

1 Joseph R. Saveri (State Bar No. 130064)
2 Steven N. Williams (State Bar No.175489)
3 **JOSEPH SAVERI LAW FIRM, LLP**
4 601 California Street, Suite 1000
5 San Francisco, CA 94108
6 Telephone: (415) 500-6800
7 Fax: (415) 395-9940
8 jsaveri@saverilawfirm.com
9 swilliams@saverilawfirm.com

10 *Attorneys for Individual and Representative*
11 *Plaintiff Shelley Schmidig*

12 Additional Counsel Listed on Signature Page

13 **UNITED STATES DISTRICT COURT**
14 **EASTERN DISTRICT OF CALIFORNIA**
15 **FRESNO DIVISION**

16 SHELLEY SCHMIDIG, individually and on
17 behalf of all others similarly situated,

18 *Plaintiff,*

19 v.

20 REALPAGE, INC.; THOMA BRAVO, L.P.;
21 AMLI MANAGEMENT COMPANY;
22 ALLIANCE RESIDENTIAL COMPANY;
23 APARTMENT MANAGEMENT
24 CONSULTANTS, LLC; ASSET LIVING,
25 LLC; AVENUE5 RESIDENTIAL LLC; BH
26 MANAGEMENT LLC; THE BOZZUTO
27 GROUP; CAMDEN PROPERTY TRUST;
28 CORTLAND PROPERTIES, INC.;
CUSHMAN & WAKEFIELD, INC.; EQUITY
RESIDENTIAL; ESSEX PROPERTY
TRUST; FPI MANAGEMENT, INC.;
GREYSTAR REAL ESTATE PARTNERS,
LLC; LINCOLN PROPERTY CO.; MID-
AMERICA APARTMENT COMMUNITIES,
INC.; MORGAN PROPERTIES; RPM
LIVING LLC; SECURITY PROPERTIES
INC.; THRIVE COMMUNITIES
MANAGEMENT, LLC; and
WINNCOMPANIES LLC,

Defendants.

Case No. _____

CLASS ACTION COMPLAINT
JURY TRIAL DEMANDED

1 Plaintiff Shelley Schmidig (“Plaintiff”) brings this action on behalf of himself and all
2 others similarly situated, against defendants Alliance Residential Company (“Alliance”), AMLI
3 Management Company (“AMLI”), Apartment Management Consultants, LLC (“AMC”), Asset
4 Living, LLC (“Asset Living”), Avenue5 Residential LLC (“Avenue5”), BH Management LLC
5 (“BH”), The Bozzuto Group (“Bozzuto”), Camden Property Trust (“Camden”), Cortland
6 Properties, Inc. (“Cortland”), Cushman & Wakefield, Inc. (“Cushman”), Equity Residential
7 (“Equity”), Essex Property Trust (“Essex”), FPI Management, Inc. (“FPI”), Greystar Real Estate
8 Partners, LLC, (“Greystar”), Lincoln Property Co. (“Lincoln”), Mid-America Apartment
9 Communities, Inc. (“MAA”), Morgan Properties (“Morgan”), RPM Living LLC (“RPM”),
10 Security Properties Inc. (“Security Properties”), Thrive Communities Management, LLC
11 (“Thrive”), Winncompanies LLC (“Winncompanies”) (collectively, the “Apartment
12 Management Defendants”), and defendants RealPage, Inc. (“RealPage”) and Thoma Bravo, L.P.
13 (“Thoma Bravo,” together with RealPage, the “RealPage Defendants,” all defendants
14 collectively, “Defendants”). Plaintiff brings this action for treble damages and injunctive relief
15 under Section 1 of the Sherman Act. Plaintiff demands a trial by jury.

16 INTRODUCTION

17 1. For the past two decades, RealPage Inc. has worked to develop a platform that
18 would allow multifamily residential apartment owners to share pricing, occupancy, and other
19 sensitive information without alerting regulators to this blatantly anticompetitive conduct. In
20 exchange for a fixed fee, RealPage has provided the apartment unit owners with the principle
21 benefit of cartelization: supracompetitive pricing. Since approximately 2016, this cartel has
22 substantially increased rents (over and beyond what the fair market would support) and inflated
23 profits for the apartment owners while positioning RealPage as the hub of the apartment leasing
24 industry, an indispensable and necessary player in one of the largest industries in the country.

25 NATURE OF THE ACTION

26 2. Computer algorithms have changed many aspects of modern life. An algorithm is
27 essentially a set a of instructions designed to solve a complex problem. Capable of processing
28

1 extraordinary amounts of data nearly instantaneously, algorithms are commonly used to detect
2 patterns in information about past events to inform decisions about how to act in the future. With
3 sufficient data, computer processing power, and advances in computer science, an algorithm can
4 predict future behaviors with high degrees of probability. Algorithms are now widely used to
5 predict how we will shop, work, and play, among many other things. Scholars and enforcement
6 agencies have noted that these increasingly sophisticated computer programs can now be
7 employed by horizontal competitors to collude on price without being detected. By agreeing to
8 provide sensitive business information to a third party whose algorithm can set a
9 supracompetitive price, and further agreeing to accept the third party's artificially inflated
10 pricing, horizontal competitors can engage in unlawful cartel behavior while claiming they are
11 simply employing "revenue management software." This is precisely what Defendants have done
12 here.

13 3. Defendants have formed a cartel in the multifamily residential apartment building
14 market in the United States, the purpose and effect of which is to artificially inflate the rental
15 prices of apartment units in the United States above competitive levels. To facilitate this
16 unlawful scheme, the Apartment Management Defendants provide RealPage—and, through
17 RealPage, one another—with highly sensitive and confidential competitive information on a
18 daily basis, including detailed real-time data regarding pricing, inventory, occupancy rates, and
19 unit types that are or will be coming available to rent, among other things. The Apartment
20 Management Defendants do so with the knowledge, provided by RealPage, that their competitors
21 are also exchanging their real-time confidential information.

22 4. Pursuant to the illegal agreement, this information is input into a powerful
23 proprietary algorithm designed, sold, marketed, and operated by RealPage, known as the AI
24 Revenue Management algorithm ("AIRM," formerly known as "YieldStar"), which uses this
25 data to provide detailed real-time pricing to the Apartment Management Defendants. The
26 Apartment Management Defendants then implement this pricing with limited exceptions,
27 adopting RealPage's prices eighty to ninety percent of the time, knowing their horizontal
28

1 competitors are doing so as well. RealPage coaches its clients to stand firm on price, advertising
2 that if they do so they can increase prices by up to seven percent over the market. Pursuant to the
3 conspiracy, the Apartment Management Defendants have outsourced their pricing decision-
4 making to RealPage and formed a cartel, restraining competition and resulting in high
5 supracompetitive rents. Rather than compete, Defendants are choosing to collude.

6 5. The Apartment Management Defendants purportedly are horizontal competitors
7 with respect to rentals of units in multi-family apartment buildings across the United States.
8 RealPage's clients, including the Apartment Management Defendants, control over sixteen
9 million rental units in the United States, comprising over seventy percent of the U.S. market for
10 multi-family apartment buildings which forms the basis of the cartel.

11 6. The cartel includes the largest multifamily real estate management companies in
12 the United States, which participate in the cartel with the aid of and through RealPage's AIRM
13 algorithm. RealPage displays this information prominently on its website, providing assurance to
14 cartel members that their horizontal competitors are also sharing their confidential information
15 through RealPage and holding fast on RealPage's supracompetitive pricing. Absent the
16 knowledge that their competitors are also sharing their confidential information, cartel members
17 would not share their confidential information or adopt RealPage's supracompetitive pricing
18 because their competitors would use the information to lure their customers away.

19 7. RealPage subscribers are able to see data from RealPage on a real-time dashboard
20 or receive downloadable data in .csv files or other formats. Each member of the cartel receives
21 daily recommended rents for each of their apartments, understanding that other cartel members,
22 including virtually all of its major horizontal competitors, are also receiving this information.
23 This constitutes a cartel price and horizontal restraint on competition. Such coordinated pricing
24 between and among horizontal competitors is a per se violation of antitrust law.

25 8. In addition, in furtherance of the cartel, this real-time market pricing information
26 enables the Apartment Management Defendants to detect and adjust to pricing variations nearly
27 instantaneously, rendering any deviations from the cartel price detectable and unprofitable. By
28

1 adopting the algorithmic pricing on a market-wide basis and enforcing market discipline with
2 instantaneous pricing data, Defendants ensure that the supracompetitive recommended rental
3 pricing remains stable and enforce participation in the cartel.

4 9. This automated pricing process is only possible due to advances in algorithmic
5 computing that enable nearly instantaneous analysis of industry data to create predictive pricing.
6 These predictive prices were unavailable to multifamily apartment management companies even
7 ten years ago. At that time, computing power was substantially undeveloped. Also, the critical
8 mass of market data necessary to form predictive pricing was not yet achieved.

9 10. Defendants have successfully increased rents to supracompetitive levels while
10 decreasing supply since at least 2016. Defendants' agreement to share their confidential
11 commercial data with their horizontal competitors and to adopt RealPage's monopoly pricing
12 constitutes a horizontal agreement not to compete on price, a per se violation of Section 1 of the
13 Sherman Act. Plaintiffs have suffered antitrust injury by paying inflated rents and seek damages
14 and injunctive relief.

15 11. By agreeing to share commercially sensitive confidential business information,
16 from which AIRM establishes supracompetitive prices the Apartment Management Defendants
17 use up to ninety percent of the time, Defendants raised rents to supracompetitive rates in
18 violation of Section 1 of the Sherman Act, causing antitrust injury to Plaintiff and the members
19 of the class. Plaintiff and the class seek compensatory damages and injunctive relief pursuant to
20 15 U.S.C. §§ 15 & 26.

21 **PARTIES AND UNNAMED CO-CONSPIRATORS**

22 12. Plaintiff Shelley Schmidig is a resident of Modesto, California, in Stanislaus
23 County, and represents a class of all renters who paid artificially inflated rents to Defendants
24 nationwide and within the Metropolitan Statistical Area for Modesto, California ("Modesto
25 Metropolitan Statistical Area"), as that area is defined by the U.S. Office of Management and
26
27
28

1 Budget.¹ She has rented an apartment managed by Defendant FPI Management, Inc. since
2 January 1, 2022.

3 13. Defendant RealPage, Inc. is a Delaware corporation headquartered in Richardson,
4 Texas. RealPage provides software and services to the residential real estate industry, including
5 the multifamily apartment management companies described herein. RealPage has thousands of
6 employees and earns over a billion dollars per year in revenue. As of December 31, 2019,
7 RealPage had over 29,800 clients, including each of the ten largest multifamily property
8 management companies in the U.S. On December 20, 2020, RealPage entered into an agreement
9 to be acquired by private equity firm Thoma Bravo for approximately \$10.2 billion. The
10 acquisition was completed in April 2021.

11 14. Defendant Thoma Bravo L.P. is a Delaware limited partnership with offices in in
12 San Francisco, California, Miami, Florida, and Chicago, Illinois. Thoma Bravo is a private
13 equity firm with over \$122 billion in assets. Thoma Bravo acquired RealPage in April 2021. On
14 information and belief, Thoma Bravo was aware of RealPage's anticompetitive activities and
15 acquired RealPage with the intent to maintain and enhance its cartel profits, which RealPage,
16 with Thoma Bravo's active guidance and participation, has done. Plaintiff is informed and
17 believes that Thoma Bravo is actively involved in the day-to-day operations of RealPage,
18 including selecting and approving acquisition targets for RealPage, setting company policies, and
19 hiring top RealPage executives from other Thoma Bravo companies, including CEO Dana Jones
20 and COO Vinit Doshi, both of whom were recruited from Thoma Bravo subsidiary Sparta
21 Systems.

22 15. Apartment Management Defendant AMLI Management Company is a Delaware
23 corporation headquartered in Chicago, Illinois. AMLI manages more than 25,000 apartment units
24 across the country. AMLI is a RealPage client.

27 ¹ See U.S. Census Bureau, Core based statistical areas (CBSAs), metropolitan divisions, and
28 combined statistical areas (CSAs), available for download at https://www2.census.gov/programs-surveys/metro-micro/geographies/reference-files/2020/delineation-files/list1_2020.xls.

1 16. Apartment Management Defendant Alliance Residential Realty, LLC is a
2 Delaware limited liability corporation headquartered in Scottsdale, Arizona. Alliance manages
3 more than 100,000 apartment units across the country. Alliance has been a RealPage client since
4 at least 2003. Alliance is a RealPage client.

5 17. Apartment Management Defendant Apartment Management Consultants, LLC is
6 a Utah limited liability corporation headquartered in Sandy, Utah. AMC is the sixth largest
7 apartment management company in the U.S., managing more than 90,000 apartment units across
8 the country. AMC is a RealPage client.

9 18. Apartment Management Defendant Asset Living, LLC is an Arizona limited
10 liability corporation headquartered in Houston, Texas. Asset Living is the fourth largest
11 apartment management company in the U.S., managing more than 100,000 apartment units
12 across the country. Asset Living is a RealPage client.

13 19. Apartment Management Defendant Avenue5 Residential, LLC is a Delaware
14 limited liability company headquartered in Seattle, Washington. Avenue5 is the twelfth largest
15 manager of multifamily rental real estate in the United States, with over 96,900 multifamily units
16 under management in twelve states. Avenue5 is a RealPage client.

17 20. Apartment Management Defendant BH Management Services, LLC is an Iowa
18 limited liability company with its headquarters in Des Moines, Iowa. BH is the eighth largest
19 manager of multifamily rental real estate in the United States, with over 100,000 multifamily
20 units under management in 28 states. BH is a RealPage client.

21 21. Apartment Management Defendant Bozzuto Management Company is a
22 Maryland company headquartered in Greenbelt, Maryland. Bozzuto is the thirteenth largest
23 manager of multifamily rental real estate in the United States with over 80,000 multifamily units
24 under management in 12 states. Bozzuto is a RealPage client.

25 22. Apartment Management Defendant Camden Property Trust is a Texas real estate
26 trust headquartered in Houston, Texas. Camden is the twenty-ninth largest manager of
27
28

1 multifamily rental real estate in the United States, with over 58,000 units under management.

2 Camden is a RealPage client.

3 23. Apartment Management Defendant Cortland Properties, Inc., is a Georgia limited
4 liability company headquartered in Atlanta, Georgia. Cortland has over 85,000 units under
5 management in 13 states. Cortland is a RealPage client.

6 24. Apartment Management Defendant Cushman & Wakefield, Inc. is a Delaware
7 corporation headquartered in New York, New York. It is the third largest manager of multifamily
8 rental real estate in the United States, with over 172,000 multifamily units under management
9 nationally. On information and belief, Cushman earns billions of dollars per year in revenue and
10 employs over ten thousand people. Cushman is a RealPage client.

11 25. Apartment Management Defendant Equity Residential is a Maryland real estate
12 investment trust headquartered in Chicago, Illinois. Equity is the sixteenth largest manager of
13 multifamily rental real estate in the United States, with over 80,000 units under management in
14 eight states. On information and belief, Equity earns over two billion dollars per year in revenue
15 and employs over 2,000 people. Equity is a RealPage client.

16 26. Apartment Management Defendant Essex Property Trust, Inc is a Maryland
17 corporation headquartered in San Mateo, California. Equity is the twenty-fourth largest manager
18 of multifamily rental real estate in the United States, with over 61,000 units under management
19 in California and Washington. On information and belief, Essex earns over 1.4 billion dollars per
20 year in revenue and employs over 1,700 people. Essex is a RealPage client.

21 27. Apartment Management Defendant FPI Management, Inc. is a California
22 corporation headquartered in Folsom, California. FPI is the fifth largest manager of multifamily
23 rental real estate in the United States, with over 150,000 multifamily units under management in
24 seventeen states. FPI is a RealPage client.

25 28. Apartment Management Defendant Greystar Real Estate Partners, LLC is a
26 Delaware limited liability corporation headquartered in Charleston, South Carolina. It is the
27 largest manager of multifamily rental real estate in the United States, with more than 782,900
28

1 multifamily units and student beds under management nationally. On information and belief,
2 Greystar earns billions of dollars per year in revenue, controls \$35.5 billion dollars in assets, and
3 employs over 20,000 people. Greystar is a RealPage client.

4 29. Apartment Management Defendant Lincoln Property Company is a Texas
5 corporation headquartered in Dallas, Texas. Lincoln is the second largest manager of multifamily
6 rental real estate in the United States, with over 210,000 multifamily units under management
7 nationally. Lincoln is a RealPage client.

8 30. Apartment Management Defendant Mid-America Apartment Communities, Inc. is
9 a Tennessee corporation headquartered in Germantown, Tennessee. MAA is the tenth largest
10 manager of multifamily rental real estate in the United States, with over 100,000 multifamily
11 units under management in sixteen states. On information and belief, MAA earns over one
12 billion dollars per year in revenue and employs over 2,400 people. MAA is a RealPage client.

13 31. Apartment Management Defendant Morgan Properties, LLC is a Pennsylvania
14 limited liability company headquartered in King of Prussia, Pennsylvania. Morgan is the
15 eleventh largest manager of multifamily rental real estate in the United States, with over 96,000
16 multifamily units under management in 20 states. Morgan is a RealPage client.

17 32. Apartment Management Defendant RPM Living LLC is a Texas limited liability
18 company headquartered in Austin, Texas. RPM is the seventh largest manager of multifamily
19 rental real estate in the United States, with over 112,000 units under management in 21 states.
20 RPM is a RealPage client.

21 33. Apartment Management Defendant Security Properties Inc. is a Washington
22 corporation headquartered in Seattle, Washington. Security Properties has over 22,000 units
23 under management in eighteen states. Security is a RealPage client.

24 34. Apartment Management Defendant Thrive Communities Management, LLC is a
25 Washington Limited Liability Company headquartered in Seattle, Washington. Thrive has over
26 18,000 units under management in the greater Pacific Northwest. On information and belief,
27 Thrive earns millions of dollars per year in revenue and employs over five hundred people.
28

1 35. Apartment Management Defendant Winncompanies LLC (“Winncompanies”) is a
2 Massachusetts company with its primary place of business located in Boston, Massachusetts.
3 Winncompanies is the ninth largest apartment management company in the United States,
4 managing over 103,000 apartment units nationwide. Winncompanies has been a RealPage client
5 since 2018.

6 36. The Apartment Management Co-Conspirators are various persons and entities,
7 including multifamily apartment management companies, known and unknown to Plaintiff and
8 not named as defendants in this action, who have participated as co-conspirators with RealPage,
9 Thoma Bravo, and the Apartment Management Defendants in the offenses alleged and have
10 performed acts and made statements in furtherance of the conspiracy.

11 **JURISDICTION AND VENUE**

12 37. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and
13 1337, as this action arises out of Section 1 of the Sherman Antitrust Act (15 U.S.C. § 1) and
14 Sections 4 and 16 of the Clayton Antitrust Act (15 U.S.C. §§ 15 and 26).

15 38. This Court has personal jurisdiction over Defendants under Section 12 of the
16 Clayton Act (15 U.S.C. § 22).

17 39. Defendants, directly or through their divisions, subsidiaries, predecessors, agents,
18 or affiliates, may be found in and transact business in the forum state, including the sale of
19 multifamily residential real estate leases.

20 40. Defendants, directly or through their divisions, subsidiaries, predecessors, agents,
21 or affiliates, engage in interstate commerce in the sale of multifamily residential real estate
22 leases.

23 41. Venue is proper in this District pursuant to 15 U.S.C. § 22 and 28 U.S.C. § 1391,
24 because one or more Defendants maintain business facilities, have agents, transact business, and
25 are otherwise found within this District and certain unlawful acts alleged herein were performed
26 and had effects within this District.

1 **FACTUAL ALLEGATIONS**

2 **A. RealPage’s AIRM Algorithm Produces Predictive Pricing and Provides**
3 **Defendants with Transparency, Certainty, and the Ability to Impose Market**
4 **Discipline**

4 42. Increased access to data facilitated by the internet, combined with increasingly
5 powerful algorithms to analyze that data, is changing the way pricing is determined, including
6 changing how cartels operate. “[A]lgorithms may work as a facilitating factor for collusion and
7 may enable new forms of co-ordination that were not observed or even possible before.”² “[T]he
8 aggregation and exchange of price and other competitive information can facilitate
9 anticompetitive coordination among competitors.”³ “The increasing power of computers . . . ,
10 plus the growing ubiquity of the Internet and increasingly sophisticated data-mining techniques
11 have driven a rapid shift of pricing decisions away from human decision makers in favor of
12 algorithms Increasingly the software programs that apply these algorithms, functioning as
13 ‘robo-sellers,’ can make pricing decisions autonomously.”⁴

14 43. The Apartment Management Defendants have agreed to outsource their pricing
15 determinations to RealPage. RealPage markets and sells pricing services based on powerful
16 algorithmic processes deriving from real-time data provided by the Apartment Management
17 Defendants pursuant to their agreement. This automated pricing process is only possible due to
18 advances in algorithmic computing that enable nearly instantaneous analysis of industry data to
19 create predictive pricing.

20 44. These predictive prices were unavailable to multifamily apartment management
21 companies in 2004, when Jeffrey Roper was hired by RealPage to improve its rudimentary
22 apartment pricing algorithm. In the 1980s, Roper had developed a pricing algorithm for the

23 _____
24 ² OECD (2017), Algorithms and Collusion: Competition Policy in the Digital Age, 19, available
25 for download at www.oecd.org/competition/algorithms-collusion-competition-policy-in-the-digital-age.htm.

26 ³ U.S. DOJ Business Review Letter for Amadeus Group, LLC and Mystic Logistics, LLC, Dec.
27 13, 2016, available for download at <https://www.justice.gov/atr/response-amadeus-group-llc-and-mystic-logistics-llc-request-business-review>.

28 ⁴ Salil K. Mehra, Antitrust and the Robo-Seller: Competition in the Time of Algorithms, 100
Minn. L. Rev.1323, 1324-25 (2016)

1 airline industry that led to a price-fixing investigation by the U.S. Department of Justice resulting
2 in settlements or consent decrees with eight airlines. Roper recognized that the multifamily
3 apartment leasing industry was “ripe” for a similar scheme, but that he needed more data. As
4 Roper refined the algorithm, RealPage continued to build its business. By 2016, after servicing a
5 number of the Apartment Management Defendants’ portfolios, AIRM had access to sufficient
6 market data to successfully calculate supracompetitive pricing that vastly increases Defendants’
7 revenues as long as all cartel members support the scheme. RealPage coaches its clients to stand
8 firm on price, advertising that if they do so they can increase prices by up to seven percent over
9 the market.

10 45. RealPage calculates and disseminates supracompetitive unit-by-unit pricing on a
11 daily basis for use by the Apartment Management Defendants. RealPage provides pricing
12 services for multifamily apartment management companies controlling over seventy percent of
13 the investment quality multifamily buildings in the United States. Those companies adopt
14 RealPage’s pricing up to ninety percent of the time, ensuring that all or nearly all renters in
15 multifamily apartment buildings pay Defendants’ supracompetitive prices.

16 **i. AIRM Processes Unit-by-Unit Data From Millions of Apartment**
17 **Units Provided by its Clients**

18 46. RealPage developed and operates its AIRM algorithm to process sensitive real-
19 time data regarding millions of units in multifamily apartment buildings and generate
20 supracompetitive pricing for those units. The information is provided by RealPage’s clients,
21 including the Apartment Management Defendants, all of whom provide RealPage with detailed
22 real-time non-public information on a daily basis about pricing (including unpublished starting
23 rents and renewal rent increases), inventory, occupancy rates, length of lease, units and unit types
24 that are or will be coming available to rent, and other confidential information about each of the
25 apartments they manage.

26 47. Cartel members share this data with the knowledge that RealPage will base its
27 recommended rents to their competitors on the data, in essence providing their competitors with
28 insight into their confidential business information. Cartel members also know that their

1 competitors are sharing their own confidential leasing information with RealPage, from which
2 each cartel member can glean information about their competitors' pricing and other data points.
3 This mutual sharing of confidential information only makes sense when cartel member are
4 confident that their competitors will not use the information to gain a competitive advantage by
5 lowering rents to lure away customers.

6 48. The U.S. Department of Justice, one of the two agencies charged with enforcing
7 the antitrust laws on behalf of the U.S. government, has stated that the exchange of the kind of
8 information the Apartment Management Defendants agree to exchange with their direct
9 competitors raises grave antitrust concerns:

10 the sharing of information related to a market in which . . . the participants are
11 actual or potential competitors may increase the likelihood of collusion on matters
12 such as price, output, or other competitively sensitive variables. The competitive
13 concern depends on the nature of the information shared. Other things being
14 equal, the sharing of information relating to price, output, costs, or strategic
15 planning is more likely to raise competitive concern than the sharing of
16 information relating to less competitively sensitive variables.⁵

17 49. Here, the Apartment Management Defendants' agreement to provide AIRM with
18 their sensitive leasing data results in the very harm to consumers about which the DOJ expressed
19 concerns.

20 50. RealPage and the Apartment Management Defendants know that, in order for the
21 AIRM algorithm to function, it requires granular real-time data from a substantial percentage of
22 market participants.

23 51. Beginning in approximately 2016, RealPage began to obtain agreements from
24 large institutional investors, including many of the Apartment Management Defendants to
25 participate in the anticompetitive scheme. The large institutional lessors of multifamily units
26 provided that source.

27 ⁵ US DOJ and FTC, Antitrust Guidelines for Collaborations Among Competitors, April 2000, p.
28 15, accessible at <https://www.ftc.gov/sites/default/files/attachments/press-releases/ftc-doj-issue-antitrust-guidelines-collaborations-among-competitors/ftcdojguidelines.pdf>.

1 52. RealPage’s customers controlled enough of the market that the data they shared
2 with RealPage provided the critical mass of data, serving as the basis for predictive algorithmic
3 pricing and coordination.

4 53. Importantly, in addition to providing a source of granular real-time leasing data
5 for AIRM, the Apartment Management Defendants had market power and power over pricing
6 because they controlled a significant share of the market.

7 54. Real-time visibility into competitors’ pricing, organized and analyzed by a highly
8 sophisticated algorithmic computer application, provided the means to adopt and enforce higher
9 prices reliably and nearly instantaneously.

10 55. RealPage also obtained control of the market through the acquisition of
11 competitors. In 2017, RealPage acquired LRO (Lease Rent Options), a rival apartment pricing
12 algorithm. Although the Department of Justice permitted the acquisition, Jeffrey Roper,
13 RealPage’s principal scientist and the creator of YieldStar (the predecessor of AIRM)
14 commented that, “I was surprised the DOJ let that go through,” demonstrating awareness that the
15 acquisition would lead to a reduction in competition.

16 **ii. AIRM Recommends Pricing to be Used by RealPage Subscribers,**
17 **Based on Their Competitors’ Highly Confidential Competitively**
18 **Sensitive Data**

19 56. AIRM analyzes the cartel members’ data and provides the cartel members with
20 supracompetitive recommended rental and renewal prices for each of their rental units on a daily
21 basis. The information is made available in the form of a real-time dashboard and provided in
22 downloadable .csv or other formats as well.

23 57. Each of the Apartment Management Defendants receives daily pricing with the
24 full knowledge that their competitors are also receiving the data and recommendations from
25 RealPage.

26 58. It would not make business sense for the Apartment Management Defendants to
27 adopt RealPage’s supracompetitive recommended rents unless they were certain their
28

1 competitors were also doing so. Otherwise they would lose business to their competitors who
2 would undercut their above-market prices.

3 59. Supracompetitive rents lead to unit vacancies which under competitive
4 circumstances would mean lost profits for the month. Under competitive conditions, a landlord
5 would be incentivized to lower rents to below supracompetitive levels.

6 60. Because cartel members know their competition will not lower their rents even for
7 vacant units, the cartel can maintain supracompetitive rents even with available vacant units on
8 the market.

9 61. AIRM, like other sophisticated algorithms operated on powerful computers and
10 computer servers, is able to digest, organize, and analyze massive amounts of past and present
11 data to arrive at predictive pricing. “[P]redictive analytics utilizes ‘a variety of statistical,
12 modeling, data mining, and machine learning techniques to study recent and historical data,
13 thereby allowing analysts to make predictions about the future’” and “can be used to
14 automatically vary pricing over time based on purchasing trends.”⁶

15 62. Algorithms also minimize human intervention and eliminate irrationality and
16 agency costs. Algorithms reduce the chance that the cartel is undermined by mistake or
17 individual intentions, and eliminate the need for direct communications where competitors like
18 the Apartment Management Defendants obtain real-time visibility into their competitors’ prices.

19 63. This is precisely what RealPage advertises and promotes:

20 Using the right revenue management solution [*i.e.*, AIRM] is a game changer
21 in maximizing profitability, as it leverages predictive analytics to predict future
22 behavior based on past performance. Multifamily professionals can increase
23 revenue premiums and gain a consistent pricing methodology to see a
24 performance boost between two and seven percent. They can also reduce the
25 price negotiation burden often placed on staff and improve leasing flexibility
26 for residents—all using data science.⁷

26 ⁶ Mehra, 100 MINN. L. REV. at 1325, n.9 (quoting Natalie Burg, Your Company Can See the
27 Future with Predictive Analytics, FORBES (Mar. 26, 2014, 9:39 AM),
<http://www.forbes.com/sites/sungardas/2014/03/26/your-company-can-see-the-future-with-predictiveanalytics-2>).

28 ⁷ See <https://www.realpage.com/blog/data-science-techniques-real-estate/>.

1 64. RealPage provides recommended rents created by AIRM for every available
2 apartment managed by the clients, including the Apartment Management Defendants. The
3 recommended rents are calibrated using localized non-public competitor data regarding pricing
4 and “unit and unit types that are or will be coming available to rent at that community” to
5 determine “what renters are willing to pay for their community.”⁸

6 65. RealPage tells its clients that its recommended prices will increase rents by
7 “between 5% and 12% in every market,” and that its clients agree to use its supracompetitive
8 prices up to ninety percent of the time. Thus the cartel members know that their competitors are
9 also raising their rents in coordination with RealPage’s recommended rents.

10 66. RealPage’s recommended rents are market specific: they take into account rents
11 charged in the specific geographic submarket (e.g. Modesto, Seattle, Denver, San Diego, etc.) for
12 each client.

13 67. While RealPage claims it does not facilitate collusion because it only shares
14 aggregated data, the *effect* is the same as if each client shared its confidential sales data directly
15 with its closest competitors, because AIRM arrives at a collusive price using that very same
16 confidential sales data from each client’s local competitors.

17 **iii. Defendants’ Collusive Agreement to Raise Prices**

18 68. An algorithm cannot alone control the market and institute market-wide cartel
19 pricing. Here, the cartel required active and knowing participation of Defendants, co-conspirators
20 and other cartel members. The Apartment Management Defendants agreed to provide their
21 highly confidential sensitive transactional data to RealPage and to adopt RealPage’s pricing.

22 69. This only makes sense if the Apartment Management Defendants knew their
23 horizontal competitors were also actively agreeing to participate in the collusive scheme.

24 70. Otherwise, competitors could and would use the confidential information to
25 target customers and lure them away.

26
27
28 ⁸ RealPage’s Frequently Asked Questions about Revenue Management Software at 3-4,
accessible at <https://www.realpage.com/asset-optimization/revenue-management/?showPdf=true>.

1 71. The agreement to provide and receive this data and to use it for setting prices
2 constitutes a horizontal agreement between and among competitors in the apartment
3 management market to form a cartel and not to compete on price.

4 72. The cartel was conceived of and facilitated by RealPage and then joined by the
5 Apartment Management Defendants and others who possessed the data, exchanged it and then
6 used the AIRM algorithm to facilitate and coordinate pricing.

7 73. All defendants shared in the ill-gotten profits from the agreements: the Apartment
8 Management Defendants through artificially inflated prices, and RealPage through the network
9 effects of their successful scheme, the growth of which served as further inducement to non-
10 clients to get in on the action or be left behind.

11 74. The Apartment Management Defendants' agreement to provide RealPage with
12 detailed pricing and other information and to allow RealPage to set supracompetitive rental
13 prices they agree to use up to ninety percent of the time has the exact same purpose and effect as
14 if they met in a smoke-filled backroom and exchanged the information and set prices directly.

15 75. RealPage has *complete visibility* into all of the Apartment Management
16 Defendants' pricing, and RealPage uses that access to create supracompetitive pricing that the
17 Apartment Management Defendants nearly universally accept.

18 76. Cartel members do not need granular visibility into their competitors' pricing
19 because they have agreed, and they know their competitors have agreed, to provide that granular
20 visibility to RealPage, which then uses the information to create supracompetitive pricing, which
21 Apartment Management Defendants agree to use.

22 77. The effect is **exactly the same** as if each cartel member shared all of its
23 confidential business data directly with each of its competitors and allowed the competitors to
24 use that data to fashion monopoly pricing. This is an impact of increasingly powerful algorithms
25 that scholars have warned about.

26 78. RealPage's recommended rents are aggressively-priced, forward-looking pricing
27 signals, which RealPage's clients adopt eighty to ninety percent of the time. Indeed, RealPage's
28

1 business model involves estimating each unit’s “potential to generate [future] . . . revenue,”
2 based on “our review of the purchasing patterns of our existing clients with respect to our data
3 analytics and on demand software solutions.”

4 79. The pricing recommendations are not merely reports of prior market results. They
5 are expressions of intent regarding future prices. RealPage advises its clients to “stay ahead of
6 the market,” recommending rents as much as seven percent above market rates. Defendants
7 know and understand these expressions of future pricing intent are largely adopted and
8 implemented by all cartel members.

9 80. Defendants’ ability to enforce pricing discipline through their near real-time
10 detection and neutralization of deviations from the cartel price stabilizes these artificially inflated
11 prices and ensures that Defendants’ ill-gotten gains can continue and grow without interruption.

12 **B. The Apartment Management Defendants’ Knowingly Agreed Not To**
13 **Compete with Their Horizontal Competitors on Price**

14 81. By collectively agreeing to provide their nonpublic sensitive leasing data to
15 RealPage and, by extension, with their main competitors in a highly organized actionable form,
16 the Apartment Management Defendants are knowingly signaling pricing to their competitors.

17 82. By agreeing to charge the supracompetitive prices provided to them by RealPage
18 eighty to ninety percent of the time, knowing that other cartel members are doing the same, they
19 outsource their pricing decisions to RealPage, effectively agreeing to refrain from competing on
20 price with their horizontal competitors, safe in the knowledge that their competitors are doing the
21 same.

22 83. The Apartment Management Defendants’ agreement to participate in the program
23 is a proxy for direct communication that would be patently illegal, used with knowledge and
24 intent by participants to coordinate and set prices at supracompetitive levels.

25 84. The Apartment Management Defendants know their competitors are also sharing
26 confidential information and using RealPage’s supracompetitive pricing.

27 85. RealPage’s website provides its clients with assurances that their competitors are
28 cartel participants, referring to their control of over sixteen million units in the United States,

1 representing nearly seventy-three percent of the market for investment grade apartments, and
2 broadcasting the identities of its clients through testimonials on its website and by facilitating
3 meetings, as discussed *infra*.

4 86. RealPage’s website assures prospective clients that its algorithm will enable them
5 to “gain visibility into real-time market and portfolio performance that allows you to benchmark
6 against the competition.”

7 87. The website states that “competitor rent data” is one of the inputs upon which it
8 bases recommended rents. Cartel members know their competitors are using RealPage’s
9 recommended rents nearly universally because RealPage’s website tells them so, stating on its
10 website that apartment managers are expected to use RealPage’s recommended rents eighty to
11 ninety-five percent of the time.

12 88. The Apartment Management Defendants are willing and active participants in the
13 anticompetitive scheme. The Apartment Management Defendants’ active participation in the
14 scheme signals their assent to an anticompetitive scheme that only makes sense if their
15 competitors also agree to participate.

16 89. In a normally functioning market, highly sensitive competitive information would
17 not be shared but would instead be closely guarded. Indeed, it would be irrational for an
18 apartment management company to provide its most sensitive business information to a third
19 party that would then share the information with its competitors, unless it was confident that its
20 competitors were also participating and using the recommendations of the third party to raise and
21 stabilize prices.

22 90. RealPage’s algorithm requires a large amount of data to operate and functions
23 more and more effectively as the amount of the data increases, meaning the algorithm only
24 works if all or nearly all multifamily apartment management companies are providing data to
25 RealPage. The Apartment Management Defendants, knowing this, are thus aware that their
26 erstwhile horizontal competitors are also cartel members, participating in the scheme.

i. Defendants Agreed to Prioritize Pricing Over Occupancy

1
2 91. Unlike sales of nonperishable goods, apartment rentals are time-sensitive. A
3 vendor who fails to sell a widget in a given month can still sell it the next month. Conversely, if
4 an apartment goes unrented for a month, the revenue for that month is lost. Moreover, a rising
5 number of empty units in a building can have a negative impact on potential renters' perceptions
6 of the building's desirability. For these reasons, multifamily apartment management companies
7 have traditionally prioritized maintaining maximum occupancy rates, and were willing to
8 negotiate down on price for new or renewing leases in order to keep the units filled, a practice
9 known as "keeping heads in the beds." In this way, multifamily apartment management
10 companies operating in a competitive market would tend to lease at rents which would keep few
11 units vacant, i.e., at or near the market-clearing price.

12 92. This strategy minimizes turnover expenses, as there are hard costs associated with
13 finding and evaluating a replacement tenant.

14 93. In contrast, through their participation in the cartel, RealPage's clients, including
15 the Apartment Management Defendants, profitably raise rents above market rates, refuse to
16 negotiate, and reduce output by decreasing occupancy. Defendants' prioritization of price over
17 occupancy can only work if the Apartment Management Defendants know their competitors are
18 doing the same. In a competitive market, maintaining a rigid position on pricing would be
19 unprofitable because revenues would decrease due to lower occupancy while the substantial
20 fixed costs of managing multifamily apartment buildings remain the same or increase.

21 94. The Apartment Management Defendants have agreed to share their confidential
22 data and adopt RealPage's non-competitive pricing, which—as facilitated and encouraged by
23 RealPage—has enabled them to turn the normal competitive functioning of the multifamily real
24 estate leasing market on its head and prioritize price over occupancy.
25
26
27
28

C. AIRM Provides Defendants with Transparency and Frequent Transactions, Enabling Defendants to Monitor Compliance and Enforce Pricing Discipline

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

95. RealPage collects highly detailed confidential information, including pricing information, regarding over 16 million apartment units on a daily basis from the Apartment Management Defendants.

96. Also on a daily basis, RealPage processes the information the Apartment Management Defendants provide to it and sends them recommended pricing based on that information, tailored to each Apartment Management Defendant's specific geographic market.

97. In addition to providing the basis for Defendants' supracompetitive pricing, this daily exchange provides Defendants with a near-real-time snapshot of competitors' pricing, enabling them to detect deviations from the cartel price almost immediately.

98. This real-time visibility into competitors' pricing enables Defendants to enforce discipline among the cartel members. Indeed, RealPage tells its clients that "[b]alancing discipline with action is key for planning your rent growth strategy" in their pricing. Use of this data also allows cartel members to identify new market entrants.

99. In addition to providing information to clients regarding how much they should charge for their units through the AIRM algorithm, RealPage also provides further instructions to coordinate pricing.

100. RealPage instructs its clients not to negotiate with tenants, telling them instead to stand firm on the recommended rent even if it means the units will go empty for a time, and "balance[e] discipline with action."

101. RealPage's advice to stand firm on price led to higher prices for consumers and higher profits for the cartel. By keeping units off the market, the multifamily apartment management companies restricted supply, thereby increasing price, resulting in increased profits even though units remained vacant. In other words, Defendants' cartel distorts the forces of supply and demand such that Defendants are able to reap profits from supracompetitive rents above the competitive market-clearing rent.

1 102. Defendants have agreed to short circuit the normal functioning of a competitive
2 market, agreeing instead not to compete.

3 103. As one apartment management executive commented, RealPage’s software
4 enabled multifamily apartment management companies to “work together,” “to work with a
5 community in pricing strategies, not to work separately,” even though they “are all technically
6 competitors.”

7 **D. The Illegal Agreement Raised Prices, as Intended**

8 104. The Apartment Management Defendants accept and employ RealPage’s
9 artificially inflated prices up to ninety percent of the time, often referring to such adherence as
10 pricing “courage” or more frequently, pricing “discipline.”

11 105. As one RealPage client explained, “we weren’t offering concessions nor were we
12 able to negotiate pricing” like they previously had. RealPage enables the Apartment
13 Management Defendants to “maximize[s] rents but you have to be willing to strictly follow it.”

14 106. As a result, the Apartment Management Defendants “rarely make any overrides to
15 the recommendations” provided by RealPage.

16 107. This practice, when combined with the use of RealPage’s recommended rents, led
17 to consistently higher supracompetitive prices for the multifamily apartment management
18 companies.

19 108. Over time, including during the Class Period, companies that agreed to follow
20 RealPage’s recommendations saw their profits increase. RealPage promoted these results to
21 provide further inducements and incentives to others to join the cartel and to maintain and
22 increase cartel participation.

23 109. Defendants are aware that their scheme would be threatened by other firms setting
24 rents too low at nearby properties. According to Jeffrey Roper, the developer of AIRM and
25 RealPage’s principal scientist, “If you have idiots undervaluing [rents], it costs the whole
26 system.” Therefore, Defendants must maintain strict adherence to the cartel in order to maintain
27 high rents.
28

1 110. Because the Apartment Management Defendants employ AIRM’s predictive
2 pricing eighty to ninety percent of the time, the predictive pricing is self-realizing: the Apartment
3 Management Defendants agree to do what AIRM tells them to do, confident in the knowledge
4 that their competitors are all doing the same thing. Every time an Apartment Management
5 Defendant agrees to share its sensitive leasing information and adopt RealPage’s recommended
6 rents, it is engaging in a horizontal agreement with its competitors not to compete on price.

7 111. The Apartment Management Defendants raise prices secure in the knowledge that
8 their competitors will do likewise, constituting a unilateral contract that the offerees accept by
9 raising their prices. That Defendants are able to charge rents as much as seven percent above the
10 market price is direct evidence of their successful scheme’s anticompetitive effects.

11 112. Plaintiff Shelley Schmidig has suffered and continues to suffer antitrust injury as
12 a result of Defendants’ unlawful scheme. Ms. Schmidig has rented an apartment managed by
13 defendant FPI since 2022. FPI increased Ms. Schmidig’s rent by approximately seven percent for
14 her 2023 lease.

15 **E. “Plus Factors” Prove That The Cartel’s Actions Constituted an**
16 **Impermissible Anticompetitive Conspiracy, Not Merely Parallel Conduct**

17 113. The market for multifamily residential units is highly conducive to collusion. The
18 terms offered to renters are transparent and include a limited number of basic items, including
19 rent, lease term, and unit size.

20 114. Key market data, including these terms, is digitized and accessible. Through the
21 computerized algorithm, profit implications of moves, counter-moves, and deviations in price
22 can be calculated and disseminated.

23 115. The computerized algorithm can determine strategies to punish deviations.

24 116. The computerized algorithm can also quickly identify and address changes in
25 price and demand.

26 117. In addition to market transparency and frequent transactions, discussed in Section
27 C.iii, *supra*, a number of other factors referred to as “plus factors” can make collusion in a given
28 market more likely.

1 **i. Opportunities to Conspire**

2 118. Defendants have multiple opportunities to conspire through virtual or face-to-face
3 forums. RealPage provides multiple channels through which Defendants can communicate with
4 one another and exchange confidential information.

5 119. For example, RealPage’s User Group provides the Apartment Management
6 Defendants with an exclusive, password-protected forum that is only available to RealPage’s
7 clients and its employees, in which Defendants can “interact with product managers and other
8 clients”⁹ and “create a completely integrated solution for the multifamily industry.”¹⁰ The User
9 group has over 1,000 members. The User Group includes an “Idea Exchange,” monitored by
10 RealPage, in which Defendants are encouraged to share ideas and comment on RealPage
11 practices.

12 120. RealPage also invites Apartment Management Defendants to join its
13 subcommittees, another forum in which the Apartment Management Defendants can
14 communicate privately among themselves and with RealPage employees.

15 121. Subcommittee members are required to join quarterly conference calls and attend
16 the annual meeting at the RealWorld conference, discussed below.

17 122. RealPage also hosts an annual RealWorld multi-day conference, typically in Las
18 Vegas, Orlando, or other popular destinations. These multi-day conferences typically draw more
19 than 1,000 attendees, including representatives of the Apartment Management Defendants, and
20 provide numerous opportunities for Defendants to exchange ideas and information.

21 123. The National Multifamily Housing Council (“NMHC”) facilitates opportunities to
22 conspire in secret and exchange information through its meetings, webinars, and information
23 portals, all of which are accessible only to its members.

24
25
26
27 _____
⁹ <https://www.realpage.com/user-group/best-practices/>.

28 ¹⁰ <https://www.realpage.com/user-group/>.

1 124. Its membership includes all of the Defendants. RealPage Chief Sales Officer
2 Brandon Bible is on the NMHC board of directors. NMHC hosts a three-day annual meeting, to
3 be held in Las Vegas in 2023, which includes an “Apartment Strategies Conference.”

4 125. Its website allows members to view a password protected list of attendees in
5 advance to determine which of the other cartel members will attend. NMHC also hosts a research
6 forum exclusively for its members, a members-only fall meeting, and other in-person and virtual
7 meetings members can attend.

8 **ii. Defendants Engaged in Concerted Action in a Highly Concentrated**
9 **Market**

10 126. Where, as here, competitors in a highly concentrated market switch from
11 independent, heterogeneous, and complex pricing structures to a uniform pricing structure, then
12 concertedly raise prices, it supports a finding of collusion.

13 127. RealPage claims that its clients control over sixteen million units out of a total of
14 twenty-two million investment grade units in the United States,¹¹ or roughly seventy-three
15 percent of the multifamily real estate leasing market.

16 128. As alleged above, beginning in 2016, nearly three-quarters of all multifamily
17 apartment management companies, including all of the Apartment Management Defendants,
18 switched from negotiating prices individually to getting their pricing from one source: RealPage,
19 and abruptly began raising prices to supracompetitive levels.

20 129. Defendants’ behavior is highly probative of collusion in violation of Section 1 of
21 the Sherman Act.

22 **iii. The Prohibitive Cost of Developing Multifamily Apartment Buildings**
23 **Creates a High Barrier to Entry for Would-Be Competitors**

24 130. Any prospective competitor seeking to enter the market for multifamily real estate
25 leases would have to commit an enormous amount of time and money to build an apartment
26 management portfolio through some combination of acquisition and development and
27 construction from the ground up.

28 ¹¹ See <https://www.realpage.com/blog/how-business-intelligence-can-clear-up-a-cloudy-forecast/>.

1 131. This presents a significant impediment for prospective market entrants.

2 **iv. High Switching Costs**

3 132. A significant part of Defendants' scheme involves increasing rents to
4 supracompetitive levels when they come up for renewal.

5 133. Many tenants are forced to absorb the inflated rents because the overwhelming
6 expense of moving, the time and labor required to locate a new apartment and move one's
7 belongings, and the disruption to family, work, and personal life caused by moving make
8 switching to a better priced alternative—if one were available—cost-prohibitive.

9 **v. Market Asymmetries and Price Inelasticity**

10 134. There are also asymmetries between Defendants and their customers.

11 135. Defendants are large, sophisticated enterprises with significant resources that can
12 afford to hold out on price while a small number of apartments go unleased.

13 136. Conversely, Plaintiff and the members of the class have only their own limited
14 resources, and many, including students and members of the military, are under severe time
15 constraints, often forced to find an apartment within the time frame of a day or a weekend.

16 137. The pool of customers is diffuse. While each of the Defendants controls many
17 thousands of leases, each customer is on their own, with little or no bargaining power. RealPage
18 encourages the Apartment Management Defendants to exploit this asymmetric relationship by
19 refusing to negotiate on price, forcing Plaintiff and the members of the class to accept
20 Defendants' terms.

21 138. Defendants have access to—and share between and among themselves—
22 information about market pricing, the number of available units, the number of people looking
23 for apartments, the true cost of utilities, amenities and services, and other valuable information
24 nearly in real time, none of which is available to Plaintiff and the members of the class.

25 139. All of these asymmetries create inelastic demand because the renters do not have
26 the power or the resources to negotiate on a level playing field with cartel members, leaving
27 them little choice but to accept the cartel's supracompetitive prices.
28

1 **vi. Apartments are a Fungible Product**

2 140. Apartments in multifamily apartment buildings are generally interchangeable.
3 Every apartment has the basic requirements for all tenants which drive marketing, sales and
4 leasing decisions: a kitchen, a living area, and one or more bedrooms and bathrooms.

5 141. Many apartment buildings have similar amenities such as parking, exercise
6 facilities, swimming pools, common areas, and internet access.

7 142. Apartments are readily comparable based on these objective features as well as by
8 rent and square footage.

9 **vii. History of Anticompetitive Behavior**

10 143. The key participants have a history of anticompetitive collusive conduct.

11 144. YieldStar (the predecessor of AIRM) was developed for RealPage by Jeffrey
12 Roper, a software programmer who previously developed a similar algorithm for airlines in the
13 1980s.

14 145. The U.S. Department of Justice investigated Roper and the airlines and concluded
15 that by employing Roper's algorithm the airlines had inflated ticket prices by more than a billion
16 dollars, in violation of the Sherman Act. The DOJ reached settlement agreements or consent
17 decrees with eight airlines.

18 146. Roper freely concedes that his airline ticketing algorithm was illegal: "We all got
19 called up before the Department of Justice in the early 1980s because we were colluding."¹² And
20 RealPage freely concedes that AIRM is based on the airline ticketing algorithm: "The technology
21 is similar to revenue management approaches that were originally adopted by the airline
22 industry."¹³

23
24
25 _____
26 ¹² Heather Vogell, *Rent Going Up? One Company's Algorithm Could Be Why*, Pro Publica, Oct.
27 15, 2022, available for download at [https://www.propublica.org/article/yieldstar-rent-increase-
28 realpage-rent](https://www.propublica.org/article/yieldstar-rent-increase-realpage-rent).

¹³ Frequently Asked Questions about Revenue Management Software, available for download at
<https://www.realpage.com/asset-optimization/revenue-management/#>.

1 **F. Defendants’ Agreement not to Compete Had the Purpose and Effect of**
2 **Increasing Prices and Decreasing Output in Violation of the Sherman Act**

3 147. Basic principles of economics provide that when parties with sufficient power
4 within a given market agree not to compete on price and to restrict output, as the Defendants here
5 have done, supracompetitive monopoly rents and profits result.

6 148. Defendants are able to maintain increased revenues even though turnover rates are
7 increasing, i.e., units are being left unleased and vacant. For example, according to the CEO of
8 Defendants Camden Property Trust, one of the adopters of AIRM, turnover rates increased
9 fifteen percent after adoption, while the overall same-property revenue growth increased by 7.4
10 percent.

11 149. This is confirmed by statements from the Apartment Management Defendants.
12 For example, Defendant Greystar, the largest apartment management company in the United
13 States, has stated that its buildings using RealPage’s pricing “outperformed their markets by
14 4.8%.” Moreover, markets where RealPage clients hold a greater market share show larger and
15 more rapid increases in rents relative to areas where their combined market share is smaller.

16 **G. The Relevant Market**

17 **i. The Relevant Product Market**

18 150. The relevant product market is the market for the lease of units in multifamily
19 residential real estate.

20 151. The multifamily residential real estate lease market satisfies the test for market
21 definition used by federal antitrust enforcement agencies, widely known as the “SSNIP test.”
22 The test asks whether a hypothetical monopolist in a proffered market could impose a small but
23 significant (typically five percent), non-transitory increase in price (a “SSNIP”), without causing
24 a sufficient number of customers to switch to other products or services in sufficient numbers to
25 make the SSNIP unprofitable. If the SSNIP is profitable, the market is properly defined. If the
26 SSNIP is not profitable, the market is too narrowly defined, and does not encompass sufficient
27 economic substitutes.
28

1 152. Here, the SSNIP test is satisfied, and the market is properly defined. RealPage
2 states that multifamily apartment management companies that agree to use RealPage's
3 recommended rent prices are able to raise prices up to seven percent above the market price on a
4 sustained basis.

5 153. The conspirators have control over prices is sufficient to show market power. As
6 Defendants freely admit, that is the case here.

7 154. Single family homes for rent are generally more expensive and thus not a
8 reasonable substitute for multifamily apartment buildings.

9 155. Many of the amenities commonly available in multifamily apartment buildings
10 are unavailable in single family homes, including building security, swimming pools, gyms,
11 common areas for socializing or hosting parties, parking, access to desirable urban areas
12 including dining and nightlife, access to public transportation, and newer facilities, some with
13 views and/or balconies.

14 156. Multifamily apartment buildings often cater to a particular cohort, such as
15 students, military, or seniors, which provide social opportunities unavailable in single family
16 homes, especially when combined with the aforementioned amenities. Nor is home or
17 condominium ownership an acceptable alternative due to the prohibitive upfront costs and extra
18 expenses such as mortgage payments, taxes, insurance, maintenance, and homeowner association
19 fees.

20 157. Defendants' scheme involves the formation of a nationwide cartel. The scope of
21 the conspiracy is nationwide.

22 158. RealPage has clients in every state and every metropolitan statistical area in the
23 United States.

24 159. Defendants' scheme operates in the same way across the entire country.

25 160. Plaintiffs and the members of the class suffer the same antitrust injury—
26 increased rents, decreased supply, lower quality inventory, inadequate service, and inflexible
27 landlords unwilling to negotiate rents—across the entire United States.
28

1 161. Through its unlawful actions Defendants' cartel is able to charge
2 supracompetitive rents to tens if not hundreds of thousands of renters throughout the country.

3 162. RealPage's clients, including the Apartment Management Defendants, control
4 approximately seventy-three percent of all units in multi-family apartment buildings across the
5 United States. Each of the Apartment Management Defendants controls multifamily apartment
6 buildings in multiple metropolitan areas throughout the country.

7 163. Demand for units in multi-family apartment buildings is highly inelastic: the
8 Apartment Management Defendants have been able to profitably raise rents up to seven percent
9 over market on an annual basis with only minimal defections.

10 **ii. The Relevant Geographic Market**

11 164. Although Defendants anticompetitive scheme is nationwide in scope, the
12 economic effects are localized in certain cases due to limitations on how far people will
13 commute between their homes and their work. For example, many people are generally willing
14 to commute across or within a metropolitan statistical area, which is defined by the U.S. Office
15 of Management and Budget as "an area containing a large population nucleus and adjacent
16 communities that have a high degree of integration with that nucleus," including additional
17 "outlying counties" if inhabitants commute between the counties to live and work. While people
18 are generally willing to commute within a metropolitan statistical area and would consider
19 similar apartments within a metropolitan area to be reasonable substitutes for one another, they
20 are generally not willing to commute between two separate metropolitan areas on a daily basis
21 Nevertheless, due to the nationwide scope of the cartel, including the participation of many of
22 the largest commercial landlords in the United States, the cartel has ubiquitous market power in
23 the United States.

24 165. Here, the relevant geographic market is no smaller than the Modesto Metropolitan
25 Statistical Area. The Modesto Metropolitan Statistical Area is a valid geographic market because
26 a SSNIP would cause renters to seek other housing within that area. On information and belief
27 the Apartment management Defendants have market power within the Modesto Metropolitan
28

1 Statistical Area, controlling approximately seventy percent or more of the market for multifamily
2 apartment buildings there, and have been able to profitably raise rents above market rates and
3 reduce supply.

4 **CLASS ACTION ALLEGATIONS**

5 166. Plaintiff brings this action on behalf of himself and all others similarly situated
6 pursuant to Federal Rules of Civil Procedure 23(a) and 23(b)(3) as representatives of the Class,
7 which is defined as follows:

8 All persons and entities living within the Modesto Metropolitan Statistical Area that are
9 direct purchasers of multifamily residential real estate leases from an Apartment
10 Management Defendant that shares data with and receives recommended pricing from
11 RealPage, or from a division, subsidiary, predecessor, agent, or affiliate of such
12 Apartment Management Defendant, at any time during the period of January 23, 2019
13 until Defendants' unlawful conduct and its anticompetitive effects cease to persist.

14 167. The Class is so numerous that joinder of all members in this action is
15 impracticable. There are tens of thousands if not hundreds of thousands of members in the
16 proposed Class.

17 168. Plaintiff's claims are typical of those of the Class.

18 169. Plaintiff and all members of the Class were all injured by the same unlawful
19 conduct, which resulted in all of them paying more for multifamily residential leases than they
20 otherwise would have in a competitive market.

21 170. Plaintiff will fairly and adequately protect and represent the interests of the Class.
22 The interests of the Plaintiff are not antagonistic to the Class.

23 171. Federal and state government entities are excluded from the Class.

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

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

28 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 multifamily residential real estate leases from competitive levels;

1 b. If Defendants entered into such a formal or informal contract,
2 combination, conspiracy, or common understanding, whether that conduct violates Section 1 of
3 the Sherman Act under the per se, quick look, or rule of reason modes of analysis;

4 c. If Defendants entered into such a formal or informal contract,
5 combination, conspiracy, or common understanding, whether that conduct has in fact artificially
6 inflated price and/or artificially suppressed supply of multifamily residential real estate leases
7 from competitive levels;

8 d. The proper measure of damages; and

9 e. The contours of appropriate injunctive relief to remediate the
10 anticompetitive effects of the challenged conduct in the future.

11 174. Plaintiff is represented by counsel who are experienced and competent in the
12 prosecution of complex antitrust and unfair competition class actions.

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

21 **AGENTS AND CO-CONSPIRATORS**

22 176. The unlawful acts alleged against the Defendants in this class action complaint
23 were authorized, ordered, or performed by the Defendants' respective officers, agents,
24 employees, representatives, or shareholders while actively engaged in the management,
25 direction, or control of the Defendants' businesses or affairs.

26 177. The Defendants' agents operated under the explicit and apparent authority of their
27 principals.
28

1 178. Each Defendant, and its subsidiaries, affiliates and agents operated as a single
2 unified entity.

3 179. Various persons and/or firms not named as Defendants herein may have
4 participated as coconspirators in the violations alleged herein and may have performed acts and
5 made statements in furtherance thereof.

6 180. Each acted as the principal, agent, or joint venture of, or for other Defendants
7 with respect to the acts, violations, and common course of conduct alleged herein.

8 **COUNT ONE**
9 **Agreement in Restraint of Trade in Violation of Section 1 of the Sherman Act**
10 **15 U.S.C. § 1**

11 181. Plaintiff repeats and realleges all previous allegations as if fully set forth herein.

12 182. Defendants have formed a cartel, the purpose and intent of which is to eliminate
13 competition, artificially inflate the price of multifamily residential real estate leases above
14 competitive levels, and artificially decrease the supply and output of multifamily residential real
15 estate leases below competitive levels.

16 183. The agreement and understandings are unreasonable restraints of trade in the
17 market for multifamily residential real estate leases in the Modesto Metropolitan Statistical Area.

18 184. Pursuant to the cartel, prices for multifamily residential real estate leases in the
19 Modesto Metropolitan Statistical Area have been fixed, stabilized and raised to supracompetitive
20 levels in the relevant antitrust market.

21 185. Defendants possess market power in the relevant market. Defendants have
22 exercised that power in the form of higher supracompetitive prices.

23 186. As a direct, foreseeable and consequent result, Defendants' cartel has caused the
24 Class to pay more than they would have paid but for the conspiracy and thereby suffer
25 overcharge damages, measured by the difference between the prices Class Members paid and
26 what they would have paid but for the illegal cartel.

27 187. The injury the class has sustained in the form of higher rents is precisely the type
28 of injury the antitrust laws are intended to prevent.

1 188. The cartel's actions, particularly the agreement to use and the use of the AIRM
2 algorithm to set prices, have produced anticompetitive effects, including but not limited to high
3 prices, lower supply and lower quality of residential real estate leases.

4 189. There are no procompetitive justifications for the Defendants' cartel, and any
5 proffered justifications, to the extent legitimate, could be achieved through less restrictive means.

6 190. Any procompetitive effects are outweighed by the anticompetitive effects.

7 191. The Defendants' cartel is a per se violation of the federal antitrust laws. In the
8 alternative, the Defendants' cartel is unlawful under either a quick look or rule of reason mode of
9 analysis.

10 192. The conduct is continuing, causing Plaintiff and members of the Class irreparable
11 harm until the conduct is enjoined or modified.

12 **PETITION FOR RELIEF**

13 Plaintiff petitions for the following relief:

- 14 A. A determination that this action may be maintained as a class action
15 pursuant to Federal Rule of Civil Procedure 23, that Plaintiff be appointed
16 class representative, and that Plaintiff's counsel be appointed as class
17 counsel.
- 18 B. A determination that the conduct set forth herein is unlawful under Section
19 1 of the Sherman Act, 15 U.S.C. § 1, under either a per se, quick look, or
20 rule of reason mode of analysis.
- 21 C. A judgment enjoining Defendants from engaging in further unlawful
22 conduct.
- 23 D. An award of attorneys' fees and costs as permitted by statute and law
- 24 E. Injunctive relief to restrain and enjoin the illegal conduct.
- 25 F. An award of pre- and post-judgment interest on all amounts awarded; and
- 26 G. Such other relief as the Court deems just and equitable.
- 27
- 28

REQUEST FOR A JURY TRIAL

Plaintiff requests a trial by jury of all issues so triable.

Dated: January 23, 2023

By: /s/ Joseph R. Saveri
Joseph R. Saveri

JOSEPH SAVERI LAW FIRM, LLP
Joseph R. Saveri (State Bar No. 130064)
Steven N. Williams (State Bar No.175489)
Cadio Zirpoli (State Bar No.179108)
Kevin E. Rayhill (State Bar No.267496)
601 California Street, Suite 1000
San Francisco, CA 94108
Telephone: (415) 500-6800
Fax: (415) 395-9940
jsaveri@saverilawfirm.com
swilliams@saverilawfirm.com
czirpoli@saverilawfirm.com
krayhill@saverilawfirm.com

Dated: January 23, 2023

Benjamin J. Widlanski
(*pro hac vice* forthcoming)
bwidlanski@kttlaw.com
Javier A. Lopez
(*pro hac vice* forthcoming)
jal@kttlaw.com

**KOZYAK TROPIN &
THROCKMORTON LLP**
2525 Ponce de Leon Blvd., 9th Floor
Coral Gables, Florida 33134
Telephone: (305) 372-1800

Dated: January 23, 2023

Archie C. Lamb, Jr., Esq.
(*pro hac vice* forthcoming)
alamb@archielamb.com
ARCHIE LAMB & ASSOCIATES
P.O. Box 2088
Birmingham, Alabama 35201
205-612-6789 (C)

*Attorneys for Individual and Representative
Plaintiff Shelley Schmidig*