March 2, 2023

The Honorable Jonathan Kanter
Assistant Attorney General
Antitrust Division
United States Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Assistant Attorney General Kanter:

We write regarding our concerns about the role that algorithmic rent-setting software may play in facilitating de-facto price setting and driving rapid inflation for rental properties, and to share the findings from our recent investigation of RealPage’s YieldStar product. These findings are particularly important given the Biden Administration’s recently announced actions to protect American renters.¹

In January, President Biden tasked the United States Department of Justice (DOJ or the Department) with addressing anti-competitive information sharing practices in the housing market.² The rise of institutional investors and rent-setting algorithms have weakened competition in the already strained housing market, resulting in substandard services and unnecessarily high housing costs for American families.³

It is therefore essential that the Department use all of its tools to ensure that renters do not fall victim to corporate landlords and anti-competitive forces. We were pleased that, last month, the Department made an important announcement that it would “heighten its scrutiny of competing companies’ pricing and other information sharing practices” because of concerns that they can “enable illegal collusion.”⁴ Our investigation of RealPage’s YieldStar product provides important new information to guide the Department’s efforts.

As institutional investors’ housing portfolios have grown, so too has their power to set rents as competition in certain housing markets dwindles. Following the financial crisis of 2008, the presence of institutional investors, particularly in the single-family housing space, has grown steadily at about 3 percent each year since 2010.⁵ By buying up chunks of housing at prices

² Id.
that are often far lower than what is charged for traditional homebuyers, large institutional investors have amassed hundreds of thousands of homes.⁶ Furthermore, these homes have increasingly become consolidated within the hands of a few, large corporate actors: Invitation Homes and American Homes 4 Rent alone have amassed approximately 130,000 single-family homes.⁷

Institutional investor purchases have been particularly targeted in high-growth regions – places where housing prices are low, population growth is high, and housing supply is scarce.⁸ Targeting has serious implications for residents of the communities that have the highest percentage of investor-owned homes. At a Senate Banking, Housing, and Urban Affairs Committee hearing, Laura Brunner, Port of Greater Cincinnati Development Authority president and CEO, testified, “We’ve been told by institutional investors that they only own about 1 percent of single-family homes; however ... this could mean 50 percent of the houses on a single street. When the geographical impact is so concentrated, it has a game-changing effect on what it means to live in that neighborhood.”⁹

A recent ProPublica investigation revealed that institutional investors are not acting alone in reducing competition in the housing market. According to the report, RealPage’s YieldStar product, a “software that uses a mysterious algorithm to help landlords push the highest possible rents on tenants,” has become the favored rent-setting tool for some of the largest landlords in the country.¹⁰ Greystar, the largest property management company in the U.S., uses this software to set rents for over 150,000 apartments.¹¹ The investigation highlighted that the algorithm’s consideration of non-public pricing information when calculating rent recommendations has effectively created a “cartel” of landlords that is able to take advantage of non-public information to fix rents.¹²

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⁸ Id.


We opened an investigation of YieldStar in November 2022, requesting information on how this rent-setting software has affected the rental housing market. While RealPage did not provide us with all of the requested information that would have provided insight into YieldStar’s direct effects on rent levels, what they did share was alarming. Publicly available information from RealPage indicates that the software is used to help set prices for over four million units, which would be approximately 8% of all rental units, and appears to show that the company has access to “transactional apartment data from the rent rolls of 13+ million units.” Information provided by RealPage also revealed that the use of YieldStar has been most prevalent in some of the regions most heavily targeted by corporate buyers and with the highest rent increases.

Notably, RealPage provided important information about the extent to which the company facilitates information sharing by and among large institutional landlords – a particular concern given the market share of the product. The company’s response indicated that “YieldStar uses a proprietary algorithm to make recommendations to apartment providers about setting a price for rental units at their property,” and that “the YieldStar software is fundamentally built on the disruptive idea that a property’s internal supply and demand dynamics are much more important than external factors, such as rents offered by other properties.” RealPage also noted that all data provided to landlords about outside properties is “anonymized and averaged.”

But RealPage’s response goes on to describe multiple instances where the algorithm facilitates and uses information sharing about rentals charged by other properties. For example, in describing the steps used by the YieldStar to recommend rents, the company indicates that:

If…it is determined that a supply/demand imbalance for that specific property is expected and thus that a [rental] price adjustment should be considered…the software uses aggregated, anonymized data from multiple sources about publicly available asking rents or actual, historically achieved rents at similar properties to help determine the price elasticity of demand…Based on this, the algorithm recommends the appropriate magnitude of any rent adjustment.

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16 Id, at 8.

17 Id, at 6.
The company continued, describing how “YieldStar will consider external data about rents for equivalent floor plans at a previously established set of other properties in the area. This produces a range (high end and low end) of rents that have been historically charged (or have been recently asked) for the particular floor plan being priced.”

Notably, the company indicates that although much of its algorithm is based on publicly available sources, it also has access to and uses proprietary data in the rent-recommendation process.

With respect to generating a range of rents, YieldStar relies on a variety of data sources for rents at other properties, including public sources, such as rents listed on apartment provider websites. While rents for other properties that are used to generate a range are gathered largely from publicly available information, YieldStar supplements these rents with data, where available, on achieved effective rents based on executed leases.

Although the company did not inform us about the precise extent to which this non-public data is used, this could be a particular problem given the company’s market share. In fact, given YieldStar’s market share, even the widespread use of its anonymized and aggregated proprietary rental data by the country’s largest landlords could result in de-facto price-setting by those companies, driving up prices and hurting renters. This is particularly disturbing given that increases in shelter costs accounted for about half of the increase in the Consumer Price Index in January 2023, with rent increasing 8.6 percent from last year.

Last month, the Department rescinded previously issued guidance on information sharing practices. This guidance provided a safe harbor to companies like RealPage, and we now know – based on the findings of our investigation – that safe harbor may have provided potential opportunities for de facto collusion and price setting. Given these findings, the DOJ should act to protect American families and closely review rent-setting algorithms like YieldStar to determine if they are having anti-competitive effects on local housing markets that have seen increased institutional investor activity.

We thank you for your attention to this matter, and are happy to provide you with additional information on our investigation of YieldStar.

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19 CNBC, “Inflation rose 0.5% in January, more than expected and up 6.4% from a year ago,” Jeff Cox, February 14, 2023, https://www.cnbc.com/2023/02/14/consumer-price-index-january-2023-.html.
22 Id.
Sincerely,

Elizabeth Warren  
United States Senator

Tina Smith  
United States Senator

Bernard Sanders  
United States Senator

Edward J. Markey  
United States Senator