ALGORITHMIC OVERSIGHT

GOVERNING AI IN THE RENTAL MARKET, ALGORITHMIC PRICING FROM ANTITRUST TO LEGISLATION

PRESENTED TO THE FACULTY OF THE DEPARTMENT OF PUBLIC POLICY AND ADMINISTRATION

CALIFORNIA STATE UNIVERSITY, SACRAMENTO

Master of Public Policy and Administration

BY

MATTHEW MELVILLE

FALL TERM 2025



of

ALGORITHMIC OVERSIGHT:

GOVERNING AI IN THE RENTAL MARKET, ALGORITHMIC PRICING FROM ANTITRUST TO LEGISLATION by

Matthew Scott Melville

Rising housing costs remain one of the most persistent challenges in the United States, and rent increases have outpaced wage growth for decades. Many structural factors contribute to high rents, including underbuilding, restrictive zoning, consolidation in the rental industry, and increased construction and financing costs. In addition, policymakers have become increasingly concerned about the role of algorithmic pricing tools in contributing to rent increases. This paper examines the influence of RealPage, Inc., the largest provider of rent-setting software in the multifamily housing market, and evaluates the legal and legislative frameworks emerging in response.

RealPage's revenue management and artificial intelligence-based pricing systems rely on the continuous exchange of nonpublic rental data among competing landlords.

Regulators argue that this information exchange, combined with RealPage's automated pricing recommendations and enforcement of high acceptance rates, facilitates algorithmic collusion. This is a form of coordinated price setting in which software

produces uniform market behavior without direct agreements among property owners.

The Department of Justice and multiple state attorneys general have alleged that

RealPage's practices constitute a hub and spoke conspiracy under the Sherman Act and that the company has monopolized or attempted to monopolize the market for revenue management software.

Policy responses vary across federal, state, and local levels. At the federal level, the Department of Justice is attempting to apply existing antitrust law to algorithmic coordination. Although this approach provides a pathway toward national precedent, federal litigation is lengthy and uncertain. Local governments have acted more quickly. Cities such as Berkeley, San Francisco, Philadelphia, and Minneapolis have enacted ordinances that restrict or prohibit the use of algorithmic rent-setting tools. These efforts demonstrate innovation but also create a fragmented regulatory environment that exposes jurisdictions to costly lawsuits.

State governments have emerged as the most active policy venue. More than half of all states have introduced legislation regulating algorithmic pricing in the rental market. These include comprehensive prohibitions, targeted bans on the use of nonpublic competitor data, and amendments to existing antitrust statutes. California's AB 325 and Connecticut's HB 7209 embed algorithmic pricing restrictions into broader housing and consumer protection laws, while states such as New York focus on

narrower definitions intended to regulate price coordination without limiting technological development.

Taken together, the RealPage litigation and resulting legislation reveal both the promise and limitations of American federalism in regulating emerging technologies.

Although algorithmic pricing is only one part of the housing affordability crisis, the rapid spread of policy activity demonstrates that lawmakers view it as an important and actionable contributor. The central challenge is whether democratic institutions can adapt fast enough to govern markets that are increasingly shaped by artificial intelligence.

ACKNOWLEDGEMENTS

To my wife, Mary, who has supported me unwaveringly on my academic journey.

To my parents, Brian and Audrey, for their endless support, thoughtful edits, and faith in my abilities.

And to Shane, my advisor, who has mastered the rare art of telling a student he is way off the beaten path with kindness and good humor.

I could not have done this without you.

Thank you,

Matthew

TABLE OF CONTENTS

	Page
Exec	cutive Summaryii
Ackr	nowledgementsv
Tabl	e of Contentsvi
List	of Tables and Figures vii
Chap	oter
1.	Introduction
2.	Federal Legal and Regulatory Responses
3.	Federal Antitrust Litigation
5.	Policy and Legislative Efforts at the Local Level
6.	Policy and Legislative Efforts at the State Level
7.	Conclusion
8.	Bibliography

LIST OF FIGURES

Figure	es	Page
1.	Poverty With and Without Geographic Price Adjustments	3
2.	Hub and Spoke Conspiracy Model	11
3.	RealPage's Market Penetration in the Phoenix Area	15
4.	RealPage's Market Penetration in the Tucson Area	16
5.	Local Legislative Efforts Regulating Algorithmic Rent	19-
	20	
6.	Primary State Legislation Regulating Algorithmic Rent Setting (2025)	23-
	25	
7.	Pending or Committee-Level State Legislation	28-
	29	
8.	Summary of State Legislative Approaches to Algorithmic Rent Regulation	on 31

I. Introduction

Housing affordability has become a national crisis in the United States. Over the last decade, rents have risen significantly faster than wages, and nearly half of all renters are now considered rent-burdened, spending more than 30 percent of their income on housing. The United States faces a shortage of several million units, and vacancy rates remain near historic lows. These broad national pressures form the backdrop for more severe affordability problems in many states and metropolitan regions.

So goes California, so goes the nation. What was once viewed as a uniquely West Coast problem is now a nationwide concern, and California illustrates the most extreme version of these trends. Across the state, the cost of housing has risen dramatically relative to median wages (Hermann, 2024). California faces an estimated shortage of 3.5 million homes, including nearly 1.5 million affordable units (Walters, 2021). Its median home price is second only to Hawaii's, and the high cost of housing contributes to the state's distinction as having the nation's highest rate of functional poverty and among the lowest homeownership rates. California also reports one of the largest homeless populations in the country, with approximately 172,000 individuals experiencing homelessness, representing about 0.48 percent of the state's total population (Walters, 2021).

The shortage of affordable housing carries substantial fiscal, economic, and social costs. California spends approximately \$7.2 billion annually on homelessness programs, nearly \$42,000 per individual (Jackson and Winegarden, 2023). Limited housing near centers of employment constrains labor mobility, reduces productivity, and lowers both personal income and state tax revenues (Klurfield, 2024). Rents have risen sharply, and between January 2020 and September 2025, average rents in California increased by 45 percent while hourly wages grew by only 25 percent (Parolin, 2024). As a result, approximately 55 percent of California renters are rent-burdened, and 27 percent are severely rent-burdened (Walters, 2021). As Parolin (2024) notes, the rise in California's poverty threshold due to housing costs has effectively nullified the poverty-reducing gains from federal programs such as SNAP since the 1980s. Expanding the housing supply, therefore, provides not only economic relief but also substantial redistributive benefits comparable to major income support programs, making it a critical anti-poverty policy tool (Parolin, 2024).

In the figure one below, we see how poverty rates change when the cost of living is modeled. The blue diamonds represent each state's poverty rate without adjusting for local prices, while the black dots show the poverty rate after adjusting for geographic differences in housing and living costs. High-cost states like California, New York, and Florida have much higher adjusted poverty rates; the most significant factor is housing costs.

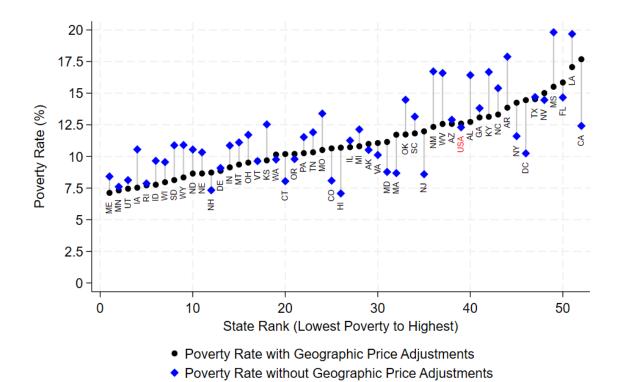


Figure 1. Poverty with and Without Geographic Price Adjustments

Inadequate housing supply also generates significant negative externalities.

Economically, high rents suppress wealth accumulation by diverting income away from savings or investment. Elevated rent burdens differ from increases in home prices because the impact is immediate, with renters facing higher costs each month that reduce disposable income and heighten financial precarity. Socially, high housing costs correlate with poorer health outcomes, reduced life expectancy, and increased mental health challenges (Singh, 2023). Limited housing near jobs contributes to longer commutes, labor-market mismatches, and lower workforce participation (Parolin, 2024). Environmentally, restricted infill development pushes new construction outward,

increasing vehicle miles traveled and contributing to greenhouse gas emissions. The visibility of homelessness and housing inequality further erodes public trust in government institutions and weakens community stability (Barnes, 2022). Taken together, these pressures create a housing market that is highly sensitive to any additional distortions, including those introduced by algorithmic rent-setting.

While many structural forces contribute to the high cost of rent, a growing body of policy attention is focused on the role of algorithmic pricing tools. Several factors have contributed to rising rents, including regulatory barriers, restrictive zoning, market consolidation, "MMBY"s Not In My Back Yard, activists who oppose construction near them or in their neighborhoods even if they acknowledge the necessity of the construction in their community, and escalating construction and financing costs (Vogell, 2024). These pressures have produced decades of underbuilding relative to population and job growth, and the relationship between supply, demand, regulatory policy, and financial conditions further complicates the rental market (Vogell, 2024). In this complex system, algorithmic price-setting software represents a new and powerful market force with the potential to raise rents and reduce occupancy rates.

RealPage, Inc., a dominant provider of rent-setting software, has consolidated its influence over the rental market, with estimates suggesting that its tools set rents for 70 percent or more of units in some regions. By pooling nonpublic rental data from competitors and generating standardized pricing recommendations, RealPage's

software may facilitate a form of algorithmic collusion. These pricing tools are increasingly cited by policymakers, regulators, and scholars as a potential contributor to rising rental prices across the country (Servidea, 2025). Cities such as Berkeley, San Francisco, and Philadelphia have already passed ordinances banning or restricting the use of algorithmic pricing tools, although Berkeley has paused enforcement due to litigation (Servidea, 2025). This reflects a broader uncertainty over whether algorithmic pricing falls within existing antitrust law or whether new legislation is required.

This paper examines how federal, state, and local governments are responding to algorithmic rent-setting tools such as those used by RealPage and what these responses reveal about the strengths and limitations of American federalism in regulating emerging technologies. It also examines whether existing antitrust law is sufficient to address algorithmic coordination or whether legislative intervention is needed.

II. Federal Legal and Regulatory Responses

On Friday, August 23, 2024, the Department of Justice (DOJ) brought a civil antitrust lawsuit against RealPage Inc. for its "unlawful scheme to decrease competition among landlords in apartment pricing and to monopolize the market for commercial revenue management software that landlords use to price apartments." The DOJ

partnered with the Attorneys General of North Carolina, California, Colorado, Illinois, Massachusetts, Minnesota, Oregon, and Tennessee, while the states of Arizona, Maryland, New Jersey, Washington, and the District of Columbia moved forward with their own separate lawsuits. An amended complaint was filed in January 2025, adding several partnering landlords as additional defendants (U.S. Department of Justice, 2024).

This federal lawsuit marks the first major antitrust case focused on algorithmic price coordination in the United States housing market. Although algorithmic coordination has been examined in industries such as airline pricing and digital advertising, this is the first major federal case applying antitrust principles to algorithmic rent setting in the housing sector (U.S. Department of Justice, 2024). The case centers on the operation of RealPage's YieldStar and Al Revenue Management (AIRM) software, which set rents by combining data analytics, machine learning, and traditional revenue management principles.

RealPage's YieldStar and AIRM tools process large volumes of rental market data provided by their clients, including rental costs, lease lengths, seasonal demand, occupancy rates, and detailed characteristics of each unit. This information is then compared against the non-public data shared by other participating partners. Using this aggregated dataset, the software suggests rental prices and lease lengths (Mayes, 2024). These recommendations can change daily or even hourly and are often

implemented automatically through the platform's auto-accept feature, allowing landlords to apply the algorithm's suggested price without manual review (U.S. Department of Justice, 2024).

RealPage argues that these tools merely enhance efficiency and remove human bias from rent determination. According to public statements, the company maintains that its software "provides data-driven insights" and "helps property managers make informed pricing decisions" based on market conditions. RealPage also contends that these tools benefit both landlords and renters by reducing vacancy rates and promoting pricing stability in volatile markets. The company's position is that its technology is a neutral facilitator of market transparency rather than a mechanism of collusion (RealPage, 2023).

The DOJ vehemently disagrees. Regulators argue that by pooling data from thousands of rental properties, RealPage's algorithms can identify and reinforce collective pricing patterns across entire metropolitan regions. The complaint alleges that the algorithm relies heavily on non-public data supplied by competing landlords, including detailed information about rents, lease terms, and occupancy rates (U.S. Department of Justice, 2024). Because this data is unavailable to the general public, the DOJ argues that the system functions as an information exchange network that substitutes algorithmic coordination for genuine price competition.

The DOJ also takes issue with RealPage's internal compliance and monitoring practices. The company tracks how often employees accept the recommended prices and lease terms. If an employee deviates from the recommendation, they must justify their decision to the system, and the deviation is reported to supervisors. The company may assign additional training to employees with lower acceptance rates. If an employee's acceptance rate falls below 90 percent, they may face disciplinary action; if a company's acceptance rate falls below 75 percent, it may be removed from the program entirely (Mayes, 2024). RealPage has stated publicly on its website that it is often glad to lose such customers. As one legal analysis notes, "This feature blurs the line between voluntary data analysis and tacit collusion" (Holland & Knight, 2025).

Finally, the DOJ points to RealPage's own marketing materials as evidence of intent. The company advertises its software as enabling clients to outperform the market and secure the highest prices, even during economic downturns when rents typically fall (U.S. Department of Justice, 2024). Historically, landlords balanced rental prices with occupancy, relying on a "heads in beds" strategy. When prices rose too high, demand fell, and revenues dropped. Regulators now note that vacancies are increasing even as prices continue to rise, yet profits rise faster. The creator of RealPage's revenue management software, Jeffrey Roper, told ProPublica that RealPage's tools circumvented human leasing agents who had "way too much empathy" and hesitated to

push rents higher (Mayes, 2024). These allegations set the stage for understanding how courts may interpret algorithmic coordination under existing antitrust law.

III. Federal Antitrust Litigation

The DOJ's lawsuit against RealPage relies on the first two provisions of the Sherman Act, the Antitrust Act of 1890, which was originally enacted to regulate monopolies and business trusts of the 19th century. In the decades following the Civil War, rapid industrialization led to new, powerful companies. Increased competition led to industrial surpluses and lower prices, prompting companies to consolidate their ownership into single firms, known as trusts, which would coordinate production and prices under centralized management, forming industry-wide monopolies (Sawyer, 2019).

Apologists argued that these arrangements stabilized the market and promoted efficiency, while critics argued they suppressed competition, inflated prices, and concentrated economic power in the hands of a few industrial magnates (Sawyer, 2019). By the 1880's public opinion shifted against trusts, and muckraker journalists depicted "robber barons" like John D. Rockefeller and J.P. Morgan as symbols of corruption and corporate influence- a reputation they failed to combat with quotes like "competition is a sin" (Rockefeller, 1909).

States attempted to regulate monopolies on their own but struggled to restrain national firms, resulting in growing calls for a federal law to restore fair competition. In

response, Congress enacted the Sherman Antitrust Act of 1890, the first federal statute addressing monopolistic behavior. The Act reflected a broader belief that preserving open competition was essential not only for economic efficiency, but also for maintaining democratic governance. Section 1 of the Sherman Act prohibits contracts, combinations, or conspiracies that restrain trade. Section 2 addresses monopolization and attempts to monopolize by a single firm (15 U.S.C. §§ 1-2). The DOJ argues that RealPage's conduct violates both of these provisions. Under Section 1, the government claims that RealPage facilitated an unlawful agreement among competing landlords by coordinating pricing decisions through shared nonpublic data and algorithmic recommendations. Under Section 2, they argue that RealPage has monopolized, or attempted to monopolize, the market for revenue management software by accumulating proprietary datasets and using them to entrench its market dominance. The DOJ is also seeking relief under Section 16 of the Clayton Act, which authorizes courts to grant injunctions to prevent ongoing harm caused by anticompetitive practices.

The central legal theory tying these claims together is that RealPage's algorithm serves as the "hub" of a "hub and spoke conspiracy," a structure long recognized in antitrust law. See the figure below. In a classic hub-and-spoke scheme, the hub forms separate vertical agreements with each spoke, while the spokes depend on the hub to coordinate behavior that would be unlawful if done through direct horizontal

agreement. Although the spokes do not communicate directly with one another, the flow of information through the hub allows them to behave as if they were coordinating horizontally. In this model, the hub transmits signals about desired retail or wholesale prices, and the spoke firms adjust their own pricing in response, reducing competition among themselves. The connecting arrows in the diagram show how complaints, price pressures, and recommended pricing mechanisms move through the hub, while the curved line at the bottom represents the goal of the Hub and spoke model: a reduction in downstream competition.

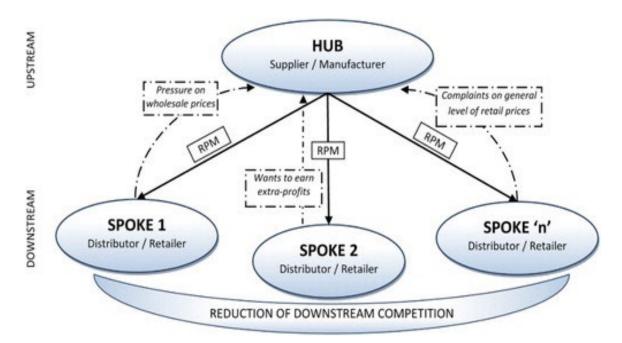


Figure 2.Hub and Spoke Conspiracy Model

According to the DOJ, RealPage occupies the hub position by collecting nonpublic, competitively sensitive information from each participating landlord and using it to generate unified pricing recommendations. Each landlord, acting as a spoke,

enters into a vertical agreement with RealPage that requires sharing detailed rental data and relying on algorithmic pricing outputs. The algorithm then creates a horizontal relationship among competing landlords by signaling higher prices to all participants and discouraging deviations through monitoring and enforcement mechanisms. This produces uniform price increases across the market, even though the landlords may never communicate directly. Paragraph 1 of the DOJ complaint summarizes this by alleging that "RealPage contracts with competing landlords who agree to share with RealPage nonpublic, competitively sensitive information about their apartment rental rates and other lease terms" (U.S. Department of Justice, 2024). In the DOJ's view, RealPage's software simply automates the coordination and enforcement functions that would constitute per se illegal price fixing if performed by humans.

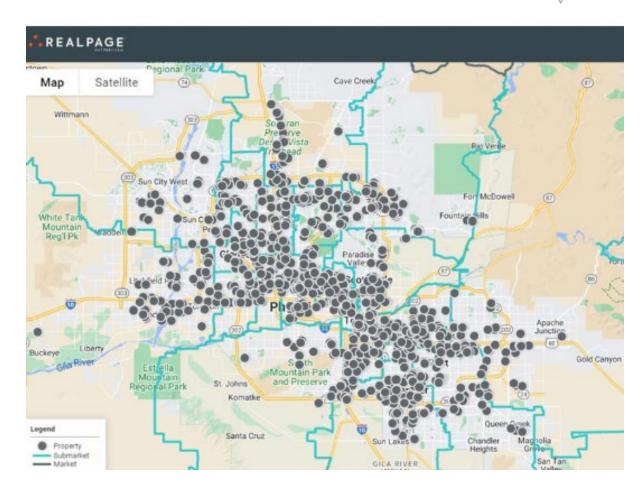
This argument suggests that the RealPage model falls under traditional antitrust doctrine, simply using technology to serve as the method of gathering information and training to enforce compliance. Historically, information exchanges among competitors, such as trade association price surveys, have been scrutinized under Section 1 when they reduce uncertainty and facilitate coordinated pricing. According to the DOJ, RealPage is using technology to side-step existing laws that prohibit individuals or organizations from doing the same. This lawsuit is the DOJ's attempt to establish that these actions are just as illegal and covered under existing legislation when committed automatically by software as they would be when committed by a human conspiracy.

The DOJ then argues that RealPage has monopolized, or attempted to monopolize, the market for commercial revenue management software serving the multifamily housing sector (U.S. Department of Justice, 2024). The agency asserts that RealPage's extensive access to proprietary rental data from its clients creates insurmountable barriers to entry for competitors, granting it a self-reinforcing data advantage. This market dominance, the DOJ argues, allows RealPage to expand its influence over rent-setting practices nationwide. As an example of its reach, "In the District of Columbia, a sizable majority of units in large multifamily buildings, approximately 60% set their prices using RealPage's RM software. In the Washington-Arlington-Alexandria Metropolitan Statistical Area, that number is even higher: over 90% of units in large buildings are priced using RealPage's RM software" (U.S. Department of Justice, 2024). These concentrations of market power are historically indicative of Monopolization and support the DOJ's central argument.

In parallel with federal enforcement, several states beyond those that have cofiled with the DOJ lawsuit have exercised their own independent antitrust and consumer-protection powers. The District of Columbia's attorney general, for instance, filed suit alleging that RealPage and several large landlords violated local antitrust laws by sharing competitively sensitive information to inflate rents (U.S. Department of Justice, 2024). That case resulted in a settlement by W.C. Smith & Co. to cease using RealPage software and pay over \$1 million in penalties (US Attorney General, 2025). The

Nevada attorney general negotiated a settlement imposing restrictions on the timeliness and granularity of data used in algorithmic pricing, mandating that any shared information be at least three months old and aggregated across a minimum of ten properties (Real Page News, 2025)The most ambitious lawsuit against RealPage may be the one filed by the Arizona DOJ. Rental price increases have been particularly significant in Arizona. Rental households are spending about 76% more on rent than they paid in 2016. Over the past few years, the Phoenix metropolitan area has "led the nation in rent increases," with many residents spending 50% to 100% of their income on rent. Approximately 70% of multifamily apartment units listed in the Phoenix metropolitan area are owned, operated, or managed by companies that have contracted with RealPage for "Revenue Management" (Mayes, 2024). The following two tables depict the concentration of RealPage-affiliated properties in the Phoenix and Tucson metropolitan areas. The pronounced clustering visible in both markets aligns with the Arizona DOJ's characterization of RealPage's footprint as a structural condition supporting its monopolization claims.

Figure 3. RealPage's Market Penetration in the Phoenix Area



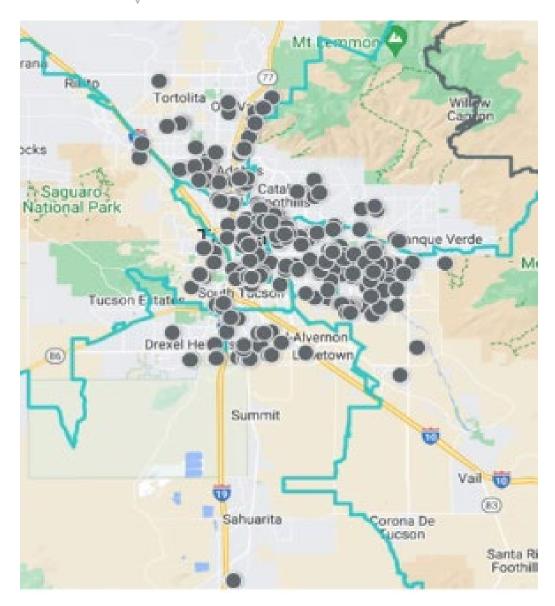


Figure 4. RealPage Market Penetration in the Tucson Area

Arizona's lawsuit takes a different approach, coupling state antitrust claims with allegations under the Arizona Consumer Fraud Act. This strategy challenges collusion but also frames algorithmic pricing specifically as a deceptive conduct that's harmed renters. Arizona's lawsuit spends a lot of time explaining at length how Algorithmic Al

pricing harms Arizona renters. Of all the Lawsuits against RealPage, the Arizona lawsuit is the most normative and critical of not just RealPage but the technology as a whole.

This lawsuit is a good example of how attorneys general can use other legislation beyond monopoly and trust law to address algorithmic coordination.

Ultimately, these court cases will establish precedent on the issue. Taken together, these cases suggest a concentrated movement toward recognizing algorithmic coordination as a distinct antitrust concern. It is increasingly evident that there is political appetite for either legal or legislative action to address what many increasingly see as market manipulation by algorithmic software.

When considering the inherent limit of ex post business law enforcement, or the efforts by legal entities such as the DOJ to use existing statutes in new ways to address emerging problems. You cannot prosecute an entity for conduct that is not clearly prohibited by law. If algorithmic pricing is ultimately found to fall outside the scope of current antitrust doctrine, or if precedent defines its reach only narrowly, then additional legislation would be needed to bridge the gap. This is where the judiciary's potential to act dynamically becomes relevant. As Gerald Rosenberg's Constrained vs. Dynamic Court framework suggests, courts sometimes expand statutory meaning and function in a legislative capacity, although political and institutional limits bound that power (Rosenberg, 1991). Just as early twentieth-century courts gradually broadened the idea of combination in restraint of trade to encompass mergers and information-

sharing agreements, a dynamic judiciary today could extend those concepts to digital coordination facilitated by machine learning.

Yet the practical limits of this power are significant. Judicial expansion requires support from the legislative and executive branches and is shaped by public and media attention. In the current political climate, the question becomes whether support from state governments and increased media scrutiny compensates for the lack of enthusiasm at the federal level. Whatever the answer, litigation of this scale routinely takes years to resolve, during which market behavior continues essentially unchanged. For policymakers and the public facing immediate affordability pressures, the slow pace of litigation may necessitate short-term legislative intervention, whether or not the courts ultimately provide a long-term solution. Local and State governments are increasingly considering such legislation to address this regulatory gap.

IV. Policy and Legislative Efforts at the Local Level

While the US federal government is currently uninterested in seriously considering the regulation of AI, with President Donald Trump seeing the growing AI field as part of a broader US competitive advantage (Exec. Order 2019), this has left the matter to the States and municipalities under our federalist system to address what they see as a legislative gap. An example of the policy substitution effect in our federalist systems where local governments step in when federal enforcement is slow or

inconsistent. As shown in Figure five below, cities such as San Francisco, Philadelphia, and Minneapolis have begun drafting ordinances that directly regulate the use of "algorithmic devices" in rent determination.

Figure 5. Local Legislative Efforts Regulating Algorithmic Rent

Jurisdict ion	Bill / Ordina nce No. & Year	Key Legislative Text (Quoted)	Fine / Enforce ment	Pass age Date	Status / Notes
Berkele y, CA	Ordina nce No. 7956- N.S (2025)	(a) "It shall be unlawful to sell, license, or otherwise provide to City of Berkeley landlords any pricing algorithm that sets, recommends, or advises on rents or occupancy levels that may be achieved for residential dwelling units in the City of Berkeley. (b) It shall be unlawful for a landlord to use a pricing algorithm described in subsection a when setting rents or occupancy levels for residential dwelling units in the city of Berkeley. Each separate month that a violation exists or continues, and each separate residential dwelling unit for which the landlord used the pricing algorithm, shall constitute a separate and distinct violation." (City of Berkeley, 2025)	\$1,000 per violatio n per month	Marc h 2025	Passed unanimo usly; later withdra wn to avoid costly litigation
San Francisc o, CA	§ 37.10 C (2024)	(a) Prohibition on Sale. "It shall be unlawful to sell, license, or otherwise provide to San Francisco landlords any algorithmic device that sets, recommends, or advises on rents or occupancy levels that may be achieved for residential dwelling units in San Francisco. (b) Prohibition on Use. It shall be unlawful for a landlord to use an algorithmic device described in subdivision (a) when setting rents or occupancy levels for residential dwelling units in San Francisco. Each separate month that a violation exists or continues, and each separate residential dwelling unit for which the landlord used the algorithmic device, shall constitute a separate and distinct violation. No	\$1,000 per violatio n	July 29, 2024	Active; modeled after Berkeley ordinanc e; expands enforce ment

		person shall enter into an agreement with any other person to not compete with respect to rental pricing, fees, or any other rental term for residential rental units in the City." (Rent Board, 2024)			
Philadel phia, PA	Bill No. 24082 3 (2024)	(b) "No person shall engage in price coordination for residential rental units in the City, including through the sale, licensure, or provision of any service or product that involves price coordination of residential rental units. (c) No person shall facilitate an agreement between two or more persons to not compete with respect to rental pricing, fees, or any other rental term for residential rental units in the City. (d) No person shall use, subscribe to, or contract or pay for, the services of another person if such services involve price coordination or otherwise encourage or facilitate an agreement with other persons to not compete with respect to any rental term for residential rental units in the City." (O'Rourke, 2024; City of Philadelphia Code § 9-813). Full text: https://codelibrary.amlegal.com/codes/philadelphiaa/latest/philadelphiaapla-0-0-0-306911	\$2,000 per instance ; treble damage s for knowing violatio ns	June 18, 2024	Active; focuses on consum er protecti on and price coordina tion
Minnea polis, MN	Ordina nce No. 2025- 010 (2028)	"An owner or operator may not use an algorithmic device when setting rents or occupancy levels for dwelling units. To the extent permitted by law, tenants may bring a civil action in district court to recover compensatory damages and reasonable attorney's fees and costs from an owner or operator found to have violated this section." (Datanetcorp, 2024)	\$1,000 fine per violatio n; tenant civil action	Marc h 26, 2028	Passed; broad ban with private right of action

Berkeley, California, was the first jurisdiction to pass such a ban in March 2025, banning the use of "algorithmic devices" in residential rent-setting. The ordinance, passed unanimously by the City Council, prohibits both the sale and use of automated pricing tools that rely on nonpublic competitor data to determine or recommend rent

levels (City of Berkeley, 2025). The preamble to the Berkeley ordinance situates algorithmic pricing within the city's broader housing equity agenda. It argues that automated tools "undermine fair competition and exacerbate rental price inflation."

At its heart, the legislative intent of the bill is to, one, maintain the independent decision-making of landlords and property managers, and two, prevent the sharing of non-public data that would enable coordinated price increases by landlords. Its text has been widely imitated by other jurisdictions at the municipal and state levels. Berkeley has since withdrawn the legislation in the face of lawsuits to avoid costly litigation. Their approach is to wait until the legality of the matter is settled in other jurisdictions, such as San Francisco, which has passed similar, nearly word-for-word legislation, as the San Francisco Administrative Code §37.10C. Or decided at the State as a whole, with the recent passage of AB 325.

While San Francisco's §37.10C. language is similar to Berkeley No. 7,853–N.S., taking both its provisions and reproducing its definitions. The San Francisco legislation expands and lays out who could sue for redress under the remedies section. Listing the City Attorney, the possibility of a tenant filing, or that of a non-profit organization with the primary mission of protecting the rights of tenants in San Francisco. (Rent Board, 2024)

Local jurisdictions outside of California have also sought to regulate AI. Both Philadelphia and Minneapolis have passed bills based on the Berkley model. Both

measures prohibit algorithmic price setting that relies on nonpublic competitor data, but they differ from Berkley on the scope of the language and fines. Philadelphia's ordinance NO. 240823 focuses more on consumer protection than does Berkeley's model, with less language as to what algorithmic pricing consists of, and focuses on the harm it does to consumers directly. Philadelphia focuses on consumer protection and sets the stage for class action lawsuits, with a penalty of \$2,000 per instance, twice that of Berkeley, and authorizes treble damages for knowing violations (O'Rourke) While the Minneapolis ordinance NO 2025-010 is the shortest, coming to two sentences and half a page worth of definitions, it simply forbids using an algorithmic device when setting rents and authorizes civil action in court to recover damages (Datanetcorp, 2024).

While these local jurisdictions have enacted ordinances regulating algorithmic rent setting, this approach risks producing a patchwork of rules that vary by city. That can make it hard for innovative companies to comply with when operating across multiple markets. A more efficient solution would be to standardize regulation at the state level, where standardized language and consistent definitions would simplify compliance for both firms and their lawyers.

V Policy and Legislative Efforts at the State Level

As shown in the table below, the states have also proposed legislation regulating the use of Algorithmic AI in the rental market. A number of disparate bills in California

were combined into Assembly Bill No. 325, which Governor Newsom signed on October 06, 2025.

Figure 6. Primary State Legislation Regulating Algorithmic Rent Setting (2025)

State / Bill No. / Year	Key Legislative Text (Quoted)	Primary Legal Mechanism / Focus	Status / Notes
California – AB 325 (2025)	Language added to the Cartwright Act (a) "It shall be unlawful for a person to use or distribute a common pricing algorithm as part of a contract, combination in the form of a trust, or conspiracy to restrain trade or commerce in violation of this chapter. (b) It shall be unlawful for a person to use or distribute a common pricing algorithm if the person coerces another person to set or adopt a recommended price or commercial term recommended by the common pricing algorithm for the same or similar products or services in the jurisdiction of this state." (Aguiar, 2025)	Amends the Cartwright Act to include algorithmic collusion; prohibits the use or sale of common pricing algorithms in rent-setting.	Signed Oct. 6, 2025; first statewide AI rent-setting ban; reinforces state control.
California – SB 52 (In committee)	unlawful for any person to sell, license, or otherwise provide to 2 or more persons a rental pricing algorithm, to set rental terms, for residential	Amends the Costa-Hawkins Rental Housing Act	In committee Long term fate unknown

	premises The bill would also make it unlawful for a person to set or adopt rental terms based on the recommendation of a rental pricing algorithm if the person knows or should know that the rental pricing algorithm processes nonpublic competitor data,		
New York – A1417 (2025)	"Prohibits a person or entity from knowingly or with reckless disregard facilitating an agreement between or among two or more residential rental property owners or managers to not compete with respect to residential rental dwelling units, including by operating or licensing a software, data analytics service, or algorithmic device that performs a coordinating function on behalf of or between and among such residential rental property owners or managers." (Rosenthal, 2025)	Adds algorithmic coordination language to state antitrust law; limits use of competitor data.	Passed; active law.
Connecticut – HB 7209 (2025)	"Prohibits the use of 'algorithmic devices' that use competitor data to set rental rates, which are deemed unfair business practices Expands Attorney General authority to investigate discriminatory housing practices and sets aside funding for homeless relief." (Judiciary Committee, 2025)	Combines AI rent regulation with broader housing and equity measures.	Enacted June 4, 2025; part of wider housing package.

Colorado – HB 25-1004 (2025)	"Prohibits an algorithmic device if sold or distributed with the intent that it will be used by two or more landlords in the same market or related market to set or recommend rent, occupancy level, or other commercial term associated with residential premises." (Servidea, 2025)	Defines algorithmic collusion narrowly; targeted antitrust regulation.	Vetoed by Gov. Jared Polis, May 29, 2025, citing overbreadth and overlap with existing law.
------------------------------------	--	--	---

AB 325 takes a different strategy, expanding the language of the California Cartwright Act, California's own antitrust law, which was modeled after the federal Sherman Antitrust Act. The Cartwright Act prohibits "combinations" of two or more persons from creating "unlawful trusts" that restrain trade, limit production, or increase prices. By linking the language to existing legislation, it is unlikely that a lawsuit will be able to overturn the reform unless the DOJ lawsuit fails and the legislation is deemed unconstitutional. California, not coincidentally, the state with the second-highest housing costs in the United States, has moved to pass legislation to address the issue without waiting on lengthy, drawn-out lawsuits or federal guidance on the matter. The passage of the California law also shields jurisdictions such as Berkeley and San Francisco from expensive litigation aimed at curbing algorithmic rental pricing, which would first target the California DOJ and its history of combative Attorneys General.

The California State Senate is still considering SB 52, which would expand the Costa-Hawkins Rental Housing Act, a law that governs rent control in California. The

legislation would specifically target and prohibit the sale/use of rental-price algorithms. The Costa-Hawkins Rental Housing Act, at first glance, appears to be an unlikely vehicle for regulating algorithmic price setting. Originally enacted in 1995, the law limits the power of local jurisdictions to impose rent control measures and explicitly reserves those powers for the state. It is widely viewed as a pro-landlord statute, designed to standardize rent control policy at the state level and prevent cities from enacting stricter local ordinances, "local control". Likewise, in algorithmic rent-setting, the state seems focused on maintaining centralized authority. Rather than allowing a patchwork of local ordinances, such as those passed in Berkeley, San Francisco, and Philadelphia, California is clearly attempting to establish a uniform statewide framework under Sacramento's oversight.

Senate Bill 52 (Rosenthal, 2025) proposes to amend the Costa-Hawkins Act by adding explicit language addressing algorithmic pricing systems. The bill states: "That act, among other things, authorizes an owner of residential real property to establish the initial and all subsequent rental rates for a dwelling or unit that meets specified criteria, subject to certain limitations." (Rosenthal, 2025). SB 52 would prohibit the use or sale of rental pricing algorithms to set or recommend rental rates, lease terms, or occupancy levels for residential properties within the state of California.

In effect, the bill extends the Act's original principle of protecting rate-setting autonomy but while Costa-Hawkins sought to preserve the landlord's right to set rents freely, SB 52 restricts that freedom when pricing decisions are delegated to automated or algorithmic systems. The Legislature justifies this shift by framing algorithmic rent-setting as a potential form of anti-competitive coordination, echoing ongoing federal and state antitrust actions against RealPage, Inc. If enacted, this amendment would replace conflicting local ordinances and make California the first state to ban AI-driven rent-setting statewide. Reaffirming state control vs local control over both rent regulation and AI governance.

California is far from the only state to pass such legislation, though it has some the broadest language. Nearly half of the state legislatures have introduced legislation that would regulate Algorithmic AI software. These include Colorado (H.B. 25-1004), Connecticut (H.B. 7209), Georgia (H.B. 679, S.B. 318), Hawaii (H.B. 831, S.B. 157 SD2), Illinois (H.B. 1427), Kentucky (H.B. 358), Maine (S.P. 636, L.D. 1552), Maryland (H.B. 817, S.B. 609), Massachusetts (H.B. 1564, S.B. 1016), Minnesota (S.F. 1036), Nevada (S.B. 199), New Jersey (A.B. 4916; A.B. 4872, S.B. 3699), New York (A.B. 4991, S.B. 2697, S.B. 1573), Oregon (S.B. 722), Virginia (H.B. 2047), and Washington (S.B. 5469). (Servidea, 2025) The following table compares proposed legislation for several of these states:

Figure 7. Pending or Committee-Level State Legislation (2025)

State	Bill(s)	Summary / Legislative Focus	Status (as of 2025)
Illinois	HB 1427	Mirrors New York's model; targets non-public data sharing between landlords; prohibits algorithmic collusion.	In committee; pending 2026 session
Maryland	HB 817 / SB 609	Modeled on NY and CA language; prohibits algorithmic coordination and deceptive practices in rent-setting.	In committee
Maine	SP 636 / LD 1552	Seeks to regulate algorithmic rent pricing using antitrust and consumer protection statutes.	In committee
Kentucky	HB 358	Introduces algorithmic rent- setting prohibitions under state antitrust framework.	In committee

Virginia HB 2047	Includes algorithmic pricing restrictions in a broader housing oversight package.	Introduced; pending 2026 session
------------------	---	--

New York has also successfully passed legislation with Assembly Bill A1417. The New York bill, like many state bills, specifically only applies to algorithms that use non-public data from a competitor. This is a common alternative to the broader protections of the Californian model. This more limited legislation focuses on the danger of AI and software serving as a mechanism for coordinating pricing behavior between competitors while not ruling on the technology itself. This approach aims to strike a balance, ensuring the market remains fair for consumers while avoiding an overly broad ban that stifles emerging innovations made possible by technology. The trade-off is whether the legislation is broad enough to cover related cases in other industries or future algorithmic business models that are not covered under the narrow definitions of the law. Lawmakers must balance the risks of not stifling new business models versus narrow definitions that require new legislation as lawmakers and courts play whack-amole with edge cases.

Other states with similar legislation to New York's are Illinois, Maryland, Maine, and Kentucky. None of these states has passed the legislation, but the legislation in each

state remains in committee at the time of this paper, and each is likely to be taken up again during the 2026 legislative sessions.

This state-level activity is unfolding amid significant uncertainty at the federal level. The ongoing DOJ and related state lawsuits could render many of these legislative efforts redundant if the courts ultimately issue a broad ruling that places algorithmic pricing squarely within the scope of existing antitrust law. At the same time, federal regulatory direction remains difficult to predict. The current administration has generally expressed support for AI innovation, and its approach to AI governance has shifted over time, creating ambiguity about the degree of future federal intervention.

This uncertainty shaped the political dynamics in Colorado, where the Democratic-leaning legislature passed HB 25-1004, only for the bill to be vetoed by Governor Jared Polis on May 29, 2025. Colorado Bill HB 25-1004 has a similar focus to New York's, but uses slightly different terminology; see the table.

The Colorado Governor gave three reasons for his veto in the veto letter. The first was to avoid unintended consequences for housing providers, which would lead to a decrease in available rental supply. The second was that existing antitrust laws may already prohibit the behavior that the law was written to protect against, as evidenced by the federal lawsuit, and lastly, the concern that broad language could discourage companies from doing business in Colorado.

authority to investigate discriminatory housing practices. And allows courts to award attorney's fees to affordable housing applicants if their application was denied in bad faith. It also sets aside funding for additional homeless relief. The strategy of passing such legislation as part of a larger housing package may be a viable strategy for activists moving forward. (Judiciary Committee, 2025)

Figure 8. Comparative Summary of State Legislative Approaches to Algorithmic Rent Regulation (2025)

Approach Type	Representative States	Key Characteristics	Potential Strengths / Weaknesses
Comprehensive Ban	California, Connecticut	Explicitly bans algorithmic rent-setting using competitor data; broad definitions.	Strong clarity; may deter innovation.
Narrow Antitrust Definition	New York, Colorado	Targets only non- public data or coordinated use; leaves space for benign uses.	Flexible; may allow loopholes.
Pending / Exploratory	Illinois, Maryland, Maine	Under study; modeled on early state precedents.	Reflects policy diffusion and evolving consensus.

In summary, States are currently taking three approaches to legislatively restrict landlords from using algorithmic pricing: One is a comprehensive ban. This is an attempt to get ahead of the issue and reduce the risks of algorithmic pricing in the rental market and beyond, but risks reducing innovation and leading to unintended consequences.

Other states, such as New York, are opting for a narrower ban that targets non-public data and expands existing anti-trust legislation to include new technologies. They risk being unprepared as new technologies and business models proliferate and playing catch up. Lastly, a number of states have proposed legislation in the community, but appear to be waiting on results from related lawsuits and the fallout of legislation in other states. It's too soon to tell what shape such legislation will take, but each of these states has seen more modest rent increases, and the legislation may feel less pressing.

Most interestingly, while the most common approach at the state level is to expand antitrust legislation to take into account these new technologies, many states, such as California's SB 52 and Connecticut's (H.B. 7209), have been innovative in expanding disparate legislation. Particularly, H.B. 7209, by embedding controversial legislation in a much larger housing bill with homeless relief and affordable housing funds, the legislature was able to frame the issue as just another part of a holistic housing equity bill, reducing partisan resistance and using "log rolling" tactics to institute reform.

VII. Conclusion

The United States faces a persistent housing crisis that strains households' finances, constrains labor markets, and undermines broader affordability. In this environment, policymakers have increasingly turned to every available tool, zoning reform, subsidies, consumer protection law, antitrust enforcement, and now algorithmic regulation, to address the pressures that drive high rents. Algorithmic rent-setting is only one factor among many, but its rapid spread across the rental market and its potential to coordinate pricing among competitors have drawn significant attention from courts and legislatures.

Having explored the scope of both the legal and legislative efforts to address the negative externalities of RealPage's algorithmic price setting and the role of the federalist system in driving regulatory innovation through Justice Brandeis's "laboratories of democracy," this paper examined how lawmakers and lawyers are struggling to stay ahead of emerging technologies and anticipate future business models. The RealPage litigation and the wave of legislative activity that followed demonstrate the diverse approaches and trade-offs between technological innovation and regulatory adaptation. They show both the flexibility and the fragmentation of American federalism, where overlapping jurisdictions and differing policy philosophies create a patchwork of enforcement and regulation.

This issue sits within a broader context of rising housing costs and widening affordability gaps. Because algorithmic rent-setting offers policymakers a way to address part of the affordability problem with limited public expenditure, it is likely to remain a focus of state and local governments. The fact that over half of U.S. states have passed or introduced bills targeting algorithmic rent-setting suggests that the policy window for regulating AI-based pricing tools is open. However, policy venue shopping indicates that in today's political climate, reform may be most effective at the state level.

Yet this diversity of approaches also outlines the difficulties ahead. While the federal and state Departments of Justice may prosecute algorithmic collusion under existing antitrust laws such as the Sherman and Cartwright Acts, these efforts are slow, costly, and vulnerable to challenge from powerful corporate actors. Local governments, though faster and more experimental, face litigation risks and the structural disadvantage of confronting interstate firms. At the federal level, the current administration's reluctance to pursue AI regulation has left states to address the issue on their own, risking isolation if their approaches conflict with future federal guidance.

At stake is whether American democratic institutions can adapt to a digital economy increasingly governed by algorithms rather than people. The RealPage controversy is more than a housing policy dispute: it is a test of institutional resilience in the age of artificial intelligence. Whether the United States relies on the slow evolution of judicial precedent or proactive legislative intervention, the resulting decisions will

shape not only the trajectory of housing affordability but also the US system of checks and balances in the digital age.

Bibliography

- Aguiar, C. (2025, March 10). *California AB 325 | 2025–2026 | Regular Session. LegiScan;*California State Legislature. https://legiscan.com/CA/text/AB325/id/3162561
- Office of the Attorney General for the District of Columbia. (2025, June 2). Attorney General Schwalb secures over \$1 million from District landlord involved in rental price-fixing scheme. Dc.gov. https://oag.dc.gov/release/attorney-general-schwalb-secures-over-1-million-0
- Baptista, D. (2024, November 26). Mexican female gig workers push to fix "sexist" algorithms.

 Context. https://www.context.news/digital-rights/mexican-female-gig-workers-push-to-fix-sexist-algorithms?utm_source=firefox-newtab-en-us

 Barnes, S. G. (2022, December 8). *The economic impact of housing insecurity in the United States.* Equitable Growth. https://equitablegrowth.org/the-economic-impact-of-housing-insecurity-in-the-united-states/
 - Boso Caretta, A., & D'Andrea, M. (2023, October 19). *Algorithmic collusion*. DLA Piper.

 https://www.dlapiper.com/en-us/insights/publications/law-in-tech/algorithmic-collusion
- Buffat, A. (2015). Street-level bureaucracy and e-government. Public Management Review, 17(1), 149–161. https://doi.org/10.1080/14719037.2013.771699
- Centre for AI Watch (De Nigris, S., Craglia, M., Nepelski, D., Hradec, J., Gómez-González, E., Gomez, E., Vázquez-Prada Baillet, R., Righi, G., De Prato, G., López Cobo, M., Samoili, S.,

- & Cardona, M.). (2020, December 1). AI Watch. Publications Office of the European Union. https://op.europa.eu/en/publication-detail/-/publication/e7086ddf-344c-11eb-b27b-01aa75ed71a1/language-en
- Compton, M. E., Young, M. M., Bullock, J. B., & Greer, R. (2023). Administrative errors and race: Can technology mitigate inequitable administrative outcomes? Journal of Public Administration Research and Theory, 33(3), 512–528.

 https://doi.org/10.1093/jopart/muac036
- Council of the City of Berkeley. (2025, March 25). Ordinance No. 7956-N.S: Prohibition on the sale or use of pricing algorithms to set rents or manage occupancy levels for residential dwelling units. https://berkeleyca.gov/sites/default/files/documents/2025-03-25%20Item%2002%20Ordinance%207956.pdf
- Datanetcorp. (2024). Use of algorithms in rental rates ordinance (2024-01399). City of Minneapolis. https://lims.minneapolismn.gov/file/2024-01399
- De Boer, N., & Raaphorst, N. (2023). Automation and discretion: Explaining the effect of automation on how street-level bureaucrats enforce. Public Management Review, 25(1), 42–62. https://doi.org/10.1080/14719037.2021.1937684
- District of Columbia v. RealPage, Inc., No. 2023 CA 004826 B (D.C. Super. Ct. filed Nov. 20, 2023).
- Exec. Order No. 13859, Maintaining America's lead in artificial intelligence, 3 C.F.R. Daily Compilation of Presidential Documents (2019-02), 1–7.

- Judiciary Committee . (2025). General Assembly an act concerning legal proceedings involving housing matters and the impermissible use of pricing algorithms and competitors' sensitive data to set rental prices. https://www.cga.ct.gov/2025/TOB/H/PDF/2025HB-07209-R00-HB.PDF
- Klurfield, K. (2024). Exploring the affordable housing shortage's impact on American workers, jobs, and the economy. Bipartisan Policy Center. https://bipartisanpolicy.org/wp-content/uploads/2024/03/Exploring-the-Aff-Housing-Shortage-Impact-on-American-Workers-Jobs-and-the-Economy_BPC-3.2024.pdf
- Hermann , A., & Whitney, P. (2024, January 22). *Home Price-to-Income Ratio Reaches Record High*. Harvard.edu. https://www.jchs.harvard.edu/blog/home-price-income-ratio-reaches-record-high-0
- Hong, J. (2024). Navigating the future: The impact of AI technologies on employment and job roles in the public sector [Graduate project].
- Jackson, K., & Winegarden, W. (2023, July 17). Something is clearly off with California's homelessness spending. CalMatters.

 https://calmatters.org/commentary/2023/07/something-clearly-off-homelessness-spending/
- Judd, A. (2024, January 22). *AI costs American renters over \$36 billion annually*. Popular Information. https://popular.info/p/ai-costs-american-renters-over-36

- Justice Department Reaches Proposed Settlement with Greystar, the largest U.S. landlord, to end its participation in algorithmic pricing scheme. (2025, August 8). Justice.gov. https://www.justice.gov/opa/pr/justice-department-reaches-proposed-settlement-greystar-largest-us-landlord-end-its
- Justice Department Sues RealPage for Algorithmic Pricing Scheme that Harms Millions of American Renters. (2024, August 23). Justice.gov.

 https://www.justice.gov/archives/opa/pr/justice-department-sues-realpage-algorithmic-pricing-scheme-harms-millions-american-renters
- Kully, D. C., & Racowski, K. R. (2025). The latest on RealPage collusion-by-algorithm litigation.

 Holland & Knight. https://www.hklaw.com/en/insights/publications/2025/01/the-latest-on-realpage-collusion-by-algorithm-litigation
- Linquiti, P. (2023). Rebooting policy analysis: Strengthening the foundation, expanding the scope. CQ Press.
- Mayes, K. K. (2024, February 28). Attorney General Mayes sues RealPage and residential landlords for illegal price-fixing conspiracy. Arizona Attorney General's Office. https://www.azag.gov/press-release/attorney-general-mayes-sues-realpage-and-residential-landlords-illegal-price-fixing
- Miller, S. M., Song, M., & Keiser, L. R. (2023). The effect of human versus automated interaction on willingness to participate in government programs: The role of

- representation. Public Administration, 101(4), 1349–1366. https://doi.org/10.1093/jopart/muaa019
- News, R. (2025, September 19). RealPage settlement with Nevada Attorney General. RealPage

 Blog. https://www.realpage.com/news/realpage-reaches-revenue-managementsoftware-settlement-with-nevada-attorney-general/
- O'Rourke, C. (2024, August 26). Bill No. 240823: City of Philadelphia § 9-813 Anticompetitive rental practices.
- Parolin, Z. (2024). *Housing policy and poverty: The case of California*. Niskanen Center. https://www.niskanencenter.org/housing-policy-and-poverty-the-case-of-california/
- RealPage. (2024, June 18). Statement from RealPage: The real story. RealPage. https://www.realpage.com/news/statement-from-realpage-the-real-story/
- Rent Board. (2024). Sec. 37.10C Use and sale of algorithmic devices prohibited. City and County of San Francisco. https://www.sf.gov/information--sec-3710c-use-and-sale-algorithmic-devices-prohibited
- Press Release. (2019, September). Senator Brian Schatz introduces legislation to improve federal government's use of artificial intelligence. https://www.schatz.senate.gov/press-releases/schatz-gardner-introduce-legislation-to-improve-federal-governments-use-of-artificial-intelligence
- Rockefeller, J. D. (1909). Random reminiscences of men and events. Doubleday, Page & Company. https://archive.org/details/randomreminiscen00rock/page/54/mode/2up

Rosenthal, M. of A. (2025). *NY State Assembly Bill 2025-A1417*. NYSenate.gov; The New York State Senate.

https://www.nysenate.gov/legislation/bills/2025/A1417/amendment/original

- Rosenberg, G. N. (1991). *The hollow hope: can courts bring about social change?* University Of Chicago.
- Sawyer, L. P. (2019). *U.S. antitrust law and policy in historical perspective*. Harvard Business School. https://www.hbs.edu/ris/Publication%20Files/19-110_e21447ad-d98a-451f-8ef0-ba42209018e6.pdf
- Servidea, K. (2025). States weigh banning algorithmic pricing of residential rental properties.

 In VitalLaw.com (pp. 1–5). Wolters Kluwer.

 https://business.cch.com/ald/VB_algorithmic-pricing-residential-rental-properties_05-05-2025_locked.pdf
- Singh, G. K., Lee, H., & Lyoung Hee Kim. (2023). Housing and Inequalities in US Life Expectancy, Child and Youth Mortality, and All-Cause and Cause-Specific Mortality, 1979-2020:

 Results from the National Longitudinal Mortality Study and the National Vital Statistics

 System. *International Journal of MCH and AIDS*, 12, e653–e653.

 https://doi.org/10.21106/ijma.653
- Walters, D. (2021, December 7). California's housing crisis both wide and deep. CalMatters.

 https://calmatters.org/commentary/2021/12/california-housing-crisis-both-wide-and-deep/

- Vogell, H. (2024, August 23). *DOJ files antitrust lawsuit against RealPage*. ProPublica. https://www.propublica.org/article/realpage-lawsuit-doj-antitrustdoj-files-antitrust-suit-against-maker-of-rent-setting-algorithm
- Young, M. M. (2022). The impact of technological innovation on service delivery: Social media and smartphone integration in a 311 system. Public Management Review, 24(6), 926–950. https://doi.org/10.1080/14719037.2021.1877794