program up to the given time period (for example, the sum of funds allocated from the first disbursement in Q1 through September 2021) and dividing by 90 percent of the ERA 1 allocation amount. (Ten percent of the funds are set aside for administrative costs and other expenses.) Program allocation amounts changed with the Treasury’s later reallocation of funds. To reflect the ratio of disbursed funds to available funds based on the program’s intended design, we use original allocation amounts rather than reallocations.


Figure 5.2.1: State and National Government ERA Expenditure Ratios as of September 2021 and February 2022


Figure 5.2.2: Local Government ERA Expenditure Ratios by State and Nationally as of September 2021 and February 2022


Note: Expenditure ratios can exceed 100 percent where additional funds were reallocated from other programs and spent.
As previously noted, in response to the uneven rollout of ERA programs, the Treasury department announced an ERA 1 fund reallocation program in October 2021 providing guidelines by which slower-spending programs would be assessed for recapture and reallocation of their funds to programs that had a better record for timely disbursement.\textsuperscript{94} Faced with the prospect of funds reallocation, some programs were able to increase their application processing and fund disbursement rates such that by February 2022 their expenditure ratios had increased dramatically (see figure 5.2.1). State programs in Georgia and Tennessee responded to the potential reallocation by proposing voluntary redistribution of funds to local ERA programs within their states. Nonetheless, these states had expended less than 20 percent of their state funds by February 2022.\textsuperscript{95} As of February 2022, local programs in five of the six states—Florida being the exception—in our study area continued to outpace their respective state-run programs in how quickly they disbursed emergency rental assistance, and state programs in the Southeast continued to lag behind the expenditure rate of state-run programs nationwide (see figure 5.2.3).


\textsuperscript{95} As noted, we did not take into account reallocation of funds in the calculation of expenditure ratios shown in figures 4.2.1–4.2.3, which is a measurement of each programs own ability to spend the funds initially allocated to it. For example, although Georgia reallocated $80 million of its initial $552.3 billion to various local programs, in the Treasury’s reporting, its expenditure ratio is still calculated against the initial $552.3 billion allocation, maintaining a consistent basis of comparison across months, regardless of reallocations.
The above data show that the rollout of rental assistance funds in some southern states lagged national numbers at the state-wide level. To visualize this lag between increased rental housing instability and available assistance, we compare the pace of eviction filings during the pandemic to the flow of ERA funds. Although we do not have comprehensive eviction filing data for most jurisdictions across the Southeast, we do have data for six counties in the inner metropolitan Atlanta area: Clayton, Cobb, DeKalb, Fulton, Gwinnett, and Henry counties. Each of these six counties (plus the City of Atlanta within them) administered a local ERA program, so we have reporting data detailing the number of households awarded ERA funds each month for these localities. Together, these two data sets provide a comparison of the potential demand for emergency rental assistance among renter households facing eviction and the flow of available support.\(^96\) However, the extent to which we can fully analyze the demand and availability of support for renters is limited. We have noted that the eviction data we use represent eviction filings, which cannot capture the actual numbers of dislocations that occur as a result of an eviction being filed. Additionally, ERA programs had various eligibility requirements, including those specifying a maximum income level of recipients, so the

\(^{96}\) Any eviction taking place within the City of Atlanta would be processed through the court system for the county where the property lies. All City of Atlanta properties lie in either Fulton or DeKalb counties.
applicant and resulting recipient pools for these programs do not include all renters that may have been experiencing instability.

In figure 5.2.4, the blue line tracks the combined number of eviction filings across the five-county inner Atlanta metro area. The green line tracks the combined number of households funded through local ERA programs in this same area.

**Figure 5.2.4: Inner Atlanta Metro Monthly Eviction Filings and Households Receiving ERA Funding**

![Eviction Filings and Households Receiving ERA Funding](image)

Sources: Metro Atlanta Evictions Data Collective Database; Department of the Treasury

The juxtaposition of the two data sets in figure 5.2.4 shows that eviction filings in the inner Atlanta metro area began to increase five months before any ERA awards had been distributed. Even when the programs were at peak distribution in October and November of 2021, the number of people facing eviction far exceeds the number of households accessing ERA. As we discussed above, eviction filing numbers do not capture everyone in need of rental assistance, just those tenants who stayed in place and whose landlords acted to remove them from their homes using the legal process. This analysis suggests a timing mismatch

---

97 See above, note 54.
98 Notably, assistance from the state-wide ERA program in Georgia administered by the Department of Community Affairs (DCA) is not included in this dataset. Until August 2021 DCA rental assistance funds were only available to applicants in areas where local programs did not exist—all of those areas would be outside of the geographies included in this chart. Although the eligibility opened to all counties in the state after that point, DCA does not share data indicating where assisted households are located. Given the relatively slow rollout of DCA’s funds, the inability to pinpoint the location of those awards, and the fact that the program voluntarily reallocated over $100 million dollars to the local programs that are represented in the chart, we did not include DCA awards in this visualization. Any reallocated funds would be included in the county’s disbursement numbers shown here.
between the increased experience of rental instability and the availability of ERA dollars. It is also notable that the local ERA programs included in this analysis were among those programs in Georgia with the highest share of funds disbursed over the same time period.

The Census Bureau’s Household Pulse Survey provides a different and broader geographic look at how effectively the disbursement of ERA funds met the need for housing assistance in the Southeast. For 41 weeks of the pandemic, the HPS tracked households’ confidence in their ability to pay rent. While an expressed lack of confidence in one’s ability to pay rent does not directly translate into a missed house payment, it does indicate instability among renter households and pressure on household budgets.

Looking across our six-state study area, we compare HPS estimates of the number of households with “little or no confidence” of being able to pay the next month’s rent with the Treasury’s reporting of households receiving ERA assistance. These estimates suggest that our observations in the inner Atlanta metro region may hold at a wider geography. During the first quarter of 2021, ERA assistance disbursement had just barely begun. Data from the HPS averaged across this same period shows that 5.1 million households in these states indicated slight or no confidence in their ability to afford their next rent payment. In the summer and early fall of 2021, as expanded federal unemployment insurance benefits tapered, an estimated 3.9 million households in the Southeast reported low or no confidence in their ability to pay rent but only 71,000 received assistance. HPS estimates of households expressing low confidence in their ability to pay rent illustrates the vulnerability many households in the Southeast felt regarding their stability as renters at varying points throughout the pandemic. At the same time, the Treasury’s disbursement reports from ERA programs in the Southeast demonstrate that many households that may have needed assistance were unlikely to have received ERA funds during this period. While we do not suggest that every HPS respondent who indicated low confidence in paying rent were applicants—or even eligible—for ERA programs, we can use these data to inform our understanding of the distress felt by renter households in the Southeast, where ERA program rollout lagged the national average.

The available data and above analysis suggest that the federal ERA faced challenges in meeting the needs of southeastern renter households quickly enough or at a sufficient scale to cover rental arrears and provide ongoing stability for renter households facing eviction. Although ERA funds disbursement picked up by February 2022, many renters may already have had to relocate given the expiration of most eviction moratoria by this time. Furthermore,

narratives of households experiencing eviction and displacement even after receiving ERA funding were reported in a *Convening Summary* by the Housing Initiative at Penn in October 2022. Those southeastern renters who did lose their housing faced a market of rising rents that we explore in more detail in section 5.4. Before that, however, we take a look at employment data to understand the depth of employment shocks that renter households experienced, and to identify metro areas where prolonged employment loss may have created a particularly difficult environment for renters during the pandemic.

5.3 Regaining Employment: What Places Were Hardest Hit and Slow to Recover?

In addition to the expectation that eviction moratoria and ERA could keep renters in place, pandemic rental stabilization policies were designed to bridge a gap until employment recovered. The time-limited nature of these programs reflected an expectation that working renters impacted by pandemic-related job loss would be able to bounce back as the economy reopened. In this section, we explore evidence indicating that the experience of many working renters across the Southeast diverged from this expectation. In fact, many places were hit harder by the shutdown than the US average and were slower to recover.

Rising unemployment from the first to the second quarter of 2020 placed new burdens on all workers and disproportionately impacted unemployment rates for Black and Hispanic workers. Federal policy responses, including assistance such as Economic Impact Payments and UI, sought to address workers’ loss of income amid large unemployment increases of the pandemic. However, while the CARES Act provided expanded funding and eligibility for unemployment insurance for many workers, UI was not uniformly accessible to all workers, with Black and Hispanic workers less likely to receive UI benefits than White workers. In April and May of 2020, months before Congress had allocated money for ERA, over 25 percent of UI applicants reported they had not received assistance, and of those who had not received

---

100 “There have been many accounts of tenants facing eviction even after they had received ERA funds to cover their rental arrears. Combining ERA with strong tenant protections is necessary to address these persistent issues,” in “What Have We Learned About Emergency Rental Assistance?,” *Convening Summary* (Philadelphia, PA: The Housing Initiative at Penn, October 2022), https://www.housinginitiative.org/what-have-we-learned-about-emergency-rental-assistance.html.


assistance, the majority reported increased difficulty in covering the costs of housing and other necessities.\textsuperscript{103}

Furthermore, rental housing that is affordable for lower- and moderate-income renter households was in short supply prepandemic. The US Census Bureau estimated that, during 2019, 42 percent of American renters were cost-burdened, and this rate was even higher for Black (47 percent) and Hispanic/Latino households (48 percent).\textsuperscript{104} Cost-burdened renter households tend to have low-paying jobs with high turnover and inflexible or irregular hours, leading to both housing and employment insecurity.\textsuperscript{105} Precarious renter households can experience even minor economic shifts as shocks to their financial stability.\textsuperscript{106} Employment instability impedes access to housing for these households. Renter households that lack job security, wages ample enough to build wealth and liquidity, and educational and training opportunities for advancing careers are less resilient in the face of destabilizing events and may find themselves unable to pay housing costs.\textsuperscript{107} Simultaneously, housing access impacts employment outcomes for these households, too. Increasing rents and limited supply of affordable housing can lead to frequent moves, impeding access to steady employment and the resources and connections necessary to secure employment when an existing job is lost or becomes insufficient to cover household expenses.\textsuperscript{108} The initial wave of COVID unemployment disproportionately impacted Black and Hispanic workers, particularly those working in industries most affected by shutdown orders and supply chain issues.\textsuperscript{109} Months later, these workers did not share in the recovery from unemployment at the same rate as White workers.\textsuperscript{110}

Table 5.3.1 shows prepandemic (2019) estimates of housing cost burden, median income, and poverty status, and levels of employment in industries most vulnerable to COVID-19-related job loss for renters and owners. These figures show that before the pandemic,

\textsuperscript{103} Daniel Schneider, Kristen Harknett, and Annette Gailliot, “Unemployed Without a Net,” The Shift Project (Harvard University, October 14, 2020), https://shift.hks.harvard.edu/unemployed-without-a-net/.

\textsuperscript{104} “2015-2019 American Community Surveys 5-Year Estimates.”


\textsuperscript{106} Bentley, Baker, and Aitken, “The ‘Double Precarity’ of Employment Insecurity and Unaffordable Housing and Its Impact on Mental Health.”


\textsuperscript{110} Han and Hart, “Job Precarity and Economic Prospects during the COVID-19 Public Health Crisis.”
renters spent more income on housing than owners did despite having a median household income less than half as large. As the table indicates, renter households were also much more likely to earn low wages, live in poverty, and work in industries that were hardest hit by the initial wave of pandemic unemployment.

Table 5.3.1: Pre-pandemic Housing and Financial Security by Tenure, National (2019)

<table>
<thead>
<tr>
<th></th>
<th>Renters</th>
<th>Owners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost-Burdened</td>
<td>42%</td>
<td>38%</td>
</tr>
<tr>
<td>Median Household Income</td>
<td>$42,000</td>
<td>$79,000</td>
</tr>
<tr>
<td>Low-Income</td>
<td>47%</td>
<td>19%</td>
</tr>
<tr>
<td>In Poverty</td>
<td>23%</td>
<td>6%</td>
</tr>
<tr>
<td>Deep Poverty</td>
<td>9%</td>
<td>3%</td>
</tr>
<tr>
<td>Employed in Vulnerable Industries</td>
<td>26%</td>
<td>18%</td>
</tr>
</tbody>
</table>

Sources: 2019 American Community Survey 1-Year Estimates\(^{115}\) and authors’ calculations
Note: Cost burden and poverty status are measured at the household level while vulnerable industry is calculated for all working-age adults.

These preexisting disparities between owners and renters were worsened by lost employment income due to the pandemic. ERA funds were not disbursed for nearly a year after March 2020, when the largest wave of pandemic job loss occurred. Many unemployed workers reported difficulty in accessing unemployment assistance during the following months as job losses slowed.\(^{116}\) These disparities suggest that relief efforts needed to address not only the economic impact from the pandemic but also the preexisting structural inequalities that heightened that impact so that affected renters could receive adequate, timely assistance.

\(^{111}\) Low-income households are those with a household income between 100 percent and 200 percent of the federal poverty threshold for their household size.
\(^{112}\) Households in poverty are those with a household income below the federal poverty threshold for their household size.
\(^{113}\) Households in deep poverty are those with a household income below 50 percent of the federal poverty threshold for their household size.
\(^{114}\) Vulnerable industries consist of “food and accommodation, retail, construction, entertainment, and other services” as defined in Mary K. Cunningham, Laurie Goodman, and Jung Hyun Choi, “Don’t Overlook the Importance of Unemployment Benefits for Renters.”
\(^{115}\) See above, note 60.
Given these challenges, and to understand the potential on-the-ground effectiveness of efforts to keep workers and households in place during the pandemic, we explore how working renters may have been affected by unemployment at a metropolitan regional level. Different areas entered the pandemic with varied levels of housing and employment insecurity. Some areas also experienced deeper employment shocks and slower recoveries than others during the pandemic. Each of these factors create varied environments for renter stabilization policies to take effect.

To understand employment patterns at a micro level, we looked at the depth of COVID-19-related employment shock to metro areas in our six southeastern states. Using QWI employment data, we first calculated the percent change in employment from the first to the second quarter of 2020, the initial wave of pandemic unemployment. We selected this period because the most extreme employment loss of the pandemic in both magnitude and speed of onset occurred over this time.

We next calculated the percent change in employment from the third to the fourth quarter of 2020. We selected this period because employment began to trend upwards nationwide over this time. Using these data, we then identified metro areas that were the hardest hit and slow to recover. We designate hardest hit metro areas as those that experienced a larger percent decrease in employment from the first quarter to the second quarter of 2020 than the national average. Metro areas that we designate slow to recover demonstrated a smaller percent increase in employment (or a decrease) from the third quarter to the fourth quarter of 2020 than the national average.

Figure 5.3.1 shows a clustering of metros around the national averages (axes represent national averages) and a number of metros that fell below the nationwide trends. The 10 metros that had higher-than-average drops and lower-than-average rebounds in employment are located in the bottom left quadrant of figure 5.3.1.
Figure 5.3.1: Employment Loss and Recovery in Southeastern Metros

Sources: Census Bureau’s Quarterly Workforce Indicators\textsuperscript{117} and authors’ calculations
Note: The vertical reference line in the figure represents the national average percent change in employment from Q1 to Q2 of 2020 (-1.9%). The horizontal reference line represents the national average percent change from Q3 to Q4 of 2020 (1.9%).

Figure 5.3.2 shows the geographic distribution of both early pandemic employment loss and lagging employment recovery across metro areas in our six southeastern states. Mississippi metros were not included as QWI figures and thus were not reported in our data set.\textsuperscript{118}


\textsuperscript{118} Mississippi does not share data with the Local Employment Dynamics Partnership, a nationwide data sharing partnership that populates the Longitudinal Employer-Household Dynamics (LEHD) data set. The LEHD are the foundational data for the Census Bureau’s QWI that we use in this study. US Census Bureau Center for Economic Studies, “Longitudinal Employer-Household Dynamics State Partners,” September 12, 2022, https://lehd.ces.census.gov/state_partners/.
The hardest hit, slowest to recover metro areas are primarily concentrated in larger coastal areas and smaller inland areas across our southeastern study area. All of the hardest hit metros had levels of employment in vulnerable industries well above the national average leading into the pandemic, largely driven by the retail and tourism sectors. We highlight the overlap of our hardest hit and slowest to recover metros to identify where pandemic employment trends likely had a significant impact on the ability of workers to pay for rental housing, particularly before emergency rental assistance funds were available. Appendix 1 has a full chart of hardest hit and slow to recover indicators and percent vulnerable industry composition by metropolitan areas across the Southeast.

By exploring early COVID-related employment loss and recovery at the metro-area level, we call attention to the variations in employment environments that metro areas across

---

119 See Appendix 1 for data breaking down industry composition in hardest hit and slow to recover metro areas.
the Southeast experienced. Given our discussion of the limited effect of eviction moratoria and the delayed rollout and likely insufficient coverage of ERA across the Southeast, renters in metro areas that were hardest hit and slow to recover may have accumulated larger rental arrearages or even faced displacement before they could access necessary assistance. In the next section, we further explore pandemic rental household stressors through an analysis of rising rent costs across the Southeast.

5.4 Navigating Rent Increases: What Places Were Hard to Stay In?

For pandemic rental stabilization policy solutions to deliver longer-term stability for renter households, the cost of rent needed to remain relatively stable. In this section, we explore what may have been the least foreseeable consequence of the pandemic: the increases in rent experienced across many markets, particularly for some areas situated across our six southeastern state study area.

Over nearly three years leading up to the pandemic (June 2017 to March 2020), nationwide median rent rose by 5.1 percent, according to Apartment List rent estimate data.\(^{120}\) Over the next 33 months of the pandemic, through December 2022, national median rent rose 19.7 percent.\(^{121}\) As with employment data, when we break down the national data into smaller geographies, we see that some places had larger rent increases than others and many exceeded the national figure. In this section, we explore how rent has increased across states and localities across the Southeast. We also take a deeper dive into selected local markets to further examine the dynamic between rising rent and employment.

---

\(^{120}\) Igor Popov, Chris Salviati, and Rob Warnock, “Apartment List Data & Rent Estimates” (Apartment List, November 29, 2022), https://www.apartmentlist.com/research/category/data-rent-estimates. See the percentage increase in rent between June 2017 and March 2020.

\(^{121}\) See the percentage increase in rent between March 2020 and December 2022, ibid.
Figure 5.4.1: Pandemic Rent Increase by State, March 2020–December 2022

Real-time rent data suggest that whether or not renter households benefited from the protective pandemic policies and the resurgence of employment opportunity, they still could have faced destabilizing rent increases as the pandemic lingered. Figure 4.4.1 depicts percentage increases in median rent from March 2020 through December 2022 at the state level, with darker blue states having experienced greater increases in median rent. Between March 2020 and December 2022 during the pandemic, median rent across the six southeastern states we studied increased by 28.3 percent, outpacing the national rate increase of 19.7 percent for the same time period. As a point of comparison in these same states median rent increased by an average of 5.1 percent between June of 2017 and March of 2020 prior to the pandemic (a period containing the same number of months), equal to the national rate of 5.1 percent for that time period.

Zooming in further, cities in our study area had particularly high median rent increases during the pandemic. Of the 569 cities in Apartment List’s national data set, 32 of the top 50 cities with the highest pandemic rent increases are located in our six southeastern states. More specifically, 22 of these cities are in Florida, six are in Georgia, and four are in Tennessee. Cities falling within the top 50 experienced 36 percent to 52 percent increases in median rent during the pandemic. This affected federal policies designed to address rental instability
during the pandemic. A chart of pandemic rent changes for these top 50 cities, including the 32 in our six-state study area, is in Appendix 2.

Connecting this analysis of accelerated rent prices with section 5.3’s discussion of metro area employment patterns, we analyze employment and rent data to understand some of the dynamics at play. Within this analysis, we examine metro areas, as our employment data is not available at the city level. We consider the impact of rising rent after the onset of the pandemic in metro areas that were both hardest hit and slow to recover. When we previously considered places that were hardest hit, we focused on data from the first to second quarters of 2020 to capture the initial impact of the pandemic, and when considering places that were slow to recover, we examined data from the third and fourth quarters of 2020 to capture places that initially lagged in early recovery of employment losses. Here, as we incorporate rent data, we consider increases in median rent prices from March of 2020 until December of 2022. This longer time horizon captures the broader impact of a rising rent environment, as increases in rent prices accelerated throughout 2021 and tenants’ leases expired, increasingly exposing them to a market of increasing median rent prices. We designate metro areas as hard to stay if they were hardest hit and slow to recover, and their rent increases also surpassed the national average. We chose the moniker hard to stay because renter households in these places experienced employment and rental market pressures that could make it particularly difficult to remain in their homes and, in the case of a voluntary or involuntary move, to find another affordable home in the same market area.

Based on this analysis, we identified three metro areas in our study area that meet the outlined specifications to be considered hard to stay; are all located in the state of Florida. Table 5.4.1, below, lists these hard to stay places alongside employment and median rent change during the pandemic.

---


123 See Appendix 1 for a table of pandemic rent increases for all metro areas in the six-state study area, organized by their status as hardest hit, slow to recover.

124 Although we are able to look at rent change at the city level, QWI data are only available at the larger metro level. Apartment List rent data is also available at this level, so at this point in our analysis we zoom out slightly to the metro area level of analysis.
Table 5.4.1: *Hard to Stay* Metro Areas in the Southeast

<table>
<thead>
<tr>
<th></th>
<th>Percent Change in Employment (Q1–Q2 2020)</th>
<th>Percent Change Employment (Q3–Q4 2020)</th>
<th>Percent Increase in Median Rent (March 2020–December 2022)</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Average</td>
<td>-1.9%</td>
<td>1.9%</td>
<td>19.7%</td>
</tr>
<tr>
<td>Miami-Fort Lauderdale-Pompano Beach, FL</td>
<td>-2.2%</td>
<td>1.3%</td>
<td>35.0%</td>
</tr>
<tr>
<td>Naples-Marco Island, FL</td>
<td>-3.2%</td>
<td>1.4%</td>
<td>58.3%</td>
</tr>
<tr>
<td>Orlando-Kissimmee-Sanford, FL</td>
<td>-5.8%</td>
<td>1.2%</td>
<td>29.4%</td>
</tr>
</tbody>
</table>

Sources: *Quarterly Workforce Indicators (2020); Apartment List Data & Rent Estimates;* and authors’ calculations

As previously mentioned, all three of these metro areas—Miami-Fort Lauderdale-Pompano Beach; Naples-Marco Island; and Orlando-Kissimmee-Sanford—met our previous criteria of places that were *hardest hit* by the pandemic, as they all experienced declines between the first and second quarters of 2020 that were larger than the national average of 1.9 percent. Of this group of three metro areas, the Orlando metro area would be considered the top *hardest hit*, as it experienced a 5.8 percent decline in employment between the first and second quarters of 2020, the largest of this group. Orlando’s industry mix also contained over 30 percent of industries considered vulnerable to COVID-19, over twice the national average.¹²⁵

These places also are considered *slow to recover* as previously defined; each saw percentage increases in employment between quarter three and four of 2020 that were lower than the national average employment growth seen at that time of 1.9 percent. Overall, they experienced smaller than average gains in employment in the midst of the pandemic, which has magnified implications because each of these places had larger than average losses early in the pandemic from which to recover.

¹²⁵ Appendix 1 contains figures for employment change, rent increase, and vulnerable industry mix covering all available metro areas in our six-state study area can be found in Appendix 1.
Each of the three metro areas listed above experienced increases in median rent prices between March of 2020 and December of 2022 that outpaced the national increase in median rent prices during that period (19.7 percent). Already considered hardest hit and slow to recover places, this third element makes a metro area hard to stay, as the combination of the below-average employment recovery and above-average rent growth created an environment that may have been difficult to stay in, especially for low- and moderate-income households more likely to have entered the pandemic with rental cost burdens. Between March 2020 and December 2022, the Naples metro area experienced the highest percentage increase in median rent prices of these three places: 58.3 percent. Rent affordability was already tight in this community, as 55.2 percent of renters were considered cost-burdened in 2019, prior to the pandemic. In the Naples metro area, an increase of 58.3 percent translates to an $807 per-month increase in median rent prices between March of 2020 and December of 2022, further constraining housing affordability in this area.

Examining the convergence of employment and housing conditions and arriving at hard to stay locations uncovers some of the difficult environments for lower-income renter households across the region we studied. Households and individuals experience employment and housing conditions simultaneously, and our analysis aims to account for that experience. While the selection of highlighted locations here are concentrated in Florida, communities that experienced both rental housing cost increases and employment loss exist across the Southeast. Although only three metros fully met the qualifications outlined to be considered hard to stay, data limitations prevent us from knowing if others exist, such as in Mississippi. Appendix 1 has a table of available data on employment change and median rent change for southeastern metro areas.

---


127 Limited data availability constrains our ability to identify places with these characteristics. For example, Mississippi does not share employer data necessary for the QWI, so none of its metro areas could be considered in this analysis. For more information, see footnote 117, above.
Rising median rent prices intensified an already difficult environment for low- and moderate-income households. Federal programs were not specifically designed to account for rapid rent growth, and workers facing increasingly unaffordable rent as the pandemic drew on did so having experienced a higher likelihood of job loss and, in some areas, a slower employment rebound. Rising rent prices in places that experienced lagging employment returns can coalesce to create a difficult environment for an individual or family to stay in their housing. These mutual housing and employment pressures existed for many workers during the pandemic and may have limited the effectiveness of pandemic relief policies and programs as they did not adequately factor in pre-pandemic housing and employment insecurity. Our analysis of hard to stay geographies suggests that rental relief funds may not have been sufficient to address these deficits and that the delay in their disbursement may have allowed those deficits to widen, as evident in our three Florida examples.

6 Conclusion

As we have discussed, the two-pronged policy approach to address rental housing instability during COVID-19—preventing evictions and providing emergency rental assistance to cover accruing rental arrearages—required optimal localized implementation and market conditions to meet their full potential. Although some national studies have found that these policies successfully stabilized renter households, a deeper dive into Southeast data reveals a different story: eviction moratoria were not a durable method for preventing the displacement of renters, federal emergency rental funds arrived too late to help some tenants, and, while employment began to rebound in some places, disparities remain across racial groups and geographies. Geographic disparities also existed in median rent prices, with large increases observed in parts of the Southeast.

Importantly, these circumstances did not occur independently from one another: renter households may have faced housing and employment challenges at the same time. Our analysis digs into the complex, layered, and localized experience of housing and employment stresses. To do this, we first identify places that were hardest hit by initial pandemic employment losses at the beginning of 2020, slow to recover in the initial rebound towards the end of 2020. Then we consider metro areas where it may have been particularly hard to stay due to rising rent markets over the course of the pandemic (from March 2020 through December 2022). We identify three examples of metro areas within the Southeast that were hard to stay places, according to this analysis: the Miami, Naples, and Orlando metro areas.

Our analysis indicates that many places in the Southeast experienced less robust eviction protections for renter households and a greater delay in the rollout of ERA funds. Further, the policy expectations underlying federal efforts to stabilize renters may not have
been able to sufficiently support the housing and employment headwinds impacting households across the Southeast during the pandemic.

We must acknowledge that our analysis was limited by the availability of housing and employment data. For example, we did not have data to conduct this analysis in many localities across our study area where renter households would have needed to rely on slower moving state-run ERA programs for assistance, such as smaller cities, towns, and rural areas. Our research provides nuance and variation to nationwide reports—and reports based in jurisdictions with more tenant protections—that may dilute some of the challenges that are specific to our region.

The unpredictable depth and pattern of employment loss at the onset of the pandemic, combined with the unforeseen rise in rent as the pandemic stretched over multiple years, presented a novel set of challenges for low- to moderate-income renter households, many of which were already housing-cost-burdened before COVID-19 arrived. The federal programs intended to address employment and housing challenges were unprecedented in scope and funding. However, despite the national availability of these programs and the indiscriminate spread of COVID-19, the disparate outcomes that we have observed in our study area point to localized conditions that may have impeded recovery for many renter households. Further research is needed to fully understand the barriers that may be causing these disparate outcomes across the Southeast, but we observe that many southeastern working renters and places have been hit hard and are at risk of being left behind as the country progresses beyond pandemic-era conditions and policies. Future economic shocks and stresses could cause these places to fall even further behind.

Efforts to drill down deeper into the localized experience of southeastern renter household financial stress and recovery will require robust data. A lack of localized employment data presented challenges to our research. For example, the Department of Labor releases only state-level unemployment claims data. Similarly, limited smaller-geography data on housing costs, migration activity among renters, and a lack of compatibility between existing housing and employment data that might link job loss to rental housing, more specifically, presented limitations for our study design. These data limitations make it

---

128 Unemployment insurance benefits claims data are not publicly available below the state level, including at the city or metro levels that we use in this analysis. See data availability at US Bureau of Labor Statistics 2020 and 2021 Local Area Unemployment statistics by county. Cohen similarly finds that without more detailed data, definitive conclusions on the impact of UI benefits are difficult if not impossible to draw. Cohen, “Measuring Employment during COVID-19.”

129 For example, eviction data are often only available in larger metro areas where court systems have made records electronically available and easier to access. ERA data also have limited availability at geographic levels below the program-level jurisdiction (statewide or local entity), making these dollars
difficult to explore pandemic housing and employment instability by demographic group at smaller geographic levels.

Improved collection and access to data at smaller geographies would allow researchers, stakeholders, service providers, and policymakers at all levels of government to better understand the experiences of various racial and ethnic groups and the impact on rural and low-population areas, and to characterize the employment overlay for renter households across various industries.

Even with these data limitations in mind, our analysis identifies a need for federal programs and policies to be better tailored for application in the local and state contexts. People in places across the country were exposed to the same virus, but they did not experience the effects of the pandemic equally, particularly in the Southeast. Even within the same region or state, geographic variation in experiences could mean the difference between maintaining housing and employment or facing instability that threatened displacement for a renter household. Shaping policy and implementation processes in ways that anticipate a variety of localized legal, resource, and employment environments may allow future policies to avoid the disparate results we observed, providing a more uniform and robust experience of housing stability and greater resilience for renters across the nation.

particularly hard to track in less populated areas that rely on statewide funds. Many nation-wide surveys that track the type and cost of housing do not have samples large enough to conduct household-level analysis below the regional, state or occasionally a major-metropolitan area. Employment data, such as unemployment, statistics, job gains/losses, and unemployment claims data, have similar geographic limitations. Even the QWI data that we rely on in this analysis are only available where LEHD data are regularly and thoroughly reported to the federal government, which excludes the entire state of Mississippi, some smaller geographic areas, certain industry sectors, and some underreported demographic groups.
Appendix 1: Employment Loss and Recovery (First Year of the Pandemic) and Median Rent Change (First 33 Months of the Pandemic), Southeastern Metro Areas, Grouped by *Hardest Hit* and *Slow to Recover*

<table>
<thead>
<tr>
<th></th>
<th>Employment Change Q1-Q2 2020 (<em>Hardest Hit Indicator</em>)</th>
<th>Employment Change Q3-Q4 2020 (<em>Slow to Recover Indicator</em>)</th>
<th>Median Rent Change March 2020-December 2022</th>
<th>Percent of Employment in Vulnerable Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National Average</strong></td>
<td>-1.9%</td>
<td>1.9%</td>
<td>19.7%</td>
<td>14.2%</td>
</tr>
<tr>
<td><strong>Hardest Hit and Slow to Recover</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naples-Maro Island, FL</td>
<td>-3.2%</td>
<td>1.4%</td>
<td>58.3%</td>
<td>35.1%</td>
</tr>
<tr>
<td>Miami-Fort Lauderdale-Pompano Beach, FL</td>
<td>-2.2%</td>
<td>1.3%</td>
<td>35.0%</td>
<td>28.1%</td>
</tr>
<tr>
<td>Orlando-Kissimmee-Sanford, FL</td>
<td>-5.8%</td>
<td>1.2%</td>
<td>29.4%</td>
<td>30.6%</td>
</tr>
<tr>
<td>Lafayette, LA</td>
<td>-2.6%</td>
<td>1.4%</td>
<td>19.0%</td>
<td>27.6%</td>
</tr>
<tr>
<td>Lake Charles, LA</td>
<td>-4.0%</td>
<td>-0.7%</td>
<td>-1.2%</td>
<td>32.4%</td>
</tr>
<tr>
<td><strong>Hardest Hit, not Slow to Recover</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Houma-Thibodaux, LA</td>
<td>-3.7%</td>
<td>2.4%</td>
<td>24.9%</td>
<td>30.4%</td>
</tr>
<tr>
<td>Columbus, GA-AL (AL part)</td>
<td>-2.2%</td>
<td>2.9%</td>
<td>20.4%</td>
<td>28.3%</td>
</tr>
<tr>
<td>Shreveport-Bossier City, LA</td>
<td>-3.1%</td>
<td>2.3%</td>
<td>19.3%</td>
<td>31.6%</td>
</tr>
<tr>
<td>Baton Rouge, LA</td>
<td>-2.7%</td>
<td>3.0%</td>
<td>18.3%</td>
<td>29.2%</td>
</tr>
<tr>
<td>New Orleans-Metairie, LA</td>
<td>-4.1%</td>
<td>3.9%</td>
<td>15.6%</td>
<td>29.1%</td>
</tr>
<tr>
<td></td>
<td>Employment Change Q1-Q2 2020 (Hardest Hit Indicator)</td>
<td>Employment Change Q3-Q4 2020 (Slow to Recover Indicator)</td>
<td>Median Rent Change March 2020-December 2022</td>
<td>Percent of Employment in Vulnerable Industries</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------------------------------</td>
<td>--------------------------------------------------------</td>
<td>------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Knoxville, TN</td>
<td>-0.3%</td>
<td>1.9%</td>
<td>52.0%</td>
<td>26.5%</td>
</tr>
<tr>
<td>Cape Coral-Fort Myers, FL</td>
<td>-1.6%</td>
<td>1.8%</td>
<td>46.5%</td>
<td>33.3%</td>
</tr>
<tr>
<td>Port St. Lucie, FL</td>
<td>-0.1%</td>
<td>1.8%</td>
<td>40.0%</td>
<td>33.0%</td>
</tr>
<tr>
<td>Tampa-St. Petersburg-Clearwater, FL</td>
<td>-0.5%</td>
<td>1.9%</td>
<td>36.6%</td>
<td>26.4%</td>
</tr>
<tr>
<td>Palm Bay-Melbourne-Titusville, FL</td>
<td>-0.1%</td>
<td>1.8%</td>
<td>33.2%</td>
<td>27.9%</td>
</tr>
<tr>
<td>Gainesville, GA</td>
<td>-0.5%</td>
<td>1.9%</td>
<td>31.6%</td>
<td>24.4%</td>
</tr>
<tr>
<td>Deltona-Daytona Beach-Ormond Beach, FL</td>
<td>-0.1%</td>
<td>1.9%</td>
<td>31.0%</td>
<td>32.8%</td>
</tr>
<tr>
<td>Lakeland-Winter Haven, FL</td>
<td>0.3%</td>
<td>1.9%</td>
<td>30.9%</td>
<td>28.9%</td>
</tr>
<tr>
<td>Atlanta-Sandy Springs-Alpharetta, GA</td>
<td>-0.8%</td>
<td>1.9%</td>
<td>25.6%</td>
<td>24.5%</td>
</tr>
<tr>
<td>Memphis, TN-MS-AR (TN part)</td>
<td>-1.5%</td>
<td>1.5%</td>
<td>25.4%</td>
<td>29.4%</td>
</tr>
<tr>
<td><strong>Not Hardest Hit, Slow to Recover</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Port-Sarasota-Bradenton, FL</td>
<td>-1.3%</td>
<td>1.9%</td>
<td>47.0%</td>
<td>32.3%</td>
</tr>
<tr>
<td>Clarksville, TN-KY (TN part)</td>
<td>-0.5%</td>
<td>3.1%</td>
<td>42.4%</td>
<td>29.7%</td>
</tr>
<tr>
<td>Savannah, GA</td>
<td>-1.7%</td>
<td>3.0%</td>
<td>36.9%</td>
<td>30.4%</td>
</tr>
<tr>
<td>Tallahassee, FL</td>
<td>-0.7%</td>
<td>3.8%</td>
<td>31.3%</td>
<td>29.8%</td>
</tr>
<tr>
<td>Mobile, AL</td>
<td>-1.3%</td>
<td>2.2%</td>
<td>30.5%</td>
<td>28.0%</td>
</tr>
<tr>
<td>Pensacola-Ferry Pass-Brent, FL</td>
<td>0.7%</td>
<td>2.0%</td>
<td>30.3%</td>
<td>31.5%</td>
</tr>
<tr>
<td>Macon-Bibb County, GA</td>
<td>0.4%</td>
<td>2.6%</td>
<td>30.1%</td>
<td>29.0%</td>
</tr>
<tr>
<td>Jacksonville, FL</td>
<td>0.5%</td>
<td>2.5%</td>
<td>30.0%</td>
<td>28.5%</td>
</tr>
<tr>
<td>Warner Robins, GA</td>
<td>-1.0%</td>
<td>2.7%</td>
<td>29.6%</td>
<td>26.3%</td>
</tr>
<tr>
<td>Chattanooga, TN-GA (GA part)</td>
<td>-0.2%</td>
<td>2.5%</td>
<td>28.9%</td>
<td>26.7%</td>
</tr>
<tr>
<td>Employment Change Q1-Q2 2020 (Hardest Hit Indicator)</td>
<td>Employment Change Q3-Q4 2020 (Slow to Recover Indicator)</td>
<td>Median Rent Change March 2020-December 2022</td>
<td>Percent of Employment in Vulnerable Industries</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>----------------------------------------------------------</td>
<td>------------------------------------------</td>
<td>---------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Chattanooga, TN-GA (TN part)</td>
<td>-0.9%</td>
<td>2.5%</td>
<td>28.9%</td>
<td>26.7%</td>
</tr>
<tr>
<td>Tuscaloosa, AL</td>
<td>-0.6%</td>
<td>6.0%</td>
<td>26.9%</td>
<td>24.1%</td>
</tr>
</tbody>
</table>

**Not Hardest Hit, Not Slow to Recover (cont.)**

| Montgomery, AL                                       | -0.9%                                                    | 3.0%                                     | 24.6%                                       | 26.1%                                       |
| Nashville-Davidson--Murfreesboro--Franklin, TN       | -1.3%                                                    | 2.6%                                     | 23.6%                                       | 25.9%                                       |
| Crestview-Fort Walton Beach-Destin, FL               | 1.7%                                                     | 2.6%                                     | 23.4%                                       | 32.3%                                       |
| Gainesville, FL                                      | -0.7%                                                    | 2.8%                                     | 22.9%                                       | 32.2%                                       |
| Huntsville, AL                                        | 0.0%                                                     | 3.3%                                     | 20.6%                                       | 21.6%                                       |
| Columbus, GA-AL (GA part)                            | -1.0%                                                    | 3.3%                                     | 20.4%                                       | 24.5%                                       |
| Athens-Clarke County, GA                             | -1.2%                                                    | 4.3%                                     | 19.2%                                       | 19.1%                                       |
| Augusta-Richmond County, GA (GA-SC) (GA part)        | -0.6%                                                    | 2.1%                                     | 18.6%                                       | 30.8%                                       |
| Birmingham-Hoover, AL                                | -1.0%                                                    | 3.3%                                     | 18.6%                                       | 25.7%                                       |
| Panama City, FL                                      | 1.5%                                                     | 2.3%                                     | 12.1%                                       | 32.5%                                       |

Sources: US Census Bureau, Quarterly Workforce Indicators (2020); Apartment List Data & Rent Estimates: US Census Bureau, American Community Survey 2019 1-Year Estimates\(^{130}\); and authors’ calculations

*Rounding caused some geographies in this category to appear as if they recovered at the same rate as the national average when they actually fell below it.

Note: Due to limited data availability, some metro areas within our six southeastern state study area are not included in the above table. The following metro areas are not included due to unavailable Apartment List data: Anniston-Oxford, AL; Auburn-Opelika, AL; Daphne-Fairhope-Foley, AL; Decatur, AL; Dothan, AL; Florence-Muscle Shoals, AL; Gadsden, AL; Homosassa Springs, FL; Ocala, FL; Punta Gorda, FL; Sebastian-Vero Beach, FL; Sebring-Avon Park, FL; The Villages, FL; Albany, GA; Brunswick, GA; Dalton, GA; Hinesville, GA; Rome, GA; Valdosta, GA; Alexandria, LA; Hammond, LA; Monroe, LA; Cleveland, TN; Jackson, TN; Johnson City, TN; Morristown, TN, and Kingsport-Bristol, TN-VA. The following metro areas are not included due to unreported QWI data and unavailable Apartment List data: Gulfport-Biloxi, MS and Hattiesburg, MS. Jackson, MS is not included due to unreported QWI data.

\(^{130}\) See above, note 60.
Appendix 2: Top 50 US Cities Ranked by Increase in Median Rent from March 2020 to December 2022

<table>
<thead>
<tr>
<th>Rank</th>
<th>City Name</th>
<th>Increase in Median Rent from March 2020 to December 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aventura, FL</td>
<td>52.4%</td>
</tr>
<tr>
<td>2</td>
<td>Knoxville, TN</td>
<td>51.5%</td>
</tr>
<tr>
<td>3</td>
<td>Town 'n' Country, FL</td>
<td>49.0%</td>
</tr>
<tr>
<td>4</td>
<td>Clarkston, GA</td>
<td>48.5%</td>
</tr>
<tr>
<td>5</td>
<td>Sarasota, FL</td>
<td>46.6%</td>
</tr>
<tr>
<td>6</td>
<td>High Point, NC</td>
<td>46.5%</td>
</tr>
<tr>
<td>7</td>
<td>Bradenton, FL</td>
<td>45.7%</td>
</tr>
<tr>
<td>8</td>
<td>Cape Coral, FL</td>
<td>45.3%</td>
</tr>
<tr>
<td>9</td>
<td>Lake Worth, FL</td>
<td>45.0%</td>
</tr>
<tr>
<td>10</td>
<td>Burlington, NC</td>
<td>45.0%</td>
</tr>
<tr>
<td>11</td>
<td>North Little Rock, AR</td>
<td>44.4%</td>
</tr>
<tr>
<td>12</td>
<td>Waco, TX</td>
<td>43.8%</td>
</tr>
<tr>
<td>13</td>
<td>Fort Myers, FL</td>
<td>43.3%</td>
</tr>
<tr>
<td>14</td>
<td>Clarksville, TN</td>
<td>42.5%</td>
</tr>
<tr>
<td>15</td>
<td>Wellington, FL</td>
<td>41.8%</td>
</tr>
<tr>
<td>16</td>
<td>Stockbridge, GA</td>
<td>41.8%</td>
</tr>
<tr>
<td>17</td>
<td>Rock Hill, SC</td>
<td>40.9%</td>
</tr>
<tr>
<td>18</td>
<td>Greensboro, NC</td>
<td>40.4%</td>
</tr>
<tr>
<td>19</td>
<td>Albuquerque, NM</td>
<td>40.4%</td>
</tr>
<tr>
<td>20</td>
<td>Tucson, AZ</td>
<td>40.3%</td>
</tr>
<tr>
<td>21</td>
<td>Coral Springs, FL</td>
<td>40.2%</td>
</tr>
<tr>
<td>22</td>
<td>Fayetteville, NC</td>
<td>40.1%</td>
</tr>
<tr>
<td>23</td>
<td>Temple, TX</td>
<td>39.8%</td>
</tr>
<tr>
<td>24</td>
<td>Killeen, TX</td>
<td>39.7%</td>
</tr>
<tr>
<td>25</td>
<td>Largo, FL</td>
<td>39.6%</td>
</tr>
<tr>
<td>26</td>
<td>Peachtree Corners, GA</td>
<td>39.4%</td>
</tr>
<tr>
<td>27</td>
<td>McDonough, GA</td>
<td>39.3%</td>
</tr>
<tr>
<td>28</td>
<td>West Palm Beach, FL</td>
<td>39.3%</td>
</tr>
<tr>
<td>29</td>
<td>Palm Bay, FL</td>
<td>39.1%</td>
</tr>
<tr>
<td>30</td>
<td>Rochester, NY</td>
<td>39.1%</td>
</tr>
<tr>
<td>Rank</td>
<td>City Name</td>
<td>Increase in Median Rent from March 2020 to December 2022</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------</td>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td>31</td>
<td>Coconut Creek, FL</td>
<td>38.5%</td>
</tr>
<tr>
<td>32</td>
<td>Asheville, NC</td>
<td>38.2%</td>
</tr>
<tr>
<td>33</td>
<td>Saratoga Springs, NY</td>
<td>37.9%</td>
</tr>
<tr>
<td>34</td>
<td>Hialeah, FL</td>
<td>37.8%</td>
</tr>
<tr>
<td>35</td>
<td>Miramar, FL</td>
<td>37.8%</td>
</tr>
<tr>
<td>36</td>
<td>Hendersonville, TN</td>
<td>37.6%</td>
</tr>
<tr>
<td>37</td>
<td>Canton, GA</td>
<td>37.5%</td>
</tr>
<tr>
<td>38</td>
<td>Boynton Beach, FL</td>
<td>37.3%</td>
</tr>
<tr>
<td>39</td>
<td>Alafaya, FL</td>
<td>37.2%</td>
</tr>
<tr>
<td>40</td>
<td>Weston, FL</td>
<td>37.1%</td>
</tr>
<tr>
<td>41</td>
<td>Gastonia, NC</td>
<td>37.0%</td>
</tr>
<tr>
<td>42</td>
<td>Escondido, CA</td>
<td>37.0%</td>
</tr>
<tr>
<td>43</td>
<td>St. Petersburg, FL</td>
<td>36.9%</td>
</tr>
<tr>
<td>44</td>
<td>Spring Hill, TN</td>
<td>36.9%</td>
</tr>
<tr>
<td>45</td>
<td>Murrieta, CA</td>
<td>36.7%</td>
</tr>
<tr>
<td>46</td>
<td>Savannah, GA</td>
<td>36.7%</td>
</tr>
<tr>
<td>47</td>
<td>Noblesville, IN</td>
<td>36.5%</td>
</tr>
<tr>
<td>48</td>
<td>Tampa, FL</td>
<td>36.5%</td>
</tr>
<tr>
<td>49</td>
<td>Clearwater, FL</td>
<td>36.3%</td>
</tr>
<tr>
<td>50</td>
<td>Delray Beach, FL</td>
<td>36.3%</td>
</tr>
</tbody>
</table>

Rows highlighted in orange indicate cities located in states that are partially or fully within the Federal Reserve Bank of Atlanta’s district (Alabama, Florida, Georgia, Louisiana, Mississippi, and Tennessee).

Source: Percent increase in median rent between March 2020 and December 2022 from Igor Popov, Chris Salviati, and Rob Warnock, “Apartment List Data & Rent Estimates.”