How Much Assistance Is Needed to Support Renters through the COVID-19 Crisis?

Sarah Strochak, Aaron Shroyer, Jung Hyun Choi, Kathryn Reynolds, and Laurie Goodman

June 2020

In this brief, we compare four published estimates (including one from the Urban Institute) to size the problem of income lost to renters, and then use a new methodology to both stratify who is most affected by the rental crisis and estimate their resulting unpaid rent. We simulate the effect of actual job loss on renter households using newly released data from the Bureau of Labor Statistics on the change in job loss from February to April by state and by industry. We believe our findings improve on prior estimates because we do not assume total job loss in vulnerable industries and do not assume full take-up of unemployment assistance.

We present three different estimates to include current policy proposals, mechanisms, and scenarios:

- First, we calculate how much income support is necessary to return all renter households to their previous rent-to-income ratio. According to our estimates, that amount is $21.3 billion a month, 78 percent of which is currently covered by a combination of state unemployment insurance and the $600 weekly supplement provided for in the Coronavirus Aid, Relief, and Economic Security (CARES) Act.
- Second, we repeat the calculation to determine rental assistance instead of income support, as policymakers may wish to address housing needs directly. We estimate that bringing renter households back to their previous rent-to income ratios would cost $5.5 billion a month in rental assistance without state unemployment insurance and the CARES Act $600 weekly supplement and $1.8 billion a month with state unemployment assistance and the CARES Act supplement.

About the Renters and Rental Market Crisis Working Group

The Urban Institute convenes the Renters and Rental Market Crisis Working Group to inform the development of federal policies to address the immediate and impending effects of the COVID-19 crisis on renters and the rental market. The working group comprises leaders from the housing field including housing providers, advocates, foundations, and capital providers. The group meets weekly to track trends in data and analysis about the crisis and sharpen policy development proposals.

Through the Rental Crisis Working Group, the Urban Institute has convened a subgroup of research organizations and affiliated researchers to compare methodologies and assumptions from various estimates of rental assistance, as well as inform the creation of Urban's new estimates, which are featured in this brief. These researchers are Maxwell Austensen and Ingrid Gould Ellen of NYU Furman Center; Elizabeth Kneebone of the Terner Center for Housing Innovation at the University of California, Berkeley; and Whitney Airgood-Obrycki of the Joint Center for Housing Studies of Harvard University.

- Third, we calculate the amount of supplemental rental payments that would be needed to alleviate housing cost burdens for the nearly half of renters who were spending more than 30 percent of their income on rent before the crisis in addition to the renters who lost income due to the COVID crisis. We estimate that alleviating rent burden (i.e., capping *all* renter households' rent-to-income ratios at 30 percent) through rental assistance would cost $15.5 billion a month without the state unemployment insurance and the CARES Act $600 weekly supplement and $11.9 billion a month if paired with both renewed state unemployment assistance and the CARES Act supplement.

These three estimates reflect the most up-to-date unemployment figures at the time of the analysis. We expect the top-line estimates to change with the job market circumstances. Our estimates also highlight important distributional effects of the two scenarios. The benefits of returning to prior levels of rent burden are fairly evenly spread across income groups. In contrast, nearly 90 percent of funds allocated to alleviate rent burden for all renter households would be allocated to those with incomes below 80 percent of the area median income (AMI).

Introduction

How much rental assistance will be needed to stably house everyone through the COVID crisis? Over the past two months, researchers have produced various estimates meant to address the challenge. Each estimate comes to slightly different conclusions about the scale of the problem and what it will take to fix it.

What makes estimating the need difficult is that the housing market was already broken for low-income and, increasingly, middle-income renters. At the start of the COVID-19 crisis, a large number of people were already unstably housed or homeless. Almost half of all renters spend more than 30 percent of their income on housing costs, and a quarter pay more than 50 percent (Joint Center for

Housing Studies 2020). Only one of every five households that qualified for federal housing assistance received it (Kingsley 2017). Unprecedented job losses from the pandemic deepen the crisis for already unstable renter households and widen it to include many individuals and families who thought their housing was secure.

In this brief, we compare assumptions across current estimates of rental assistance needs. We then use facets of each methodology and new Bureau of Labor Statistics unemployment data to model a more precise estimate of the income lost to renter households as a result of the COVID-19 crisis. The estimates presented here capture the situation at this time, but both the job losses from the crisis and the data available are changing quickly as the crisis unfolds.

In each estimate, a relevant factor is how policymakers disentangle housing needs that existed before the COVID-19-induced economic collapse and whether a distinction should be made at all. The people who are the most unstably housed and those experiencing homelessness are not always fully captured in estimates of need if they were not in the labor force when the crisis hit; however, they have the highest potential life, safety, and health risks during the crisis.

Comparison of Estimation Methodologies

The Urban Institute, the Joint Center for Housing Studies of Harvard University (JCHS), the Terner Center for Housing Innovation at the University of California, Berkeley, and the Furman Center at New York University have each released estimates to illustrate either the number of renter households that are likely impacted by job or income losses, or how much rental assistance renters need to stay stably housed during the COVID-19 emergency.[1] These estimates draw on the same baseline data (the 2018 American Community Survey), but the framing and methodologies used in each analysis differ; therefore, the estimates vary (see the separate appendix file for a comparison across estimation methodologies).[2]

All four centers estimated the number of at-risk renter households employed in jobs that are most vulnerable to potential job losses from the COVID-19 crisis. They did this by using occupancy or industry codes to classify households. The four centers' estimates of the number of renter households who had at least one wage-earner at risk of job or income loss were largely similar, and differences among them were driven by differences in the selected industries (table 1). Estimates vary from 12.1 million households (by JCHS) to 14.9 million households (by Urban). Only JCHS measured the amount of rental assistance needed under various scenarios. The other studies presented renter households with individuals in vulnerable industries by household income or race and ethnicity.

TABLE 1

Number and Share of At-Risk Households

Household income	Urban		JCHS		Terner		Furman	
	Number	Share	Number	Share	Number	Share	Number	Share
Below 30% of AMI	2,073,739	20.0%	1,767,495	17.1%	1,893,154	18.3%	2,291,476	22.1%
30–50% of AMI	2,404,351	34.2%	1,937,354	27.5%	2,199,222	31.2%	2,507,830	35.6%
50–80% of AMI	3,368,909	38.5%	2,672,132	30.6%	3,262,701	37.3%	3,234,466	37.0%
80–100% of AMI	1,799,546	41.1%	1,432,723	32.7%	1,768,309	40.4%	1,629,791	37.2%
100–150% of AMI	2,860,898	41.2%	2,291,692	33.0%	2,915,854	41.9%	2,534,472	36.5%
150%+ of AMI	2,431,365	38.9%	1,959,247	31.4%	2,566,824	41.1%	2,080,285	33.3%
Total	**14,938,808**	**34.2%**	**12,060,643**	**27.6%**	**14,606,064**	**33.4%**	**14,278,320**	**32.7%**

Sources: Urban Institute (Urban) blog post, March 27, 2020; Joint Center for Housing Studies (JCHS) blog post, April 28, 2020; Terner Center for Housing Innovation (Terner) blog post, April 24, 2020; NYU Furman Center (Furman) blog post, June 4, 2020. See note 1 (page 10) for full citations.

Note: AMI = area median income.

While low income households are more likely to work in vulnerable industries, the share of people ages 16–65 who work increases with household income relative to AMI. For example, the share of people ages 16–65 that worked at least part time was 41 percent for those in households with incomes below 30 percent of AMI while it was over 85 percent for those in households with incomes at or above 150 percent of AMI. Many lower-income household members were not working before the pandemic and thus will not have losses of household income to report. This reflects that many low-income households were already financially struggling before COVID-19.

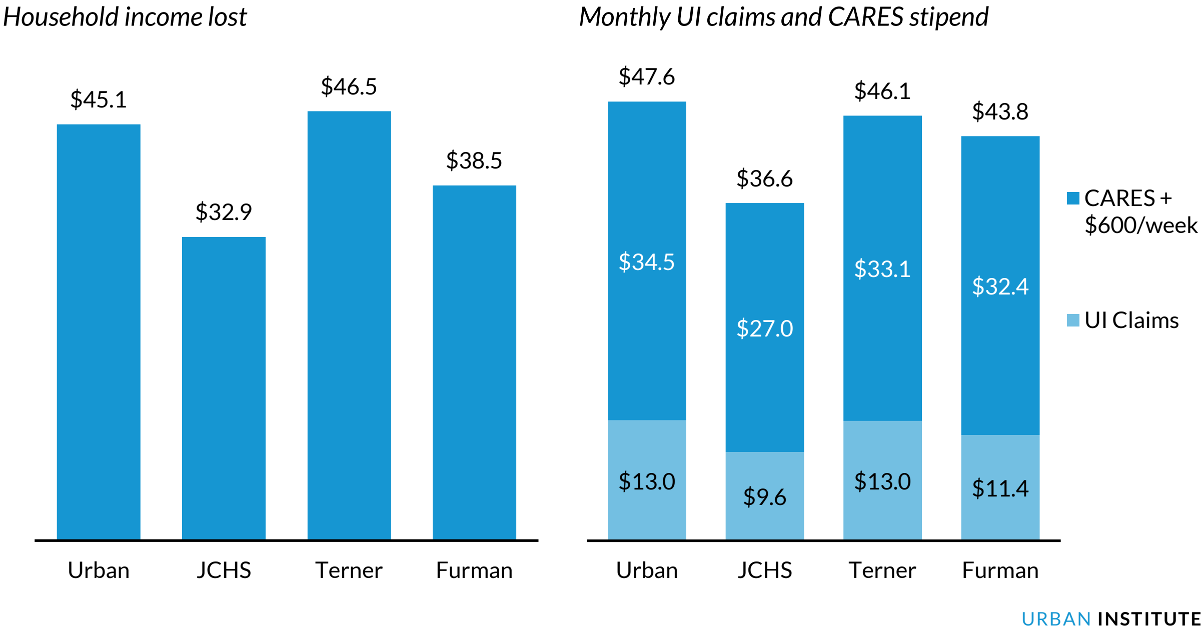
Finally, we compared these estimates of lost household income to the benefits households would receive from unemployment insurance and the additional CARES Act $600 weekly supplement. State unemployment assistance provides those who successfully file an unemployment claim with a portion of their previous salary for approximately 26 weeks (CBPP 2020), and the CARES Act allows an additional 13 weeks of unemployment assistance.[3] The CARES Act also expands unemployment insurance benefits by $600 a week through July 31, 2020, for people who are out of work because of the COVID-19 pandemic.

We assume that all people who lost their jobs lose 100 percent of their income and get half their monthly income through unemployment assistance if it does not exceed their state's maximum benefit. If it does exceed, then we assume that the person received the state's maximum UI benefit. We find that the unemployment benefits and CARES Act supplement cover the estimated income losses (figure 1).

These estimates have two major limitations. They likely overstate the amount of assistance needed because they assume total job loss for renters in the vulnerable sectors. This suspicion is confirmed by April unemployment benefit claims data, which show $48 billion was distributed to homeowners and renters together, a figure that nears the amount estimated for renters alone here.[4] And, by focusing on the most vulnerable industries, these estimates do not capture job loss in other sectors, which affect the income characteristics of the populations of affected renter households.

FIGURE 1

Comparing Income Losses to Assistance from State and Federal Unemployment (in billions of dollars)



A New Method: Simulating Rental Assistance Gaps

Building on these estimates, we create a new approach that refines the previous assumptions to make analysis of the amount of monthly income lost to renter households, and therefore the rental assistance needed to cover this loss, more accurate. We use newly released data from the Bureau of Labor Statistics on the change in job loss from mid-February to mid-April by state and by industry to simulate the effect of job loss on renter households. Within the same industry, renters have higher unemployment rates than homeowners, therefore we use weights to model slightly higher job loss. This analysis does not capture households that did not lose jobs but might face significant income losses from reduced hours. For example, recent survey data from the US Census Bureau found that nearly half of all households (includes homeowners) lost income because of COVID-19.[5]

For each industry, we calculate the ratio of renter unemployment to homeowner unemployment, and then use this ratio to adjust job loss for renters. We use the same method as described above to consider the effect of unemployment insurance, but we assume a take-up rate of 65 percent based on an analysis that shows that many eligible applicants are unable to successfully navigate their states' unemployment system (Zipperer and Gould 2020). For more details on our analysis, see the technical appendix.

Using this method, we estimate that there are 8.9 million renter households (20 percent of all renter households) with at least one person who has lost their job in the past two months. The share of households that had at least one member experience a job loss varies by income level. We theorize that the variation stems partly from the difference in pre-crisis employment participation by income group.

For example, 42 percent of renters earning below 30 percent of AMI worked in the previous year, while over 80 percent of renters earning over 80 percent of AMI worked in the past year. Our estimate found that 11 percent of households making below 30 percent of AMI lost a job in recent months, compared with over 26 percent of renter households making over the AMI (see table 2). The lower rate of job loss among extremely low-income renters may also reflect that those who are working are more likely to be employed in essential industries, such as waste management, health care, or food service.[6]

TABLE 2

Job Loss by Income

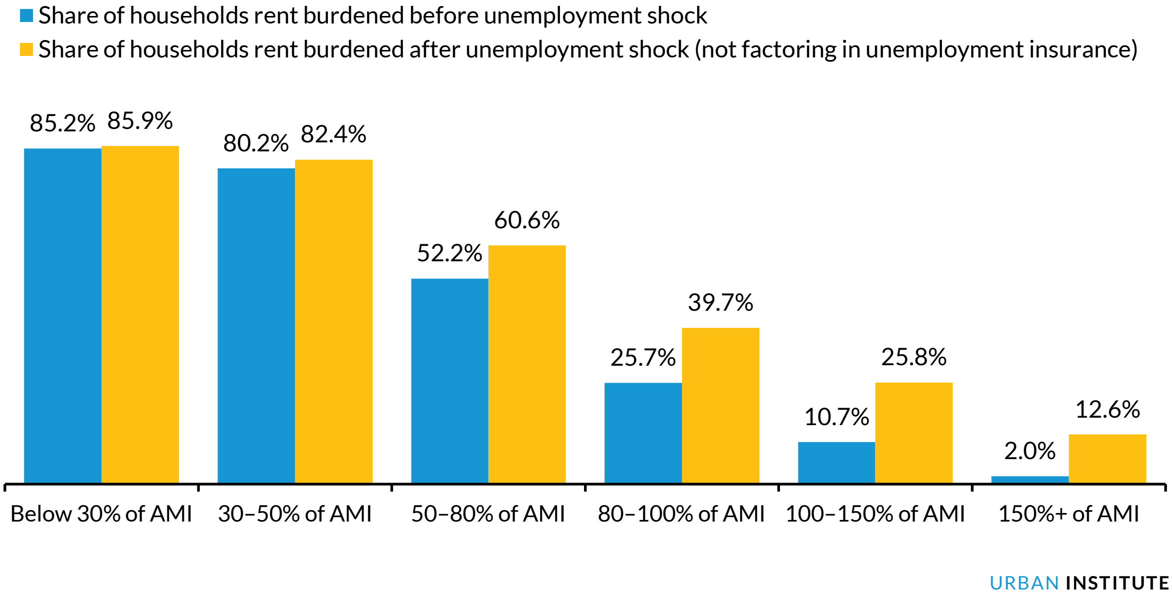
Household income	Households with at least one job loss	Share of households at income level with at least one job loss
Below 30% of AMI	1,098,419	10.6%
30–50% of AMI	1,286,004	18.3%
50–80% of AMI	1,963,293	22.4%
80–100% of AMI	1,064,089	24.3%
100–150% of AMI	1,831,024	26.3%
150%+ of AMI	1,671,813	26.8%
Total	**8,914,642**	**20.4%**

Fifty-nine percent of renter households that experienced at least one job loss were not previously housing cost burdened (paid more than 30 percent of their income on rent), 23 percent of households that experienced at least one job loss were previously cost burdened, and 18 percent of households that experienced at least one job loss were previously severely cost burdened (paid more than 50 percent of their income on rent). The lower number of severely cost-burdened households impacted again stems from a lower share of people in these households in the labor force before the COVID-19 crisis. Approximately half of renters with a severe cost burden had worked in the previous year, while 70 percent of rent-burdened households, and 81 percent of unburdened households had worked in the previous year.

As a result of job losses and before factoring in state and federal unemployment assistance, rent burden increased the most for renter households making above 100 percent of AMI, while rent burden remains fairly stable, albeit extremely high, for households making below 50 percent of AMI (figure 2).

FIGURE 2

How Job Losses Affect Rent Burden



What Would It Take to Return Renters to Prior Levels of Rent Burden?

We conducted an analysis on what it would take to return all renter households to their prior levels of rent burden in two ways: through income supports and through rental assistance. Income supports restore the income lost from recent employment shocks, while rental assistance provides a share of support as a rental payment for households that experienced income drop due to job losses. Income supports are substantially costlier than rental assistance, but they provide financial support to households beyond just paying rent.

We estimate that without federal and state unemployment assistance, it would cost $21.3 billion a month in income support to return all renter households to their prior rent-to-income ratio. Some renters with higher incomes will choose to pay less than 30 percent of their total income on rent. For renters who were previously paying below 30 percent of their income on rent, we estimated what it would take to return them to a 30 percent rent-to-income ratio, which is the standard used by federal programs, not to their prior rent to income ratio.

We calculate that a combination of state unemployment insurance and the CARES Act $600 weekly supplement currently covers 78 percent of the monthly cost. Accounting for these benefits, it would cost $4.6 billion a month in income support to return all renter households to their prior rent-to-income ratio. State unemployment assistance alone covers 59 percent of that monthly cost. This analysis highlights the potential dire effects if the supplemental unemployment assistance from the CARES Act, as well as basic unemployment assistance, expire without a replacement.

TABLE 3

Monthly Cost of Returning Households to Prior Rent Burden, with a Cap of 30 Percent, through Income Supports

Households with job loss	With no benefits	With basic UI benefits	With CARES Act $600/week
8,914,642	$21,349,009,333	$8,668,882,482	$4,643,107,753

Federal and state policymakers could also provide assistance is by supplying renters with the minimum amount necessary to pay rent (as opposed to the income support method, which provides income and assumes renters will spend the same percentage on rent as they did before the crisis). Therefore, we also estimate the monthly cost of providing assistance to enable renter households who had lost jobs to fulfill their rental obligations. We analyzed how much monthly rental assistance would be needed to return households to their prior rent-to-income ratio. We estimate that this would cost $5.5 billion a month without both the state unemployment insurance and the CARES Act $600 weekly supplement, $3.6 billion a month if paired with only state unemployment assistance, and $1.8 billion a month if paired with renewed state unemployment assistance and the CARES Act supplement.

TABLE 4

Monthly Cost of Returning to Prior Rent-to-Income Ratio, with a Cap of 30 Percent, through Rental Assistance

Households with job loss	With no benefits	With basic UI benefits	With CARES Act $600/week
8,914,642	$5,477,058,655	$3,636,848,862	$1,849,559,021

What Would It Take to Alleviate Rent Burden for All Renters?

The COVID-19 crisis exacerbates an existing housing crisis. Members of low-income households were less likely to be working before the economic shock, so they are less likely to receive support that is provided only to those who lose their jobs. Therefore, we also estimate the amount needed to alleviate rent burden for all renters, not just those directly impacted by COVID-19-related job loss. To answer this question, we only looked at the cost to supplement rental payments and not to replace lost income.

We estimate that alleviating rent burden through rental assistance would cost $15.5 billion a month without both the state unemployment insurance and the CARES Act $600 weekly supplement, $14 billion a month if paired with only state unemployment assistance, and $11.9 billion a month if paired with renewed state unemployment assistance and the CARES Act supplement.

TABLE 5

Monthly Cost of Alleviating Rent Burden through Rental Assistance

Before unemployment shock	With no benefits	With basic UI benefits	With CARES Act $600/week
$11,392,997,235	$15,486,389,450	$13,993,661,979	$11,906,868,231

Analyzing Assistance Options by Income Level

Next, we analyze the two rental assistance options (returning households to previous rent burden with a 30 percent cap and alleviating rent burden for all renters) by income level. This level of analysis is important because our estimates provide aggregate monthly numbers based on one point in time. Providing per capita estimates could allow policymakers to consider how to resize assistance based on changes in unemployment levels.

For this analysis, we factored in benefits already dispersed through state unemployment assistance and the CARES Act $600 weekly supplement. Returning to prior levels of rent burden allocates a greater share of spending, measured per household, to higher-income groups than alleviating rent burden for all renters (table 6). The cost of alleviating rent burden for all renter households allocates the highest spending per household on households under 30 percent of AMI, with an estimated $562 per household. Spending per household drops sharply as income increases under the second proposal.

The benefits of returning to prior levels of rent burden are fairly evenly spread across income groups. In contrast, nearly 90 percent of funds allocated to alleviate rent burden for all renter households would be allocated to those below 80 percent of AMI (figure 3).

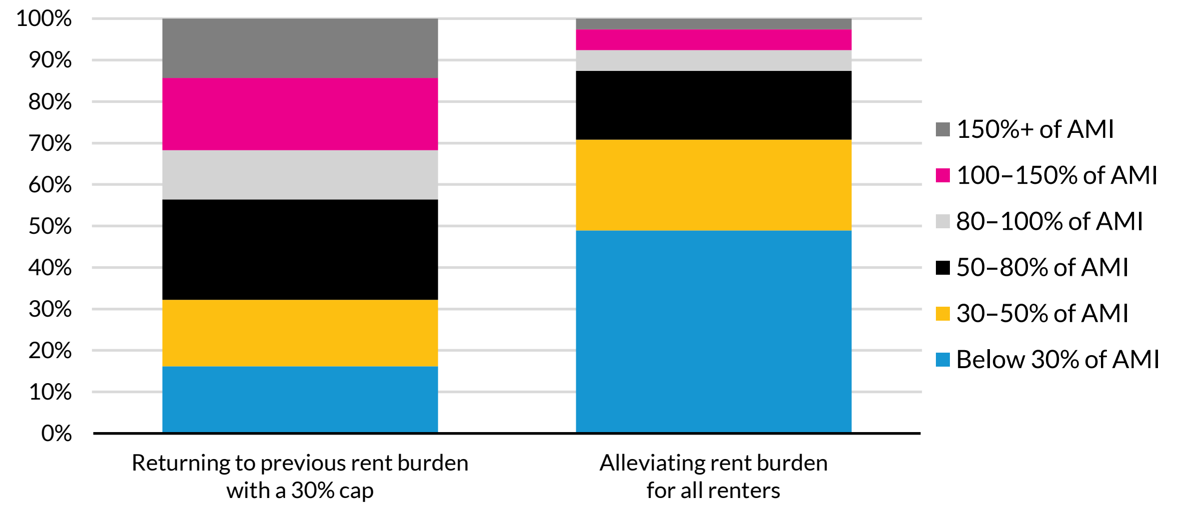
TABLE 6

Monthly Cost per Household of Two Rental Assistance Proposals

	Returning Households to Previous Rent Burden with a 30% Cap			Alleviating Rent Burden for All Renters		
Household income	**Households**	**Total spending**	**Spending per household**	**Households**	**Total spending**	**Spending per household**
Below 30% of AMI	1,098,419	$298,872,146	$272	10,363,143	$5,828,365,935	$562
30–50% of AMI	1,286,004	$297,454,411	$231	7,039,143	$2,602,612,401	$370
50–80% of AMI	1,963,293	$446,361,305	$227	8,745,562	$1,971,865,938	$225
80–100% of AMI	1,064,089	$219,420,897	$206	4,377,909	$595,423,861	$136
100–150% of AMI	1,831,024	$322,823,348	$176	6,951,006	$600,297,009	$86
150%+ of AMI	1,671,813	$264,626,915	$158	6,248,590	$308,303,088	$49
Total	**8,914,642**	**$1,849,559,021**	**$207**	**43,725,353**	**$11,906,868,231**	**$272**

FIGURE 3

Benefits by Income Group for Two Rental Assistance Proposals



Many Renter Households Struggling before the COVID Crisis Do Not Benefit from CARES Act Assistance

Unemployment insurance is alleviating the pain for many renter households, but the share of households that previously participated in the labor force and experienced job loss increases with prior incomes, which means that much of the expanded unemployment assistance from the CARES Act flows to higher-income households. As table 7 shows, unemployment assistance spending per household increases with household income. We estimate that 45 percent of combined federal and state assistance goes to renter households earning above 100 percent of the area median income.

TABLE 7

Estimated Monthly Assistance from UI Benefits and Cares Act, by Income

Household income	Number of households	Number of households receiving assistance	State unemployment assistance, plus CARES Act weekly $600 supplement	Spending per household	Spending per household receiving assistance
Below 30% of AMI	10,363,143	718,851	$2,202,626,591	$213	$3,064
30–50% of AMI	7,039,143	869,086	$3,043,723,895	$432	$3,502
50–80% of AMI	8,745,562	1,316,237	$5,041,948,950	$577	$3,831
80–100% of AMI	4,377,909	718,402	$2,932,392,476	$670	$4,082
100–150% of AMI	6,951,006	1,254,130	$5,363,251,600	$772	$4,276
150%+ of AMI	6,248,590	1,154,191	$5,269,321,159	$843	$4,565

Conclusion

This brief introduces new estimates of the amount of rental assistance needed to keep renters stably housed through the COVID-19 crisis. Despite better-than-expected jobs numbers from May, far more renters are at risk of housing instability and homelessness, and more assistance is needed to help them weather the storm. These estimates use newly released data to model lost renter income, as well as participation in unemployment assistance. These estimates provide a snapshot of needs based on the April unemployment data. We expect the top-line estimates to change with the job market circumstances.

Currently, the combination of state unemployment insurance and the CARES Act $600 weekly supplement nearly fill the gap needed to return renter households to their pre-crisis levels of cost burden. With the impending July benefit cliff for expanded unemployment insurance benefits available under the CARES Act and a rolling cliff for state unemployment assistance to follow later this year, policymakers must decide how to provide assistance to renters, which subset of the population to target the assistance, and whether the policy goal of that assistance is to return those renters to pre-crisis cost burdens or alleviate a greater share of their burden. The magnitude of the assistance needed will depend on how quickly affected renter households can regain employment, as well as the extension of the additional unemployment assistance from the CARES Act.

Notes

1 Karan Kaul and Laurie Goodman, "The Price Tag for Keeping 29 Million Families in Their Homes: $162 Billion," *Urban Wire* (blog), Urban Institute, March 27, 2020, https://www.urban.org/urban-wire/price-tag-keeping-29-million-families-their-homes-162-billion; Whitney Airgood-Obrycki, "How Much Assistance Would It Take to Help Renters Affected by COVID-19?" Joint Center for Housing Studies of Harvard University blog, April 28, 2020, https://www.jchs.harvard.edu/blog/how-much-assistance-would-it-take-to-help-renters-affected-by-covid-19/; Elizabeth Kneebone and Cecile Murray, "Estimating COVID-19's Near-Term Impact on Renters," Terner Center for Housing Innovation blog, April 24, 2020, https://ternercenter.berkeley.edu/blog/estimating-covid-19-impact-renters; "Understanding the Potential Magnitude of Rent Shortfalls in New York Due to COVID," *The Stoop* (blog), NYU Furman Center, June 4, 2020, https://furmancenter.org/thestoop/entry/understanding-the-potential-magnitude-of-rent-shortfalls-in-new-york-state.

2 The American Community Survey microdata provide a wealth of information on workers and households, but the most recent data were collected in December 2018. They represent the most complete and up-to-date publicly available information, but they still might not accurately capture pre-crisis conditions. For example, between December 2018 and the start of the COVID-19 crisis, unemployment rates fell, labor force participation rose, and rent prices rose.

3 "Unemployment Insurance Relief during COVID-19 Outbreak," US Department of Labor, accessed June 10, 2020, https://www.dol.gov/coronavirus/unemployment-insurance.

4 Greg Iacurci, "Americans Got $48 Billion in Unemployment Benefits Last Month. It Could Have Been Double," CNBC, May 14, 2020, https://www.cnbc.com/2020/05/14/americans-got-48-billion-in-unemployment-benefits-in-april.html.

5 "Measuring Household Experiences during the Coronavirus (COVID-19) Pandemic," US Census Bureau, https://www.census.gov/householdpulsedata.

[6] Audrey Kearney and Calley Muñana, "Taking Stock of Essential Workers," Kaiser Family Foundation, May 1, 2020, https://www.kff.org/coronavirus-policy-watch/taking-stock-of-essential-workers/.

References

CBPP (Center on Budget and Policy Priorities). 2020. "Policy Basics: How Many Weeks of Unemployment Compensation Are Available?" Washington, DC: Center on Budget and Policy Priorities.

Joint Center for Housing Studies. 2020. *The State of the Nation's Housing 2019*. Cambridge, MA: Joint Center for Housing Studies of Harvard University.

Kingsley, G. Thomas. 2017. *Trends in Housing Problems and Federal Housing Assistance*. Washington, DC: Urban Institute.

Zipperer, Ben, and Elise Gould. 2020. "Unemployment Filing Failures." Washington, DC: Economic Policy Institute.

About the Authors

Sarah Strochak is a research analyst in the Housing Finance Policy Center at the Urban Institute. She works with researchers to analyze data, write blog posts, and produce data visualizations for the center's work on access to credit, homeownership, and affordable housing. Strochak received a BA with honors in economics from the University of California, Berkeley, with minors in city and regional planning and geospatial information science and technology. While at Berkeley, she was a research assistant at the Terner Center for Housing Innovation.

Aaron Shroyer is a policy associate with the Research to Action Lab at the Urban Institute. His project work involves advising foundations and local governments on policy and grantmaking strategies around the issues of housing and community development. His projects have included developing policy solutions that increase housing affordability and supporting local initiatives aimed at creating inclusive economies. Before joining Urban, Shroyer was a management fellow for the City of Kansas City, Missouri, focusing on projects related to economic development, housing and neighborhood development, sustainability, and performance management. Before that, he was a summer mayoral fellow within Mayor Rahm Emanuel's office in Chicago. Shroyer has a bachelor's degree in government and a master's degree in leadership and public policy, both from the University of Virginia.

Jung Hyun Choi is a research associate with the Housing Finance Policy Center. She studies urban inequality, focusing on housing, urban economics, real estate finance, and disadvantaged populations in the housing market. Before joining Urban, Choi was a postdoctoral scholar at the University of Southern California Price Center for Social Innovation, where her research examined innovative housing and social policies to enhance quality of life for low-income households. Choi holds a PhD in public policy and management from the Price School of Public Policy at the University of Southern California.

Kathryn Reynolds is a policy program manager with the Research to Action Lab. Previously, Reynolds was deputy director of the White House Council for Strong Cities, Strong Communities, a council founded by President Obama to help achieve economic recovery in US cities. She was a 2011–13

Presidential Management Fellow. She holds a master's degree in public administration from New York University's Wagner Graduate School of Public Service.

Laurie Goodman is a vice president at the Urban Institute and codirector of its Housing Finance Policy Center, which provides policymakers with data-driven analyses of housing finance policy issues that they can depend on for relevance, accuracy, and independence. Goodman spent 30 years as an analyst and research department manager on Wall Street. From 2008 to 2013, she was a senior managing director at Amherst Securities Group LP, a boutique broker-dealer specializing in securitized products, where her strategy effort became known for its analysis of housing policy issues. From 1993 to 2008, Goodman was head of global fixed income research and manager of US securitized products research at UBS and predecessor firms, which were ranked first by *Institutional Investor* for 11 years. Before that, she held research and portfolio management positions at several Wall Street firms. She began her career as a senior economist at the Federal Reserve Bank of New York. Goodman was inducted into the Fixed Income Analysts Hall of Fame in 2009.

Goodman serves on the board of directors of MFA Financial, Arch Capital Group Ltd., and DBRS Inc. and is an adviser to Amherst Capital Management. She has published more than 200 journal articles and has coauthored and coedited five books. Goodman has a BA in mathematics from the University of Pennsylvania and an AM and PhD in economics from Stanford University.

Acknowledgments

This brief was produced in consultation with the Renters and Rental Market Crisis Working Group, a cross-sector group of housing stakeholders working on COVID-19 response policies and funded by grants from JPMorgan Chase and the Ballmer Group, among others. We are grateful to them and to all our funders, who make it possible for Urban to advance its mission.

Unless otherwise specifically stated, the views and opinions expressed in the brief are solely those of the authors and do not necessarily reflect the views and opinions of JPMorgan Chase & Co. or its affiliates. The views expressed also should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute's funding principles is available at urban.org/fundingprinciples.

We are deeply grateful to the following people for their contributions: Erika Poethig of the Urban Institute; Maxwell Austensen and Ingrid Gould Ellen of NYU Furman Center; Elizabeth Kneebone of the Terner Center for Housing Innovation at the University of California, Berkeley; and Whitney Airgood-Obrycki of the Joint Center for Housing Studies of Harvard University.

URBAN INSTITUTE

500 L'Enfant Plaza SW
Washington, DC 20024

www.urban.org

ABOUT THE URBAN INSTITUTE

The nonprofit Urban Institute is a leading research organization dedicated to developing evidence-based insights that improve people's lives and strengthen communities. For 50 years, Urban has been the trusted source for rigorous analysis of complex social and economic issues; strategic advice to policymakers, philanthropists, and practitioners; and new, promising ideas that expand opportunities for all. Our work inspires effective decisions that advance fairness and enhance the well-being of people and places.