

UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF TENNESSEE
NASHVILLE DIVISION

RACHEL MEREDITH, MIA LAUDER,
BENJAMIN DEMPSEY, and IVONNE
ARRIOLA MENDIETA, individually and on
behalf of all others similarly situated,

Plaintiffs,

v.

REALPAGE, INC.; THOMA BRAVO
FUND XIII, L.P.; THOMA BRAVO FUND
XIV, L.P.; THOMA BRAVO L.P.;
GREYSTAR MANAGEMENT SERVICES,
LLC; BH MANAGEMENT SERVICES,
LLC; CAMPUS ADVANTAGE, INC.;
CARDINAL GROUP HOLDINGS LLC; CA
STUDENT LIVING OPERATING
COMPANY, LLC; TIMBERLINE REAL
ESTATE VENTURES LLC; and
B.HOM STUDENT LIVING LLC; JOHN
DOES 1-10,

Defendants.

Case No. 3:23-md-03071

MDL No. 3071

Judge Waverly D. Crenshaw, Jr.

This document relates to:

Lauder, et al. v. RealPage, Inc., et al.,
No. 3:23-cv-00757

Dempsey, et al. v. RealPage, Inc., et al.,
No. 3:23-cv-00792

**FIRST AMENDED CONSOLIDATED
CLASS ACTION COMPLAINT**

JURY TRIAL DEMANDED

TABLE OF CONTENTS

	<u>Page</u>
I. NATURE OF THE ACTION	1
II. PARTIES	9
III. JURISDICTION AND VENUE	14
IV. FACTUAL BACKGROUND.....	15
A. RealPage’s revenue management software is widely used in the student housing market.	15
B. Each of the Lessor Defendants participated in RealPage’s scheme to artificially inflate the price of student housing rent during the class period.....	23
C. RealPage and Lessor Defendants conspired to eliminate competition in the student housing market by effectively outsourcing price and supply decisions to a common decision maker.....	27
D. Defendants monitor and enforce compliance with the scheme.	37
D. The market for student housing real estate leases is distinct from the multifamily market.....	42
E. “Plus Factors” indicate the market for student housing real estate leases is susceptible to the formation, maintenance, and efficacy of a cartel.....	59
1. High barriers to entry	59
2. High barriers to exit	60
3. Inelastic demand	60
4. High concentration.....	61
5. Fungibility of demand.....	63
6. Frequent exchanges of competitively sensitive information	63
7. Opportunities to collude and extensive evidence of collusion.....	64
F. Defendants’ conduct has had extensive anticompetitive effects.....	67
1. Lessor Defendants’ use of RealPage has led to supracompetitive prices	67

2.	Government regulators have expressed concerns about algorithmic pricing's effect on competition.....	70
3.	The conspiracy has caused vulnerable students to languish while the Defendants flourished.	71
V.	RELEVANT MARKET	74
A.	The relevant product market is the market for the lease of student housing real estate.....	74
B.	Regional submarkets.....	75
1.	Austin, TX.....	76
2.	Tallahassee, FL	76
3.	Columbia, SC.....	76
4.	Knoxville, TN	77
5.	Eugene, OR	77
6.	Auburn, AL	77
7.	Gainesville, FL.....	78
8.	Baton Rouge, LA	78
9.	Champaign, IL	78
10.	State College, PA	78
11.	College Station, TX	79
12.	Huntsville, TX.....	79
13.	Tuscaloosa, AL	79
14.	Madison, WI	79
15.	Wilmington, NC.....	80
16.	San Antonio, TX	80
17.	Seattle, WA	80
18.	College Park, MD	80
19.	New Haven, CT	81
20.	West Lafayette, IN	81
21.	East Lansing, MI.....	81

22.	Bloomington, IN	81
23.	Greensboro, NC	81
24.	Arlington, TX.....	82
25.	Louisville, KY.....	82
26.	Fort Collins, CO.....	82
27.	Pullman, WA.....	83
VI.	FRAUDULENT CONCEALMENT.....	83
VII.	CONTINUING VIOLATIONS	86
VIII.	CLASS ACTION ALLEGATIONS	87
IX.	CLAIMS FOR RELIEF	89
FIRST CLAIM FOR RELIEF VIOLATION OF SECTION 1 OF THE SHERMAN ACT FOR AGREEMENT IN RESTRAINT OF TRADE 15 U.S.C. § 1 (On behalf of nationwide class for injunctive and equitable relief and compensatory damages).....		89
SECOND CLAIM FOR RELIEF VIOLATION OF SECTION 1 OF THE SHERMAN ACT FOR CONSPIRACY TO EXCHANGE COMPETITIVE INFORMATION 15 U.S.C. § 1 (On behalf of nationwide class for injunctive and equitable relief and compensatory damages).....		89
THIRD CLAIM FOR RELIEF VIOLATION OF STATE ANTITRUST STATUTES (On behalf of Plaintiffs and the Class).....		91
REQUEST FOR RELIEF		106
JURY TRIAL DEMANDED.....		108

Plaintiffs Rachel Meredith, Mia Lauder, Benjamin Dempsey, and Ivonne Arriola Mendieta, individually and on behalf of all others who leased student housing properties directly from any Lessor Defendant or Co-Conspirator from January 1, 2010, through the present (the “Class,” as defined below), upon personal knowledge as to the facts pertaining to themselves and upon information and belief as to all other matters, and upon the investigation of counsel, bring this class action complaint to recover treble damages, injunctive relief, and other relief as appropriate, based on violations of federal antitrust laws and state laws against Defendants RealPage, Inc., Thoma Bravo Fund XIII, L.P., Thoma Bravo Fund XIV, L.P., and Thoma Bravo L.P. (collectively, “RealPage”); and Greystar Management Services, LLC; BH Management Services, LLC; Campus Advantage, Inc.; Cardinal Group Holdings, LLC; CA Student Living Operating Company, LLC; Timberline Real Estate Ventures LLC; B.HOM Student Living LLC; and John Does 1-10 (collectively the “Lessor Defendants” and together with RealPage, “Defendants”).

I. NATURE OF THE ACTION

1. Plaintiffs challenge an unlawful agreement among Lessor Defendants of student housing properties to artificially inflate the prices of student housing across the United States, including near college campuses.

2. Property managers within the real estate industry recognize the market for student housing as distinct from the market for traditional apartments—what the industry calls multifamily housing—and in fact manage or build large volumes of so-called “purpose-built” housing, i.e., housing designed specifically for students.¹ Students are a captive market: they

¹ See, e.g., Campus Advantage, *What is Purpose-Built Student Housing?* (February 21, 2018), available at <https://campusadv.com/purpose-built-student-housing/> (“Purpose-built student housing is an apartment community designed for residents in higher education. These communities offer amenities tailored to college students, such as individual leases, study areas, fully furnished units, and roommate matching. They’re typically located near a college campus and may offer unique residence life programs, such as Students First™, and employ students to act as community assistants, providing support to their fellow student residents. College campuses are like small cities in themselves, where students live, study, and work all in the same area. This campus-centric lifestyle drives a need for a different kind of housing – one that is not typically fulfilled by conventional housing options.”) (last visited July 13, 2023).

need to live near the school campus and they often have less time to make a rental choice because the leasing cycle for student housing is tied to the academic year. Student housing leases often rent per bed rather than on a per square foot basis. Leases usually run between nine and twelve months.²

3. Large property managers, including the Lessor Defendants, manage student housing properties near many college campuses across the United States. In a competitive market, these companies would compete with one another to attract student renters and maximize occupancy of their properties. Indeed, this is what they used to do: before implementing any of Defendant RealPage’s “Revenue Management Solutions” software, competing lessors would try to maximize occupancy by keeping rent competitive and/or offering concessions (e.g., a free month of rent) and giveaways (e.g., raffle prizes or gift cards³).

4. But this is no longer the case. RealPage introduced its Revenue Management Solutions (“RMS”) specifically within the context of student housing. RealPage’s Revenue Management Solutions software includes YieldStar, LRO Student, RealPage’s “Student Revenue Management,” and AI Revenue Management (“AIRM”). The Lessor Defendants used RealPage’s RMS to stop making independent pricing and supply decisions.

5. RealPage is a company that collects real-time pricing and supply levels from its participants. Each month, participants give RealPage data on pricing, concessions, and other information for their own properties, as well as the information the participants may have gathered about their competitors. RealPage compiles this data into a common algorithm that sends the participants forward-looking, unit-specific pricing and supply recommendations based on their shared data.

² ORG Portfolio Management, *Student Housing: An Attractive Alternative to Multifamily* (March 28, 2022), available at <https://irei.com/wp-content/uploads/2022/05/Student-Housing-Thought-Piece-Final.pdf> (last visited July 13, 2023).

³ Julia Bunch, *A Breakdown of Student Housing Giveaways*, RealPage Analytics (June 7, 2021), available at <https://www.realpage.com/analytics/breakdown-student-housing-giveaways/> (last visited July 13, 2023).

6. Lessor Defendants agreed to follow these recommendations, on the mutual understanding that competing lessors would do the same. RealPage recommends that participants accept its recommended prices, and closely monitors compliance—going so far as to request that housing managers justify, in writing, deviations from RealPage’s recommended pricing. For example, Campus Advantage put in place a program that would automatically accept RealPage’s pricing recommendations unless an employee manually overrode the recommendation and explained their reason for overriding the recommendation. Trainings captured from RealPage’s website also demonstrate that Lessor Defendants had to manually override the pricing provided by RealPage and Defendant Lessors were instructed to provide “objective facts, not subjective reasoning” to enact the override:

The screenshot shows the RealPage Asset Optimization software interface. At the top, there's a navigation bar with 'Asset Optimization' and a sub-menu 'New Lease Workflow / Asset Optimization / New Lease Workflow'. Below this, there are sections for 'Pending Review' (1), 'Pending Approval' (0), and 'Approved' (0). A prominent orange circular badge labeled 'BEST PRACTICE' with a checkmark icon is overlaid on the interface. A callout box contains the text: 'Enter a reason that is based on objective facts, not subjective reasoning.' To the right, a sidebar titled 'Keep Yesterday's Rent' displays the text 'The Conventional II - 1B1B*'. Below this is a 'Comment' section with a large red-bordered input field. Further down is a 'Comments History' section with a list of entries. The first entry is for 'Mon - Jan 07, 2019' at '04:08 am CST' by 'AutoPilot', which says 'Accept - Recommended (\$1,373) Accepted by AutoPilot'. The second entry is for 'Sun - Jan 06, 2019' at '04:17 am CST' by 'AutoPilot', which says 'Accept - Recommended (\$1,381) Accepted by AutoPilot'. The third entry is for 'Sat - Jan 05, 2019' at '04:08 am CST' by 'AutoPilot', which says 'Accept - Recommended (\$1,381) Accepted by AutoPilot'. At the bottom right of the sidebar are 'Cancel' and 'Done' buttons. On the left side of the main interface, there's a vertical toolbar with various icons. In the center, there are two main charts: 'The Conventional II - 1B1B* Charts' and 'Leasing Velocity / Lease Compliance'. The 'The Conventional II - 1B1B* Charts' chart shows 'Market Range' with 'Forecast & Optimization' and 'Demand Forecast' sections, and a line graph for 'Revenue' from April 2016 to January 2019. The 'Leasing Velocity / Lease Compliance' chart shows 'Exposure OCCUPANCY: 95% LEASED: 95%' with a bar chart for 'Units' and a legend for 'Vacant', 'TBD New', 'On Notice', and 'TBD Renewal'.

7. Indeed, RealPage employs so called “pricing advisors,” or “revenue management advisors,”⁴ who oversee and closely monitor Lessor Defendants’ compliance with RealPage’s recommended rates. On its website, for instance, RealPage touts that its advisors “[r]eview

⁴ According to RealPage’s VP of Consumer Relations and Revenue Management, and VP of LRO Solutions, when “You[] hear someone referred to as a revenue manager or pricing advisor, they’re the same thing.” *Best Practices for Revenue Management Webcast*, RealPage Videos, at (10:39-10:58), <https://www.realpage.com/videos/best-practices-revenue-management-webcast/>.

pricing daily or weekly in collaboration with on-site and regional operations management” and “[m]onitor and report on weekly rents, occupancy, and revenue trends.”⁵

8. RealPage employees meet with Lessor Defendants regularly—often once a week or more—to ensure that Lessor Defendants complied with the program. For example, each week Cardinal employees met with RealPage representatives over Zoom to discuss rent recommendations. Before these meetings each week, Cardinal employees would review the recommended rental rates that RealPage gave them. Then, during the weekly call, RealPage and Cardinal would discuss their target rate in comparison to the market. Once everyone agreed on the price, RealPage would lock the rents in for the week.

9. RealPage provided the platform and the algorithms for collusion, which granted Lessor Defendants the unprecedented ability to “[f]acilitate collaboration among operations”⁶ and “track your competition’s rent with precision.”⁷ Lessor Defendants submitted to RealPage data that is “as fine and granular as bits of sand,”⁸ including rents charged *for each unit and each floor plan*, lease terms, amenities, move-in and move-out dates. RealPage takes this data—“literally hundreds of variables,” according to founder and former CEO Steve Winn⁹—and recommends a price for each unit that a lessor owns, giving Lessor Defendants the courage to charge inflated prices with the implicit assurance that all of their competitors will do the same.

⁵ “RealPage AI Revenue Management,” RealPage, available at <https://www.realpage.com/asset-optimization/revenue-management/> (last visited July 13, 2023).

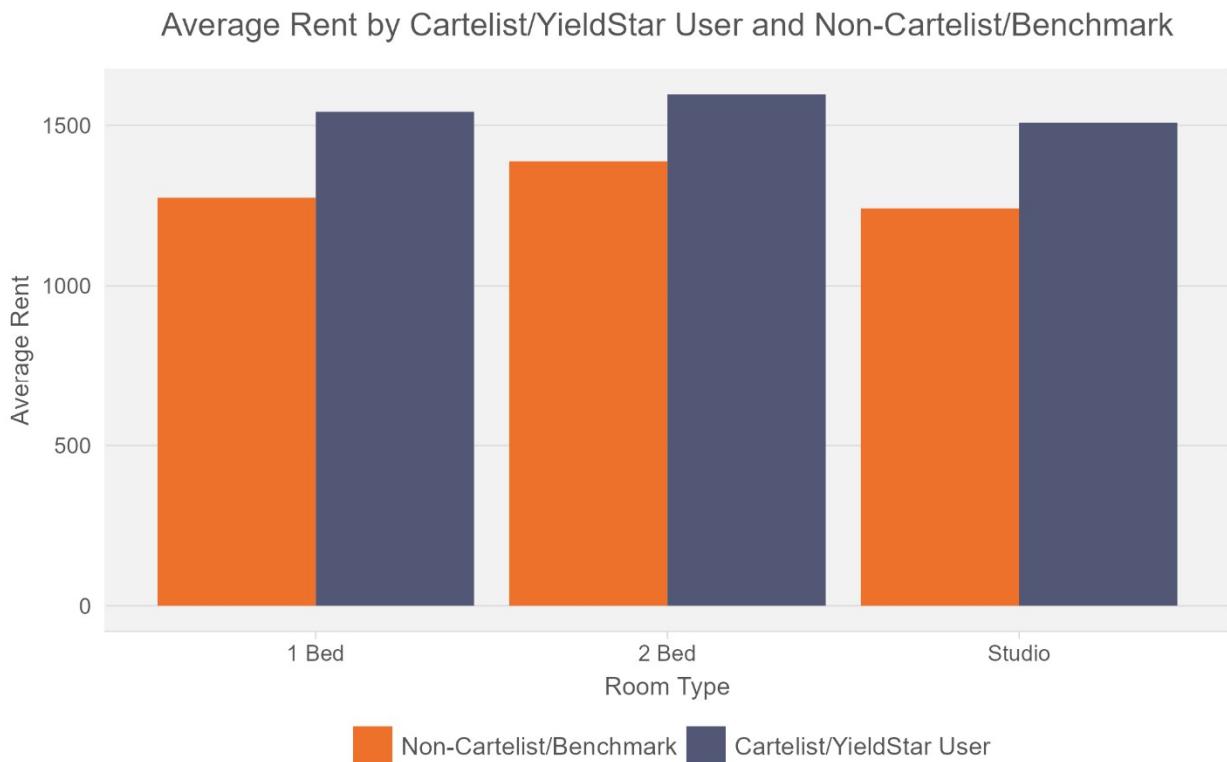
⁶ Keith Dunkin, *Driving Outperformance: Ensuring Success with Revenue Management* (March 2014), available at <https://www.naahq.org/sites/default/files/naa-documents/meetings/student-housing/D1-Ensuring-your-success.pdf> (last visited July 13, 2023).

⁷ *YieldStar Revenue Management Overview Presentation*, RealPage Videos, available at <https://www.realpage.com/videos/revenue-management-software-oveview-sop/> (last visited July 13, 2023).

⁸ *How YieldStar Can Double & Triple Revenue Performance*, RealPage Videos, available at <https://www.realpage.com/videos/yieldstar-helps-top-nmhc-companies/> (last visited July 13, 2023).

⁹ RealPage, Inc. Q2 2020 Earnings Conference Call (July 30, 2020), available at <https://seekingalpha.com/article/4363323-realpages-rp-ceo-steve-winn-on-q2-2020-results-earnings-call-transcript> (last visited July 13, 2023).

10. As a result of these exchanges, rent for student housing properties was higher among Lessor Defendants properties:



11. In a presentation at the 2014 National Apartment Association Student Housing Conference & Exposition, RealPage explained that its RMS software “utilizes the competitive data” by “[c]omparing the effective rent you achieve to the top and bottom of the competitive range for your selected competitors.”¹⁰ RealPage even gave a sneak peek of the dashboard that property managers have access to, which included a view by competitor¹¹:

¹⁰ Keith Dunkin, *Driving Outperformance: Ensuring Success with Revenue Management* (March 2014), available at <https://www.naahq.org/sites/default/files/naa-documents/meetings/student-housing/D1-Ensuring-your-success.pdf> (last visited July 13, 2023).

¹¹ *Id.*

Operational Insight

v3.0

Dashboard | Alerts | Offered Rates | Pricing Review | Unit Rates | Reports | Charts | Controls | Configuration | Competitors | Lease Audit

Property Details		Supervisor View																								
Community:	Nationwide Vista	Rate Type:	New	Post Date: 03/04/2013																						
End Date:	05/27/2013	Days Left:	84																							
Review Rates	Accept Rates	Export Type:	CSV (Excel)	<input type="button" value="Export"/>	Supervisor	<input type="button" value="Save Layout"/>																				
Property Information		Property Statistics						In Place			Forecast						Recent Avg Eff			Yesterday						
Floor Plan	Total Units	Occ Units	% Occup	% Leased	Sustainable Capacity	Rate Type Cap	Capacity Units	Available Units	Vacant	ON	TBD	Units	% of Capacity	MTM Leases Needed	Yesterday Shortfall	% of Capacity	Shortfall at Rec	% of Capacity	Lease Change	Rent	Last Lease Date	Mkt Pos	28 Day % Change	Rent	Mkt Pos	Date of Last Change
1B1B-A2A3*	45	44	98%	96%	94%	36%	16	2	1	1	8	12	75%	0	4	0	0%	0	0%	\$1,196	02/28/2013	90%	-1%	\$1,189	88%	03/02/2013
1B1B - Cabernet*	10	9	90%	60%	94%	60%	6	2	1	1	1	4	67%	0	2	0	0%	0	0%	\$1,276	10/02/2012	92%	0%	\$1,240	85%	03/02/2013

12. RealPage emphasized in presentations that it had designed specific revenue management tools customized for the student housing market¹²:

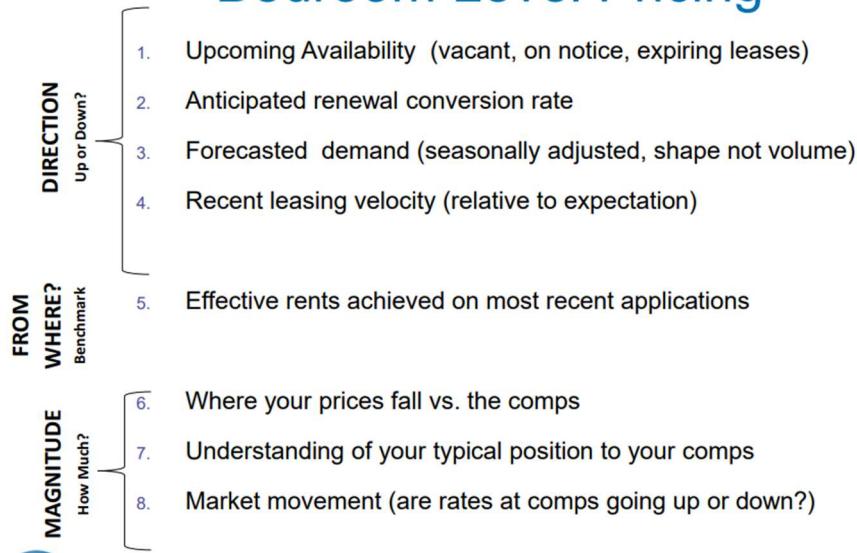
Revenue Management For Student

- Designed specifically for Student Living
- Provides by the bed or unit pricing
- Recognizes the annual lease up
- Price centrally but leverage on site expertise
- Deployed in partnership with leading institutional investors, management providers and owner operators

13. Consistent with the specific needs of the student housing market, RealPage provided pricing information for Lessor Defendants that allowed them to closely analyze their pricing in comparison to their competitors at a bedroom-by-bedroom level:

¹² *Id.*

Bedroom Level Pricing



14. Similarly, in 2012, a company named Rainmaker Group launched a revenue management program called “LRO Student” that was specifically designed for the student housing market.¹³ LRO Student took into account the unique aspects of the student housing market in projecting prices, including the fact (a) that individual units are often leased by bed and (b) that tenants are limited in the number of times they will renew before they graduate. Competitors would input property data and their competitive environments. The application’s pricing engine would then use the data input by multiple users to calculate the best price for the market and would provide users with updated prices on a daily basis.¹⁴ “LRO Student is built up to meet specific needs of Student Housing,” taking into account “[c]ompetitor rents” and “changes to competitive inventory.”¹⁵ The LRO assets of Rainmaker Group were subsequently acquired by RealPage for \$300 million in 2017.¹⁶ By integrating LRO Student into its own

¹³ *The Price is Right*, Student Housing Business (February 22, 2023), available at <https://studenthousingbusiness.com/the-price-is-right/> (last visited July 13, 2023).

¹⁴ *Id.*

¹⁵ *In the Hotseat: ReLuminous LLC*, Apartment Revenue Management Conference Presentation (Sept. 23-25, 2013), available at <https://www.nahq.org/sites/default/files/naa-documents/meetings/ARM/In-The-Hot-Seat.pdf> (last visited July 13, 2023).

¹⁶ Donovan Jones, *RealPage to Acquire Rainmaker Group Multifamily LRO Assets*, Seeking Alpha (March 9, 2017), available at <https://seekingalpha.com/article/4053859-realpage-to-acquire-rainmaker-group-multifamily-lro-assets> (last visited July 13, 2023).

revenue management system, RealPage acknowledged the combined “data science talent and modeling tools through these acquisitions allows our customers to achieve better harvesting and placement of capital in the rental housing industry.”¹⁷ According to RealPage, “[t]his acquisition extended our revenue management footprint, augmented our repository of real-time lease transaction data, and increased our data science talent and capabilities. We also expect the acquisition of LRO to increase the market penetration of our YieldStar Revenue Management solution and drive revenue growth in our other asset optimization solutions.”¹⁸ RealPage’s acquisition of LRO indeed increased market penetration of its RMS, precipitating a structural shift in the forces of supply and demand.

15. Together, RealPage and Lessor Defendants have successfully driven rents higher for students across the country and boasted about the impact of their collusion. In a press release, RealPage stated its revenue management software yielded a 2% to 7% revenue outperformance in the market.¹⁹ One Lessor Defendant, Greystar, stated in a video testimonial on RealPage’s website that “over the last 10 years, spanning about 150 projects, the services that [RealPage] provided have equated to a return on investment of about 300% on about 90% of those projects.”²⁰ In a joint case study between RealPage and Lessor Defendant Campus Advantage, Campus Advantage reported outperforming the market by 14.1% “with a negative YoY occupancy change.”²¹ RealPage advised property owners and potential clients: “If you want to

¹⁷ RealPage Inc., 2017 Annual Report (Form 10-K) at 39 (March 1, 2018), <https://www.sec.gov/Archives/edgar/data/1286225/000128622518000008/rp-20171231x10k.htm> (hereinafter, RealPage 2017 10-K Form) (last visited July 13, 2023).

¹⁸ RealPage 2017 Form 10-K, *supra* note 17.

¹⁹ Press Release, RealPage, *RealPage Hosts Executive Student Summit* (May 8, 2019), <https://www.realpage.com/news/realpage-hosts-executive-student-summit/> (last visited July 13, 2023).

²⁰ *RealPage Consulting Helps Greystar Succeed in the Student Housing Industry*, RealPage Videos, available at <https://www.realpage.com/videos/student-housing-software-review-greystar/> (last visited July 13, 2023).

²¹ *Student Housing: Revenue Management Case Study*, RealPage Case Studies, available at https://www.realpage.com/case-studies/campus-advantage-revenue-management-case-study/?utm_source=campus-advantage&utm_medium=bp&utm_campaign=pmi&utm_term=20181003 (last visited July 13, 2023).

outperform the market term after term, focus less on occupancy and more on strategic lease pricing.” Campus Advantage had “below average occupancy rates,” yet still outperformed the market by double digits. Each of Lessor Defendant Campus Advantages’ properties “implemented a premium revenue management solution with exclusive student housing market research and reporting . . . The real-time accessibility of this data was critical to widening the margins for above market performance.”²²

16. The conspiracy Plaintiffs and members of the Class challenge is unlawful under Section 1 of the Sherman Act and state law. Plaintiffs bring this action to recover treble damages as well as injunctive and other appropriate relief on behalf of all others similarly situated.

II. PARTIES

17. Plaintiff Rachel Meredith is a resident of the State of Alabama and a student at Auburn University. Plaintiff Meredith rented a multifamily residential unit at UNCOMMON Auburn, located at 250 W. Glenn Avenue, Auburn, Alabama, beginning in August 2021 through the present. The property is operated by Lessor Conspirator CA Student Living Operating Company, LLC in Auburn, Alabama. Plaintiff Meredith has paid higher rent as a result of Defendants’ conspiracy.

18. Plaintiff Mia Lauder is a resident of the State of Oregon and a student at the University of Oregon. Plaintiff Lauder rented a purpose-built student housing unit at The Soto, located at 1180 Patterson Street, Eugene, Oregon, in August 2022 through the present. The property is operated by Lessor Defendant Campus Advantage Inc., in Eugene, Oregon. Plaintiff Lauder has paid higher rent as a result of Defendants’ conspiracy.

19. Plaintiff Benjamin Dempsey is a resident of the State of Alabama and was a student at Auburn University. Plaintiff Dempsey rented a purpose-built student housing unit at The Beacon, located at 1255 S. College Street, Auburn, Alabama, beginning in the Fall of 2015 through the Spring of 2017. The property is operated by Lessor Defendant Campus Advantage

²² *Id.*

Inc., in Auburn, Alabama. Plaintiff Dempsey has paid higher rent as a result of Defendants' conspiracy.

20. Plaintiff Ivonne Arriola Mendieta is a resident of the State of Florida and was a student at Florida State University. Plaintiff Mendieta rented a purpose-built student housing unit at The Osceola, located at 500 Chapel Dr., Tallahassee, Florida, beginning in May 2016 through July 2016. The property is operated by Defendant Conspirator Cardinal Group Holdings LLC, in Tallahassee, Florida. Plaintiff Mendieta has paid higher rent as a result of Defendants' conspiracy.

21. Defendant RealPage, Inc. is a Delaware corporation headquartered in Richardson, Texas. RealPage provides software and services to the residential real estate industry, including the revenue management software described herein. RealPage was a public company from 2010 until December 2020, when it was purchased by Chicago-based private equity firm Thoma Bravo, L.P., in a transaction that valued RealPage at approximately \$10.2 billion.²³ At that time, RealPage had over 31,700 clients, including each of the 10 largest multifamily property management companies in the United States.²⁴

22. Defendants Thoma Bravo Fund XIII, L.P. and Thoma Bravo Fund XIV, L.P. are Delaware limited partnerships (collectively, "Thoma Bravo Funds"). Defendant Thoma Bravo L.P. ("Thoma Bravo") is a Delaware limited partnership. Thoma Bravo is a private equity firm. In its capacity as the investment manager of over \$122 billion in assets spread across several investment vehicles, including the Thoma Bravo Funds, Thoma Bravo controls the strategic operation and investment decisions of those funds and the assets they own. In April 2021, Thoma Bravo directed the Thoma Bravo Funds to acquire RealPage in an all-cash go-private transaction. On information and belief, Thoma Bravo was aware of RealPage's anticompetitive activities and

²³ Press Release, RealPage, Inc., Thoma Bravo Complete Acquisition of RealPage (April 22, 2021), <https://www.realpage.com/news.thoma-bravo-complete-acquisition-of-realpage/> (hereinafter, "Merger Closing Press Release").

²⁴ RealPage Inc., 2020 Annual Report (Form 10-k) at 6 (March 1, 2021) (hereinafter, "RealPage 2020 Form 10-K").

acquired RealPage with the intent to maintain and enhance its cartel profits, which RealPage, with Thoma Bravo's active guidance and participation, has done.

23. Both RealPage and Thoma Bravo anticipated Thoma Bravo would provide strategic guidance to RealPage post-acquisition. In the Merger Closing Press Release, Steve Winn, Chairman of the Board and CEO of RealPage, stated that "Thoma Bravo brings significant expertise from its deep experience with software companies, and together we are committed to helping our customers innovate, grow and serve the next generation of multifamily operators and residents."²⁵ Thoma Bravo Founder and Managing Partner Orlando Bravo adds: "As a firm, we embrace these fundamental shifts in industries where software driven solutions are making meaningful advancements and we have the expertise and resources to help grow these capabilities at companies like RealPage. We believe our partnership can accelerate RealPage's momentum as it innovates on behalf of its customers."²⁶

24. Plaintiffs are informed and believe that Thoma Bravo has carried through on those stated intentions and is actively involved in the day-to-day operations of RealPage, including selecting and approving acquisition targets for RealPage, setting company policies, and hiring top RealPage executives from other Thoma Bravo companies, including CEO Dana Jones and COO Vinit Doshi, both of whom were recruited from Thoma Bravo subsidiary Sparta Systems. Thoma Bravo Operating Partner Charles Goodman is Chairman of RealPage's board of directors.²⁷

25. Lessor Defendant Greystar Management Services, LLC ("Greystar") is a Delaware limited partnership headquartered in Charleston, South Carolina. It is the largest manager of multifamily rental real estate in the United States and the fourth largest student

²⁵ Merger Closing Press Release, *supra* note 36.

²⁶ *Id.*

²⁷ Press Release, RealPage, Inc., RealPage Appoints Dana Jones as Chief Executive Officer (June 29, 2021), <https://www.realpage.com/news/realpage-appoints-dana-jones-as-chief-executive-officer/> (last accessed on July 3, 2021).

housing manager in the United States.²⁸ It manages over 100,000 student beds globally, serves more than 80 universities, and manages \$17.3 billion in student housing assets.²⁹ Greystar is one of RealPage's clients and uses its revenue management software.

26. Lessor Defendant BH Management Services, LLC is a Florida limited liability corporation headquartered in Des Moines, Iowa. BH Management Services was combined with another student housing property management company, Campus Evolution Villages, in 2020 to form B.HOM Student Living. B.HOM Student Living is the fourteenth largest student housing manager in the United States³⁰ and manages over 30,000 beds across 40-plus universities.³¹ B.HOM Student Living was also one of RealPage's clients and uses its revenue management software. On information and belief, BH Management Services manages a property located in Denver, Colorado.

27. Lessor Defendant Campus Advantage, Inc. ("Campus Advantage") is a Delaware corporation headquartered in Austin, Texas. It is the nation's fifteenth largest student housing manager.³² It specializes in property management for student housing communities and has over 250 communities in 18 states.³³ Campus Advantage is one of RealPage's clients and uses its

²⁸ *Top 25 Owners & Managers 2021*, Student Housing Business (November/December 2021) at 92, available at <https://editions.mydigitalpublication.com/publication/?m=58489&i=733087&p=92&ver=html5> (last visited July 13, 2023).

²⁹ *Greystar Student Housing*, Greystar, available at <https://www.greystar.com/product-specialties/student-housing> (last visited July 13, 2023).

³⁰ *Top 25 Owners & Managers 2021*, Student Housing Business (November/December 2021) at 92, available at <https://editions.mydigitalpublication.com/publication/?m=58489&i=733087&p=92&ver=html5> (last visited July 13, 2023).

³¹ *Timberline acquires new Columbia University Dorm for \$84M*, Real Estate Weekly (November 8, 2021), available at <https://rew-online.com/timberline-acquires-new-columbia-university-dorm-for-84m/> (last visited July 13, 2023).

³² *Top 25 Owners & Managers 2021*, Student Housing Business (November/December 2021) at 92, available at <https://editions.mydigitalpublication.com/publication/?m=58489&i=733087&p=92&ver=html5> (last visited July 13, 2023).

³³ *Portfolio of Communities*, Campus Advantage, available at <https://campusadv.com/portfolio/> (last visited July 13, 2023).

revenue management software. As noted above, Plaintiff Mia Lauder rented a purpose-built student housing unit at “The Soto,” which is prominently advertised as a “Campus Advantage” property.³⁴

28. Lessor Defendant Cardinal Group Holdings, LLC (“Cardinal Group”) is a Delaware limited liability corporation headquartered in Denver, Colorado. It provides property management services to on-and-off campus student housing as well as conventional commercial real estate and affordable housing units in 38 states, and it employs over 2,000 people.³⁵ Cardinal Group is one of RealPage’s clients and uses its revenue management software.

29. Lessor Defendant CA Student Living Operating Company, LLC (“CA Student”) is a Delaware limited liability corporation headquartered in Chicago, Illinois. It is a wholly owned subsidiary of CA Ventures Global Services, LLC. It was founded in 2004 as a niche investor and operator of student apartments and has since delivered 29,995 beds in over 69 university markets. It employs over 570 people.³⁶ CA Student is one of RealPage’s clients and uses its revenue management software. As noted above, Plaintiff Rachel Meredith rented a multifamily residential unit at UNCOMMON Auburn, located at 250 W. Glenn Avenue, Auburn, Alabama, which is identified as a CA Student property on its website.³⁷

30. Lessor Defendant Timberline Real Estate Ventures LLC (“TREV”) is a privately held real estate operator and investment manager focused on the residential sector that has acquired more than \$2.8 billion of total investments since its inception in 2012.³⁸ TREV specializes in the development, acquisition, and operation of student housing, multifamily, and mixed-use retail/residential communities, and “utilize[es] its fully integrated property

³⁴ *We’ve Joined the Campus Advantage Team!*, The Soto, <https://livethesoto.com/weve-joined-campus-advantage-family/> (last visited August 4, 2023).

³⁵ Cardinal Group Companies, <https://cardinalgroup.com/> (last visited July 13, 2023).

³⁶ CA Student, <https://www.ca-ventures.com/real-estate/student> (last visited July 13, 2023).

³⁷ See UNCOMMON Auburn, <https://www.uncommonau.com/> (last visited August 4, 2023).

³⁸ Plaintiffs have named Timberline Real Estate Ventures, LLC in this Complaint as it is the entity currently named in the underlying student housing complaints, but the parties will be filing a motion to substitute this entity for TREV Management II LLC, consistent with the parties’ meet and confers.

management team through its owned affiliate B.HOM Student Living with partner, BH Management Services.”³⁹ TREV is headquartered in Rye, New York.

31. Lessor Defendant B.HOM Student Living LLC (“B.HOM”) is a student housing operator headquartered in Dallas, Texas. As noted above, B.HOM manages more than 30,000 beds in properties at universities around the United States.⁴⁰ Since approximately 2020, B.HOM has been a wholly owned affiliate of Defendant Timberline Real Estate Ventures.

32. Lessor Defendants John Does 1-10 are entities whose names are unknown at this time, but who used RealPage’s pricing software to price leases in the market for student housing real estate during the class period.

III. JURISDICTION AND VENUE

33. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1337, as this action arises out of Section 1 of the Sherman Antitrust Act (15 U.S.C. § 1) and Sections 4 and 16 of the Clayton Antitrust Act (15 U.S.C. §§ 15 and 26).

34. This Court has personal jurisdiction over Defendants under Section 12 of the Clayton Act (15 U.S.C. § 22), Federal Rule of Civil Procedure 4(h)(1)(A), Colorado’s long-arm statute, C.R.S. § 13-1-124, and Oregon’s long-arm statute, ORCP 4.

35. Each Defendant: (a) transacted business throughout the United States, including in this District; and/or (b) engaged in an antitrust conspiracy that was directed at and had a direct, foreseeable, and intended effect of causing injury to the business or property of persons residing in, located in, or doing business throughout the United States, including in this District. Moreover, certain Defendants leased residential units to individuals throughout the United States, including in this District.

36. Venue is proper in this District pursuant to Sections 4, 12, and 16 of the Clayton Act (15 U.S.C. §§ 15, 22, and 26) and the federal venue statute (28 U.S.C. § 1391), because one

³⁹ *About Us*, Timberline Real Estate Ventures, <https://www.timberlinerev.com/about-us/> (last visited July 13, 2023).

⁴⁰ See *Operating Coast to Coast*, <https://www.bhomstudentliving.com/portfolio/> (last visited August 6, 2023).

or more Defendants maintain business facilities, have agents, transact business, and are otherwise found within this District.

37. The activities of the Defendants and their co-conspirators, as described herein, were within the flow of, were intended to, and did have direct, substantial, and reasonably foreseeable effects on the interstate commerce of the United States.

38. No other forum would be more convenient for the parties and witnesses to litigate this case.

IV. FACTUAL BACKGROUND

A. RealPage's revenue management software is widely used in the student housing market.

39. RealPage was founded in 1998 and, in 2002, acquired the original YieldStar software from a company called Camden Property Trust.⁴¹ As detailed in ProPublica's October 15, 2022 exposé, in 2004, RealPage hired Jeffrey Roper as its "principal scientist" to improve YieldStar.⁴² Roper, who had previously worked on airline price-setting software that the Department of Justice alleged artificially inflated airfares by more than a billion dollars, began building a "master data warehouse" that pulled in client data from other RealPage applications and output pricing recommendations—often, contrary to lessors' standard practice, recommendations that rent be raised.⁴³

40. RealPage first launched its "YieldStar Student Housing" product in approximately 2009 and quickly obtained buy-in from a critical mass of customers in the student housing market.⁴⁴ According to a 2013 article, YieldStar Student allows users to "input community data,

⁴¹ *RealPage Acquires YieldStar Multifamily Revenue Management System*, RealPage News (July 19, 2022), available at <https://www.realpage.com/news/realpage-acquires-yieldstar-multifamily-revenue-management-system/> (last visited July 13, 2023).

⁴² Heather Vogell, *Rent Going Up? One Company's Algorithm Could Be Why*, ProPublica (October 15, 2022), available at <https://www.propublica.org/article/yieldstar-rent-increase-realpage-rent> (last visited July 13, 2023).

⁴³ *Id.*

⁴⁴ *The Price is Right*, Student Housing Business (February 22, 2023), available at <https://studenthousingbusiness.com/the-price-is-right/> (last visited July 13, 2023) (reporting in

which provides valuable historical information when it comes time to project future pricing.” Meanwhile, RealPage “gathers community data from other OneSite⁴⁵ and YieldStar users”—i.e., competitor pricing data—“to help paint a more complete picture of the market,” and “also leverages MPF Research, its multifamily research arm that was founded in 1961 and presently tracks approximately 7 million multifamily units nationwide.” Then, the “Yieldstar platform uses a complex algorithm to analyze all of these data sources to come to a suggested price point.”⁴⁶

41. According to Keith Dunkin, then-vice president of market development for YieldStar, in 2013 “Yieldstar Student Housing ha[d] improved user revenues by 3 to 7 percent relative to the market.”⁴⁷ In the same article, Dunkin stated that RealPage “ha[d] a proven track record on a sustained basis for the past four years with the same partners and the same assets,” and went on to note that RealPage had signed up 12 “partners” in the previous year—which it anticipated would make “its user-supplied market data . . . even more complete”:

Yieldstar Student Housing will only get better in the future. According to Dunkin, a dozen partners have signed up for Yieldstar Student Housing in the past year. In addition, as market penetration for Yieldstar Student Housing increases, its user-supplied market data will become even more complete.

“RealPage is fully committed to the student housing industry,” Dunkin says. “We’re investing significantly within our existing OneSite portion of the platform and the ancillary products associated with it. We are continuing to invest heavily in our Yieldstar revenue management piece. We are passionate that student living is an evolving marketplace, and one that we want to have a leadership position in.”

42. In a presentation at the 2014 National Apartment Association Student Housing Conference & Exposition, RealPage described its revenue management tool in more detail, explaining that it “utilizes the competitive data” by “[c]omparing the effective rent you achieve

February 2013 that “[f]our years ago, RealPage entered the student housing realm with two applications, OneSite Student and YieldStar Student Housing”).

⁴⁵ According to the same article, OneSite “serves as [RealPage’s] core leasing and property management offering,” while YieldStar is RealPage’s “revenue management platform.” *See id.*

⁴⁶ *Id.*

⁴⁷ *Id.*

to the top and bottom of the competitive range for your selected competitors.”⁴⁸ RealPage even gave a sneak peek of the dashboard that property managers have access to, which included a view by competitor⁴⁹:

Operational Insight

The screenshot shows a software interface titled "Operational Insight". At the top, there is a navigation bar with links: Dashboard, Alerts, Offered Rates, Pricing Review, Unit Rates, Reports, Charts, Controls, Configuration, Competitors, and Lease Audit. Below the navigation bar, there is a header "Property Details Supervisor View". The header includes fields for "Community: Nationwide Vista", "Rate Type: New", and "Post Date: 03/04/2013". It also shows "End Date: 05/27/2013" and "Days Left: 84". Below the header, there are tabs for "Review Rates", "Accept Rates", "Export Type: CSV (Excel)", and buttons for "Export" and "Save Layout". The main content area has several sections: "Property Information", "Property Statistics", "In Place", "Forecast", "Recent Avg Eff", and "Yesterday". The "Property Information" section contains a table with columns for Floor Plan, Total Units, Occupied Units, % Occupied, % Leased, Sustainable Capacity, Rate Type Cap, Capacity Units, Available Units, Vacant, ON, TBD, Units, % of Capacity, MTM, Leases Needed, Yesterday Shortfall, % of Capacity, Shortfall at Rec, % of Capacity, Lease Change, Rent, Last Lease Date, Mkt Pos, 28 Day % Change, Rent, and Mkt Pos. Two rows of data are shown: "1B1B-A2A3" and "1B1B - Cabernet".

43. RealPage emphasized in presentations that it had designed specific revenue management tools customized for the student housing market⁵⁰:

Revenue Management For Student

- Designed specifically for Student Living
- Provides by the bed or unit pricing
- Recognizes the annual lease up
- Price centrally but leverage on site expertise
- Deployed in partnership with leading institutional investors, management providers and owner operators

44. Consistent with the specific needs of the student housing market, RealPage provided pricing information for student housing providers that allowed them to closely analyze their pricing in comparison to their competitors at a bedroom-by-bedroom level⁵¹:

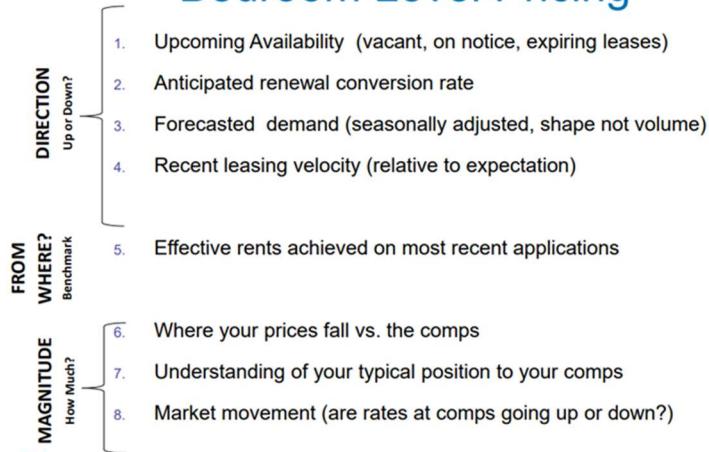
⁴⁸ Keith Dunkin, *Driving Outperformance: Ensuring Success with Revenue Management* (March 2014), available at <https://www.naahq.org/sites/default/files/naa-documents/meetings/student-housing/D1-Ensuring-your-success.pdf> (last visited July 13, 2023).

⁴⁹ *Id.*

⁵⁰ *Id.*

⁵¹ *Id.*

Bedroom Level Pricing



45. In 2012, several years after RealPage launched YieldStar Student, a company named Rainmaker Group launched a similar revenue management program called “LRO Student” that was specifically designed for the student housing market.⁵² LRO Student took into account the unique aspects of the student housing market in projecting prices, including the fact (a) that individual units are often leased by bed and (b) that tenants are limited in the number of times they will renew before they graduate. Competitors would input property data and their competitive environments. The application’s pricing engine would then use the data input by multiple users to calculate the best price for the market and would provide users with updated prices on a daily basis.⁵³ According to an October 2012 press release describing LRO Student’s launch:

With similar user interfaces, functionality, and reporting capabilities as LRO revenue management, LRO Student delivers superior pricing recommendations based on the specific move-in periods for each academic year for all residents, beds within a given asset, and unique expiration periods (all students eventually graduate). Additional key benefits available to student housing owners/operators through this offering include:

More accurate view of supply and demand constraints – takes into consideration the limited applicant pool based on school or university populations

⁵² *The Price is Right*, Student Housing Business (Aug. 12, 2019), available at <https://studenthousingbusiness.com/the-price-is-right/> (last visited July 13, 2023).

⁵³ *Id.*

Greater market share analysis – ability to better track competitive products for a given educational institute

Improved pricing – recommendations driven by in-depth analysis of historical and market data instead of emotional pricing

Increased probability of renewal – engages property management software data to improve renewal forecasting.⁵⁴

46. In 2017, RealPage made a bid to acquire the developer of LRO Student, Lease Rent Options (“LRO”) from the Rainmaker Group, and its revenue pricing capabilities. The Department of Justice scrutinized the deal, as RealPage would be acquiring its only significant competitor. However, to the surprise of even the architect of RealPage’s revenue management software, Jeffrey Roper, it was eventually permitted to proceed for \$300 million.⁵⁵ Before the acquisition, RealPage was pricing 1.5 million units. LRO’s data added another 1.5 million units, doubling RealPage’s reach, according to founder and then-CEO Steve Winn.⁵⁶

47. According to a press release, in 2019, YieldStar Student served “more than 50 clients.” RealPage also touted its results: a 2% to 7% revenue outperformance of the market, with a 95% client satisfaction rate.⁵⁷

48. Today, RealPage brands its pricing software “AI revenue management,” and markets it as a tool that helps lessors “continuously maximize asset value with precision pricing capabilities.” RealPage describes this software as “the industry’s only price optimization solution

⁵⁴ Jessica Fiur, *The Rainmaker Group Launches Industry’s First Revenue Management Product Engineered Specifically for Student Housing*, Multi-Housing News (Oct. 16, 2021), available at <https://www.multihousingnews.com/the-rainmaker-group-launches-industrys-first-revenue-management-product-engineered-specifically-for-student-housing/> (last visited July 13, 2023).

⁵⁵ Heather Vogell, *Rent Going Up? One Company’s Algorithm Could Be Why*, ProPublica (October 15, 2022), available at <https://www.propublica.org/article/yieldstar-rent-increase-realpage-rent> (“The approval allowed RealPage to acquire its only significant competitor, Roper said, adding, ‘I was surprised the DOJ let that go through.’”) (last visited July 13, 2023).

⁵⁶ *Id.*

⁵⁷ *RealPage Hosts Executive Student Summit*, RealPage Newsroom (May 8, 2019) (last visited July 13, 2023).

powered by next-generation data that makes it possible to consistently reduce vacancies and maximize rents,” explaining that it “outperforms the market 2%-5%.” Its website states:

Building on deep experience with millions of units and decades of successful results with clients outperforming in every market, AI Revenue Management accelerates the accuracy of its supply and demand algorithms and optimizes amenity pricing to drive revenue yields even further.

Improved pricing algorithms factor real-time lease transaction data spanning 13M+ units that includes true performance indicators like lease trade-out, average vacant days between leases and retention rates for more precise outcomes.⁵⁸

49. RealPage notes proudly in a promotional eBook that “the multifamily industry was reported as having achieved critical mass for revenue management adoption” in 2016⁵⁹ and claims on its website that its AI revenue management software is now “[t]rusted”—i.e., used to set the price in—“over 4 million units.”⁶⁰ However, this is just a portion of the data available to train RealPage’s algorithms, as RealPage also obtains data from properties that use other RealPage software. According to RealPage’s 2020 10-K, RealPage had a base of 31,700 clients who “use one or more of [RealPage’s] integrated data analytics or on demand software solutions to help manage [their] operations.”⁶¹ Collectively, these clients use RealPage’s products “to help manage the operations of approximately 19.7 million real estate units.”⁶²

50. This client base (among whom are RealPage’s student housing operator clients) gives RealPage access to real-time data on nearly every aspect of the rental housing market, including otherwise non-public data on rents and occupancy. This in turn allows RealPage to

⁵⁸ “RealPage AI Revenue Management,” RealPage, available at <https://www.realpage.com/asset-optimization/revenue-management/> (last visited July 13, 2023).

⁵⁹ RealPage, *3 Ways to Leverage AI for Maximum NOI*, available at <https://www.realpage.com/ebooks/leverage-ai-maximum-noi/?showPdf=true> (last visited July 13, 2023).

⁶⁰ “RealPage AI Revenue Management,” RealPage, available at <https://www.realpage.com/asset-optimization/revenue-management/> (last visited July 13, 2023).

⁶¹ See RealPage, Inc., Form 10-K 2020, available at <http://edgar.secdatabase.com/2500/12862252000011/filing-main.htm> (last visited July 13, 2023).

⁶² *Id.*

calculate and recommend supracompetitive unit-by-unit, or bed-by-bed, pricing on a *daily basis*. Indeed, on a video posted to its website, RealPage explains that “YieldStar crunches millions of transactions each night, pinpointing price shifts for every single unit on the platform at any point in time.”⁶³ A 2021 presentation on RealPage’s “AI Revenue Management” available on the website of The Medve Group, a property management company utilizing RealPage’s Revenue Management Solutions, includes a slide showing how daily prices are recommended to lessors⁶⁴:

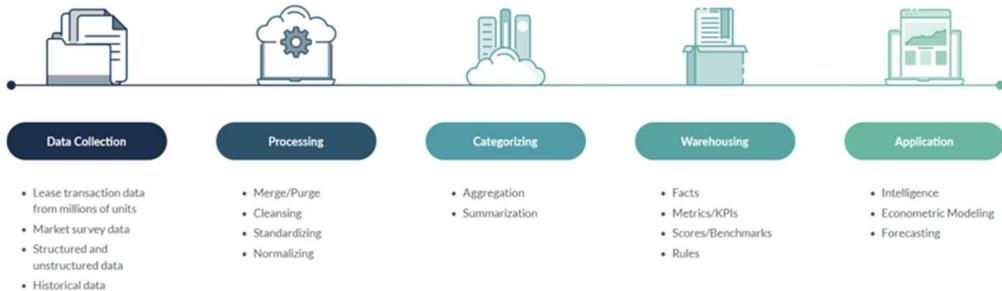


51. The following diagram from a RealPage eBook shows how RealPage aggregates its data, including nonpublic lease transaction data, and thus coordinates pricing among its clients⁶⁵:

⁶³ *YieldStar Calculates the Right Rent Price at the Right Time*, RealPage Videos, available at <https://www.realpage.com/videos/yieldstar-measures-price-elasticity/> (last visited July 13, 2023).

⁶⁴ *AI Revenue Management*, The Medve Group, Inc., (June 21, 2021), available at [https://medve.com/assets/airm-manager-training-medve-management-6.23.2021-\(1\).pdf](https://medve.com/assets/airm-manager-training-medve-management-6.23.2021-(1).pdf) (last visited July 13, 2023).

⁶⁵ *3 Ways to Leverage AI for Maximum NOI*, RealPage, available at <https://www.realpage.com/ebooks/leverage-ai-maximum-noi/?showPdf=true> (last visited July 13, 2023).



52. Consistent with this, in a slide titled, “Why Revenue Management,” the same Medve Group presentation referenced above emphasizes that RealPage’s tool is valuable precisely because it gives “insight” into competitors’ pricing, stating: “Competitor insight that allows for pricing visibility relative to market.” Another slide, captioned “Sizing up the competition,” explains that RealPage recommends price changes by “leverage[ing] the RealPage Lease Transaction data set augmented with survey data from RealPage Analytics” and “[i]dentifies competitive floor plans that likely present with yours in on-line searches”⁶⁶:

Sizing Up the Competition

MARKET RANGE PEER COMPARISON

Creates a market range chart to determine magnitude of pricing change relative to market

THE HOW

- Mirrors the prospect buying experience
- Leverages the RealPage Lease Transaction data set augmented with survey data from RealPage Analytics
- Identifies competitive floor plans that likely present with yours in on-line searches
- Based on geographic bedroom type and effective rental rate relationships over time
- Manual entry is not required

THE WHY

- We may have different availability in our floor plans than our peers
- Our peers may have different operational strategy and business objectives (i.e. they are re-financing or on the market)
- Our management approach and reputation is the single most important differentiator to prospects

 REALPAGE

⁶⁶ *AI Revenue Management*, The Medve Group, Inc., (June 21, 2021), available at [https://medve.com/assets/airm-manager-training-medve-management-6.23.2021-\(1\).pdf](https://medve.com/assets/airm-manager-training-medve-management-6.23.2021-(1).pdf) (last visited July 13, 2023).

53. AI Revenue Management is used by Lessor Defendants in the student housing market. In a 2022 video interview of Jennifer Cassidy, Lessor Defendant Cardinal Group Management's Senior Vice President of Student Operations, Arben Skivjani, RealPage's Chief Economist, states that AI Revenue Management is offered to student housing operators.⁶⁷ He goes on to describe the features RealPage offers to student housing operators: "For student housing managers such as Jennifer, AI revenue management is not the only product that RealPage has to offer. Our market analytics tool offers historical data as well as highly accurate forecasts for conventional and student housing for various matrices, such as rent and occupancy, revenue, supply and demand, and enrollment growth, for nearly 190 universities of different sizes across the country. Our latest, greatest forecast lets our clients see aggregated past and forecasted performance of privately owned student housing units depending on their distance from campus."⁶⁸

B. Each of the Lessor Defendants participated in RealPage's scheme to artificially inflate the price of student housing rent during the class period.

54. To participate in RealPage's pricing algorithm (and thus see how the program is being used), a user must own property and agree to either use a RealPage Pricing Advisor or employ their own in-house pricing advisor who is then trained by RealPage. The full list of RealPage participants is hidden from the public and is thus unknown to Plaintiffs. RealPage never published the full list of participants. For this reason, the full effect of the conspiracy is hidden from the public's view.

⁶⁷ RealPage, "How to Capture Robust Growth in Student Housing and Where to Focus," available at https://www.facebook.com/NAAhq/videos/as-we-begin-the-2022-school-year-we-take-a-look-at-student-housing-trends-as-arb/456006323161854/?locale=ms_MY (last visited July 13, 2023).

⁶⁸ *Id.*

55. Nevertheless, Plaintiffs can demonstrate that each of the Lessor Defendants participated in RealPage’s scheme to artificially inflate prices of student housing through the use of revenue management software during the class period.

56. **Greystar.** Greystar used RealPage to set prices for student housing above competitive rates. For example, Greystar used RealPage’s Revenue Management Solutions to set prices at a 290-apartment student living property in Austin, Texas. Greystar told its property managers to accept RealPage’s pricing recommendations, and the property managers did so approximately 98 to 99% of the time. Greystar also held weekly or biweekly calls with a RealPage Pricing Advisor. These calls were generally held over Zoom and attended by a Greystar regional manager.

57. **TERV, B.HOM Student Living, and BH Management.** Timberline Real Estate Ventures, B.HOM Student Living, and BH Management Services used RealPage to set prices for student housing above competitive rates. Since approximately 2020, B.HOM has been a wholly owned affiliate of Defendant Timberline Real Estate Ventures. RealPage has created a special private website for BH Management called “BH Corporate University” that it uses to train BH managers in how to use the RealPage revenue management software.⁶⁹ Sierra Garza, the Senior Revenue Manager for BH Management, credited RealPage for providing data that “yields a better performance.”

⁶⁹ <https://realpagelearning.com/v5/login/207/>.



REALPAGE

Email / Username

Password

Remember Me

[Forgot your password?](#)

Login

[Return to BH SharePoint](#)

Welcome to the BH Corporate University! Please login to access your training assignments.

If this is your first time logging into the system, please use the information and password link in the [Welcome to the BH Corporate University!](#) email that you received from StrategicLearning@BHManagement.com. This email will typically appear in your inbox the day after your first day at BH. If you cannot locate the email, you may instead click the [Forgot your password?](#) link and enter your email address. An email will be sent to you with a link for password reset.

Questions? Please create a [Freshservice ticket](#). We are happy to help!

58. **Campus Advantage.** Campus Advantage used RealPage to set prices for student housing above competitive rates. In the July 2021 issue of Student Housing Business, Peter Iannone, the director of revenue management for Campus Advantage confirmed in an article that Campus Advantage has used RealPage's YieldStar software to maintain higher prices. Iannone credited the software for driving up rental rate prices by 5.4 percent. In a video on RealPage's website, Jennifer Cassidy, the Senior Vice President of Asset Management for Campus Advantage also credited YieldStar with increasing rent by more than 5 percent. Campus Advantage also admitted that it partnered with RealPage's revenue advisors to "increase effective rent by 11.1 percent" for student housing properties near the University of Missouri. Campus Advantage student housing properties used YieldStar Student for pricing. Campus Advantage employees would collect competitor pricing data directly from competitors. Campus Advantage employees would then enter the competitor pricing information into YieldStar student. Campus Advantage would then receive recommendations from YieldStar about how much it should raise its prices. YieldStar Student's pricing recommendations would be implemented automatically unless they were specifically overridden by Campus Advantage

employees. Campus Advantage would have to enter reasons for overriding YieldStar's pricing recommendations if it chose not to accept them.

59. **Cardinal Group.** The Cardinal Group used YieldStar Student to set prices for student housing above competitive rates. On a weekly basis, Cardinal Group employees would input market data into the YieldStar Student system, including information both about Cardinal Group buildings and competitor properties. The information that Cardinal Group employees inputted into YieldStar Student included rental rates at both Cardinal Group buildings and competitor properties. Cardinal Group would then receive rent recommendations on a weekly basis from YieldStar Student. During leasing season, employees associated with Cardinal Group student housing properties would meet each week with RealPage account executives over Zoom to discuss rent recommendations that were provided by YieldStar Student. Employees that participated in these calls with RealPage included Janna Dalton, an SVP and head of asset management at Cardinal Group, and Carey McDonald, director of revenue at Cardinal Group.⁷⁰ Cardinal Group would then either accept or reject the rent recommendations that YieldStar Student provided. If Cardinal Group declined the rent recommendation, then Cardinal Group would have to provide reasons for why it was declining the rent recommendation.

60. **CA Student.** CA Student used RealPage's YieldStar student to set prices for its student housing properties. Individuals at CA Student with national and regional responsibilities met with RealPage representatives on a regular basis to discuss YieldStar Student. CA Student

⁷⁰ Carey McDonald, the Revenue Management Director at Cardinal Group describes his job in his LinkedIn profile as "Supporting Conventional and Student Housing operators on Revenue Management Platforms." Other employees from the Cardinal Group with LinkedIn profiles claim to be "experienced" with YieldStar software. See Lane Johnson - Portfolio Manager at Cardinal Group Management, LinkedIn <https://www.linkedin.com/in/lanejohnson51/> (last accessed August 30, 2023). Mr. Johnson's LinkedIn profile states that he is currently a portfolio manager at Cardinal Group and is "responsible for overseeing on-site operations from the corporate level across a portfolio of 13 remote student housing communities."

provided RealPage with its revenue workbook, which included the company's revenue goals prior to the pre-leasing season. RealPage then provided CA Student with suggestions on ways to meet its revenue goals. Individual property managers at CA Student would then have phone calls with RealPage representatives on a weekly basis during the critical pre-leasing season. During those phone calls, CA Student and RealPage would discuss the revenue growth goals for a building, the rent amounts, the number of pre-leased units, and potential tenant traffic. CA Student and RealPage would also discuss the actions of competitor buildings, including their pre-leasing status, promotions, and rent amounts. RealPage advisors would then review with CA Student the pricing recommendations of YieldStar Student, which included recommendations on raising rents.

C. RealPage and Lessor Defendants conspired to eliminate competition in the student housing market by effectively outsourcing price and supply decisions to a common decision maker.

61. Before RealPage facilitated collusion among Lessor Defendants, lessors—acting independently—tried to maximize occupancy. Lessor Defendants had only a short time period to set rent prices and ensure “heads in beds” at the beginning of a new school term. Every day a unit was left empty was a lost opportunity to earn revenue for that day, so Lessors offered sufficiently attractive pricing to maintain maximum occupancy. This could come in the form of reduced prices or promotional offers. Promotions included rental concessions (offering the first month free if the customers signed a one-year lease) and giveaways (gift cards, raffles, Apple products, free parking, or sometimes even cruise tickets). In one blog post, RealPage described the pre-RealPage status quo: “A property may set the rate at \$400 by renting early for the fall semester, \$420 when half the beds have been booked, and \$450 when there aren’t many left,”

and conceded this seemed “like a logical approach to pricing.”⁷¹ RealPage continued, “in fear of empty beds, some properties offer concessions or discounts for early rental decisions.”⁷²

62. RealPage is describing a competitive situation, where Lessor Defendants maximize occupancy by setting their own prices based on their independent observations of the market. This type of pricing strategy is characteristic of a competitive market.

63. RealPage called the status quo, in which competitors actually competed, “leav[ing] money on the table.”⁷³ Instead of offering price reductions and discounts to entice customers, RealPage enabled property managers to set “top tier price[s],” and participation in the cartel allowed property managers to “feel confident that it won’t end up with empty beds at the time the semester starts.”⁷⁴ Following widespread adoption of RealPage, Lessor Defendants swiftly and concertedly shifted from the previous competitive “market share over price” strategy to a new collusive “price over volume” strategy. As RealPage put it, “High Occupancy =/= Optimum Revenue Performance,”⁷⁵ and “[r]ather than lease to a target occupancy . . . you’re leasing to achieve maximum revenue.”⁷⁶ Price over volume is characteristic of a cartelized market. RealPage offers a product that creates one unified platform “specifically designed to streamline the unique day-to-day challenges of Student Housing,” utilizing market data that

⁷¹ Guy Lyman, *Price Units Right in Student Housing with Revenue Management*, RealPage Blog (June 21, 2018), available at <https://www.realpage.com/blog/price-units-right-in-student-housing-with-revenue-management/> (last visited July 13, 2023).

⁷² *Id.*

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ *Student Housing: Revenue Management Case Study*, RealPage Case Studies, available at https://www.realpage.com/case-studies/campus-advantage-revenue-management-case-study/?utm_source=campus-advantage&utm_medium=bp&utm_campaign=pmi&utm_term=20181003 (last visited July 13, 2023).

⁷⁶ Guy Lyman, *Price Units Right in Student Housing with Revenue Management*, RealPage Blog (June 21, 2018), available at <https://www.realpage.com/blog/price-units-right-in-student-housing-with-revenue-management/> (last visited July 13, 2023).

covers one million student beds.⁷⁷ RealPage offers Revenue Management Solutions as part of that platform, which assists property managers in setting rent prices.⁷⁸

64. RealPage and the Lessor Defendants adopted a new strategy: increasing prices notwithstanding market conditions and tolerating the lost revenue resulting from any unrented and empty housing units. In a competitive market, this strategy would quickly fail—any units listed at prices exceeding the market price would stay empty and the property manager would eventually go out of business. In the market RealPage and Lessor Defendants created, each Lessor Defendant had mutual assurances that other Lessor Defendants would also keep prices high, leaving students with no choice but to pay what Defendants demanded.

65. RealPage also discouraged Lessor Defendants from offering specials, or various types of discounts, to entice renters. RealPage told Lessor Defendants to set up the software to get the prices right so that the Lessor Defendants would not need to offer specials to entice tenants. RealPage also told the Lessor Defendants that offering discounts and specials would “break the algorithm that figures out what pricing should be.”

66. In a joint case study between RealPage and Lessor Defendant Campus Advantage, Campus Advantage reported outperforming the market by 14.1% “with a negative YoY occupancy change.”⁷⁹ RealPage advised property owners and potential clients: “If you want to outperform the market term after term, focus less on occupancy and more on strategic lease pricing.” Lessor Defendant Campus Advantage had “below average occupancy rates,” yet still outperformed the market by double digits. Each of Campus Advantages’ properties “implemented a premium revenue management solution with exclusive student housing market

⁷⁷ “Student,” RealPage, <https://www.realpage.com/student/> (last visited July 13, 2023).

⁷⁸ *RealPage Announces Launch of Prelease Management for Student Living*, RealPage Newsroom (Feb. 25, 2013), available at <https://www.realpage.com/news/realpage-announces-launch-of-prelease-management-for-student-living/> (last visited July 13, 2023).

⁷⁹ *Student Housing: Revenue Management Case Study*, RealPage Case Studies, available at https://www.realpage.com/case-studies/campus-advantage-revenue-management-case-study/?utm_source=campus-advantage&utm_medium=bp&utm_campaign=pmi&utm_term=20181003 (last visited July 13, 2023).

research and reporting The real-time accessibility of this data was critical to widening the margins for above market performance.”⁸⁰

67. Critically, RealPage and Lessor Defendants have effectuated their anticompetitive agreement to hike prices by agreeing generally to set prices using RealPage’s coordinated algorithmic pricing. Lessor Defendants often referred to such adherence as pricing “courage” or “discipline.” Lessor Defendants also agree to provide RealPage with real-time access to their competitively sensitive and nonpublic data on their student housing real estate leases.

68. RealPage boasts the “Industry’s most comprehensive historical data set from 2013,”⁸¹ which today includes “over 1 million Student beds of in-depth market data”⁸² and key performance indicators for nearly 1,000 universities.⁸³ For each property manager, RealPage “[d]ynamically calibrates elasticity for each bedroom type” by incorporating data from “each lease and lease application”⁸⁴:

⁸⁰ *Id.*

⁸¹ “Student Asset Optimization,” RealPage, available at <https://www.realpage.com/student/asset-optimization/#revenue-management-section> (last visited July 13, 2023).

⁸² “Student,” RealPage, <https://www.realpage.com/student/> (last visited July 13, 2023).

⁸³ “Student Asset Optimization,” RealPage, available at <https://www.realpage.com/student/asset-optimization/#revenue-management-section> (last visited July 13, 2023).

⁸⁴ Keith Dunkin, *Driving Outperformance: Ensuring Success with Revenue Management* (March 2014), available at <https://www.naahq.org/sites/default/files/naa-documents/meetings/student-housing/D1-Ensuring-your-success.pdf> (last visited July 13, 2023).

Bedroom Level Pricing

How the tool utilizes the competitive data:

- Starts with your market survey, Operations approves the comps
- Dynamically calibrates elasticity for each bedroom type by:
 - Reading each lease and lease application for your asset
 - Determining the effective rent (net of all appropriate concessions)
 - Comparing the effective rent you achieve to the top and bottom of the competitive range for your selected competitors. Of note, the top and the bottom is a blending of multiple unit types to protect against “bad data”
 - The tool assigned a price position for each lease and aggregates to form a elasticity curve to truly define the price/demand relationship

69. In the case study performed for Lessor Defendant, Campus Advantage, RealPage states that such metrics included “Perpetual lease-up by applicable year, semester, or quarter,” “Actual lease transactions and pricing data,” “Waitlist factors,” “Distinct leasing patterns for student renters,” and “Monitoring renewal conversions.”⁸⁵ RealPage then compares that property manager’s rent “to the top and bottom of the competitive range for [their] selected competitors” and finally “assign[s] a price position for each lease.”⁸⁶ By applying a single, common pricing algorithm to a shared dataset of competitors in a given market, RealPage provided the conduit through which Lessor Defendants colluded to raise student rents.

70. On information and belief, RealPage regularly provides Lessor Defendants with recommended price levels that are tailored for the student housing market through their Revenue Management Solutions. RealPage regularly engages in communications with Lessor Defendants regarding their pricing strategies. For example, according to Witness 1, for Lessor Defendants

⁸⁵ *Student Housing: Revenue Management Case Study*, RealPage Case Studies, available at https://www.realpage.com/case-studies/campus-advantage-revenue-management-case-study/?utm_source=campus-advantage&utm_medium=bp&utm_campaign=pmi&utm_term=20181003 (last visited July 13, 2023).

⁸⁶ Keith Dunkin, *Driving Outperformance: Ensuring Success with Revenue Management* (March 2014), available at <https://www.naahq.org/sites/default/files/naa-documents/meetings/student-housing/D1-Ensuring-your-success.pdf> (last visited July 13, 2023).

Greystar and BH Management Services,⁸⁷ Greystar used RealPage's Revenue Management Solutions to set prices at a 290-apartment student living property in Austin, Texas. Greystar "always wanted" Witness 1 and other property managers to accept RealPage's pricing recommendations, and Witness 1 did so approximately "98 to 99% of the time." Witness 1 recalled Lessor Defendant Greystar's regional managers or senior managers saying things like, "We have this program for a reason," and stated that RealPage's pricing recommendations for student housing properties were the same as with multifamily housing properties, with one exception: some student housing properties set prices by the bed/room, as opposed to by unit.

71. RealPage strongly emphasizes the importance that Lessor Defendants focus on maximizing profitability and total revenue, rather than the procompetitive focus on occupancy rates that would occur in a competitive market, and did occur among lessors before the rise of revenue management programs.⁸⁸ Jeffrey Roper, RealPage's main architect, publicly described the problem as: "If you have idiots undervaluing, it costs the whole system."⁸⁹ For example, RealPage's custom marketing materials for one of its Revenue Management Solutions software, RealPage Student Revenue Management, states that "occupancy isn't always the answer" and that "RealPage Student Revenue Management" is a "surgical tool" that "replac[es] traditional occupancy rates with intelligent pricing based on hard data, resulting in the best rates for every bed."

72. Lessor Defendant Campus Advantage stated in a customer testimonial on the RealPage website, "Our peers are all focused on achieving occupancy the quickest they can . . .

⁸⁷ Specifically, Witness 1 worked for Defendant Greystar from February 2009 to July 2015 as a community manager, and for Defendant BH Management Services from September 2015 to January 2020 as a property manager. Defendants and the Court will be provided with her identity through separate correspondence.

⁸⁸ "RealPage Student," RealPage, available at <https://www.realpage.com/storage/files/pages/pdfs/2020/02/vst-18-014-016-student-revenue-management-flyer.pdf> (last visited July 13, 2023).

⁸⁹ Heather Vogell, *Rent Going Up? One Company's Algorithm Could Be Why*, ProPublica (Oct. 15, 2022), available at <https://www.propublica.org/article/yieldstar-rent-increase-realpage-rent> (last visited July 13, 2023).

we're more so focused on achieving a revenue goal instead of being focused on occupancy . . . the results really speak for themselves.”⁹⁰



Empower Your Pricing

Get Metrics That Matter with RealPage Student Revenue Management.

With a short sales cycle and one big yearly leasing window, pricing for student housing can be a challenge, but occupancy isn't always the answer. Empower yourself with real data. RealPage Student Revenue Management engages all of the tough metrics that student housing presents, and responds with bigger returns. It's a powerful solution that becomes a surgical tool in your property manager's hands, replacing traditional occupancy rates with intelligent pricing based on hard data, resulting in the best rate for every bed, and biggest ROI from every

student property in your portfolio. The most empowering aspect of RealPage Student Revenue Management is that it becomes smarter with every lease it tracks, year to year, leasing season to leasing season, so that your student pricing strategy is constantly growing with your business. Over time, you'll build a carefully constructed pricing strategy, based on data, that never stops evolving. Demand more from your properties and more for your business. Get RealPage Student Revenue Management and experience the returns for yourself.

73. Lessor Defendants are squeezing an already-tight housing market. In economic terms, the student housing market in any given college town faces an inelastic (i.e., static) demand that, at most points, outpaces supply. One exception is when the student body arrives in the weeks before the Fall term, looking for housing within a small radius around their campus. At this point, the student housing market is as competitive as it gets—Lessor Defendants fight to attract a sudden influx of a large customer base. But in a matter of weeks, this customer base dwindles: students settle in, classes start, and Lessors again have market power. This is evident from RealPage’s own assessment that “A property may set the rate at \$400 by renting early for the fall semester, \$420 when half the beds have been booked, and \$450 when there aren’t many

⁹⁰ *Student Housing: YieldStar Helps You Become Head of the Class in Student Housing*, RealPage Videos, available at <https://www.realpage.com/videos/yieldstar-customer-review-campus-advantage/> (last visited July 13, 2023).

left.”⁹¹ The collusion between Lessors and RealPage eliminates this short, early competitive stage of the student housing cycle.

74. In its promotional materials, RealPage explicitly warns lessors that, “in fear of empty beds, some properties offer concessions or discounts for early rental decisions.”⁹² RealPage purports to solve this problem: it allows Lessor Defendants the “confidence” to start the semester with prices at \$450 and stay there, freeing them from reliance on “blunt instruments such as tiered pricing or concessions.”⁹³ And it imposes this discipline on Lessors by relying on competitor pricing data:

Revenue management for Student Housing

This is where commercial revenue management algorithms comes in. Despite the volatility of student housing, it’s still entirely predictable. Revenue management solutions look at bed availability by unit type, future expirations, historic rental patterns, competitor pricing, leasing velocity and other criteria to help you arrive at an ideal rent to charge. Rather than lease to a target occupancy, or even to a target occupancy at arbitrary prices, you’re leasing to achieve *maximum revenue* – the ideal balance of occupancy and rent price to get there.⁹⁴

75. What RealPage refers to as “fear,” most would understand as a natural market force disciplining suppliers to compete fairly. RealPage subverts this natural competitive dynamic by ensuring that, even if some beds remain empty, Lessor Defendants still end up with supracompetitive profits—because the monopoly rents RealPage helps lessors extract from rented units offset losses from unrented units.

76. Remarkably, RealPage’s promotional materials even speculate whether “students themselves” will “accept” the “price volatility” that comes with Lessor Defendants’ adoption of

⁹¹ Guy Lyman, *Price Units Right in Student Housing with Revenue Management*, RealPage Blog (June 21, 2018), available at <https://www.realpage.com/blog/price-units-right-in-student-housing-with-revenue-management/> (last visited July 13, 2023).

⁹² *Id.*

⁹³ *Id.*

⁹⁴ *Id.* (emphasis in original).

RealPage's Revenue Management Solutions, i.e., whether students will protest RealPage's supracompetitive pricing:

But is the price volatility accepted by the students themselves, or will there be a backlash? The answer can be found in Uber's surge pricing, something with which students are very familiar. Prices shift constantly with supply and demand, and over time Uber consumers (who tend to skew younger) have come to understand the logic and view it as reasonable. So there's a precedent for them to consider.⁹⁵

77. In a case study about Lessor Defendant Campus Advantage, Campus Advantage reported outperforming the market by 14.1% in the 2017 leasing season, "even with below average occupancy rates."⁹⁶ RealPage's website also relayed Campus Advantage's testimonial: "Jennifer Cassidy, Senior Vice President of Asset Management for Campus Advantage, was able to see 5.4% effective rental rate growth when using YieldStar . . . because YieldStar gives her staff the ability to better understand supply and demand in their markets and to price things accordingly."⁹⁷

78. Madison Meier, Vice President of Business Development for Defendant Campus Advantage, stated in a customer testimonial on the RealPage website: "Our peers are all focused on achieving occupancy the quickest they can, whether that be in concession or raised rates and we're more so focused on achieving a revenue goal instead of being focused on occupancy . . . the results really speak for themselves . . . instead of just trying to lease their properties as quick as they can to a 100%, they're focused on really maximizing rates and really leasing each bed at its maximum potential."⁹⁸

⁹⁵ *Id.*

⁹⁶ *Student Housing: Revenue Management Case Study*, RealPage Case Studies, available at https://www.realpage.com/case-studies/campus-advantage-revenue-management-case-study/?utm_source=campus-advantage&utm_medium=bp&utm_campaign=pmi&utm_term=20181003 (last visited July 13, 2023).

⁹⁷ *Student Housing: YieldStar Helps You Become Head of the Class in Student Housing*, RealPage Videos, available at <https://www.realpage.com/videos/yieldstar-customer-review-campus-advantage/> (last visited July 13, 2023).

⁹⁸ *Id.*

79. Michael Greene, Sr. Director Business Operations at Lessor Defendant Greystar, stated in a video testimonial: “The statistics that we have as far as return on investment over the last 10 years, spanning about 150 projects, the services that [RealPage’s team] have provided have equated to a return on investment of about 300% on about 90% of those projects.”⁹⁹

80. RealPage’s own executives admit that RealPage’s coordinated algorithmic pricing is “driving” anticompetitive effects in the form of higher prices and reduced output.¹⁰⁰ RealPage advertises that its Revenue Management Solutions software recommends pricing that “calculates exactly what you should pay on that particular day, based on availability, class and amenities, competitor pricing, season, historical data and other criteria.” Through RealPage’s Revenue Management Solutions software, business managers can “generate the highest possible revenues in a way no human (or even team of humans) could ever do on a daily basis.”¹⁰¹

81. RealPage’s customer testimonials reveal that the price increases on student housing were only made possible through the pricing courage afforded by RealPage’s competitively sensitive data.

82. Jennifer Cassidy, Senior Vice President of Asset Management for Lessor Defendant Campus Advantage, stated in a video testimonial on RealPage’s site that “Prior to using this product, a lot of our pricing decisions were reactionary. So if we were seeing concessions as a trend in the market, we were at the mercy of that trend whereas now we’re more of a trend setter in that we understand the supply and demand that’s happening at our property and we’re able to make decisions based on that—despite what’s happening in our markets.” The

⁹⁹ *RealPage Consulting Helps Greystar Succeed in the Student Housing Industry*, RealPage Videos, available at <https://www.realpage.com/videos/student-housing-software-review-greystar/> (last visited July 13, 2023).

¹⁰⁰ Heather Vogell, *Rent Going Up? One Company’s Algorithm Could Be Why*, ProPublica (October 15, 2022), available at <https://www.propublica.org/article/yieldstar-rent-increase-realpage-rent> (last visited July 13, 2023).

¹⁰¹ Guy Lyman, *Price Units Right in Student Housing with Revenue Management*, RealPage Blog (June 21, 2018), available at <https://www.realpage.com/blog/price-units-right-in-student-housing-with-revenue-management/> (last visited July 13, 2023).

site boasts that Lessor Defendant Campus Advantage “was able to see 5.4% effective rental rate growth when using YieldStar.”¹⁰²

83. RealPage’s pricing software was built by individuals who previously had been involved in anticompetitive coordinated pricing efforts. Jeffrey Roper, one of the main architects of RealPage’s software, was the former Director of Revenue Management at Alaska Airlines when it and other airlines began using common software to share nonpublic planned routes and prices with each other in the 1980s. The Department of Justice estimated that the agreement cost customers over a billion dollars, and it reached settlements or consent decrees for price-fixing violations with eight airlines, including Alaska Airlines. Roper said, “We all got called up before the Department of Justice in the early 1980s because we were colluding . . . We had no idea.” But Roper evidently did not learn his lesson: less than a decade later, he had turned to the apartment rental industry to begin building a “master data warehouse” of client data.¹⁰³

D. Defendants monitor and enforce compliance with the scheme.

84. RealPage has various stops in place to closely monitor Lessor Defendants’ “discipline,” i.e., their compliance with the scheme here, including specific workflows by which property managers accept RealPage’s pricing “recommendations.” Pictured below is a slide from RealPage’s “YieldStar Revenue Management – Manager Training” deck, which details the times and processes by which property managers accept RealPage’s pricing “recommendations”:

¹⁰² *Student Housing: YieldStar Helps You Become Head of the Class in Student Housing*, RealPage Videos, available at <https://www.realpage.com/videos/yieldstar-customer-review-campus-advantage/> (last visited July 13, 2023).

¹⁰³ Heather Vogell, *Rent Going Up? One Company’s Algorithm Could Be Why*, ProPublica (October 15, 2022), available at <https://www.propublica.org/article/yieldstar-rent-increase-realpage-rent> (last visited July 13, 2023).

Daily Workflow

- Every weekday, the Community Manager will log into YieldStar and review recommendations no later than 9:30 AM local time
- The Revenue Management Advisor accepts agreed upon pricing within 1 hour
 - The Community Manager, Regional Manager and Asset Manager will receive an e-mail once rates have been accepted
- Pricing disputes will be escalated to the Regional Manager
- Rates that are not agreed to will be researched and responded to by the end of the day
 - In the meantime, yesterday's rents will persist
- On the weekends, rates that fall within auto acceptance parameters will be accepted
- Once prices are set for the day, the onsite team will print and save electronically the Rent Summary and the Unit Availability report and save electronically the New Lease Rents report from YieldStar
- The Community Manager should always relay pricing changes to the leasing team



30 ©2022 RealPage Inc.

85. Consistent with this, in a 2021 presentation concerning one of RealPage's RMS products, "AI Revenue Management," available on the website of The Medve Group, the slide below explains that property managers access the AI revenue platform "daily" to review "the auto accepted rates for the day." If a property manager recommends "adjustments"—i.e., prices other than what RealPage suggests—they must provide "supporting documentation," and a RealPage "Performance Advisor" then reviews these recommendations during a weekly call¹⁰⁴:

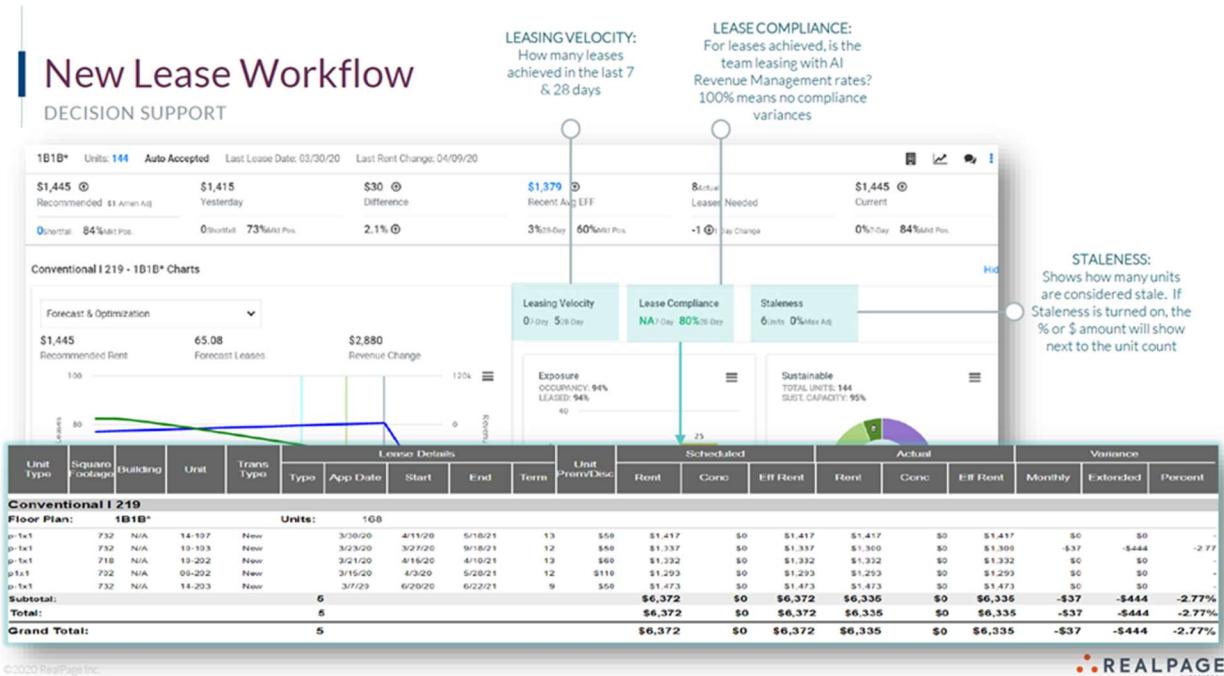
MEDVE GROUP - Daily Workflow

- Property Manager will access AIRM Daily and review the auto accepted rates for the day. Property Managers may recommend an adjustment if needed while providing supporting documentation.
- Every week, the Performance Advisor will host a call with those involved in decision making
- Recommendations will be reviewed, and changes will be made while on the weekly call or if adjustments are suggested during the week.
- The Property Manager, Regional Manager and Asset Manager will receive an e-mail summarizing any changes following the call
- On days outside of the weekly call, rates that fall within auto acceptance parameters will be accepted
 - Auto-pilot acceptance will not trigger an email notification- be sure to follow report generation below for new pricing information.
- Each day the onsite team will print and save electronically the Rent Summary and the Unit Availability report from AI Revenue Management
- The Property Manager should always relay pricing changes to the leasing team

86. These "recommendations" are overwhelmingly accepted; as noted above, according to Witness 1, a former employee of Lessor Defendant Greystar, Greystar accepted

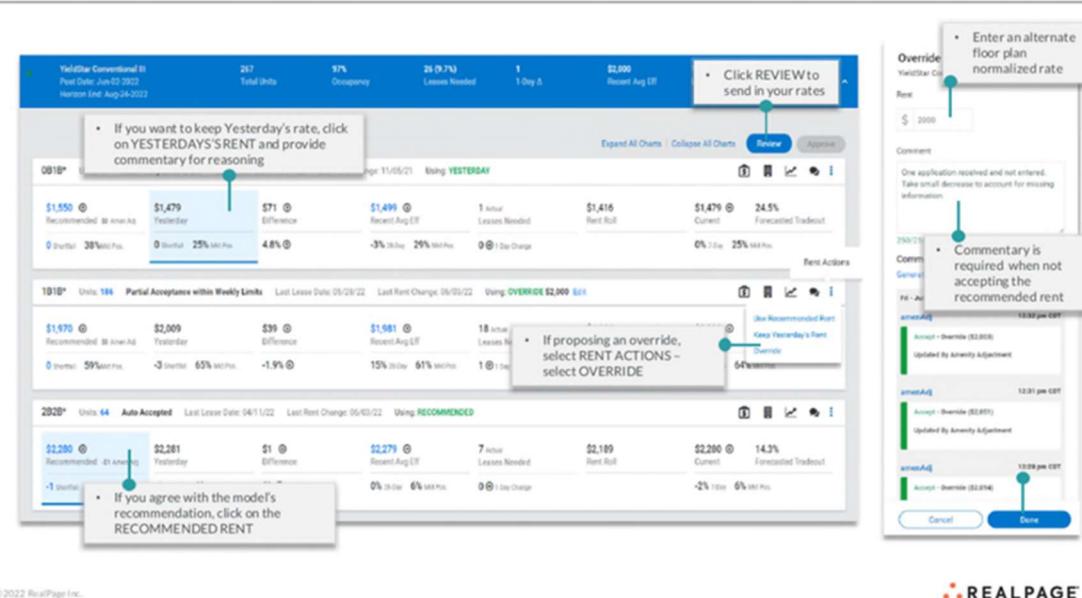
¹⁰⁴ *AI Revenue Management*, The Medve Group, Inc. (June 21, 2021), available at [https://medve.com/assets/airm-manager-training-medve-management-6.23.2021-\(1\).pdf](https://medve.com/assets/airm-manager-training-medve-management-6.23.2021-(1).pdf) (last visited July 13, 2023).

RealPage's pricing recommendations "98 to 99%" of the time during her employment, and Greystar "always wanted" Witness 1 and other property managers to accept RealPage's pricing recommendations. Indeed, RealPage tracks the rate at which its recommended prices are accepted, which it expresses as a "lease compliance" rate in internal dashboards. For example, the same Medve Group presentation referenced above includes a slide showing how "lease compliance" is tracked, with "100%" meaning "no compliance variances"¹⁰⁵:



87. Maintaining these high acceptance rates is critical to RealPage's scheme. According to YieldStar's "Manager Training Deck," if a property manager elects to keep a previous day's pricing or proposes overriding RealPage's pricing recommendations, he or she must "provide commentary for reasoning":

¹⁰⁵ *Id.*



88. According to Witness 1, during her time at Greystar, overriding RealPage's pricing recommendations required—consistent with the above—(a) explicitly declining the recommendation made by the software and (b) typing an explanation for why she was doing so. These explanations were then sent to RealPage for review. RealPage employees would sometimes “push back” on Witness 1’s prices, which were lower than what RealPage recommended.

89. RealPage even employs so-called “Pricing Advisors” or “Revenue Managers” who oversee and closely monitor Lessor Defendants’ compliance with RealPage’s recommended rates. RealPage prominently advertises this service on its website, explaining that it provides “pricing advisory services for strategic oversight” of lessors’ “asset strategy,” and that its advisors:

- Review pricing daily or weekly in collaboration with on-site and regional operations management;
- Monitor and report on weekly rents, occupancy, and revenue trends;
- Adjust configurations and pricing to align with your asset objectives as market conditions and business strategies change; and
- Work across any market and any part of the lifecycle spectrum, including lease-up, long-term hold, disposition, and renovation.¹⁰⁶

¹⁰⁶ “RealPage AI Revenue Management,” RealPage, available at <https://www.realpage.com/asset-optimization/revenue-management/> (last visited July 13, 2023).

90. Consistent with this, a job listing for an “AI Revenue Management Advisor” posted on LinkedIn in June 2023 lists the following “primary responsibilities,” which include “[a]rticulate the AI revenue management value proposition and develop credibility for its concepts and benefits,” “[p]rovide review of revenue recommendations for/on behalf of customers to ensure adoption and satisfaction,” and “[c]onduct regular performance analysis regarding . . . revenue management adoption behavior”¹⁰⁷:

About the job

Summary

The AI Revenue Management Advisor I is the key link between the RealPage platform and our customers' ability to improve operations and unlock hidden yield for multifamily assets. AI Revenue Management Advisors work closely with all levels of RealPage customer personnel from c-level executives and investors to regional and property staff to understand current operations and recommend strategies to improve adoption of the RealPage platform and increase multifamily asset yield.

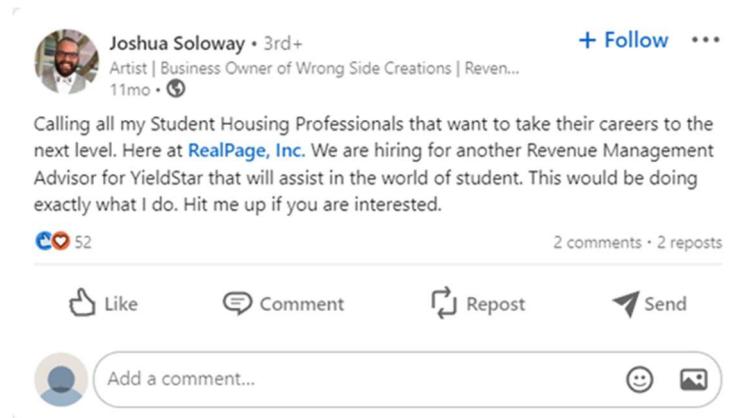
Primary Responsibilities

- Navigate customer business scenarios to consult on asset strategy and configure AI Revenue Management accordingly.
- Articulate the AI revenue management value proposition and develop credibility for its concepts and benefits across client organizations.
- Build and maintain relationships with customers and internal RealPage staff.
- Provide review of revenue recommendations for/on behalf of customers to ensure adoption and satisfaction.
- Host regular discussions with operations teams, executive management, and ownership regarding revenue performance.
- Conduct regular performance analysis regarding financial results, revenue management adoption behavior, leasing velocity and market conditions, and present results to leadership.
- Answer modeling-related questions and provide thoughtful feedback to customers.
- Consult with customers on parameter configurations and make recommendations for necessary changes.
- Efficiently participate in multiple projects and use Sales Force to track and update project steps.
- Maintain a working knowledge of the integration with each Property Management System.
- Identify opportunities for adoption and expansion of RealPage products.
- Provide input and feedback, from a business user's perspective to the RealPage Product group, on solution features and functionality.
- Coordinate with other RealPage teams as needed to facilitate timely implementation and overall client success with an emphasis on the other pillar products that support AI Revenue Management, including ILM, Flex, Screening, etc.
- Prepare and deliver in person and virtual solution reviews.
- Mentor junior advisors.

91. Finally, publicly available job postings also suggest that RealPage employs dedicated advisors, including “Revenue Management Advisors,” who focus on student housing. For example, in mid-2022, Joshua Soloway, a Revenue Management Advisor at RealPage,

¹⁰⁷ Job Listing for “AIRM Revenue Management Advisor” with RealPage, Inc., available at <https://www.linkedin.com/jobs/view/airm-revenue-management-advisor-at-realpage-inc-3599576364/> (last visited July 13, 2023).

solicited applications for a RealPage Revenue Management Advisor “that will assist in the world of student”¹⁰⁸:



92. Witness 1 also stated that, when she worked at Lessor Defendant Greystar, she was required to have either weekly or biweekly calls with a RealPage Pricing Advisor. These calls were generally held over Zoom and attended by a Greystar regional manager.

93. Because RealPage’s revenue is largely derived from “license and subscription fees relating to [RealPage’s] on demand software solutions, typically licensed over one year terms; commission income from sales of renter’s insurance policies; and transaction fees for certain of our on demand software solutions,” in addition to selling new software licenses, RealPage has an interest in facilitating the cartel to ensure property management companies see the revenue increases RealPage claims its software yields, thereby incentivizing existing clients to renew their software licenses annually.¹⁰⁹

D. The market for student housing real estate leases is distinct from the multifamily market.

94. The market for student housing real estate leases is distinct from the market for multifamily real estate leases.

¹⁰⁸ May 2022 LinkedIn Post, available at <https://www.linkedin.com/in/joshua-soloway-3b545563/recent-activity/all/> (last visited July 13, 2023).

¹⁰⁹ RealPage, Inc., Form 10-K 2020, available at <http://edgar.secdatabase.com/2500/12862252000011/filing-main.htm> (last visited July 13, 2023).

95. From the perspective of the consumer, student housing rental apartment units are not economic substitutes for multifamily rental apartment units because, among other things, student housing properties often grant student tenants a more flexible leasing cycle that aligns with the school year, the ability to lease by the bed rather than the unit, and they are often more affordable than multifamily units (since many students do not work full time). Student housing units are also not an economic substitute for apartments, condominiums, or homes for purchase because, among other reasons, purchase of real estate requires the ability to make a substantial down payment and to obtain financing.

96. RealPage itself, in a publicly available e-book aimed at potential customers (titled “Moving the Need: How Revenue Management Empowers Student Housing”), catalogues the many ways in which the student market is unique:

Student housing doesn’t quite operate using the same methodology as the rest of multifamily. From the fluid leasing dynamics to short, high-volume turnaround times, these unique assets can be a challenge for both operators and investors. For operators, the goal is to maintain a smoothly running operation. For investors, the story is, and should be, profitability.

While investors may be enjoying the consistent realization of revenue from these assets, their properties may be leaving money on the table. Profits for the Student sector can sometimes flatten out, likely driven by fear of low occupancy and a lack of insight into both the asset and data-driven market dynamics.

The science of revenue management has been widely successful for many multifamily properties in providing a deeper understanding of property and market leasing dynamics. So, while some Student operators may think they’re playing the “safe” bet by focusing on occupancy instead of revenue, they’re keeping rents and profits lower than necessary by not using the tools available to them.¹¹⁰

97. In a section of the e-book titled “Student is Different,” RealPage goes on to note many differences between traditional multifamily housing and the student market:

¹¹⁰ See RealPage, “Moving the Needle: How Revenue Management Empowers Student Housing,” at 1, available at <https://www.realpage.com/ebooks/student-housing-revenue-management/> (last visited July 13, 2023).



98. In particular, RealPage emphasizes the unique ways in which student housing operators have traditionally priced housing—and how, by adopting its “scalpel”-like revenue management software, Defendant Lessors can achieve “big returns” and avoid leaving “money on the table.” For example, the eBook above states:

- While occupancy has historically been the end-all-be-all metric for Student Housing – due to fluid inventory, differing metrics from conventional multifamily and the long wait required to fill an empty unit – it only keeps the bottom line steady. But no investment is a genuinely good investment that is not growing. And with revenues in the sector remaining flat, owners and investors are rightly looking for ways to get more from their assets. Revenue management is the answer, with its carefully constructed decision-making structure that matches the business model you’re using. It uses historical data combined with current velocity and considers market movement to carefully determine the best pricing for each resident, at each moment, in order to get the most revenue. While it does take occupancy into account, revenue management goes beyond to include other metrics like revenue, historical demand and effective rent, in order to offer true insight into the value of each bed.

- In order to get the most revenue from each and every bed, many Student properties have historically relied on tiered pricing based on how full their occupancy is. While that seems like a rational policy, it's actually leaving money on the table. Revenue management doesn't base pricing only on how many leases are coming through the door. It caters to market dynamics, including supply, demand, velocity, and timing. With the consistency and demand that Student properties offer on an ongoing basis, leasing teams shouldn't EVER take their foot off the gas, regardless of momentum. Revenue management focuses on overall revenue growth and outperformance, instead of solely occupancy.
- Currently, Student Housing relies much more on instinct and special leasing deals to bring in more residents when occupancy is in danger of dropping. But does that really work? And for who? Should they offer a lower rent that influences the guarantor (or parent) or an amenity like an Apple TV to sway the renter (student)? And what's the impact of each on net effective rent? Compared to the method many operators use today, revenue management is the scalpel, while and [sic] specials and concessions are the equivalent to a hammer. Revenue management helps to carefully construct a pricing strategy, based on data, that continues to evolve.
- With one big yearly leasing window and a short sales lifecycle, Student Housing is a challenge at best. RealPage Revenue Management for Student engages all of the touch metrics that Student Housing presents, and faces them head-on. In return, it offers big returns, with intelligent pricing returns based on hard data.¹¹¹

99. Industry participants recognize student housing as a unique market with unique challenges; indeed, all Defendants named in this action have personnel, webpages, and services specific and unique to student housing¹¹² and, as discussed below, many of their properties are concentrated in specific university-dense areas and college towns around the country. Mike Peter, President and CEO of Lessor Defendant Campus Advantage, said in a video testimonial about RealPage's services, "Student is a specialty niche. And while there are many similarities

¹¹¹ *Id.* at 5, 8, 9, 10.

¹¹² For example, Lessor Defendant Campus Advantage's website is replete with references to a distinct student housing market and informs visitors that "Campus Advantage specializes in creating successful communities in the student housing industry through our property management, investment, and consulting services." See Campus Advantage, <https://campusadv.com/> (last visited July 13, 2023).

obviously between accounting needs between what's going on with the multifamily and student housing, we do have some unique and often time-sensitive needs that maybe they don't experience in the multi-family world.”¹¹³

100. Lessor Defendants also build properties specifically for, and market them to, student renters. For example, “Slate at 901” is a property owned by Lessor Defendant Campus Advantage in Knoxville, Tennessee, that advertises itself as “A Revolution in Student Living” and “Student Apartments Near UTK.”¹¹⁴ Potential renters are informed that “Life at Slate at 901 is all about a modern living experience for the modern student—a dynamic community with so much to offer, it will exceed your expectations!”¹¹⁵ Similarly, “The 505,” a property in Los Angeles owned by Greystar, is advertised as “The Ultimate Student Living Experience,” and all apartments have been “thoughtfully designed to cultivate academic success.”¹¹⁶

101. Consistent with this, RealPage tracks “student housing rent per bed” separately from traditional rents and publishes frequent and detailed analyses of the student housing market on its webpages. For example, the promotional eBook cited above explains to potential customers that “beds are easily tracked,” and that while “[a]t first, the idea of measuring beds versus units seems to alter the data model when attempting to measure the success or failure of a Student Housing property[,] [t]he reality is that revenue management doesn’t care. It doesn’t discriminate based on units. It just needs a baseline and a property’s history, with more data being collected every day.”¹¹⁷ An April 2022 blog post on RealPage’s website distinguishes

¹¹³ *RealPage Student Delivers Outstanding Quality that Outpaces Market*, RealPage Videos, available at <https://www.realpage.com/videos/realpage-student-delivers-outstanding-quality/> (video) (last visited July 13, 2023).

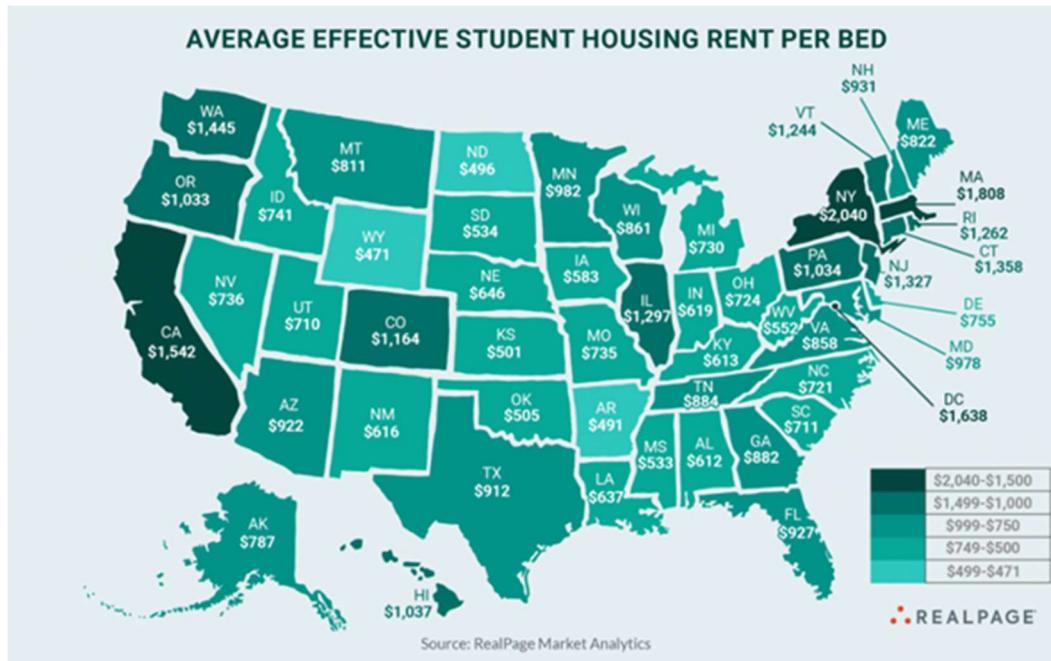
¹¹⁴ See *Slate at 901*, <https://slateat901.com/> (last visited July 13, 2023).

¹¹⁵ *Id.*

¹¹⁶ See *The 505*, <https://the505la.com/> (last visited July 13, 2023).

¹¹⁷ RealPage, “Moving the Needle: How Revenue Management Empowers Student Housing” at 7, available at <https://www.realpage.com/ebooks/student-housing-revenue-management/> (last visited July 13, 2023).

between “conventional apartment rents” and “student housing pricing,” and includes “RealPage Market Analytics data” showing average effective student housing rent per bed¹¹⁸:



102. Indeed, RealPage even tracks student housing rent by “floorplan type” and region, recognizing that “[t]hose considering off-campus student housing tend to gravitate to the floorplan type that meets their expectations” and that “[students] budgets are also a driving factor”¹¹⁹:

¹¹⁸ Julia Bunch, *Average Student Housing Rents Ranked by State*, RealPage Analytics (April 18, 2022), available at <https://www.realpage.com/analytics/average-student-housing-rents-ranked-state/> (last visited July 13, 2023); see also Julia Bunch, *Student Housing Sees Highest Rent Growth in Years*, RealPage Analytics (September 16, 2021), available at <https://www.realpage.com/analytics/student-housing-sees-highest-rent-growth-years/> (last visited July 13, 2023) (tracking “student housing rents,” identifying “student housing operators” as a distinct category of lessors, and noting that student housing rents “soared” in Fall 2021).

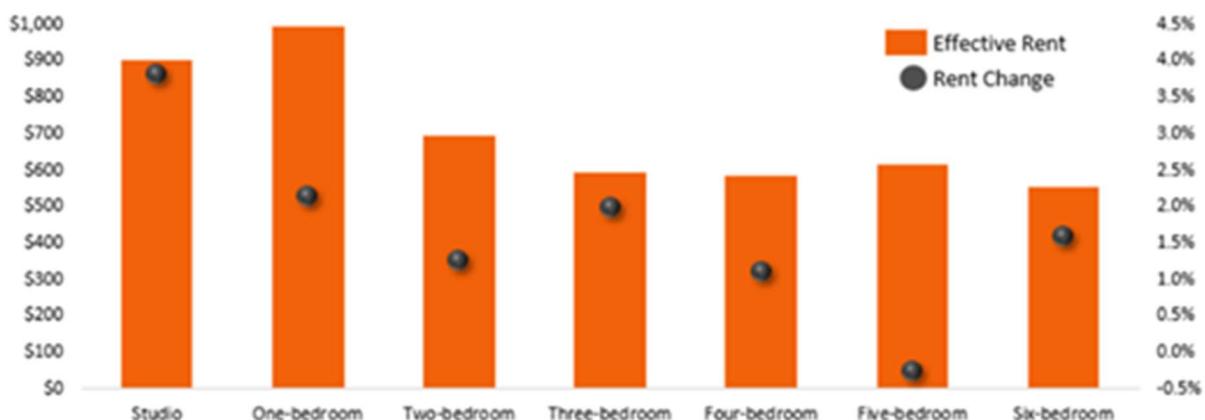
¹¹⁹ *Floorplan Pricing Differs Across Regions*, RealPage Analytics (March 21, 2018), available at <https://www.realpage.com/analytics/floorplan-pricing-differs-across-regions/> (last visited July 13, 2023).

YOY Average Effective Rent by Floorplan Type - February 2018



Source: RealPage, Inc. Note: Based on RealPage, Inc. data as of February 2018. Only includes off-campus student housing properties. Effective rent is based on the average from November 2017 to February 2018 for same-store properties.

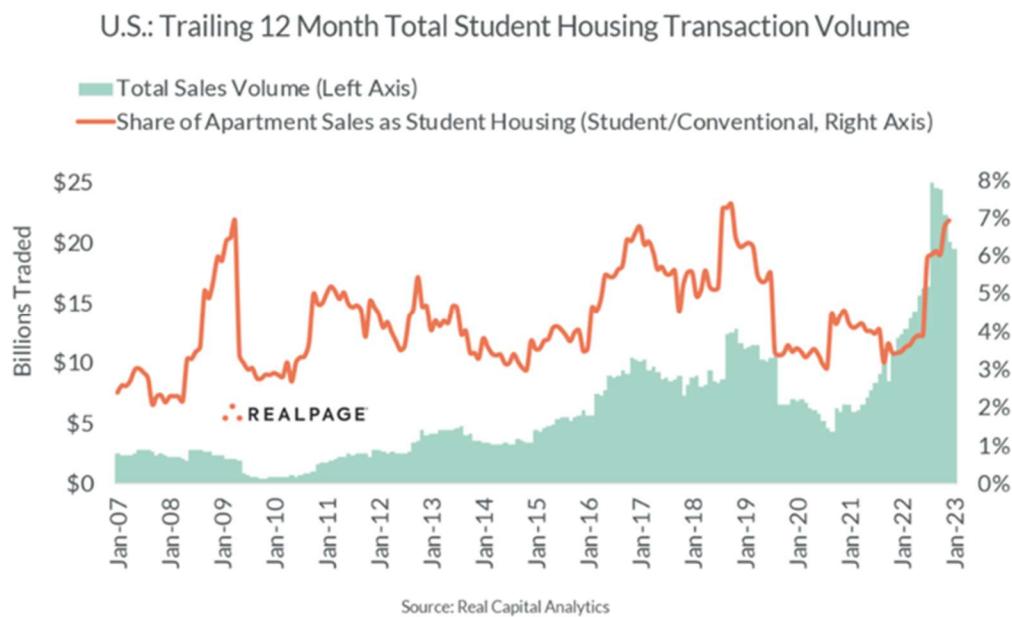
South Region YOY Average Effective Rent and Growth by Floorplan Type February 2018



Source: RealPage, Inc. Note: Based on RealPage, Inc. data as of February 2018. Only includes off-campus student housing properties. Effective rent is based on the average from November 2017 to February 2018 for same-store properties.

103. RealPage also closely tracks student housing inventory separate from multifamily inventory. Charts posted on RealPage's website in April 2023, for instance, break out student housing supply by "total beds delivered" in "off campus purpose built" housing, i.e., dedicated

off-campus student housing, and likewise track student housing as a discrete share of apartment transaction volumes¹²⁰:



104. Other RealPage resources even track “off-campus purpose-built bed count” by university, separate from “campus housing,” “conventional multifamily housing,” “single family residences,” or “Greek Life residences.” A chart posted on RealPage’s website in January 2023,

¹²⁰ Carl Whitaker, *7 Takeaways from Interface Student Housing*, RealPage Analytics (April 19, 2023), available at <https://www.realpage.com/analytics/student-housing-update-1q23/> (last visited July 13, 2023).

for instance, lists campuses identified as “the nation’s most highly concentrated in terms of available off-campus student housing beds relative to enrollment”¹²¹:

Campus	Total Beds (By Start of 2023)	Enrollment/ Bed Ratio	Campus	Total Beds (By Start of 2023)	Enrollment/ Bed Ratio
University of South Carolina	11,912	3.0	University of Mississippi	7,244	2.5
Clemson University	8,937	3.0	Sam Houston State University	8,744	2.5
University of Arkansas	9,495	2.9	University of Texas at Austin	20,442	2.5
Baylor University	6,882	2.8	Auburn University	13,082	2.3
University of Oregon	7,868	2.8	East Carolina University	12,779	2.3
University of Missouri	11,626	2.7	Texas A&M University	29,228	2.2
Mississippi State University	8,653	2.7	James Madison University	10,000	2.2
North Carolina State University	13,691	2.6	University of Florida	25,646	2.1
University of Alabama	14,520	2.6	Texas State University	21,016	1.8
Coastal Carolina University	3,912	2.6	Georgia Southern University	10,647	1.8
Louisiana State University	13,390	2.6	Florida State University	27,846	1.6
Texas Tech University	15,778	2.6			

Source: RealPage Market Analytics Student Housing (MASH)

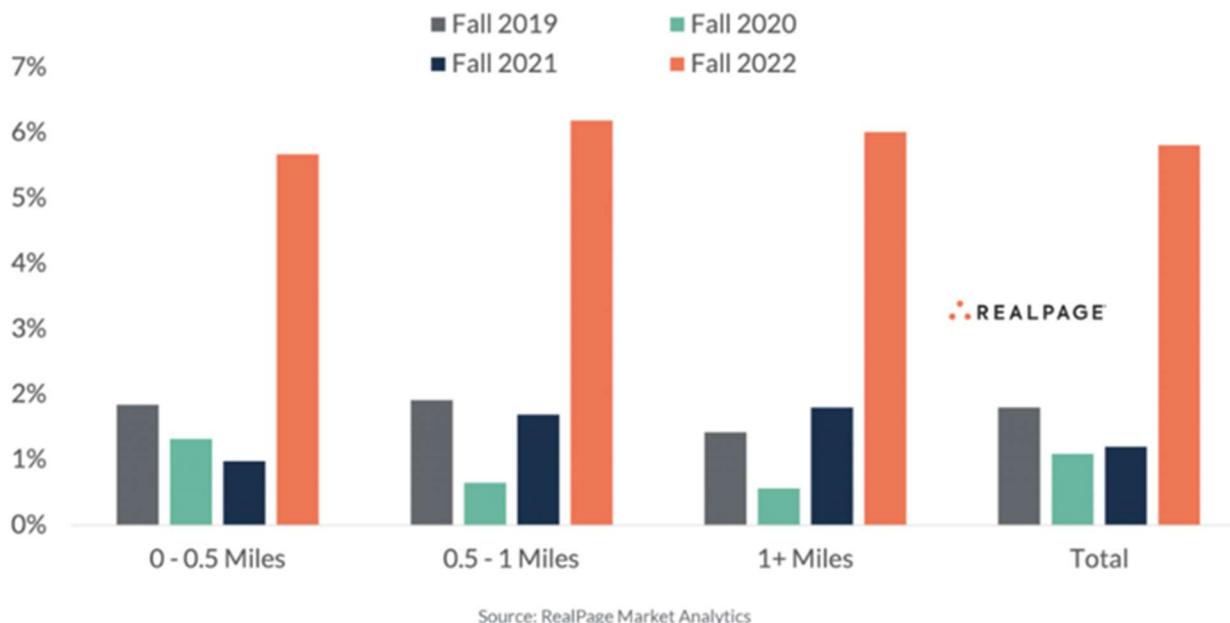


105. Consistent with this, RealPage boasts regularly (and publicly) about historically high rises in student rental prices (in effect admitting the antitrust impact of its conduct), and closely tracks student housing inventory by occupancy. A July 2022 blog post of RealPage’s website (titled “Once Again Student Housing Rent Growth, Occupancy Set Records”) notes, for instance, that a record 86.2% of beds at the “RealPage 175”—a core set of 175 universities RealPage tracks—were “pre-leased” for Fall 2022, and that “year-over-year effective asking rent change for same-store assets again stood at 5.8% in June 2022”—a “record” and “more than triple the average” of rent changes in student housing over previous years¹²²:

¹²¹ Carl Whitaker, *Student Housing Outlook for 2023*, RealPage Analytics (Jan. 12, 2023), available at <https://www.realpage.com/analytics/student-housing-outlook-for-2023/> (last visited July 13, 2023).

¹²² Julia Bunch, *Once Again Student Housing Rent Growth, Occupancy Set Records*, RealPage Analytics (July 14, 2022), available at <https://www.realpage.com/analytics/once-again-student-housing-rent-growth-occupancy-set-records/> (last visited July 13, 2023).

Fall 2022 Rent Growth Triples Norm



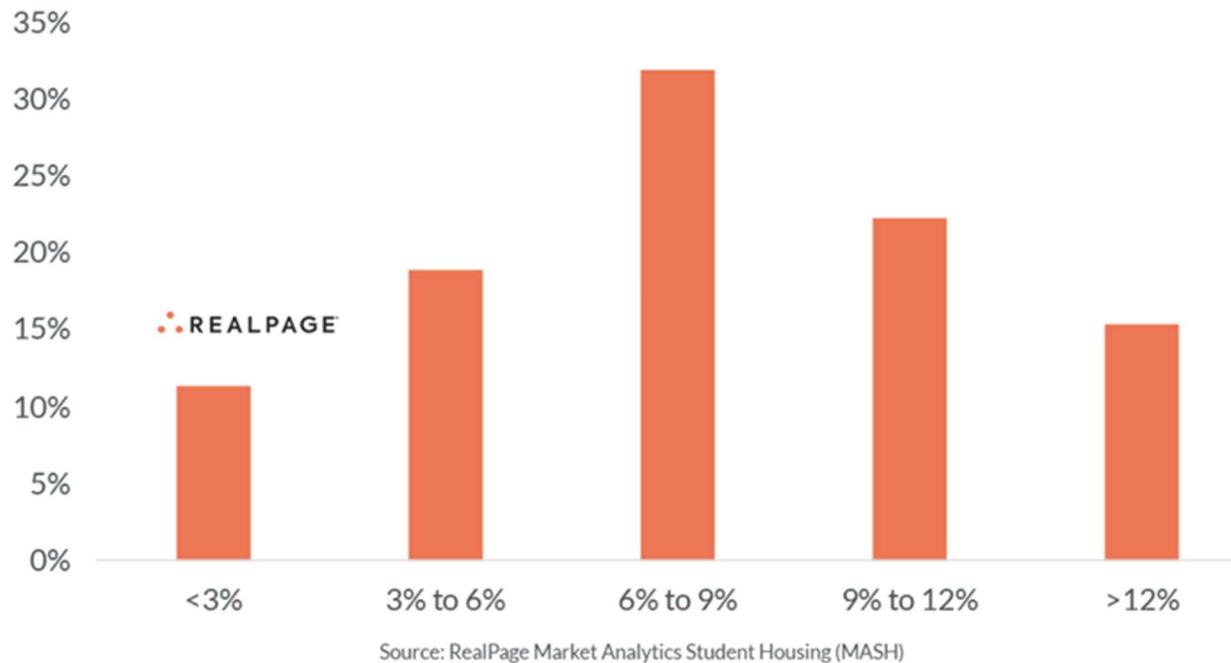
106. A follow up post from March 10, 2023, notes that this trend has continued and that rent growth “soared” in Fall 2023, stating: “Fall 2023’s annual effective rent growth towers head and shoulders above previous years, even considering last year’s substantial rebound. Annual effective rent growth hit 9.5% in February, the third consecutive month of 9%+ rent hikes.”¹²³

107. Similarly, an April 19, 2023 post on RealPage’s website states that “[t]he near-term outlook for the student housing industry may be at an all-time high” and emphasizes “today’s double digit revenue growth” in the student housing industry, noting that “just one in 10 RealPage 175 campuses is failing to match 3% annual rent growth today, an impressive feat considering that threshold was considered outperformance not too long ago”¹²⁴:

¹²³ Julia Bunch, *Rent Growth Hits Another High in Fall 2023 Pre-Leasing Season*, RealPage Analytics (March 10, 2023), available at <https://www.realpage.com/analytics-rent-growth-hits-another-high-in-fall-2023-pre-leasing-season/> (last visited July 13, 2023).

¹²⁴ Carl Whitaker, *7 Takeaways from Interface Student Housing*, RealPage Analytics (April 19, 2023), available at <https://www.realpage.com/analytics/student-housing-update-1q23/> (last visited July 13, 2023).

Distribution of RealPage 175 Campuses by
YoY Effective Rent Change (Feb. 2023)



Source: RealPage Market Analytics Student Housing (MASH)

108. Another June 12, 2023 post on RealPage’s website notes “double digit” rent growth in student housing at “key schools” around the country, finding that, at a substantial number of schools, this growth has significantly outpaced rent growth in conventional multifamily housing in these markets¹²⁵:

¹²⁵ Carl Whitaker, *Student Housing Rent Growth in Double Digits at Key Schools*, RealPage Analytics (June 12, 2023), available at <https://www.realpage.com/analytics/schools-outperform-rent-growth-student-housing/> (last visited July 13, 2023).

Comparing Purpose-Built Rent Change (YoY) versus Conventional MSA-Level Rent Change: RealPage 175 Campuses		
Range of Difference: Purpose Built vs. Conventional	Number of RealPage 175 Campuses	% of RealPage 175*
>8%	21	14%
6% to 8%	16	11%
4% to 6%	22	15%
2% to 4%	19	13%
0% to 2%	22	15%
-2% to 0%	25	17%
-2% to -4%	14	9%
<-4%	11	7%

*Includes only qualified campuses with stabilized conventional MSA data (150 out of 175 campuses)

Source: RealPage Market Analytics & Market Analytics for Student Housing (MASH)



Fall 2023 Rent Change - May 2023 Weighted by Monthly Change in Pre-Lease * Rent Change	Purpose-Built Rent Change (YoY)	Conventional MSA Rent Change (YoY)	Difference
Arizona State University	18.5%	-4.1%	22.6%
University of Arkansas	21.5%	8.1%	13.4%
University of Arizona	13.5%	0.4%	13.1%
University of South Florida	13.1%	0.4%	12.7%
University of North Carolina	12.9%	0.7%	12.2%
Boise State University	8.5%	-3.3%	11.8%
University of Nevada - Las Vegas	8.2%	-3.5%	11.6%
Texas State University	9.8%	-1.6%	11.4%
Coastal Carolina University	8.6%	-2.6%	11.2%
Baylor University	17.2%	6.8%	10.4%
North Carolina State University	11.0%	0.7%	10.3%
Florida Atlantic University - Boca Raton	10.7%	0.8%	10.0%
University of Miami	15.1%	5.4%	9.7%
Purdue University	15.7%	6.0%	9.7%
East Tennessee State University	10.1%	0.8%	9.2%
College of Charleston	15.1%	6.0%	9.1%
Florida International University	14.4%	5.4%	9.0%
University of California - Davis	6.5%	-2.4%	9.0%
Texas Woman's University	11.3%	2.3%	9.0%
University of North Texas	11.0%	2.3%	8.7%
University of Oklahoma	10.1%	2.0%	8.1%

Source: RealPage Market Analytics & Market Analytics for Student Housing (MASH)



109. RealPage also assesses the revenue potential of student housing separately from “conventional multifamily units.” In its 10-K for the fiscal year 2019, for instance, RealPage estimates “revenue per unit” in the “student market” separate from revenue per unit in the multifamily market:

According to the U.S. Census Bureau American Housing Survey for the United States, there were 44.6 million rental real estate units in the United States in 2017. Based on U.S. Census Bureau data and our own estimates, we believe that the overall size of the U.S. rental real estate market, including rent, utilities, and insurance, exceeds \$580.0 billion annually. We estimate that the total addressable market for our current data analytics and on demand software solutions is approximately \$16.1 billion per year. This estimate assumes that each of the 44.6 million rental units in the United States has the potential to generate annually a range of approximately \$310 in revenue per unit for single family units to approximately \$500 in revenue per unit for conventional multifamily units. **In addition, we**

estimate that the student and senior markets have the potential to generate annually approximately \$510 in revenue per unit, and affordable housing markets will generate annually approximately \$300 in revenue per unit. We base this potential revenue assumption on our review of the purchasing patterns of our existing clients with respect to our data analytics and on demand software solutions, the solutions currently utilized by our existing clients, the number of units our clients manage with these solutions, and our current pricing for data analytics and on demand software solutions.¹²⁶

110. RealPage's descriptions of the market are consistent with those of industry participants. For example, Defendant Campus Advantage describes "purpose-built student housing" as a separate housing category: a 2018 post on its website lists the various unique features of this student-specific housing, emphasizing (among other things) its shorter leasing model as a "key differentiator"¹²⁷ alongside features like "individual leases," "roommate matching," "units and amenities designed for students," "furnished apartments," "study areas," "proximity to campus," and "residence life programs":

¹²⁶ See RealPage, Inc., Form 10-K 2020, available at <http://edgar.secdatabase.com/2500/12862252000011/filing-main.htm> (emphasis added) (last visited July 13, 2023).

¹²⁷ Campus Advantage, *What is Purpose-Built Student Housing?* (February 21, 2018), available at <https://campusadv.com/purpose-built-student-housing/> (last visited July 13, 2023).

What Is Purpose-Built Student Housing?

Purpose-built student housing is an apartment community designed for residents in higher education. These communities offer amenities tailored to college students, such as individual leases, study areas, fully furnished units, and roommate matching. They're typically located near a college campus and may offer unique residence life programs, such as **Students First™**, and employ students to act as community assistants, providing support to their fellow student residents.

College campuses are like small cities in themselves, where students live, study, and work all in the same area. This campus-centric lifestyle drives a need for a different kind of housing – one that is not typically fulfilled by conventional housing options. It also offers developers an opportunity to tailor new living experiences to better serve college students' unique needs. Some differentiators of purpose-built student housing include:

- Individual leases
- Roommate matching
- Units and amenities designed for students
- Furnished apartments
- Study areas
- Proximity to campus
- Residence life programs

A key differentiator of student housing is in the leasing model. Instead of leasing by the unit for 12-month contracts, purpose-built housing allows students to lease by the bed with options to lease for the months they are attending school. Additionally, roommate-matching programs are common to help residents find other student(s) who will be a great fit.

In purpose-built student housing, units and amenities are designed specifically with students in mind. Students commonly “travel light,” leaving many belongings back at home with their parents. While at college, their focus is on studying, as well as connecting with friends during their leisure times. Therefore, in general, student residents don’t require large storage space. Instead, they get more value out of community amenities, such as a pool, a gym, and group study areas.

111. Other industry sources recognize student housing as unique as well. For example, Multifamily Dive, a website that provides “journalism and insight into . . . the multifamily housing & real estate industry,” reported in June 2022 that “[p]rivate developers [were] slated to deliver just 26,000 new student housing beds near universities across the country in fall 2022,” and that, “[a]cross the 175 colleges and universities tracked by RealPage, 43 [would] receive new student housing inventory in fall 2022.”¹²⁸ The same article includes a chart—sourced from RealPage itself—cataloguing “fall 2022 student bed deliveries” for various universities in Fall 2022:

¹²⁸ Mary Salmonsen, *The top colleges for student housing starts*, Multifamily Dive (June 17, 2022), available at <https://www.multifamilydive.com/news/top-15-colleges-student-housing-starts-data/625505/> (last visited July 13, 2023).

University Name	Fall 2022 student bed deliveries
1. University of Washington	2,116
2. Virginia Polytechnic Institute and State University (Virginia Tech)	1,920
3. Indiana University	1,570
4. Clemson University	1,396
5. University of Maryland	1,274
6. University of Florida	1,147
7. University of Michigan	1,103
8. University of Texas at Austin	1,039
9. University of South Florida	891
10. Auburn University	889
11. Northern Arizona University	854
12. George Mason University	825
13. University of Georgia	806
14. University of North Carolina – Charlotte	746
15. Georgia State University	741

SOURCE: RealPage

112. Another article on the student real estate market explains:

Student housing emerged as a niche sector of commercial real estate in the mid-1990s as demographics, increased college-going rates and growing graduate programs produced 38% growth in higher education enrollments during the decade of the 2000s,” says Pierce. “At the same time as housing demand was increasing, so was student appetite for higher end product that resulted from a combination of an aging housing stock on and off campus and a proliferation of high school students having their own bedrooms, as opposed to share with a sibling like prior generations, at home.

As a result, student housing has emerged as a top asset class for institutional investment. This has also propelled student housing into a new format with highly amenitized and well-designed spaces. “The result was the emergence of the purpose-built student housing sector, where private developers began building apartments off-campus that are leased by-the-bedroom and offer student oriented unit mixes, mostly three and four bedroom floor plans, single occupancy bedrooms and bathrooms and class-A amenities, like

resort-style pools, 24/7 fitness centers, tanning beds, sand volleyball and basketball courts, business centers, game rooms, study rooms.¹²⁹

113. Researchers also recognize student housing as a separate market. According to a 2022 paper, for instance:

Student housing has several unique characteristics that separate it from market-rate traditional multifamily. Student housing real estate is located around or on college campuses and is targeted towards undergraduate or graduate students. It is primarily rent per bed although some rents are conducted on a rent per square foot basis for graduate-level targeted properties. Due to the tenants being students, leases typically require a guarantor and leases are between nine and twelve months. The leasing cycle is focused around the academic year with all leases beginning before the start of the academic year and expiring at the end of the academic year or after the summer term and with very small periods of downtime. Turnover costs at student housing properties are generally more expensive due to the wear that students put on the units. The industry rule of thumb is that turnover costs are \$150 per bed however this can differ based on the market or tenant base.¹³⁰

114. Revenue management services also regard student housing differently than other forms of rental housing. RealPage states on its website, “Student housing management has its own set of unique challenges. From the constant turn to planning shared rent payment responsibilities, student housing is about as different as it gets in rental housing.”¹³¹ Dave McKenna, vice president of Student Living at RealPage, stated, “Student housing has some of the most demanding operational needs in the multifamily industry.”¹³² Competing providers of revenue management software often specialize their software for student housing by having a

¹²⁹ Kelsi Maree Borland, *Inside the Ownership Consolidation in Student Housing*, GlobeSt.com (November 21, 2018), available at <https://www.globest.com/2018/11/21/inside-ownership-consolidation-in-student-housing/> (last visited July 13, 2023).

¹³⁰ ORG Portfolio Management, *Student Housing: An Attractive Alternative to Multifamily* (March 28, 2022), available at <https://irei.com/wp-content/uploads/2022/05/Student-Housing-Thought-Piece-Final.pdf> (last visited July 13, 2023).

¹³¹ *RealPage Student Housing Management Software Overview*, RealPage Videos, available at <https://www.realpage.com/videos/student-housing-management-renting-to-college-students/> (last visited July 13, 2023).

¹³² *RealPage Announces Launch of Prelease Management for Student Living*, RealPage Newsroom (Feb. 25, 2013), available at <https://www.realpage.com/news/realpage-announces-launch-of-prelease-management-for-student-living/> (last visited July 13, 2023).

different leasing cycle, leasing by the bed rather than by the unit, accounting for limited renewals of the same tenant, and a smaller customer base that is “limited to the student populations of nearby schools and can be even further limited by on-campus housing requirements and enrollment changes.”¹³³

115. The Rainmaker Group, another revenue management firm that once competed with RealPage, also recognized the student housing market as distinct. In 2013, The Rainmaker Group’s VP of Strategic Initiatives, Steve Tappert, likened the difference between leasing a conventional multifamily property and a student housing property to “the difference between waiting for a train and waiting for a cruise ship. If you miss your train, you may wait a couple of minutes for the next one. If you miss your ship, you will be waiting at the dock for quite a while.”¹³⁴ When Tappert saw his multifamily clients trying to use conventional multifamily revenue management software on their student housing platforms, he stated, “You can’t just shoehorn a multifamily solution onto a student housing asset—it won’t work.”¹³⁵

116. In fact, as discussed below, the Rainmaker Group was among the first in the industry to offer—beginning in 2012—a revenue management product engineered specifically for student housing, called LRO Student,¹³⁶ now integrated in RealPage’s RMS software. One client, Wood River Properties, LLC, stated “LRO essentially revolutionized a key part of our business: pricing units.”¹³⁷

¹³³ *The Price is Right*, Student Housing Business (Aug. 12, 2019), available at <https://studenthousingbusiness.com/the-price-is-right/> (last visited July 13, 2023).

¹³⁴ *Id.*

¹³⁵ *Id.*

¹³⁶ Jessica Fiur, *The Rainmaker Group Launches Industry’s First Revenue Management Product Engineered Specifically for Student Housing*, Multi-Housing News (Oct. 16, 2021), available at <https://www.multihousingnews.com/the-rainmaker-group-launches-industrys-first-revenue-management-product-engineered-specifically-for-student-housing/> (last visited July 13, 2023).

¹³⁷ Donovan Jones, *RealPage to Acquire Rainmaker Group Multifamily LRO Assets*, Seeking Alpha (Mar. 9, 2017), available at <https://seekingalpha.com/article/4053859-realpage-to-acquire-rainmaker-group-multifamily-lro-assets> (last visited July 13, 2023).

117. Another Lessor Defendant, Greystar, stated in a video testimonial on RealPage's website that "over the last 10 years, spanning about 150 projects, the services that [RealPage] provided have equated to a return on investment of about 300% on about 90% of those projects."¹³⁸

E. "Plus Factors" indicate the market for student housing real estate leases is susceptible to the formation, maintenance, and efficacy of a cartel.

118. The market for the sale of student housing residential real estate leases from Lessor Defendants to lessees is characterized by numerous "plus factors" that render the industry susceptible to collusion, such that the formation, maintenance, and efficacy of a cartel is more likely. These include (1) high barriers to entry, (2) high barriers to exit, (3) market concentration, (4) inelastic consumer demand, (5) relative fungibility of residential real estate leases, (6) exchanges of competitively sensitive information among horizontal competitors, and (7) numerous opportunities to collude at trade associations and RealPage functions.

1. High barriers to entry

119. First, student housing property owners and operators face significant entry barriers. These include the high cost of acquiring property, establishing a property management infrastructure, and ongoing costs of building maintenance and regulatory compliance.

120. Even small rental properties cost millions of dollars to acquire. Large properties, such as those operated by Lessor Defendant Greystar, run into the hundreds of millions of dollars to own and manage and take several years and significant experience to build or acquire. For example, Lessor Defendant Greystar recently raised a \$600 million fund in order to build three student housing complexes.¹³⁹ Thus, new entrants into the student housing real estate leasing market are unlikely to discipline cartel pricing.

¹³⁸ *RealPage Consulting Helps Greystar Succeed in the Student Housing Industry*, RealPage Videos, available at <https://www.realpage.com/videos/student-housing-software-review-greystar/> (last visited July 13, 2023).

¹³⁹ Gail Kalinoski, *Greystar Secures \$600M for Student Housing Projects*, Multi-Housing News (November 4, 2021), available at <https://www.multihousingnews.com/greystar-secures-600m-for-student-housing-projects/> (last visited July 13, 2023).

2. High barriers to exit

121. Second, renters face high exit barriers. Renters typically incur substantial cost and inconvenience when moving, and student renters in particular cannot move too far from campus, forcing them to rent where Lessor Defendants are. As noted above, for instance, RealPage tracks rent growth on student campus in part by proximity to campus, with the three categories used being “0-0.5 miles,” “0.5-1 miles,” and “1+ miles”¹⁴⁰, and regularly analyzes the market using figures like the following¹⁴¹:



122. Accordingly, renters cannot easily turn to alternative Lessors to discipline cartel pricing.

3. Inelastic demand

123. Third, the demand for student housing real estate property leases is relatively inelastic, particularly in so-called “college towns.” Except for an anomalous period during the height of the COVID-19 pandemic, students needed to live near their school to attend it. There are few, if any, realistic alternatives to renting as a student. Buying is financially prohibitive and would make little sense for a tenant who is likely to graduate and move elsewhere in four years.

¹⁴⁰ Julia Bunch, *Once Again Student Housing Rent Growth, Occupancy Set Records*, RealPage Analytics (July 14, 2022), available at <https://www.realpage.com/analytics/once-again-student-housing-rent-growth-occupancy-set-records/> (last visited July 13, 2023).

¹⁴¹ Julia Bunch, *Campus-Adjacent Student Housing Misses Normal Premiums*, RealPage Analytics (July 9, 2021), available at <https://www.realpage.com/analytics/close-campus-student-housing-yet-rebound/> (last visited July 13, 2023).

Indeed, industry sources recognize this: for example, a January 2021 article in Re Journals, a real estate publication, observes that “[s]tudents have inelastic demand for housing adjacent to large, tier-one campuses which is why, despite the vigorous development activity, the industry was enjoying a 95 percent occupancy rate pre-COVID.”¹⁴²

124. Thus, no reasonable substitutes exist to discipline cartel pricing.

4. High concentration

125. Fourth, the market for student housing real estate property leases is highly concentrated. As discussed above, many college towns are dominated by relatively few sellers, and Lessor Defendants’ properties are often clustered in these places.

126. Even within the real estate industry, student housing is recognized as a uniquely concentrated sector. According to an April 2023 RealPage blog post, “[s]tudent housing has always been a fairly consolidated sector,” and “the industry’s continued consolidation doesn’t appear to be slowing down either.”¹⁴³ The post continues: “things like centralization and broader technology adoption among operators is only going to further delineate the top performing companies from the ones that need to reassess their operational approach (and, if not, likely exit the space which, in turn, will drive additional consolidation).”¹⁴⁴

127. Consistent with this, a 2018 article notes, for instance, that there was “tremendous consolidation in the student housing industry during the 2010 decade,” and that the “top 25”

¹⁴² Matt Baker, *Making the grade: Student housing finds a way to endure the pandemic*, Re Journals (Jan. 20, 2021), available at <https://rejournals.com/making-the-grade-student-housing-finds-a-way-to-endure-the-pandemic/> (last visited July 13, 2023).

¹⁴³ Carl Whitaker, *7 Takeaways from Interface Student Housing*, RealPage Analytics (April 19, 2023), available at <https://www.realpage.com/analytics/student-housing-update-1q23/> (last visited July 13, 2023).

¹⁴⁴ *Id.*

owners of total beds in the “Axio175”¹⁴⁵ collectively controlled 71% of beds in 2017 (a number likely higher today)¹⁴⁶:

CATEGORY	2010	2011	2012	2013	2014	2015	2016	2017
TOTAL BEDS - OWNED BY TOP 25	276,412	294,708	321,947	373,877	395,207	383,647	482,684	531,239
TOTAL BEDS - AXIO 175 MARKETS	447,880	472,770	512,360	568,647	622,849	667,193	707,719	750,433
TOP 25 OWNER % OF AXIO 175	62%	62%	63%	66%	63%	58%	68%	71%
% GROWTH (BEDS) OF TOP 25 OWNERS	--	6.6%	9.2%	16.1%	5.7%	-2.9%	25.8%	10.1%
TOP 25 OWNERS - MINIMUM BEDS TO QUALIFY	2,766	4,000	4,220	5,604	5,060	4,160	5,300	5,401
AVERAGE BEDS OWNED BY TOP 25	11,056	11,788	12,878	14,955	15,808	15,346	19,307	21,250

128. The article further explains that “[t]his consolidation in student housing ownership is largely due to the management-intensive nature of the asset class providing the opportunity for best-in-class operators to attract institutional capital that wants to invest with scale . . . It’s a perfect storm, if you will, as experienced, best-in-class operators can deliver superior operating and investment performance, while their increasing economies of scale also reduce operating expenses on the margin for these growing companies.”¹⁴⁷

129. More broadly, the market for revenue management software is highly concentrated. For example, RealPage’s 2020 10-K indicates that its clients—i.e., those who “use one or more of [RealPage’s] integrated data analytics or on demand software solutions to help manage [their] operations”—control 19.7 million real estate units out of “about 22 million investment-grade apartments in the US . . . ”¹⁴⁸ Indeed, Tracy Saffos, “Industry Principal” at RealPage, boasted in 2020 that RealPage “collects data on . . . a very large chunk of the total

¹⁴⁵ According to RealPage, the Axio175 “are 175 of the top universities around the country, as favored by publicly traded student housing REITs and larger owners and managers of student housing properties.” See *University Success Improves Student Housing Potential*, RealPage Analytics (May 25, 2017), available at <https://www.realpage.com/analytics/university-success-improves-student-housing-potential/> (last visited July 13, 2023).

¹⁴⁶ Kelsi Maree Borland, *Inside the Ownership Consolidation in Student Housing*, Globe St (November 21, 2018), available at <https://www.globest.com/2018/11/21/inside-ownership-consolidation-in-student-housing/> (last visited July 13, 2023).

¹⁴⁷ *Id.* (quoting Frederick Pierce of Pierce Education Properties, a student housing operator).

¹⁴⁸ Gad Meiron, *How Business Intelligence Can Clear Up a Cloudy Forecast*, RealPage Blog (July 29, 2020), available at <https://www.realpage.com/blog/how-business-intelligence-can-clear-up-a-cloudy-forecast/> (last visited July 13, 2023).

inventory in the country After almost 20 years of collecting data, there are literally billions and billions of transactional data points to power our BI and Benchmarking capabilities.”¹⁴⁹

5. Fungibility of demand

130. Fifth, student housing residential real estate properties are relatively fungible, particularly within classes of properties. That is, when controlling for certain high-level characteristics of properties—such as the number of bedrooms and bathrooms, amenities, location, or the age of the building—properties within those classes are relatively fungible.

6. Frequent exchanges of competitively sensitive information

131. Sixth, Lessor Defendants, directly and using RealPage as a conduit, share competitively sensitive information with one another. RealPage’s Founder and former CEO Steve Winn has noted in earnings calls that RealPage’s numbers “give a much more accurate view of what’s happening in the market compared to merely looking at rents reported by Internet listing services or other sources.”¹⁵⁰ It is even less likely that this function could be recreated using any public, non-competitively sensitive sources as the advertised rates for student housing real estate leases typically diverge from the actual rates. Furthermore, RealPage provides specific, non-public pricing information on important factors such as concessions that are given at the time of lease that are individually negotiated and not otherwise publicly available.

132. Remarkably, aside from facilitating the exchange of competitively sensitive information through its platform, RealPage encourages the Lessor Defendants to engage in direct communications its clients to obtain pricing data from one another. Specifically, in an “Overcoming Objections Guide,” RealPage exhorts lessors to “[s]hop your competitors over the

¹⁴⁹ *Id.*

¹⁵⁰ RealPage, Inc. Q2 2020 Earnings Conference Call (July 30, 2020), available at <https://seekingalpha.com/article/4363323-realpages-rp-ceo-steve-winn-on-q2-2020-results-earnings-call-transcript> (last visited July 13, 2023).

phone, in-person, and view their websites. Be knowledgeable about their pricing, specials, and product”¹⁵¹:



Protips

- Shop your competitors over the phone, in-person, and view their websites. Be knowledgeable about their pricing, specials, and product.
- Inform your customer's how your community outperforms without speaking ill of your competitor.
- Utilize a calculator to compute their savings.

7. Opportunities to collude and extensive evidence of collusion

133. Seventh, RealPage and Lessor Defendants have ample opportunities to collude, as well as a clear incentive to do so. As one former RealPage employee observed, the student housing industry is “weird” because the companies “all talk to each other. They all know each other . . . It’s the craziest thing. We would go to conferences and they were all talking. They could be the biggest competitors to each other and they’re talking to each other.”

134. RealPage operates a private RealPage User Group Forum, an association of over a thousand lessors, including on information and belief, Lessor Defendants, which, according to RealPage, aims “to improve communications between RealPage and the user community,” while “promot[ing] communication between users” themselves. Within that Forum is an “Idea Exchange,” where Lessor Defendants submit their own recommendations for changes or improvements to RealPage’s offerings, as well as provide comments on proposed changes that RealPage is considering implementing to its software offerings.¹⁵²

135. RealPage also encourages clients to serve on subcommittees. According to RealPage, “[a]ny RealPage client may serve on a user group committee”; to join, a client must

¹⁵¹ “Revenue Management: Overcoming Objections Guide,” RealPage (2021), available at <https://medve.com/assets/rm-overcoming-objections-2021.pdf> (last visited July 13, 2023).

¹⁵² “User Group Overview,” RealPage, available at <https://www.realpage.com/user-group/overview/> (last visited July 13, 2023).

“[a]ttend one annual meeting to be held during the RealWorld conference” and “[p]articipate in one conference call per quarter.”¹⁵³

136. RealPage has hosted in-person, annual, multi-day RealWorld summits. The summits gather Lessor Defendants with RealPage executives to network, exchange insights and ideas, and discuss revenue management tools. Over the past five years, those conferences have been held in Las Vegas, NV, Nashville, TN, Orlando, FL, and virtually during the COVID-19 pandemic.

137. RealPage has also hosted “Student Summits,” specific to the student housing market, since 2014. According to a RealPage press release, “The summit features in-depth presentations and discussions on revenue management A highlight of the Student Summit is gaining an understanding of the critical role revenue management now plays in profitability. RealPage is a leader in this arena with YieldStar®, the first revenue management solution purpose built for multifamily. RealPage specifically launched YieldStar Student, tailor made for Student Housing operators that now serves more than 50 clients.”¹⁵⁴

138. Industry trade associations offer RealPage and Lessor Defendants additional opportunities to conspire. As an illustrative example, the National Multifamily Housing Council (“NMHC”), which advertises itself as “the place where the leaders of the apartment industry come together to guide their future success,” holds several events every year, including in person “Apartment Strategy Conference,” an “Annual Meeting,” a “Fall Meeting,” hosted in cities including San Diego, CA, Las Vegas, NV, and Washington, DC. NMHC counts among its “Chair’s Circle Sponsors” RealPage, Greystar, and more participating Lessors. Of note, NMHC “tracks market conditions through NMHC member surveys as well as data from data provider partners,” to provide “industry benchmarks” on topics including “In Place Rent Per Square Foot,” “Rent Change – New Leases,” and “Rent Change – Renewals.” RealPage has also

¹⁵³ “User Group,” RealPage, available at <https://www.realpage.com/user-group/> (last visited July 13, 2023).

¹⁵⁴ Press Release, RealPage, *RealPage Hosts Executive Student Summit* (May 8, 2019), <https://www.realpage.com/news/realpage-hosts-executive-student-summit/> (last visited July 13, 2023).

attended Pension and Real Estate Association, Urban Land Institute, and National Apartment Association (“NAA”). Both the NAA and NMHC have hosted student housing-specific conferences and summits.

139. RealPage also features prominently at student housing-specific industry conferences. An April 2023 post on RealPage’s blog, for example, discusses various “takeaways” from the April 2023 “Interface Student Housing Conference” in Austin, “where more than 1,000 industry professional gathered to discuss the state of the student housing industry.”¹⁵⁵ An agenda for the conference lists RealPage’s Senior Director of Research & Analysis as a featured speaker on the conference’s first day in a presentation titled “Industry Data Snapshot: What are the Numbers When it Comes to Leasing, Rental Rates and Enrollment Trends?”¹⁵⁶:

2:30 PM - 3:20 PM

(3rd Floor Ballroom E)

Industry Data Snapshot: What are the Numbers When it Comes to Leasing, Rental Rates and Enrollment Trends?

Jeff Adler, Vice President, Yardi

Carl Whitaker, Sr. Director of Research & Analysis, RealPage

Charlie Matthews, Founder & CEO, College House

Dena Costello, Vice President of Business Development & Client Services, Campus Advantage -
Moderator

140. As discussed above, RealPage advisors have regular contact with Lessor Defendants to (1) enforce price discipline and (2) keep them up to date on their competitors. Advisors help Lessors “Review pricing daily or weekly in collaboration with on-site and regional operations management,” “Monitor and report on weekly rents, occupancy and revenue trends,” and “Adjust configurations and pricing to align with your asset objectives as market conditions

¹⁵⁵ Carl Whitaker, *7 Takeaways from Interface Student Housing*, RealPage Analytics (April 19, 2023), available at <https://www.realpage.com/analytics/student-housing-update-1q23/> (last visited July 13, 2023).

¹⁵⁶ Agenda for 15th Annual Interface Student Housing Conference, available at <https://web.event.com/event/b5cd66fe-e8ad-46e5-b11b-6eaa2850bf9d/websitePage:1a8eecbc-3ee0-4c0f-ade3-a57b46e535da> (last visited July 13, 2023).

and business strategies change.”¹⁵⁷ In an earnings call, RealPage’s CFO, Tom Ernst, stated that RealPage was “actively ramping” efforts to have RealPage’s sales team discuss their revenue management products with their clients.¹⁵⁸ Finally, RealPage prominently advertises its relationship with large student housing operators, thus ensuring that Lessor Defendants have the “courage” to adhere to higher, supracompetitive prices without fear of being undercut by their competitors—who they can be confident are often also using RealPage. For example, as discussed above, RealPage publicly touts its relationship with Lessor Defendants Campus Advantage and Cardinal Group, by way of press releases and promotional videos, and emphasizes how the use of RealPage’s RMS software has allowed these companies to price above competitive levels. Given student housing operators’ many opportunities to meet (e.g., at industry conferences), together with RealPage’s encouragement that lessors “[s]hop [their] competitors,” it is likely that lessors are aware of one another’s use of RealPage.

F. Defendants’ conduct has had extensive anticompetitive effects.

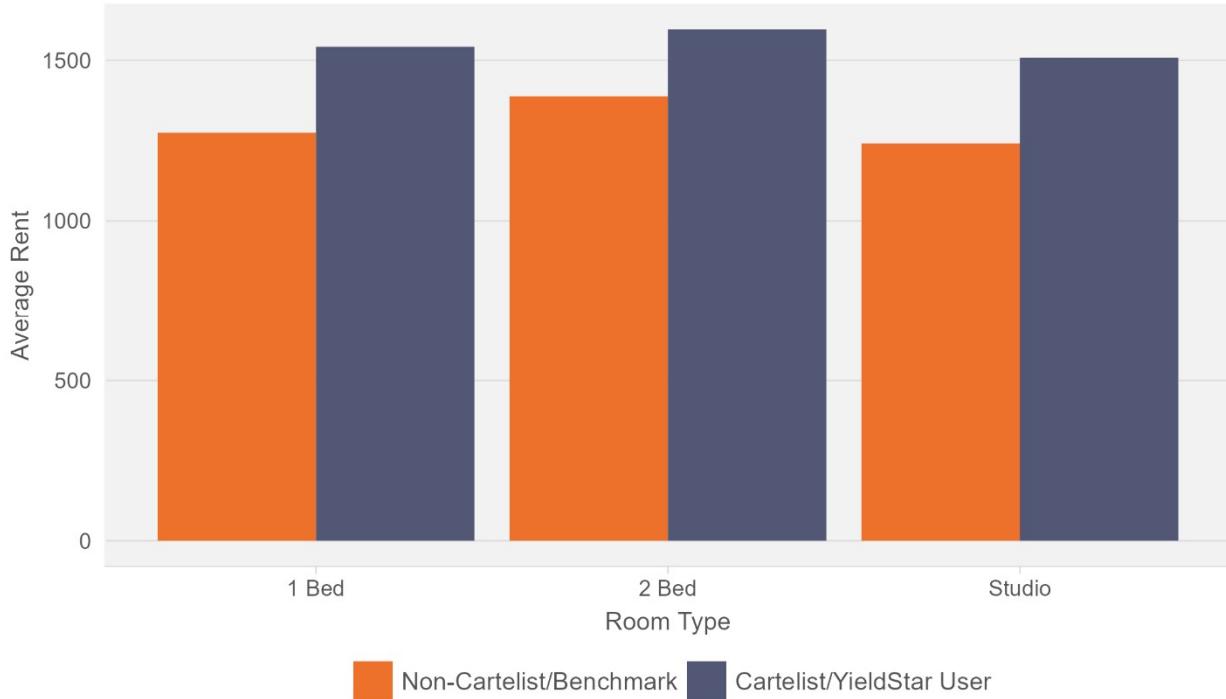
1. Lessor Defendants’ use of RealPage has led to supracompetitive prices

141. A preliminary econometric regression indicates that usage of YieldStar Student leads to supracompetitive prices for student housing properties that use the software. Publicly available rental prices for student housing were collected for Auburn, Baton Rouge, Tallahassee, and Eugene in August 2023. The regression analysis compared prices for properties owned or managed by Lessor Defendants versus student housing owned or managed by non-defendants. The regression analysis controlled for various property and geographic features, including the size of the unit and the distance of the property from the university. The regression estimated an average overcharge of 10.9% on properties that were priced using YieldStar Student, as compared to the benchmark properties. As such, the preliminary results suggest that YieldStar Student produces anticompetitive effects in the form of artificially elevated prices.

¹⁵⁷ “RealPage AI Revenue Management,” RealPage, available at <https://www.realpage.com/asset-optimization/revenue-management/> (last visited July 13, 2023).

¹⁵⁸ RealPage, Inc. Q2 2020 Earnings Conference Call (July 30, 2020) (last visited July 13, 2023).

Average Rent by Cartelist/YieldStar User and Non-Cartelist/Benchmark



142. As discussed above, RealPage boasts openly and often about the fact that, by using its Revenue Management Solutions software, Lessors Defendants can beat the market: RealPage has variously claimed that Lessor Defendants are able to achieve “2% to 7% revenue outperformance” in the student housing market¹⁵⁹ and that “YieldStar Student Housing has improved user revenues by 3 to 7 percent relative to the market.”¹⁶⁰ Similarly, in a joint case study between RealPage and Lessor Defendant Campus Advantage, Campus Advantage reported

¹⁵⁹ RealPage Press Release, *RealPage Hosts Executive Student Summit*, (May 8, 2019), <https://www.realpage.com/news/realpage-hosts-executive-student-summit/> (last visited Nov. 2, 2022).

¹⁶⁰ *The Price is Right*, Student Housing Business (Feb. 22, 2023), available at <https://studenthousingbusiness.com/the-price-is-right/> (last visited June 14, 2023).

outperforming the market by 14.1% “with a negative YoY occupancy change.”¹⁶¹ RealPage advised property owners and potential clients: “If you want to outperform the market term after term, focus less on occupancy and more on strategic lease pricing.” Campus Advantage had “below average occupancy rates,” yet still outperformed the market by double digits.

143. More broadly, prices for student housing are at record highs. As noted above, for instance, RealPage has recently noted that “Fall 2023’s annual effective rent growth towers head and shoulders above previous years, even considering last year’s substantial rebound,” with “[a]nnual effective rent growth hit[ting] 9.5% in February, the third consecutive month of 9%+ rent hikes”¹⁶²; indeed, “[t]he near-term outlook for the student housing industry may be at an all-time high,” with “double digit revenue growth” and “just one in 10 RealPage 175 campuses . . . failing to match 3% annual rent growth today, an impressive feat considering that threshold was considered outperformance not too long ago.”¹⁶³

144. At many schools, this “double digit” rent growth in student housing has even significantly outpaced rent growth in conventional multifamily housing in the same markets.¹⁶⁴ A chart from the same post captures some of these remarkable year-over-year increases:

¹⁶¹ *Student Housing: Revenue Management Case Study*, RealPage Case Studies, available at https://www.realpage.com/case-studies/campus-advantage-revenue-management-case-study/?utm_source=campus-advantage&utm_medium=bp&utm_campaign=pmi&utm_term=20181003 (last visited June 14, 2023).

¹⁶² Julia Bunch, *Rent Growth Hits Another High in Fall 2023 Pre-Leasing Season*, RealPage Analytics (March 10, 2023), available at <https://www.realpage.com/analytics-rent-growth-hits-another-high-in-fall-2023-pre-leasing-season/> (last visited July 13, 2023).

¹⁶³ Carl Whitaker, *7 Takeaways from Interface Student Housing*, RealPage Analytics (April 19, 2023), available at <https://www.realpage.com/analytics/student-housing-update-1q23/> (last visited July 13, 2023).

¹⁶⁴ Carl Whitaker, *Student Housing Rent Growth in Double Digits at Key Schools*, RealPage Analytics (June 12, 2023), available at <https://www.realpage.com/analytics/schools-outperform-rent-growth-student-housing/> (last visited July 13, 2023).



2. Government regulators have expressed concerns about algorithmic pricing's effect on competition.

145. Government regulators around the world have also expressed concerns about algorithmic pricing's effect on competition.

146. Earlier this year, for example, the Principal Deputy Assistant Attorney General of the Antitrust Division for the Department of Justice stated: "Where competitors adopt the same pricing algorithms, our concern is only heightened. Several studies have shown that these algorithms can lead to tacit or express collusion in the marketplace, potentially resulting in higher prices, or at a minimum, a softening of competition."¹⁶⁵

147. Similarly, while serving as acting chairman of the Federal Trade Commission, Maureen Ohlhausen explained in 2017 how multiple firms outsourcing pricing decisions to a single third-party actor—just as Lessor Defendants have done with RealPage—raises significant antitrust concerns:

What if algorithms are not used in such a clearly illegal way, but instead effectively become a clearing house for confidential pricing information? Imagine a group of competitors sub-contracting their pricing decisions to a common, outside agent that provides algorithmic pricing services. Each firm communicates its pricing strategy to the vendor, and the vendor then programs its algorithm to reflect the firm's pricing strategy. But because the same outside vendor now has confidential price strategy information from

¹⁶⁵ Principal Deputy Assistant Attorney General Doha Mekki of the Antitrust Division Delivers Remarks at GCR Live: Law Leaders Global 2023, United States Department of Justice (February 2, 2023), available at <https://tinyurl.com/mrxshn2k> (last visited July 13, 2023).

multiple competitors, it can program its algorithm to maximize industry-wide pricing. In effect, the firms themselves don't directly share their pricing strategies, but that information still ends up in common hands, and that shared information is then used to maximize market-wide prices. Again, this is fairly familiar territory for antitrust lawyers, and we even have an old fashioned term for it, the hub-and-spoke conspiracy. Just as the antitrust laws do not allow competitors to exchange competitively sensitive information directly in an effort to stabilize or control industry pricing, they also prohibit using an intermediary to facilitate the exchange of confidential business information. Let's just change the terms of the hypothetical slightly to understand why. Everywhere the word "algorithm" appears, please just insert the words "a guy named Bob". **Is it ok for a guy named Bob to collect confidential price strategy information from all the participants in a market, and then tell everybody how they should price? If it isn't ok for a guy named Bob to do it, then it probably isn't ok for an algorithm to do it either.**¹⁶⁶

148. RealPage here plays exactly that role of "a guy named Bob." It collects price information from each of the Lessor Defendants, and then tells them, through use of its algorithm, how to price student housing.

3. The conspiracy has caused vulnerable students to languish while the Defendants flourished.

149. The cost of attaining higher education has exploded over the 21st Century. Today, the average public university student will pay more than \$31,410 to earn a bachelor's degree.¹⁶⁷ Over the past 10 years, student loan debt in the United States has more than doubled and the balance of student loan debt now totals **\$1.757 trillion**. More than 43.8 million Americans—one in five adults—is saddled with student loan debt. Rent increases account for a significant part of

¹⁶⁶ Maureen K. Ohlhausen, *Should We Fear The Things That Go Beep In the Night? Some Initial Thoughts on the Intersection of Antitrust law and Algorithmic Pricing*, Federal Trade Commission (May 23, 2017), available at https://www.ftc.gov/system/files/documents/public_statements/1220893/ohlhausen_-concurrences_5-23-17.pdf (emphasis added) (last visited July 13, 2023).

¹⁶⁷ Melanie Hanson, "Student Loan Debt Statistics," EducationData.org (April 1, 2023), available at <https://educationdata.org/student-loan-debt-statistics> (last visited July 13, 2023).

this debt burden; living expenses are the second-largest driver of college costs after tuition and fees.¹⁶⁸

150. Increased rent for student housing can thus burden students and their parents for years in the future as the interest compounds. This impacts groups who were historically denied access to higher education: Black or African American students are the most likely demographic to borrow loans for college (73.2% take on debt) and women are 9.2% more likely to need federal student loans compared to their male peers.¹⁶⁹

151. It is impossible for many students to pay for the high cost of student housing without incurring debt. For example, the University of Tennessee – Knoxville estimates that housing and meals for the 2023 academic year will cost students \$11,240.¹⁷⁰ A full-time student who attends this university and also works a minimum wage work-study job for 20 hours a week will take home about \$530 a month after taxes.

152. Students are struggling to keep up with the rising costs of attaining higher education. In 2019, one-third of students at University of Washington—a public university in Seattle—reported that they could not afford to eat balanced meals while attending school. One in five students said they went hungry because they sometimes or often ran out of food and could not afford more. Denzil Suite, University of Washington’s vice president for Student Life, observed that, “[a]s the cost of living increases, we are seeing more cases where—in addition to the normal stresses and challenges of completing a college education—some of our students are struggling to maintain stable living situations and reliable nourishment.”¹⁷¹

153. Due to these soaring costs, the companies that manage student housing—Lessor Defendants—are flourishing. In 2023, the student housing industry celebrated “the theme of

¹⁶⁸ *Id.*

¹⁶⁹ *Id.*

¹⁷⁰ University of Tennessee Campus Guide, available at <https://tennessee.edu/campus-guide/> (last visited July 13, 2023).

¹⁷¹ Kim Eckart, UW News, *UW Students Face Food, Housing Insecurity, Survey Shows*, (May 10, 2019), available at <https://www.washington.edu/news/2019/05/10/uw-students-face-food-housing-insecurity-survey-shows/> (last visited July 13, 2023).

ultra-strong performance” as “annual rent growth hovered near its best-ever rate, just shy of 10%.”¹⁷² The rent growth for Fall 2023, for example “easily claims the highest rates on record, hovering above 9% for five consecutive months.”¹⁷³ Meanwhile, 62.5% of American Indian or Native American students, 52% of Black or African American students, 36% of Hispanic or Latinx students, and 30% of white students reported experiencing housing insecurity as they shoulder these ever-increasing costs.¹⁷⁴

154. Perversely, high rent for student housing (and debt incurred as a result) creates a pipeline that keeps college students trapped as renters for years after they leave higher education because juggling student loan debt makes it more difficult for them to qualify for a home loan. The Federal Reserve Bank of New York estimated in 2018 that if student debt levels had stayed close to 2001 levels rather than increasing, there would be 360,000 more homeowners in America today.¹⁷⁵

155. Thus, the inflated costs of student housing can impact students’ lives for decades—if not generations. This is especially true for students who face housing insecurity because of the high student rent costs. Seventy-two percent of students who face housing insecurity consider dropping out of college, which can affect their long-term earning potential.¹⁷⁶

¹⁷² Julia Bunch, RealPage, *Expect Another Ultra-Full Occupancy Rate in Student Housing for Fall 2023* (May 12, 2023), available at <https://www.realpage.com/analytics/student-housing-update-april-2023/> (last visited July 13, 2023).

¹⁷³ *Id.*

¹⁷⁴ Olya Glantsman, et al., *Risk of food and housing insecurity among college students during the COVID-19 pandemic*, 50 J. CMTY. PSYCHOL. 2726-2745 (August 2022), available at <https://onlinelibrary.wiley.com/doi/full/10.1002/jcop.22853> (last visited July 13, 2023).

¹⁷⁵ Natalie Kitroeff, The New York Times, *How Student Debt Can Ruin Home Buying Dreams* (May 25 2018), available at <https://www.nytimes.com/2018/05/25/business/how-student-debt-can-ruin-home-buying-dreams.html> (last visited July 13, 2023).

¹⁷⁶ Kamaron McNair, CNBC, *20% of College Students Struggle to Find Stable Housing – Why it Could Have Long-Term Consequences* (November 30, 2022), available at <https://www.cnbc.com/2022/11/30/20percent-of-college-students-struggle-to-find-stable-housing.html> (last visited July 13, 2023).

Those who drop out of college with student debt have a worse shot at being homeowners than their peers who graduated high school but never went to college.¹⁷⁷

V. RELEVANT MARKET

156. Defendants' actions described herein constitute a single unlawful conspiracy to fix, raise, stabilize, or maintain at artificially high levels rental costs charged for student residential real estate across the United States, and is *per se* illegal under the Sherman Act. This agreement was supported by Lessor Defendants' reciprocal exchange of competitively sensitive information through RealPage, which was a facilitating practice in furtherance of Defendants' cartel.

157. Further, because the conduct alleged here increased prices and reduced output, if the Court declines to analyze this case under the *per se* mode of analysis, the Court could analyze this case under the "quick look" mode of analysis. Under either mode of analysis, Plaintiffs are not required to prove that Defendants had market power in any defined antitrust market.

A. The relevant product market is the market for the lease of student housing real estate.

158. To the extent the Court ultimately applies the "rule of reason" mode of analysis to these claims—notwithstanding the horizontal nature of the alleged conspiracy—the relevant product market is the market for the lease of student housing real estate and the relevant geographic market is the United States.

159. As discussed in detail above, from the perspective of the consumer, student housing rental apartment units are not economic substitutes for multifamily rental apartment units because, among other things, student housing properties often grant student tenants a more flexible leasing cycle that aligns with the school year, the ability to lease by the bed rather than the unit, and are often more affordable than multifamily units (since many students do not work full time). Student housing units are also not an economic substitute for apartments,

¹⁷⁷ Melody Hahm, Yahoo! News, *How College Can Ruin Your Chances of Buying a House*, (July 29, 2016), available at <https://www.yahoo.com/news/student-loan-debt-fannie-mae-000000841.html> (last visited July 13, 2023).

condominiums, or homes for purchase because, among other reasons, purchase of real estate requires the ability to make a substantial down payment and to obtain financing.

160. The student housing real estate lease market satisfies the test for market definition used by federal antitrust enforcement agencies, widely known as the “SSNIP test.” The test asks whether a hypothetical monopolist in a proffered market could profitably impose a small but significant (typically 5%), non-transitory increase in price (a “SSNIP”), without causing a sufficient number of customers to switch to other products or services such that the SSNIP would be unprofitable to the monopolist. If the SSNIP is profitable, the market is properly defined. If the SSNIP is not profitable, the market is too narrowly defined, and does not encompass sufficient economic substitutes.

161. Here, the SSNIP test is satisfied, and the market is properly defined. As described above and below, pursuant to the Lessor Defendants’ agreement not to compete on price, Lessor Defendants are able to increase “2% to 7% revenue outperformance” in the student housing market¹⁷⁸ yet those increases have not driven enough renters out of the market such that the SSNIP has become unprofitable to Lessor Defendants.

B. Regional submarkets

162. RealPage operates a nationwide business, with offices across the country and clients in every major metropolitan area. RealPage’s Revenue Management Solutions software operates throughout the country in the same way, accounting for any regional variations in rental market conditions. Tenants across the country are impacted by the conspiracy facilitated by RealPage, as nationwide rental prices increase and output declines.

163. Because students live near the institutions they attend, markets for student housing are tied to those institutions. Therefore, students near a given institution do not consider

¹⁷⁸ Press Release, RealPage, *RealPage Hosts Executive Student Summit* (May 8, 2019), <https://www.realpage.com/news/realpage-hosts-executive-student-summit/> (last visited July 13, 2023). Earlier RealPage statements corroborate this as well. For example, in a 2013 article on StudentHousingBusiness.com, Keith Dunkin, vice president of market development for YieldStar, stated that “YieldStar Student Housing has improved user revenues by 3 to 7 percent relative to the market.” *The Price is Right*, Student Housing Business (August 12, 2019), available at <https://studenthousingbusiness.com/the-price-is-right/> (last visited July 13, 2023).

student housing elsewhere (e.g., in another city or state) as an adequate substitute for a student housing lease near their institution.

164. The relevant geographic submarkets here are those markets in the United States in which Defendants' conduct increases the prices paid by student lessors above competitive levels. Plaintiffs allege that Defendants' scheme harmed competition in at least the following markets, each of which comprises a separate and distinct relevant regional geographic market under any potential Rule of Reason analysis:¹⁷⁹

1. Austin, TX

165. Austin is home to multiple universities, including the University of Texas at Austin, St. Edward's University, and Huston-Tillotson University, and has an estimated student population of at least 56,000 students. Lessor Defendants collectively have several student housing properties in the Austin market. Specifically:

- **Greystar:** the Hilltop, Skyloft
- **B.HOM:** 21 Rio

2. Tallahassee, FL

166. Tallahassee is home to Florida State University and Florida A&M University, and has an estimated student population of at least 55,000. Lessor Defendants collectively have at least five student housing properties in the Tallahassee market. Specifically:

- **Greystar:** CollegeTown Madison Street
- **Cardinal Group:** NXNW, Tenn Street, The Osceola
- **Campus Advantage:** Forum Tallahassee

3. Columbia, SC

167. Columbia is home to the University of South Carolina, Benedict College, Columbia College, and Columbia International University, and has an estimated student

¹⁷⁹ On information and belief, both Lessor Defendants and John Doe Defendants have increased rent above supracompetitive levels in additional markets currently unknown to Plaintiffs. The information below is drawn from Defendants' websites, which list their properties in various student markets.

population of at least 38,000. Lessor Defendants collectively have at least two student housing properties in the Columbia market. Specifically:

- **Cardinal Group:** Redtail on the River

- **Campus Advantage:** The Rowan

4. **Knoxville, TN**

168. Knoxville is home to the University of Tennessee and has a student population of approximately 34,000 students. Lessor Defendants collectively have at least five student housing properties in the Knoxville market. Specifically:

- **B.HOM:** The Commons, The Commons on Bridge

- **Cardinal Group:** Quarry Trail, 303 Flats

- **Campus Advantage:** Slate at 901

5. **Eugene, OR**

169. Eugene is home to Bushnell University, Lane Community College, and the University of Oregon, and has an estimated student population of 29,794. Lessor Defendants collectively have at least six student housing properties in the Eugene market. Specifically:

- **Campus Advantage:** The Soto

- **Cardinal Group:** 13th & Olive, Arena District, Ferry Street Flats, Patterson Social,

- **CA Student:** Uncommon Eugene

6. **Auburn, AL**

170. Auburn is home to Auburn University and has an estimated student population of 31,526. Lessor Defendants collectively have at least five student housing properties in the Auburn market. Specifically:

- **BH Management Services:** The Samford Glenn Apartments

- **Campus Advantage:** The Beacon

- **Cardinal Group:** The Grove at Auburn, Logan Square, The Magnolia

7. Gainesville, FL

171. Gainesville is home to Santa Fe College and the University of Florida and has an estimated student population of 74,089. Lessor Defendants collectively have at least five student housing properties in the Gainesville market. Specifically:

- **Campus Advantage:** Lyons Corner Townhomes, Lyons Corner Apartments
- **Cardinal Group:** The Continuum, Varsity House Gainesville
- **B.HOM:** West 20

8. Baton Rouge, LA

172. Baton Rouge is home to Baton Rouge Community College and Louisiana State University and has an estimated student population of 55,668. Lessor Defendants collectively have at least six student housing properties in the Baton Rouge market. Specifically:

- **BH Management Services:** Bristol Place Apartments
- **Campus Advantage:** Fairway View
- **Cardinal Group:** The Armstrong, The Lodges at 777, The Oliver Student Living, The Villas at Riverbend

9. Champaign, IL

173. Champaign is home to Parkland College and the University of Illinois, Urbana-Champaign, and has an estimated student population of 62,001. Lessor Defendants collectively have at least four student housing properties in the Champaign market. Specifically:

- **Campus Advantage:** 212 East
- **Cardinal Group:** Seven07
- **CA Student:** HERE Champaign
- **B.HOM:** Illini Tower

10. State College, PA

174. State College is home to Pennsylvania State University-Main Campus and has an estimated student population of 88,914. Lessor Defendants collectively have at least five student housing properties in the State College market. Specifically:

- **Cardinal Group:** Parkway Plaza, The Bryn, The Yards at Old State, and Tremont

- **CA Student:** Rise at State College.

11. College Station, TX

175. College Station is home to Texas A&M University and has an estimated student population of 72,530. Lessor Defendants collectively have at least three student housing properties in the College Station market. Specifically:

- **Campus Advantage:** The Cambridge at College Station
- **Cardinal Group:** 12 North, Stadium View

12. Huntsville, TX

176. Huntsville is home to Texas State University and has an estimated student population of 21,633. Lessor Defendants collectively have at least two student housing properties in the Huntsville market.

- **Campus Advantage:** Republic at Sam Houston
- **Cardinal Group:** Midtown Sam Houston

13. Tuscaloosa, AL

177. Tuscaloosa is home to Shelton State Community College and The University of Alabama and has an estimated student population of 43,757. Lessor Defendants collectively have at least three student housing properties in the Tuscaloosa market. Specifically:

- **Cardinal Group:** The Lofts at City Center and The Cottages at Lake Tamaha
- **CA Student:** Uncommon Tuscaloosa

14. Madison, WI

178. Madison is home to the University of Wisconsin and has an estimated student population of 64,234. Lessor Defendants collectively have at least three student housing properties in the Madison market. Specifically:

- **Greystar:** Hub at Madison
- **Cardinal Group:** Statesider and Towers on State
- **CA Student:** Uncommon Madison

15. Wilmington, NC

179. Wilmington is home to Cape Fear Community College and University of North Carolina, Wilmington, and has an estimated student population of 33,124. Lessor Defendants collectively have at least four student housing properties in the Wilmington market. Specifically:

- **CA Student:** Uncommon Wilmington
- **Timberline Real Estate Ventures:** CEV Wilmington
- **B.HOM:** Seahawk Retreat and Wilmington Commons

16. San Antonio, TX

180. San Antonio is home to Northwest Vista College, San Antonio College, and the University of Texas, San Antonio and has an estimated student population of 131,307. Lessor Defendants collectively have at least eight student housing properties in the San Antonio market. Specifically:

- **BH Management Services:** The Brooksfield Apartments, Hidden Lake Apartments, Paragon Westover Hills Apartments, The Kennedy Apartments, The Woodland Apartments, and Walker Ranch Apartments
- **Campus Advantage:** Prado
- **Cardinal Group:** Copper Pointe

17. Seattle, WA

181. Seattle is home to the University of Washington, Seattle University, and Seattle Pacific University and has an estimated student population of 81,980. Lessor Defendants collectively have at least six student housing properties in the Seattle market. Specifically:

- **Campus Advantage:** NOLAN
- **Greystar:** The Accolade, Arista Residences, Centerline, Solara, The M Seattle

18. College Park, MD

182. College Park is home to the University of Maryland, College Park, and has an estimated student population of 41,272. Lessor Defendants collectively have at least two student housing properties in the College Park market.

- **Cardinal Group and CA Student:** Landmark Maryland

- **B.HOM:** Terrapin Row

19. New Haven, CT

183. New Haven is home to Southern Connecticut State University and Yale University and has an estimated student population of 30,386. Lessor Defendants collectively have at least three student housing properties in the New Haven market. Specifically:

- **Cardinal Group:** College and Crown
- **B.HOM:** Howe Place Apartments and Olive and Wooster

20. West Lafayette, IN

184. West Lafayette is home to Purdue University and has an estimated student population of 50,344. Lessor Defendants collectively have at least two student housing properties in the West Lafayette market. Specifically:

- **Campus Advantage:** Launch
- **Cardinal Group:** Fuse

21. East Lansing, MI

185. East Lansing is home to Michigan State University and has an estimated student population of 50,612. Lessor Defendants collectively have at least three student housing properties in the East Lansing market. Specifically:

- **Campus Advantage:** Block 36 and Hannah Lofts
- **Cardinal Group:** 25 East

22. Bloomington, IN

186. Bloomington is home to Indiana University and has an estimated student population of 45,448. Lessor Defendants collectively have at least two student housing properties in the Bloomington market. Specifically:

- **Cardinal Group:** The Monroe
- **CA Student:** Evolve Bloomington

23. Greensboro, NC

187. Greensboro is home to North Carolina A&T State University and the University of North Carolina, Greensboro, and has an estimated student population of 39,266. Lessor

Defendants collectively have at least three student housing properties in the Greensboro market. Specifically:

- **BH Management Services:** Abbington Place Apartment Homes
- **B.HOM:** Cottages at Greensboro, Spartan Crossing

24. Arlington, TX

188. Arlington is home to The University of Texas, Arlington, and has an estimated student population of 47,315. Lessor Defendants collectively have at least five student housing properties in the Arlington market. Specifically:

- **BH Management Services:** Elmsgate at Cliffside Apartments, Huntington Meadows Apartments, and Ridgewood Preserve Apartment Homes
- **Campus Advantage:** LIV+ Arlington
- **Cardinal Group:** Maverick Place

25. Louisville, KY

189. Louisville is home to the University of Louisville and Jefferson Community and Technical College and has an estimated student population of 51,056. Lessor Defendants collectively have at least five student housing properties in the Louisville market. Specifically:

- **BH Management Services:** Cooper Creek Apartments, Renaissance St. Andrews Apartment Homes, and Valley Farm Apartment Homes
- **Cardinal Group:** Avoca, Frontgate

26. Fort Collins, CO

190. Fort Collins is home to Colorado State University and has an estimated student population of 33,001. Lessor Defendants collectively have at least two student housing properties in the Fort Collins market. Specifically:

- **Cardinal Group:** Flats at the Oval
- **B.HOM:** Stadium Apartments

27. Pullman, WA

191. Pullman is home to Washington State University and has an estimated student population of 29,843. Lessor Defendants collectively have at least two student housing properties in the Pullman market. Specifically:

- **Cardinal Group:** Grove at Pullman
- **CA Student:** Evolve on Main

VI. FRAUDULENT CONCEALMENT

192. Defendants actively concealed their conduct, including the extent of their information exchange, and Plaintiffs and members of the Class did not and could not have discovered Defendants' anticompetitive conduct.

193. There is no public list of RealPage participants. RealPage would never publish such a list. RealPage's pricing recommendations are also not available to the public—to participate, a company must own property that can set rents. Because there was no public list of participants, Plaintiffs and the Class had no way of knowing the full effects of the conspiracy.

194. In furtherance of the conspiracy, Defendants concealed their anticompetitive scheme and told Plaintiffs and the class the method they used to set pricing was ensuring "fair pricing" and increased competition; in reality, Lessor Defendants used RealPage to inflate prices and decrease competition.

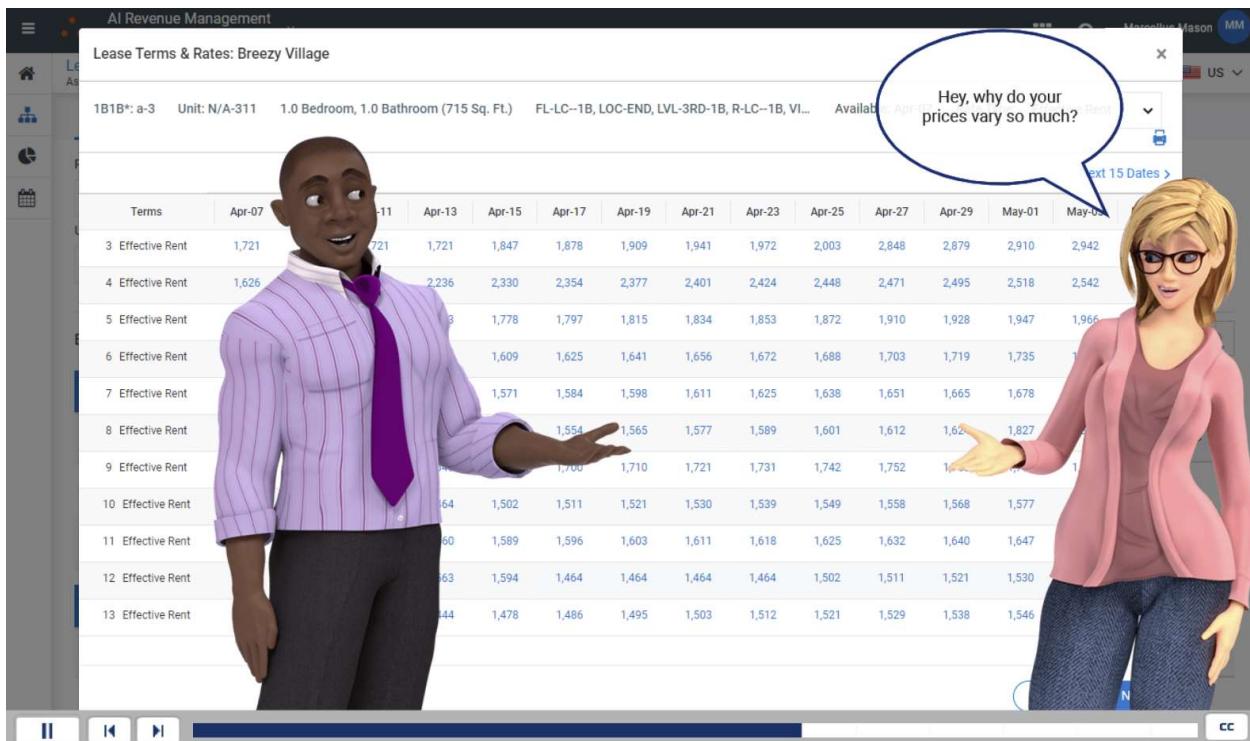
195. For example, Dave McKenna, the vice president of Student Living at RealPage, falsely stated that RealPage would provide its clients with "the ability to compete more effectively in this hyper-competitive space."

196. Likewise, Peter Iannone, the Director of Revenue Management at Campus Advantage, remarked that RealPage provided a benefit to students by ensuring that prices were fair and competitive: "The biggest benefit for students and parents is fair pricing. [RealPage] helps keep our rent prices stable and helps ensure we have the lowest prices at the beginning of the year and the highest prices at the end of the year[.]"

197. Because RealPage allowed Lessor Defendants to adjust rates in real time, class members would often pay different rates in the same unit. RealPage taught Lessor Defendants

how to sidestep tenant questions on this issue and providing the Lessor Defendants with scripts on how to explain these pricing differences without mentioning RealPage. These trainings and materials were provided to each of the Lessor Defendants and Lessor Defendants used these materials to maintain the conspiracy's secrecy.

198. RealPage created video trainings with animated people to teach Lessor Defendants' employees how to stick to the script to ensure the rates RealPage recommended stuck. These trainings were only available behind a password protected online learning portal:



199. These trainings used scenarios with prompts to teach Lessor Defendants' employees to stick to a script with the "best response" for tenants who had questions about pricing based on RealPage's pricing algorithm. These trainings were designed to conceal the conspiracy to make sure that the pricing provided by RealPage could not be discovered or negotiated by tenants. For example, the trainings taught leasing managers not to mention the use of "AI Revenue Management software" and instead tell tenants units were being "priced individually"—information that was patently false.

Scenario 2



Listen to the scenario, then read each of the three possible responses.
Select the box that gives the best response for the business situation.

"We use AI Revenue Management to price our apartments,
so we don't offer specials."

"Our prices are so low we don't need to offer specials."

"Our specials are built into our prices. We price each
apartment individually and we also take market conditions
into consideration."

Scenario 6



Listen to the scenario, then read each of the three possible responses.
Select the box that gives the best response for the business situation.

"You are right Mr. Smyth. If you come by the leasing office
today, we will offer you the price that's posted on our
website."

"Mr. Smyth, it's just like when you buy a shirt at the store. One
day it could be full price and the next day it could be 50% off
the full price."

"Mr. Smyth, the rates we have today are based on our current
availability which can be very different from what we will
have when your lease expires."

200. The Lessor Defendants used these trainings to conceal the conspiracy from tenants. Jennifer Cassidy, the senior vice president of student housing operations for the Cardinal Group, described the importance of these trainings: "Because student housing is rented by the bed, two people in the same unit could be paying very different prices. Training the team on how to explain the pricing strategy is key."

201. Because of Defendants' concealment, Plaintiffs and members of the Class had neither actual nor constructive knowledge of the facts constituting their claim for relief. Plaintiffs and members of the Class did not discover, and could not have discovered through the exercise of reasonable diligence, the existence of the conspiracy alleged herein until shortly before filing their complaint.

202. Defendants engaged in anticompetitive conduct, including secret information exchange and other communications, that did not reveal facts that would put Plaintiffs or members of the Class on inquiry notice that there was an anticompetitive agreement related to the market for student housing. Throughout the Class Period, Defendants effectively, affirmatively, and fraudulently concealed their anticompetitive agreement from Plaintiffs and class members, including by telling members of the Class that leasing rates were fair, competitive, or individually priced.

203. Not until recently was the conduct of Defendants, including the actions of RealPage, widely known or reported. Only after the recent publication in October 2022 of an article in ProPublica was there a comprehensive presentation of the full scope of the confidential services that RealPage provides to its clients in the real estate industry.

VII. CONTINUING VIOLATIONS

204. Plaintiffs' Sherman Act claims, which are subject to a four-year statute of limitations period, are also timely under the continuing violations doctrine. The conspiracy alleged above began at least as early as January 1, 2010, and continued into the time period of October 18, 2018 to the present.

205. This complaint alleges Lessor Defendants set prices pursuant to recommendations from Defendant RealPage's algorithms trained on a pool of competitively sensitive transaction data within the four-year statutory period.

206. As a result of the anticompetitive conduct challenged in this complaint, throughout the Class Period and to the present, Lessor Defendants were able to and did inflate prices for student housing.

207. Plaintiffs and members of the proposed Class purchased student housing directly from a Lessor Defendant at artificially inflated prices, caused by the conduct challenged in this complaint, throughout the Class Period.

208. Thus, each Lessor Defendant's sale of student housing leases at artificial and non-competitive prices constituted a new overt act causing injury to the proposed Class.

VIII. CLASS ACTION ALLEGATIONS

209. Plaintiffs bring this action on behalf of themselves and all others similarly situated pursuant to Federal Rule of Civil Procedure 23(a) and (b)(3) as representatives of the Class, which is defined as follows:

All persons and entities in the United States that leased student housing in the United States from a Lessor Defendant that used RealPage's Revenue Management Solutions software programs, or from a division, subsidiary, predecessor, agent, or affiliate of such Lessor Defendant, at any time during the period of January 1, 2010 until the Defendants' unlawful conduct and its anticompetitive effects cease to persist.

210. The Class is so numerous that joinder of all members in this action is impracticable. There are thousands of members in the proposed Class.

211. Plaintiffs' claims are typical of those of the Class.

212. Plaintiffs and members of the Class were all injured by the same unlawful conduct, which resulted in all of them paying more for leases than they otherwise would have in a competitive market.

213. Plaintiffs will fairly and adequately protect and represent the interests of the Class. The interests of the Plaintiffs are not antagonistic to the Class.

214. Questions of law and fact common to the members of the Class will predominate over questions, if any, that may be individual to individual class members, since the Defendants have acted and refused to act on grounds generally applicable to the Class.

215. Questions of law and fact common to the Class include:

- a. Whether Defendants have entered into a formal or informal contract, combination, conspiracy, or common understanding to artificially inflate price and/or artificially

- suppress supply of student housing real estate leases from competitive levels;
- b. If Defendants entered into such a formal or informal contract, combination, conspiracy, or common understanding, whether that conduct violates Section 1 of the Sherman Act under the *per se*, quick look, or rule of reason modes of analysis;
 - c. If Defendants entered into such a formal or informal contract, combination, conspiracy, or common understanding, whether that conduct has in fact artificially inflated price and/or artificially suppressed supply of student housing real estate leases from competitive levels;
 - d. The proper measure of damages; and
 - e. The contours of appropriate injunctive relief to remediate the anticompetitive effects of the challenged conduct in the future.

216. Plaintiffs and members of the Class are represented by counsel who are experienced and competent in the prosecution of complex antitrust and unfair competition class actions.

217. Class action treatment is the superior method for the fair and efficient adjudication of the controversy in that, among other things, such treatment will permit a large number of similarly situated persons or entities to prosecute their common claims in a single forum simultaneously, efficiently, and without the unnecessary duplication of effort and expense that numerous individual actions would engender. The benefits of proceeding through the class mechanism, including providing injured persons or entities with a method of obtaining redress for claims that might not be practicable for them to pursue individually, substantially outweigh any difficulties that may arise in the management of this class action.

IX. CLAIMS FOR RELIEF
FIRST CLAIM FOR RELIEF

**VIOLATION OF SECTION 1 OF THE SHERMAN ACT
FOR AGREEMENT IN RESTRAINT OF TRADE
15 U.S.C. § 1**

**(ON BEHALF OF NATIONWIDE CLASS FOR INJUNCTIVE AND
EQUITABLE RELIEF AND COMPENSATORY DAMAGES)**

218. Plaintiffs incorporate and reallege, as though fully set forth herein, each and every allegation set forth in the preceding paragraphs of this Complaint.

219. Beginning at a time currently unknown to Plaintiff and members of the Class, Defendants and their co-conspirators formed a cartel to artificially inflate the price of and artificially decrease the supply and output of student housing leases.

220. Defendants' cartel has caused the Plaintiffs and members of the Class to suffer overcharge damages.

221. There are no procompetitive justifications for the Defendants' cartel, and any proffered justifications, to the extent legitimate, could have been achieved through less restrictive means.

222. The Defendants' cartel is unlawful under a *per se* mode of analysis. In the alternative, the Defendants' cartel is unlawful under either a quick look or rule of reason mode of analysis.

SECOND CLAIM FOR RELIEF

**VIOLATION OF SECTION 1 OF THE SHERMAN ACT FOR
CONSPIRACY TO EXCHANGE COMPETITIVE INFORMATION
15 U.S.C. § 1**

**(ON BEHALF OF NATIONWIDE CLASS FOR INJUNCTIVE AND
EQUITABLE RELIEF AND COMPENSATORY DAMAGES)**

223. Plaintiffs incorporate and reallege, as though fully set forth herein, each and every allegation set forth in the preceding paragraphs of this Complaint.

224. Beginning at a time currently unknown to Plaintiffs and members of the Class, Defendants and their co-conspirators entered into a continuing agreement to regularly exchange detailed, timely, competitively sensitive and non-public information about their operations. This

agreement is an unreasonable restraint of trade in violation of Section 1 of the Sherman Act, 15 U.S.C. § 1.

225. Defendants' acts in furtherance of their combination or conspiracy were authorized, ordered, or done by their officers, agents, employees, or representatives while actively engaged in the management of Defendants' affairs.

226. Defendants' anticompetitive acts involved United States domestic commerce and import commerce, and had a direct, substantial, and foreseeable effect on interstate commerce by raising and fixing prices for student housing leases throughout the United States, including discrete geographic submarkets in college towns.

227. The relevant product market is the market for the lease of student housing real estate and the relevant geographic market is the United States, including discrete geographic submarkets in college towns detailed in Section V.B.

228. Lessor Defendants could impose an increase in the price of student housing they controlled collectively without causing many consumers to switch their purchases to another lease. Student leases constitute a unique product market.

229. The information regularly exchanged by Lessor Defendants pursuant to the agreement has consisted of detailed, competitively sensitive and non-public information about current and future pricing plans regarding leasing.

230. Lessor Defendants' regular information exchanges through RealPage reflected concerted action between horizontal competitors in the market for leases for student housing.

231. When Lessor Defendants that are competing for the same consumers exchange competitive information, it reduces the incentives to compete on price. Furthermore, RealPage's algorithmic pricing specifically encouraged Lessor Defendants to adhere to a common pricing system that kept prices artificially high while artificially suppressing output. This strategic information exchange, as well as RealPage's pricing recommendations based off the information exchange, was a material factor in Lessor Defendants' decisions to inflate the prices that Plaintiffs and members of the Class paid during the Class Period.

232. Lessor Defendants' unlawful agreements to exchange, and the actual exchanges of nonpublic, timely, and detailed data were not reasonably necessary to further any procompetitive purpose.

233. The information-exchange agreement has had the effect of (1) reducing and suppressing competition among Lessor Defendants in the market for leases for student housing and (2) inflating the prices for leases during the Class Period.

234. As a result of Defendants' unlawful conduct, Plaintiffs and members of the Class have been harmed by being forced to pay inflated, supracompetitive prices for leases.

235. As a direct and proximate result of Defendants' anticompetitive conduct, Plaintiffs and members of the Class have been injured in their business or property and will continue to be injured in their business and property by paying more for leases than they would have paid and will pay in the absence of the conspiracy.

THIRD CLAIM FOR RELIEF

VIOLATION OF STATE ANTITRUST STATUTES (ON BEHALF OF PLAINTIFFS AND THE CLASS)

236. Plaintiffs repeat and reiterate the allegations set forth above as if fully set forth herein, and each of the state-specific causes of action described below incorporates the allegations as if fully set forth therein.

237. During the Class Period, Defendants and their co-conspirators entered and engaged in a contract, combination, or conspiracy to fix, raise, stabilize, or maintain at artificially high levels, the rents they charge for student housing leases in various states to unreasonably restrain trade and commerce in violation of the various state antitrust laws set forth below.

238. In formulating and effectuating this conspiracy, Defendants and their co-conspirators performed acts in furtherance of the combination and conspiracy, including: agreeing to fix, increase, maintain, or stabilize student housing leases at artificially high levels, which injured Plaintiffs and members of the Class; exchange of competitively sensitive information between and among Lessor Defendants; and participating in meetings and trade

association conversations among themselves in the United States and elsewhere to implement, adhere to, and police the unlawful agreements they reached.

239. Defendants and their co-conspirators engaged in actions described above for the purpose of carrying out their unlawful agreements to fix, increase, maintain, or stabilize prices of rents for student housing leases at artificially high levels. As a direct and proximate result of Defendants' conduct, Plaintiffs and members of the Class were deprived of free and open competition and paid more to rent their apartments than they otherwise would have in the absence of Defendants' unlawful conduct. This injury is of the type the antitrust laws of the below states were designed to prevent and flows from that which makes Defendants' conduct unlawful.

240. In addition, Defendants have profited significantly from the conspiracy. Defendants' profits derived from their anticompetitive conduct come at the expense of and to the detriment of Plaintiffs and members of the Class.

241. Accordingly, Plaintiffs and the members of the Class in each of the following jurisdictions seek damages (including statutory damages where applicable), to be trebled or otherwise increased as permitted by each particular jurisdiction's antitrust law, and costs of suit, including reasonable attorneys' fees, to the extent permitted by the following state laws.

242. Defendants' anticompetitive acts described above were knowing and willful and constitute violations of the following state antitrust statutes.

243. **ALABAMA:** Defendants entered into an unlawful agreement to restrain trade in the State of Alabama in violation of Ala. Code § 6-5-60, *et seq.* Due to Defendants' unlawful conduct, (1) price competition for rentals was restrained, suppressed, and eliminated throughout Alabama; (2) the price of residential rental units in the State of Alabama were raised, fixed, maintained, and stabilized at artificially high levels; and (3) individuals have been deprived of free and open competition. Defendants' conspiracy substantially affected Alabama commerce and accordingly, Plaintiffs and the members of the Class seek all forms of relief available under Ala. Code § 6-5-60, *et seq.*

244. **ALASKA:** Defendants have entered into an unlawful agreement in restraint of trade in violation of Alaska Stat. § 45.50.562, *et seq.* Defendants' conspiracies had the following effects: (1) price competition for rentals was restrained, suppressed, and eliminated throughout Alaska; (2) the price of residential rental units in the State of Alaska were raised, fixed, maintained, and stabilized at artificially high levels; and (3) individuals have been deprived of free and open competition. During the Class Period, Defendants' illegal conduct substantially affected Alaska commerce. Accordingly, Plaintiffs and members of the Class seek all forms of relief available under Alaska Stat. § 45.50.562, *et seq.*

245. **ARIZONA:** Defendants have entered into an unlawful agreement in restraint of trade in violation of Ariz. Rev. Stat. § 44-1401, *et seq.* Defendants' conspiracies had the following effects: (1) price competition for rentals was restrained, suppressed, and eliminated throughout Arizona; (2) the price of residential rental units in the State of Arizona were raised, fixed, maintained, and stabilized at artificially high levels; and (3) individuals have been deprived of free and open competition. During the Class Period, Defendants' illegal conduct substantially affected Arizona commerce. Accordingly, Plaintiffs and members of the Class seek all forms of relief available under Ariz. Rev. Stat. § 44-1401, *et seq.*

246. **CALIFORNIA:** Defendants have entered into an unlawful agreement in restraint of trade in violation of Cal. Bus. & Prof. Code §16700, *et seq.* During the Class Period, Defendants and their co-conspirators entered into and engaged in a continuing unlawful trust in restraint of the trade and commerce. Each defendant has acted in violation of Cal. Bus. & Prof. Code § 16720 to fix, raise, stabilize, and maintain prices of residential apartment rentals at supracompetitive levels. The violations of Cal. Bus. & Prof. Code § 16720 consisted, without limitation, of a continuing unlawful trust and concert of action among Defendants and their co-conspirators, the substantial terms of which were to fix, raise, maintain, and stabilize the prices of residential apartment units. For the purpose of forming and effectuating the unlawful trust, Defendants and their co-conspirators have done those things which they combined and conspired to do, including, but not limited to, the acts, practices and course of conduct set forth above, and creating a price floor, fixing, raising, and stabilizing the price of residential rentals. Defendants'

conspiracies had the following effects: (1) price competition for rentals was restrained, suppressed, and eliminated throughout California; (2) the price of residential rental units in the State of California were raised, fixed, maintained, and stabilized at artificially high levels; and (3) individuals have been deprived of free and open competition. As a result of Defendants' violation of Cal. Bus. & Prof. Code § 16720, Plaintiffs and members of the Class seek treble damages and their cost of suit, including a reasonable attorneys' fee, pursuant to Cal. Bus. & Prof. Code § 16750(a).

247. **DISTRICT OF COLUMBIA:** Defendants' actions have violated D.C. Code § 28-4501, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) competition in the residential rental apartment market was restrained, suppressed, and eliminated throughout the District of Columbia; (2) residential apartment prices were raised, fixed, maintained, and stabilized at artificially high levels throughout the District of Columbia; (3) Plaintiffs and members of the Class, including those who resided in the District of Columbia and rented an apartment in the District of Columbia, paid supracompetitive, artificially inflated prices for their rentals, including in the District of Columbia. During the Class Period, Defendants' illegal conduct substantially affected commerce in the District of Columbia. By reason of the foregoing, Defendants have entered into agreements in restraint of trade in violation of D.C. Code § 28-4501, *et seq.* Accordingly, Plaintiffs and members of the Class seek all forms of relief available under D.C. Code § 28-4501, *et seq.*

248. **FLORIDA:** Defendants have violated the Fla. Stat. §§ 542.15, *et seq.* through their anticompetitive actions. Through their actions and actions of co-conspirators, rents of residential units in the State of Florida were raised, fixed, maintained, and stabilized at artificially high level, thereby injuring Plaintiffs and the Class. Throughout the Class Period, competition in the residential rental apartment market was restrained, suppressed, and eliminated throughout Florida. Plaintiffs and members of the Class, including those who resided and rented an apartment in the State of Florida, paid supracompetitive, artificially inflated prices for their rentals. During the Class Period, Defendants' illegal conduct substantially affected commerce in

Florida. Accordingly, Plaintiffs and members of the Class seek all forms of relief available under Fla. Stat. § 542.15.

249. **GEORGIA:** Defendants have entered into an unlawful agreement in restraint of trade in violation of Ga. Code Ann. § 13-8-2.1, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) competition in residential rental market was restrained, suppressed, and eliminated throughout Georgia; (2) residential rental prices were raised, fixed, maintained and stabilized at artificially high levels throughout Georgia. During the Class Period, Defendants' illegal conduct substantially affected Georgia commerce. By reason of the foregoing, Defendants have entered into agreements in restraint of trade in violation of Ga. Code Ann. § 13-8-2.1. Accordingly, Plaintiffs and members of the Class seek all forms of relief available under Ga. Code Ann. § 13-8-2.1, *et seq.*

250. **HAWAII:** Defendants have violated Haw. Rev. Stat. Ann. § 480-1, *et seq.*, through their actions. *See* Haw. Rev. Stat. Ann. §§ 480-4, 480-13. Through Defendants' actions and the actions of their co-conspirators, rents of residential units in the State of Hawaii were raised, fixed, maintained, and stabilized at artificially high levels, thereby injuring Plaintiffs and the Class. Throughout the Class Period, competition in the residential rental apartment market was restrained, suppressed, and eliminated throughout Hawaii. Plaintiffs and members of the Class, including those who resided in the State of Hawaii and rented an apartment in Hawaii, paid supracompetitive, artificially inflated prices for their rentals. During the Class Period, Defendants' illegal conduct substantially affected commerce in Hawaii. Accordingly, Plaintiffs and members of the Class seek all forms of relief available under Haw. Rev. Stat. Ann. § 480-1, *et seq.*

251. **IDAHO:** Defendants have violated Idaho Code § 48-101, *et seq.*, through their anticompetitive actions. Through their actions and actions of co-conspirators, rents of residential units in the State of Idaho were raised, fixed, maintained, and stabilized at artificially high level, thereby injuring Plaintiffs and the Class. Throughout the Class Period, competition in the residential rental apartment market was restrained, suppressed, and eliminated throughout Idaho. Plaintiffs and members of the Class, including those who resided in the State of Idaho and rented

an apartment in Idaho, paid supracompetitive, artificially inflated prices for their rentals. During the Class Period, Defendants' illegal conduct substantially affected commerce in Idaho.

Accordingly, Plaintiffs and members of the Class seek all forms of relief available under Idaho Code § 48-101, *et seq.*

252. **ILLINOIS:** Defendants have entered into an unlawful agreement in restraint of trade in violation of Section 740 ILCS 10/1, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) competition in residential rental market was restrained, suppressed, and eliminated throughout Illinois; (2) residential rental prices were raised, fixed, maintained, and stabilized at artificially high levels throughout Illinois. During the Class Period, Defendants' illegal conduct substantially affected Illinois commerce. By reason of the foregoing, Defendants have entered into agreements in restraint of trade in violation of Section 740 ILCS 10/1, *et seq.* Accordingly, Plaintiffs and members of the Class seek all forms of relief available under Section 740 ILCS 10/1, *et seq.*

253. **INDIANA:** Defendants violated Indiana Code, §§ 24-1-1-1, *et seq.*; 24-1-2-1, *et seq.*; and 24-1-3-1, *et seq.* by entering into unlawful agreement in restraint of trade in the State of Indiana. Specifically, Defendants' combinations or conspiracies detrimentally affected the competition in the Indiana residential rental market by restraining, suppressing, and eliminating competition. Further, Defendants' unlawful conduct raised, fixed, maintained, and stabilized rents in Indiana at artificially high levels. During the Class Period, Defendants' illegal conduct substantially affected Indiana commerce. Accordingly, Plaintiffs and members of the Class seek all relief available under Indiana Code §§ 24-1-1-1, *et seq.*; 24-1-2-1, *et seq.*; and 24-1-3-1, *et seq.*

254. **IOWA:** Defendants have entered into an unlawful agreement in restraint of trade in violation of Iowa Code § 553.1, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) competition in residential rental market was restrained, suppressed, and eliminated throughout Iowa; (2) residential rental prices were raised, fixed, maintained and stabilized at artificially high levels throughout Iowa. During the Class Period, Defendants' illegal conduct substantially affected Iowa commerce. By reason of the foregoing, Defendants have

entered into agreements in restraint of trade in violation of Iowa Code § 553.1, *et seq.*

Accordingly, Plaintiffs and members of the Class seek all forms of relief available under Iowa Code § 553.1, *et seq.*

255. **KANSAS:** Defendants have entered into an unlawful agreement in restraint of trade in violation of Kan. Stat. § 50-101, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) price competition for rentals was restrained, suppressed, and eliminated throughout Kansas; (2) the price of residential rental units in the State of Kansas were raised, fixed, maintained, and stabilized at artificially high levels; and (3) individuals have been deprived of free and open competition. During the Class Period, Defendants' illegal conduct substantially affected Kansas commerce. Accordingly, Plaintiffs and members of the Class seek all forms of relief available under Kan. Stat. § 50-101, *et seq.*

256. **LOUISIANA:** Defendants have entered into an unlawful agreement in restraint of trade in violation of La. Stat. Ann. § 51:121, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) price competition for rentals was restrained, suppressed, and eliminated throughout Louisiana; (2) the price of residential rental units in the State of Louisiana were raised, fixed, maintained, and stabilized at artificially high levels; and (3) individuals have been deprived of free and open competition. During the Class Period, Defendants' illegal conduct substantially affected Louisiana commerce. Accordingly, Plaintiffs and members of the Class seek all forms of relief available under La. Stat. Ann. § 51:121, *et seq.*

257. **MAINE:** Defendants have entered into an unlawful agreement in restraint of trade in violation of Me. Rev. Stat. Ann. Tit. 10, § 1101. Defendants' combinations or conspiracies had the following effects: (1) competition in the Maine residential rental market was restrained, suppressed, and eliminated; (2) rental prices for Maine residential units were raised, fixed, maintained, and stabilized at artificially high levels. During the Class Period, Defendants' illegal conduct substantially affected Maine commerce. Accordingly, Plaintiffs and members of the Class seek all relief available under Me. Rev. Stat. Ann. tit. 10, § 1104.

258. **MARYLAND:** Defendants violated Md. Code, Com. Law § 11-201, *et seq.*, by entering into unlawful agreement in restraint of trade in the State of Maryland. Specifically,

Defendants' combinations or conspiracies detrimentally affected the competition in the Maryland residential rental market by restraining, suppressing, and eliminating competition. Further, Defendants' unlawful conduct raised, fixed, maintained, and stabilized rents in Maryland at artificially high levels. During the Class Period, Defendants' illegal conduct substantially affected Maryland commerce. Accordingly, Plaintiffs and Members of the Class seek all relief available under Md. Code, Com. Law § 11-201, *et seq.*

259. **MASSACHUSETTS:** Defendants have entered into an unlawful agreement in restraint of trade in violation of the Massachusetts Antitrust Act, Mass. Gen. Laws ch. 93, § 1, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) competition in the Massachusetts residential rental market was restrained, suppressed, and eliminated; (2) Massachusetts residential rental prices were raised, fixed, maintained, and stabilized at artificially high levels. During the Class Period, Defendants' illegal conduct substantially affected Massachusetts commerce. Accordingly, Plaintiffs and members of the Class seek all relief available under the Massachusetts Antitrust Act, Mass. Gen. Laws ch. 93, § 1, *et seq.*

260. **MICHIGAN:** Defendants have entered into an unlawful agreement in restraint of trade in violation of Mich. Comp. Laws § 445.771, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) competition in the residential rental market was restrained, suppressed, and eliminated throughout Michigan; (2) residential rental prices were raised, fixed, maintained, and stabilized at artificially high levels throughout Michigan. During the Class Period, Defendants' illegal conduct substantially affected Michigan commerce. Accordingly, Plaintiffs and members of the Class seek all relief available under Mich. Comp. Laws § 445.771, *et seq.*

261. **MINNESOTA:** Defendants have violated the Minn. Stat. § 325D.49, *et seq.*, through their anticompetitive actions. Through their actions and actions of co-conspirators, rents of residential units in the State of Minnesota were raised, fixed, maintained, and stabilized at artificially high level, thereby injuring Plaintiffs and the Class. Throughout the Class Period, competition in the residential rental apartment market was restrained, suppressed, and eliminated throughout Minnesota. Plaintiffs and members of the Class, including those who resided in the

State of Minnesota and rented an apartment there, paid supracompetitive, artificially inflated prices for their rentals. During the Class Period, Defendants' illegal conduct substantially affected commerce in Minnesota. Accordingly, Plaintiffs and members of the Class seek all forms of relief available under Minn. Stat. § 325D.49, *et seq.*

262. **MISSISSIPPI:** Defendants have entered into an unlawful agreement in restraint of trade in violation of Miss. Code § 75-21-1, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) competition in the residential rental market was restrained, suppressed, and eliminated throughout Mississippi; (2) residential rental prices were raised, fixed, maintained, and stabilized at artificially high levels throughout Mississippi. During the Class Period, Defendants' illegal conduct substantially affected Mississippi commerce. Accordingly, Plaintiffs and members of the Class seek all relief available under Miss. Code § 75-21-1, *et seq.*

263. **MISSOURI:** Defendants have entered into an unlawful agreement in restraint of trade in violation of Mo. Rev. Stat. § 416.011, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) competition in the residential rental market was restrained, suppressed, and eliminated throughout Missouri; (2) residential rental prices were raised, fixed, maintained, and stabilized at artificially high levels throughout Missouri. During the Class Period, Defendants' illegal conduct substantially affected Missouri commerce. Accordingly, Plaintiffs and members of the Class seek all relief available under Mo. Rev. Stat. § 416.011, *et seq.*

264. **MONTANA:** Defendants have entered into an unlawful agreement in restraint of trade in violation of Montana Code Ann. § 30-14-201, *et seq. See also* Mont. Code Ann. § 30-14-205. Specifically, Defendants' combinations or conspiracies detrimentally affected the competition in the Montana residential rental market by restraining, suppressing, and eliminating competition. Further, Defendants' unlawful conduct raised, fixed, maintained, and stabilized rents in Montana at artificially high levels. During the Class Period, Defendants' illegal conduct substantially affected Montana commerce. Accordingly, Plaintiffs and Members of the Class seek all relief available under Montana Code Ann. § 30-14-201, *et seq.*

265. **NEBRASKA:** Defendants restrained trade and commerce in the State of Nebraska by entering into an unlawful agreement in violation of Neb. Rev. Stat. § 59-801, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) competition in the residential rental market was restrained, suppressed, and eliminated throughout Nebraska; (2) residential rental prices were raised, fixed, maintained, and stabilized at artificially high levels throughout Nebraska. During the Class Period, Defendants' illegal conduct substantially affected Nebraska commerce. Accordingly, Plaintiffs and members of the Class seek all relief available under Neb. Rev. Stat. § 59-801, *et seq.*

266. **NEW HAMPSHIRE:** Defendants have entered into an unlawful agreement in restraint of trade in violation of New Hampshire Revised Statutes Ann. § 356:1. Specifically, Defendants' combinations or conspiracies detrimentally affected the competition in the New Hampshire residential rental market by restraining, suppressing, and eliminating competition. Further, Defendants' unlawful conduct raised, fixed, maintained, and stabilized rents in New Hampshire at artificially high levels. During the Class Period, Defendants' illegal conduct substantially affected New Hampshire commerce. Accordingly, Plaintiffs and Members of the Class seek all relief available under New Hampshire Revised Statutes § 356:1, *et seq.*

267. **NEW JERSEY:** Defendants restrained trade and commerce in the State of New Jersey by entering into an unlawful agreement in violation of N.J. Rev. Stat. § 56:9-1, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) competition in the residential rental market was restrained, suppressed, and eliminated throughout New Jersey; (2) residential rental prices were raised, fixed, maintained, and stabilized at artificially high levels throughout New Jersey. During the Class Period, Defendants' illegal conduct substantially affected New Jersey commerce. Accordingly, Plaintiffs and members of the Class seek all relief available under N.J. Rev. Stat. § 56:9-1, *et seq.*

268. **NEW MEXICO:** Defendants violated New Mexico Statutes Annotated § 57-1-1, *et seq.*, by entering into unlawful agreement in restraint of trade in the State of New Mexico. Specifically, Defendants' combinations or conspiracies detrimentally affected the competition in the New Mexico residential rental market by restraining, suppressing, and eliminating

competition. Further, Defendants' unlawful conduct raised, fixed, maintained, and stabilized rents in New Mexico at artificially high levels. During the Class Period, Defendants' illegal conduct substantially affected commerce in New Mexico. Accordingly, Plaintiffs and Members of the Class seek all relief available under New Mexico Statutes Annotated § 57-1-1, *et seq.*

269. **NEW YORK:** Defendants have entered into an unlawful agreement in restraint of trade in violation of New York Gen. Bus. L. § 340, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) competition in the residential rental market was restrained, suppressed, and eliminated throughout New York; (2) residential rental prices were raised, fixed, maintained, and stabilized at artificially high levels throughout New York. During the Class Period, Defendants' illegal conduct substantially affected New York commerce. The conduct set forth above is a *per se* violation of the Donnelly Act, NY Gen. Bus. L. § 340, *et seq.* Accordingly, Plaintiffs and members of the Class seek all relief available under New York Gen. Bus. L. § 340, *et seq.*

270. **NORTH CAROLINA:** Defendants have entered into an unlawful agreement in restraint of trade in violation of North Carolina General Statutes § 75-1, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) competition in the residential rental market was restrained, suppressed, and eliminated throughout North Carolina; (2) residential rental prices were raised, fixed, maintained, and stabilized at artificially high levels throughout North Carolina. During the Class Period, Defendants' illegal conduct substantially affected North Carolina commerce. Accordingly, Plaintiffs and members of the Class seek all relief available under North Carolina General Statutes § 75-1, *et seq.*

271. **NORTH DAKOTA:** Defendants' actions have violated N.D. Cent. Code § 51-08.1-01, *et seq.*, through their anticompetitive actions. Through their actions and actions of co-conspirators, rents of residential units in the State of North Dakota were raised, fixed, maintained, and stabilized at artificially high level, thereby injuring Plaintiffs and the Class. Throughout the Class Period, competition in the residential rental apartment market was restrained, suppressed, and eliminated throughout North Dakota. Plaintiffs and members of the Class, including those who resided in the State of North Dakota and rented an apartment there,

paid supracompetitive, artificially inflated prices for their rentals. During the Class Period, Defendants' illegal conduct substantially affected commerce in North Dakota. Accordingly, Plaintiffs and members of the Class seek all forms of relief available under N.D. Cent. Code § 51-08.1-01, *et seq.*

272. **OHIO:** Defendants violated Ohio Rev. Code § 1331:01, *et seq.*, by entering into unlawful agreement in restraint of trade in the State of Ohio. Specifically, Defendants' combinations or conspiracies detrimentally affected the competition in the Ohio residential rental market by restraining, suppressing, and eliminating competition. Further, Defendants' unlawful conduct raised, fixed, maintained, and stabilized rents in Ohio at artificially high levels. During the Class Period, Defendants' illegal conduct substantially affected commerce in Ohio. Accordingly, Plaintiffs and Members of the Class seek all relief available under Ohio Rev. Code § 1331:01, *et seq.*

273. **OKLAHOMA:** Defendants have entered into an unlawful agreement in restraint of trade in violation of the Oklahoma Antitrust Reform Act, Okla. Stat. tit. 79, § 201, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) competition in the Oklahoma residential rental market was restrained, suppressed, and eliminated; (2) Oklahoma residential rental prices were raised, fixed, maintained, and stabilized at artificially high levels. During the Class Period, Defendants' illegal conduct substantially affected Oklahoma commerce. Accordingly, Plaintiffs and members of the Class seek all relief available under the Oklahoma Antitrust Reform Act, Okla. Stat. tit. 79, § 201, *et seq.*

274. **OREGON:** Defendants have entered into an unlawful agreement in restraint of trade in violation of Or. Rev. Stat. § 646.725, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) price competition for rentals was restrained, suppressed, and eliminated throughout Oregon; (2) the price of residential rental units in the State of Oregon were raised, fixed, maintained, and stabilized at artificially high levels; and (3) individuals have been deprived of free and open competition. During the Class Period, Defendants' illegal conduct substantially affected Oregon commerce. Accordingly, Plaintiffs and members of the Class seek all forms of relief available under Or. Rev. Stat. § 646.725, *et seq.*

275. **PENNSYLVANIA:** Defendants have violated the Pennsylvania Unfair Trade Practices and Consumer Protection Law, 73 Pa. Stat. Ann. § 201-1, *et seq.*, through their actions. Defendants engaged in unfair trade practice that artificially raised, fixed, maintained, and stabilized rent prices for residential units in Pennsylvania. Throughout the Class Period, competition in the residential rental apartment market was restrained, suppressed, and eliminated throughout Pennsylvania. Plaintiffs and members of the Class, including those who resided in Pennsylvania and rented an apartment there, paid artificially inflated prices for their residential units. During the Class Period, Defendants' illegal conduct substantially affected commerce in Pennsylvania. Accordingly, Plaintiffs and members of the Class seek all forms of relief available under 73 Pa. Stat. Ann. § 201-1, *et seq.*

276. **SOUTH CAROLINA:** Defendants' have violated the antitrust laws of South Carolina, S.C. Code Ann. § 39-3-10, *et seq.*, through their anticompetitive actions. Through Defendants' actions and the actions of their co-conspirators, rents of residential units in the State of South Carolina were raised, fixed, maintained, and stabilized at artificially high levels, thereby injuring Plaintiffs and the Class. Throughout the Class Period, competition in the market for residential units was restrained, suppressed, and eliminated throughout South Carolina. Plaintiffs and members of the Class, including those who resided in the State of South Carolina and rented residential units there, paid supracompetitive, artificially inflated prices for their rentals. During the Class Period, Defendants' illegal conduct substantially affected commerce in South Carolina. Accordingly, Plaintiffs and members of the Class seek all forms of relief available under S.C. Code Ann. § 39-3-10, *et seq.*

277. **SOUTH DAKOTA:** Defendants have violated the South Dakota Codified Laws § 37-1-3.1, *et seq.* through their anticompetitive actions. Through their actions and actions of co-conspirators, rents of residential units in the State of South Dakota were raised, fixed, maintained, and stabilized at artificially high level, thereby injuring Plaintiffs and the Class. Throughout the Class Period, competition in the residential rental apartment market was restrained, suppressed, and eliminated throughout South Dakota. Plaintiffs and members of the Class, including those who resided in the State of South Dakota and rented an apartment there,

paid supracompetitive, artificially inflated prices for their rentals. During the Class Period, Defendants' illegal conduct substantially affected commerce in South Dakota. Accordingly, Plaintiffs and members of the Class seek all forms of relief available under South Dakota Codified Laws § 37-1-3.1, *et seq.*

278. **TENNESSEE:** Defendants have entered into an unlawful agreement in restraint of trade in violation of Tenn. Code Ann. § 47-25-101, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) price competition for rentals was restrained, suppressed, and eliminated throughout Tennessee; (2) the price of residential rental units in the State of Tennessee were raised, fixed, maintained, and stabilized at artificially high levels; and (3) individuals have been deprived of free and open competition. During the Class Period, Defendants' illegal conduct substantially affected commerce in Tennessee. Accordingly, Plaintiffs and members of the Class seek all forms of relief available under Tenn. Code Ann. § 47-25-101, *et seq.*

279. **UTAH:** Defendants violated Utah Code Annotated § 76-10-3101, *et seq.* by entering into unlawful agreement in restraint of trade in the State of Utah. Specifically, Defendants' combinations or conspiracies detrimentally affected the competition in the Utah residential rental market by restraining, suppressing, and eliminating competition. Further, Defendants' unlawful conduct raised, fixed, maintained, and stabilized rents in Utah at artificially high levels. During the Class Period, Defendants' illegal conduct substantially affected commerce in Utah. Accordingly, Plaintiffs and Members of the Class seek all relief available under Utah Code Annotated § 76-10-3101, *et seq.*

280. **VERMONT:** Defendants have entered into an unlawful agreement in restraint of trade in violation of Vt. Stat. Ann. tit. 9, § 2453, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) price competition for rentals was restrained, suppressed, and eliminated throughout Vermont; (2) the price of residential rental units in Vermont were raised, fixed, maintained, and stabilized at artificially high levels; and (3) individuals have been deprived of free and open competition. During the Class Period, Defendants' illegal conduct substantially affected commerce in the State of Vermont.

Accordingly, Plaintiffs and members of the Class seek all forms of relief available under Vt. Stat. Ann. tit. 9, § 2465, *et seq.*

281. **VIRGINIA:** Defendants have entered into an unlawful agreement in restraint of trade in violation of the Virginia Antitrust Act, Va. Code Ann. § 59.1-9.1, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) price competition for rentals was restrained, suppressed, and eliminated throughout Virginia; (2) the price of residential rental apartments were raised, fixed, maintained, and stabilized at artificially high levels throughout Virginia; and (3) individuals have been deprived of free and open competition. During the Class Period, Defendants' illegal conduct substantially affected commerce in the State of Virginia. Accordingly, Plaintiffs and members of the Class seek all forms of relief available under the Virginia Antitrust Act, Va. Code Ann. § 59.1-9.1, *et seq.*

282. **WASHINGTON:** Defendants have entered into an unlawful agreement in restraint of trade in violation of Wash. Rev. Code Ann. § 19.86.010, *et seq.* See Wash. Rev. Code Ann. § 19.86.030. Defendants' combinations or conspiracies had the following effects: (1) price competition for residential units was restrained, suppressed, and eliminated throughout Washington; (2) the price of residential units were raised, fixed, maintained, and stabilized at artificially high levels throughout Washington; and (3) individuals have been deprived of free and open competition for residential units. During the Class Period, Defendants' illegal conduct substantially affected commerce in the State of Washington. Accordingly, Plaintiffs and members of the Class seek all forms of relief available under Wash. Rev. Code Ann. § 19.86.010, *et seq.*

283. **WEST VIRGINIA:** Defendants have violated West Virginia Code § 47-18-3, *et seq.*, through their anticompetitive actions. Through their actions and actions of co-conspirators, rents of residential units in West Virginia were raised, fixed, maintained, and stabilized at artificially high level, thereby injuring Plaintiffs and the Class. Throughout the Class Period, competition in the residential rental apartment market was restrained, suppressed, and eliminated throughout West Virginia. Plaintiffs and members of the Class, including those who resided in the State of West Virginia and rented an apartment there, paid supracompetitive, artificially

inflated prices for their rentals. During the Class Period, Defendants' illegal conduct substantially affected commerce in West Virginia. Accordingly, Plaintiffs and members of the Class seek all forms of relief available under West Virginia Code § 47-18-3, *et seq.*

284. **WISCONSIN:** Defendants have entered into an unlawful agreement in restraint of trade in violation of Wis. Stat. § 133.01, *et seq.* Defendants' combinations or conspiracies had the following effects: (1) price competition for rentals was restrained, suppressed, and eliminated throughout Wisconsin; (2) the price of residential rental apartments were raised, fixed, maintained, and stabilized at artificially high levels throughout Wisconsin; and (3) individuals have been deprived of free and open competition. During the Class Period, Defendants' illegal conduct substantially affected commerce in the State of Wisconsin. Accordingly, Plaintiffs and members of the Class seek all forms of relief available under Wis. Stat. § 133.01, *et seq.*

285. **WYOMING:** Defendants' actions have violated Wyo. Stat. § 40-4-101, *et seq.*, through their anticompetitive actions. Through their actions and actions of co-conspirators, rents of residential units in Wyoming were raised, fixed, maintained, and stabilized at artificially high levels, thereby injuring Plaintiffs and the Class. Throughout the Class Period, competition in the residential rental apartment market was restrained, suppressed, and eliminated throughout Wyoming. Plaintiffs and members of the Class, including those who resided in the State of Wyoming and rented an apartment in Wyoming, paid supracompetitive, artificially inflated prices for their rentals. During the Class Period, Defendants' illegal conduct substantially affected commerce in Wyoming. Accordingly, Plaintiffs and members of the Class seek all forms of relief available under Wyo. Stat. § 40-4-101, *et seq.*

REQUEST FOR RELIEF

WHEREFORE, Plaintiffs, on behalf of themselves and the Class of all others similarly situated, respectfully request judgment against Defendants as follows:

A. The Court determine that this action may be maintained as a class action under Rule 23(a), (b)(2), and (b)(3) of the Federal Rules of Civil Procedure, appoint Plaintiffs as Class Representatives and their counsel of record as Class Counsel, and direct that notice of this action,

as provided by Rule 23(c)(2) of the Federal Rules of Civil Procedure, be given to the Class, once certified;

B. The unlawful conduct, conspiracy, or combination alleged herein be adjudged and decreed in violation of Section 1 of the Sherman Act;

C. Plaintiffs and members of the Class recover damages, to the maximum extent allowed under the applicable laws, and that joint and several judgments in favor of Plaintiffs and members of the Class be entered against Defendants in an amount to be trebled to the extent such laws permit;

D. Defendants, their affiliates, successors, transferees, assignees and other officers, directors, partners, agents and employees thereof, and all other persons acting or claiming to act on their behalf or in concert with them, be permanently enjoined and restrained from in any manner continuing, maintaining or renewing the conduct, conspiracy, or combination alleged herein, or from entering into any other conspiracy or combination having a similar purpose or effect, and from adopting or following any practice, plan, program, or device having a similar purpose or effect;

E. Defendants, their affiliates, successors, transferees, assignees and other officers, directors, partners, agents and employees thereof, and all other persons acting or claiming to act on their behalf or in concert with them, be permanently enjoined and restrained from in any manner continuing, maintaining, or renewing the sharing of highly sensitive competitive information that permits individual identification of company's information;

F. Plaintiffs and members of the Class be awarded pre- and post- judgment interest as provided by law, and that such interest be awarded at the highest legal rate from and after the date of service of this Complaint;

- G. Plaintiffs and members of the Class recover their costs of suit, including reasonable attorneys' fees, as provided by law; and
- H. Plaintiffs and members of the Class have such other and further relief as the case may require and the Court may deem just and proper.

JURY TRIAL DEMANDED

Plaintiffs demands a trial by jury, pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, of all issues so triable.

DATED: September 7, 2023

Respectfully submitted,

/s/ Steve W. Berman

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